BUSBY
Biological Services

May 29, 2025

Mr. Scott Sinnett
C/O Mr. Andy Fotsch
Cielo Mar La Jolla, LLC
7514 Girard Avenue, Suite 1315
La Jolla, California 92037

RE: Revised Biological Letter Survey Report for the Proposed Cielo Mar Residential Subdivision located at 8303 La Jolla Shores Drive in the La Jolla Neighborhood of the City of San Diego, California

Mr. Sinnett and Mr. Fotsch:

Busby Biological Services, Inc. (BBS) has prepared this revised biological letter survey report for the proposed Cielo Mar Residential Subdivision (project) located at 8303 La Jolla Shores Drive in the La Jolla Neighborhood of the City of San Diego, California (Attachment 1: Figures 1 through 3). The project would include the subdivision and re-development of an existing developed property that is surrounded by residential development.

BBS prepared this biological letter survey report following the City's Guidelines for Conducting Biology Surveys (City 2002) and in accordance with the City of San Diego's (City's) Biology Guidelines (City 2018a). The purpose of this biological letter survey report is to (1) describe the project; (2) provide an overview of the federal, state, and local biological regulations that apply to the project; (3) document the existing biological conditions within the survey area; (4) evaluate the survey area for the potential to support sensitive biological resources; (5) assess the significance of potential impacts to sensitive biological resources associated with project implementation; and (6) describe requisite measures to avoid, minimize, and/or mitigate these impacts to below a level of significance. This biological letter survey report provides the City with information necessary during the environmental review process to determine the project's compliance with the California Environmental Quality Act (CEQA), the Multiple Species Conservation Program (MSCP), and the City's Environmentally Sensitive Lands (ESL) Regulations, among other applicable federal, state, and local regulations.

1.0 PROJECT DESCRIPTION AND LOCATION

The project site is currently comprised of a single-family residence, existing Accessory Dwelling Unit (ADU), and associated landscape/hardscape on the approximately 4.45-acre (194,016-square-foot) property. The project would include (1) the demolition of the existing single-family residence, existing ADU, and associated landscape/hardscape; (2) the subdivision of the three parcels into six, single-family residential lots that range from approximately 0.48 acre (20,737 square feet) to 0.77 acre (33,717 square feet); (3) the extension of Calle De Cielo as a private road to serve the new development; and (4) the construction of six, single-family residences – one on each of the abovementioned residential lots – plus a small, Homeowners' Association (HOA) facility.

The project site lies within the La Jolla Neighborhood, which is located in the La Jolla Community Planning Area of the City (Attachment 1: Figures 1 through 3). It is situated on

the U.S. Geological Survey (USGS) La Jolla 7.5-minute quadrangle (USGS 2025; Attachment 1: Figure 2) in Township 15S, Range 4W, and Section 24. It lies at 8303 La Jolla Shores Drive, approximately 0.38 mile east of La Jolla Shores Beach and the Pacific Ocean, 0.27 mile north of the La Jolla Parkway and Torrey Pines Road interchange, and 1.14 miles west of Interstate 5 (Attachment 1: Figures 2 and 3).

The project site is situated on an approximately 4.45-acre property that consists of three parcels - Assessor's Parcel Numbers (APNs) 346-250-08-00, 346-250-09-00, and 346-250-10-00. The project site is located south of the current terminus of Calle Del Cielo, and it is bounded immediately to the northwest by Calle Frescota and to the northeast, east, south, and west by existing residential development (Attachment 1: Figure 3).

The project site is located within the Coastal Zone, but it is not located in or adjacent to any open space or conserved lands. The closest conserved land is the La Jolla Open Space located east of Torrey Pines Road, approximately 0.25 mile northeast of the project site (Attachment 1: Figure 4). The closest Multi-Habitat Planning Area (MHPA), which is the City's habitat preserve, is the Pottery Canyon Natural Open Space Park also located east of Torrey Pines Road, approximately 0.85 mile southeast of the project site.

2.0 RELEVANT REGULATIONS

The following paragraphs address federal, state, and/or local regulations or policies for biological resources that would apply to the project. The project is anticipated to comply with all applicable federal, state, and local biological regulations as described below.

2.1 Federal Regulations

An overview of applicable federal regulations is provided in this section.

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA), administered by the U.S. Fish and Wildlife Service (USFWS) for freshwater fish and terrestrial wildlife and the National Oceanic and Atmospheric Administration (NOAA) for marine and anadromous species, provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered 'take' under FESA. Section 9(a) of FESA defines 'take' as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." A species that is proposed for listing under FESA is not afforded the same level of protection as those officially listed, meaning these species are not protected by the "take" prohibitions of FESA until the listing rule is finalized. The project is anticipated to comply with FESA.

2.1.2 Migratory Bird Treaty Act

All migratory bird species that are native to the U.S. or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004. The MBTA prohibits the killing or transport of native migratory birds or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. In addition, the USFWS commonly places restrictions on

disturbances allowed near active raptor nests. No permit is issued under the MBTA, and the MBTA does not mandate specific protection. If project impacts are proposed, avoidance measures are typically required to prevent impacts to nesting birds to comply with the MBTA. If vegetation removal occurs during the avian breeding season (February 15 to September 15), a pre-construction survey no more than 10 days prior to the start of work would be required to determine the presence or absence of nesting birds. If nesting birds are detected, appropriate avoidance measures must be implemented to ensure that the taking of birds or eggs or the disturbance of breeding activities is avoided. Potential measures include but are not limited to, follow-up surveys, construction monitoring, avoidance areas, and noise barriers. The project is anticipated to comply with the MBTA.

2.1.3 Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (CZMA), administered by NOAA's Office of Ocean and Resource Management (OCRM) and the CCC, preserves, protects, develops, and – where possible – enhances or restores the coastal zone in the U.S. California has a federally approved Coastal Zone Management Program (CZMP), discussed further in Section 2.2 State Regulations, below. The project is anticipated to comply with the CZMA.

2.2 State Regulations

An overview of applicable state regulations is provided in this section.

2.2.1 California Environmental Quality Act

CEQA requires an environmental review for projects that would result in potentially adverse impacts on the environment. Adverse environmental impacts are typically mitigated in accordance with state laws and regulations. The project is anticipated to comply with CEQA.

2.2.2 California Endangered Species Act

The California ESA (CESA), administered by the California Department of Fish and Wildlife (CDFW), is similar to FESA in that it provides the legal framework for the listing and protection of species (and their habitats) within California that are identified as being endangered or threatened with extinction. CESA prohibits the "take" of any species of wildlife designated as an endangered, threatened, or candidate species. Under CESA, "take" means to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a protected species, or any part or product of it, without proper authorization. Unlike FESA, while a species is a candidate for listing under the CESA, it is afforded the same protections as a state-listed endangered or threatened species. The project is anticipated to comply with CESA.

2.2.3 California Fish and Game Code

Under Section 3503 of the California Fish and Game Code (CFGC), it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 of the CFGC prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls), or of their nests and eggs. To comply with CFGC Sections 3503 and 3503.5, the avoidance measures described above in the Federal Regulations section would

be required to prevent impacts to nesting birds. The project is anticipated to comply with the CFGC.

2.2.5 California Native Plant Protection Act

The California Native Plant Protection Act (NPPA), as administered by CDFW, preserves, protects, and enhances rare and endangered plant species within California. CDFW requires a permit pursuant to Section 2081(a and b) of the CESA for the taking of plant species designated as candidate, rare, threatened, or endangered. The project is anticipated to comply with the NPPA.

2.2.4 California Coastal Act

The California Coastal Act (CCA), administered by the CCC, regulates conservation and use of coastal resources through responsible development. Under the CCA, ESHAs are defined as areas "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." It limits activities within ESHAs and requires protection of ESHAs from significant disruption of habitat values. The CZMP is administered by the California Coastal Conservancy and the CCC. The California Coastal Conservancy is responsible for purchasing, protecting, restoring, and enhancing coastal resources, while the CCC manages the development within the coastal zone. The CCA encourages local governments to create LCPs to protect public access and coastal resources on a local level. The project is anticipated to comply with the CCA.

2.2.6 California Natural Community Conservation Planning Program

The California Natural Community Conservation Planning (NCCP) program, administered by CDFW, is a cooperative effort by the CDFW and numerous public and private partners that takes a broad-scale, ecosystem approach to planning for the protection and perpetuation of biological diversity throughout California by protecting both habitats and the species within these habitats while also accommodating compatible land use. The City's MSCP Subarea Plan is part of this NCCP program and discussed in further detail Section 2.3, below. The project is anticipated to comply with the NCCP program.

2.3 City Programs and Regulations

An overview of applicable City programs and regulations is provided in this section.

2.3.1 Multiple Species Conservation Program

The City's MSCP Subarea Plan was adopted by USFWS, CDFW, and the City in July 1997 and allows incidental take of threatened and endangered species as well as other sensitive species conserved by the MSCP (City 1997). These MSCP-covered species include 85 sensitive plant and wildlife species, 15 of which are also listed as "Narrow Endemic Species" that have restricted geographic distributions, soil affinities, and/or habitats within the region. Under the MSCP, impacts to Narrow Endemic Species are to be avoided to the maximum extent practicable.

The City's MSCP Subarea Plan designates regional preserves, classified as the MHPA, that conserve sensitive vegetation communities and undeveloped land to sustain the City's MSCP-covered plant and wildlife species while allowing development of other areas subject to MSCP requirements. The City's MSCP Subarea Plan provides implementation strategies, preserve design, and management guidelines. Under the City's MSCP Subarea Plan, wetland vegetation communities and rare/uncommon upland vegetation communities (i.e., Tiers I, II, IIIA, IIIB) are considered sensitive by the City, while common upland vegetation communities (Tier IV) are not considered sensitive by the City.

The City's MSCP Subarea Plan also includes provisions for adding species that are not currently covered by the MSCP Subarea Plan to the MSCP-covered species list. If a species that is not on the MSCP-covered species list is proposed for listing by one or both of the wildlife agencies, USFWS and/or CDFW will determine if additional conservation measures are needed to adequately protect the species within the City's MSCP Subarea Plan area and will determine if an Incidental Take Permit (ITP), Habitat Conservation Plan (HCP), or other conservation measure(s) are required to assure that impacts to these species are not significant.

The project site is located within the Urban Habitat Lands area per the City's MSCP Subarea Plan. The project would be required to show consistency with the MSCP General Management Directives (Section 1.5.2 of the City's MSCP Subarea Plan) and Specific Management Policies and Directives for Urban Habitat Lands (Section 1.5.7 of the City's MSCP Subarea Plan). The project site is located approximately 0.25 mile southwest of the closest designated open space and approximately 0.85 mile northwest of the nearest MHPA; therefore, the General Planning Policies and Design Guidelines (Section 1.4.2 of the MSCP) and MSCP Land Use Adjacency Guidelines (Section 1.4.3) would not apply to the project. The project is anticipated to comply with all applicable sections of the City's MSCP Subarea Plan.

2.3.2 City of San Diego Municipal Code

The City's Municipal Code provides the legal framework for local governance through various ordinances that direct both residential and commercial aspects that are within the City's jurisdiction, including – but not limited to – public health and safety, zoning and land use, building and construction, business regulations, public works and utilities, traffic and vehicles, and government and administration. Chapters 11 through 14 of the City's Municipal Code comprise the City's Land Development Code, which includes the majority of the City's planning, zoning, subdivision, and building regulations. The City's Land Development Code includes technical manuals, standards, and guidelines to guide both residential and commercial development. The applicable regulations and manuals include the ESL Regulations and the Land Development Manual; these are described below. The project is anticipated to comply with all applicable sections of the City's Municipal Code.

Environmentally Sensitive Lands Regulations

Chapter 14, Article 3, Division 1 of the City's Municipal Code provides the City's ESL Regulations (City 2018b). These regulations protect, preserve, and, where damaged, restore ESL within the City and the viability of the species populations that are supported by these lands (City 2018a). ESL areas include lands within or partially within the MHPA; wetlands occurring within or outside the MHPA; vegetation communities classified as Tier I, II, IIIA, or

IIIB; habitat for sensitive species; coastal beaches; coastal bluffs; Special Flood Hazard Areas, and steep hillsides. Tier IV: Other Uplands vegetation communities are not considered ESL (City 2018a and 2018b). In addition, the City's ESL Regulations require development restrictions within the MHPA, the establishment of impact avoidance areas around raptor nesting locations, and seasonal restrictions on grading where development may impact certain bird species. The project site does not support any ESL; therefore, the City's ESL Regulations do not apply to the project.

Land Development Manual

The City's Land Development Manual consolidates the technical manuals, standards, and guidelines that are referenced by the City's Land Development Code (1) to establish requirements for the submittal of applications, including the identification of required fees and deposits; (2) to establish development standards and guidelines used in the review of applications; and (3) to assist in the review and processing of applications. The City's Land Development Manual contains a number of appendices, which include technical manuals that were originally adopted before the Land Development Manual. The applicable manuals include the City's Biology Guidelines (City 2018a), the City's Landscape Standards (City 2016), and the City's Steep Hillside Guidelines (City 2004). These manuals are discussed below, and the project is anticipated to comply with all applicable portions of the Land Development Manual.

Biology Guidelines

The City's Biology Guidelines (City 2018a) were developed by the City's Development Services Department (DSD) to aid in the implementation and interpretation of the ESL Regulations. In addition, the *Biological Impact Analysis and Mitigation Procedures* section of the City's Biology Guidelines provides the standards for the significance determination for impacts and appropriate avoidance, minimization, and/or mitigation measures required to comply with CEQA and the Coastal Act. The City's Biology Guidelines are the baseline biological standards for processing Neighborhood Development Permits, Site Development Permits and Coastal Development Permits issued pursuant to the ESL Regulations. The project is anticipated to comply with the City's Biology Guidelines.

Landscape Standards

The City's Landscape Standards (City 2016) establish the minimum project requirements for plant material, irrigation, brush management, and other landscape-related standards in accordance with the City's Land Development Code. These standards provide the technical guidelines to create and maintain landscapes that conserve and efficiently use water as well as required brush management zones for any property that includes a habitable structure and native or naturalized vegetation. The project is anticipated to comply with the City's Landscape Standards.

Steep Hillside Guidelines

The City's Steep Hillside Guidelines (City 2004) provide standards and guidelines to assist in the interpretation and implementation of the development regulations for steep hillsides contained in City's ESL Regulations. Steep hillsides are defined in the Land Development Code as areas (1) with a natural slope gradient of at least 25 percent (25 feet of vertical rise

for every 100 feet of horizontal distance) with an increase in vertical elevation of at least 50 feet or (2) where a portion of the site has a slope gradient of at least 200 percent (200 feet of vertical rise for every 100 feet of horizontal distance) with an increase in elevation of at least 10 feet. Every proposed development project that encroaches into steep hillsides is subject to the ESL Regulations and is evaluated for conformance with the Steep Hillside Guidelines as part of the environmental review process for the required Neighborhood Development Permit, Site Development Permit, and/or Coastal Development Permit. The project site does not support any steep hillsides; therefore, the City's Steep Hillsides Guidelines do not apply to the project.

2.3.4 La Jolla Community Plan and Local Coastal Program Land Use Plan

The La Jolla Community Plan and Local Coastal Program Land Use Plan (Community Plan; City 2014) was prepared to guide land development in La Jolla in such a manner to highlight elements and features of the community that contribute to its overall character and atmosphere. The Community Plan also provides guidance for preservation of key natural resources, including Mount Soledad, the shoreline parks, sensitive coastline bluffs, landscaped and natural parks, nature trails, bikeways, and promenades along the public beaches. The Community Plan establishes three key issues related to natural resources:

1. To protect and preserve sensitive natural resources, including natural drainage, biologically sensitive slopes and hillsides, beaches, ocean, bluffs and canyons, plant and animal habitats, and wildlife linkages throughout the community. The seismic and geological instability of the area should be a consideration in such efforts.
2. To increase public awareness of beach and coastal access points within the community through appropriate signage.
3. To maintain the public views of the ocean, bluff, hillsides, open space canyons, and beach areas from public vantage points within the community.

To address these issues, the Community Plan establishes the following natural resources goals:

- Preserve the natural amenities of La Jolla, such as its open space, hillsides, canyons, bluffs, parks, beaches, tidepools, and coastal waters.
- Maintain the identified public views to and from these amenities to achieve a beneficial relationship between the natural/unimproved and developed areas of the community.
- Enhance existing public access to La Jolla's beaches and coastline areas (for example La Jolla Shores Beach and Children's Pool areas) to facilitate greater public use and enjoyment of these and other coastal resources.
- Preserve all designated open space and habitat linkages within La Jolla, such as the slopes of Mount Soledad and the sensitive ravines of Pottery Canyon.
- Protect the environmentally sensitive resources of La Jolla's open areas, including its coastal bluffs, sensitive steep hillside slopes, canyons, native plant life, and wildlife habitat linkages.
- Conserve the City's MHPA.

The project was designed to be consistent with the Community Plan goals. It would not affect any coastal bluffs, open space (including the MHPA), parks, beaches, tidepools, coastal

waters, or habitat linkages. Therefore, the project is anticipated to comply with the Community Plan.

3.0 METHODS AND SURVEY LIMITATIONS

Prior to conducting the biological reconnaissance survey, BBS reviewed existing literature and historical databases for available biological resources information and records of sensitive biological resources within 1 mile of the project site (Google Earth 2025; USGS 2025; U.S. Department of Agriculture [USDA] 1973; California Department of Fish and Wildlife [CDFW] 2025a through c; U.S. Fish and Wildlife Service 2025; California Native Plant Society [CNPS] 2025; Richardson 2025; iNaturalist 2025). In addition, the Community Plan (City 2014) was reviewed to ensure project consistency.

BBS conducted a biological reconnaissance survey within the approximately 9.31-acre survey area, which included the 4.45-acre project site and a 4.86-acre, 100-foot off-site survey buffer. BBS conducted the survey to document the existing biological resources on-site and assess the survey area for its potential to support sensitive biological resources. The survey was conducted on foot and with the aid of binoculars.

Vegetation communities and land cover types were mapped by hand onto aerial imagery and later digitized using Geographic Information Systems (GIS) software. Plant species observed within the survey area were noted; however, an exhaustive inventory of non-native ornamental plant species was not prepared. Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were noted. The assessment of the potential for sensitive plant and wildlife species to occur within and adjacent to the survey area was based on existing database records, species' habitat requirements, and current site conditions. In addition, representative digital photographs were taken (Attachment 2).

Vegetation community classifications follow Holland (1986) as modified by Oberbauer (2008). Plant nomenclature follows the Jepson Online Interchange (University of California 2025) for native and naturalized species, and Sunset Western Garden Book (Brenzel 2012) for ornamental species. Wildlife nomenclature follows Crother et al. (2017) for amphibians and reptiles, American Ornithological Society Checklist (Chesser et al. 2025) and the San Diego County Bird Atlas (Unitt 2004) for birds, and the San Diego County Mammal Atlas (Tremor 2017) for mammals. Sensitive species status is based on California Natural Diversity Database (CNDDB; CDFW 2025a through c).

The survey results reflect existing environmental conditions at the time of the surveys, and such conditions naturally change over time, seasonally, and from year to year. The lists of plant and wildlife species include species detected during the surveys but are limited by temporal and seasonal factors. In addition, BBS did not conduct focused plant surveys or walk transects within the survey area; therefore, the lists of plant species detected during the surveys is not all-inclusive. The surveys were performed during the day, when nocturnal animals were not detectable, and some areas of private property were inaccessible on foot and, therefore, could only be surveyed visually with the aid of binoculars from accessible vantage points. To account for these survey limitations, sensitive plant and wildlife species that have the potential to occur within the survey area were assessed based on pertinent literature describing the distribution and habitat preference, data from historical species occurrence databases, and the extensive local experience of the BBS biologists.

4.0 RESULTS

BBS Principal Biologist Darin Busby conducted a biological reconnaissance survey of the 9.21-acre survey area on February 14, 2025, between the hours of 0930 and 1100. Weather was cool and calm, with temperatures from 58 to 60 degrees Fahrenheit, wind speeds of 1 to 3 miles per hour, cloud cover decreasing from 90 to 10 percent, and no precipitation.

The following sections describe the physical characteristics, plant and wildlife observed or detected, sensitive biological resources, and potential for sensitive plant and wildlife species to occur within and adjacent to the project site**.**

4.1 Land Use, Topography, and Soils

The project site is located on a fully developed residential property that lies south of the current terminus of Calle Del Cielo (Attachment 1: Figure 5) and is surrounded on all sides by residential development.

The project site is on a gentle, west-facing slope. Elevations within the project site range from 68 feet above mean sea level (amsl) along the western boundary of the property to 144 feet along the eastern boundary of the property. No steep hillsides as defined in the City's Land Development Code are present on the property.

Soils within the project site were mapped historically as Altamont clay, 15 to 30 percent slopes, in the eastern half of the project site and Corralitos loamy sand, 5 to 9 percent slopes, in the western half of the project site (Klutz 2023, USDA 1973). Altamont clay soils, 15 to 30 percent slopes, typically occur on rounded hills and have slow permeability, medium to rapid runoff, and a moderate to high erosion hazard. Corralitos loamy sand, 5 to 9 percent slopes, consist of loamy sands formed in alluvium derived from marine sandstone and typically are found in narrow valleys and on small alluvial fans. These soils have a rapid permeability, medium runoff, moderate erosion hazard, and are excessively drained. While these two soil types were mapped historically within the project site, these soils have been disturbed and likely modified through the existing residential use of the property.

4.2 Botanical Resources – Flora

The entire survey area was mapped as urban/developed land (Attachment 1: Figure 5). Urban/developed land is a City Tier IV (Other Uplands) land cover type that includes areas with manufactured structures, pavement or hardscape, and landscaped areas. Within the survey area, the urban/developed land includes the existing single-family residence, existing Accessory Dwelling Unit (ADU), surrounding residential development, and the associated landscape/hardscape. The existing landscape within the survey area is dominated by non-native, ornamental species such as freeway iceplant (*Carpobrotus edulis*), Brazilian pepper tree (*Schinus terebinthifolius*), oleander (*Nerium oleander*), golden wattle (*Acacia longifolia*), carob (*Ceratonia siligua*), river red gum (*Eucalyptus camaldulensis*), bougainvillea (*Bougainvillea* sp.), ngaio tree (*Myoporum laetum*), and Bermuda grass (*Cynodon dactylon*); however, the site has not been maintained for several years and supports a few native species, such as lemonade berry (*Rhus integrifolia*), toyon (*Heteromeles arbutifolia*), morning-glory (*Calystegia macrostegia*), and purple needlegrass (*Stipa pulchra*).

A total of 62 plant species were observed within the survey area, including 11 (18 percent) native species and 51 (82 percent) non-native species (Attachment 3). None of the plant species observed are considered sensitive.

4.3 Zoological Resources – Fauna

A total of 13 wildlife species were observed or detected during the biological reconnaissance survey (Attachment 4), including red-shouldered hawk (*Buteo lineatus*), an unidentified gull species, Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), house finch (*Haemorhous mexicanus*), orange-crowned warbler (*Leiothlypis celata*), song sparrow (*Melospiza melodia*), California towhee (*Melozone crissalis*), Say's phoebe (*Sayornis saya*), and California ground squirrel (*Otospermophilus beecheyi*). All of these species are common in residential developments in the City, and none is considered sensitive.

4.4 Sensitive Biological Resources

The survey area was assessed for sensitive biological resources. Assessments for the potential occurrence of sensitive biological resources are based upon known ranges; habitat preferences for the species; and historical species occurrence records from the CNDDB (CDFW 2025a), USFWS all species occurrence database (USFWS 2025), SanBIOS databases (County 2025), Bumble Bees of North America Occurrence Records Database (Richardson 2025), and iNaturalist (2025). The following sections describe the sensitive biological resources that are known to occur or have a potential to occur within and/or adjacent to the project site.

4.4.1 Sensitive Vegetation Communities and Environmentally Sensitive Lands

For purposes of this report, sensitive vegetation communities include those identified as Tier 1 through IIIB in the City's Biology Guidelines (City 2018a). Per the City's MSCP Subarea Plan (City 1997) and the City's ESL Regulations (City 2018b), ESL includes sensitive biological resources, steep hillsides, coastal beaches, coastal bluffs, or Special Flood Hazard Areas.

No sensitive vegetation communities or ESL occur within the survey area (Attachment 1: Figure 5.) In addition, the project site is not within or immediately adjacent to a designated MHPA (Attachment 1: Figure 4).

4.4.2 Sensitive Plant Species

Sensitive plant species are plant species that are (1) listed, proposed, or candidates for listing by state or federal agencies as threatened or endangered (USFWS 2025; CDFW 2025a and b); (2) identified as California Rare Plant Rank (CRPR) 1 or 2 on the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS 2025); and/or (3) designated as and MSCP-covered species or Narrow Endemic species (City 1997).

No sensitive plant species were observed within the survey area during the biological reconnaissance survey. Based on the literature review and database search, 21 sensitive plant species were assessed for their potential to occur within the survey area, because they

are designated as an MSCP-covered Narrow Endemic species and/or known from or have potential to occur within 1 mile of the project site (CDFW 2025a, County 2025). None of these sensitive plant species are expected to occur within or immediately adjacent to the project site based on the absence of suitable habitat, prevalence of developed and disturbed conditions, and lack of historical or known occurrences in the immediate vicinity. Attachment 5 provides an evaluation of all 21 sensitive plant species that were assessed for potential to occur.

4.4.3 Sensitive Wildlife Species

Sensitive wildlife species are wildlife species that are (1) listed, proposed, or candidates for listing by state or federal agencies as threatened or endangered (USFWS 2025; CDFW 2025a and c); (2) designated as "fully protected" by CDFW (CDFW 2025a and c); (3) considered a state species of special concern by CDFW (CDFW 2025a and c); and/or (4) designated as an MSCP-covered species (City 1997). In addition to the sensitivity criteria described above, most native bird species are covered by the MBTA and CFGC. While these species may not be considered sensitive according to the above criteria, effects on breeding and nesting activities are prohibited. As the list of species covered under the MBTA and CFGC is extensive, the individual species are not discussed in this report or presented in Attachment 6; however, nesting birds are briefly discussed below and are addressed further in Sections 6 and 7, below.

No sensitive wildlife species were observed within the survey area during the biological reconnaissance survey. Based on the literature review and database search, 45 sensitive wildlife species were assessed for their potential to occur within the survey area, because they are designated as MSCP-covered species and/or because they are known from or have potential to occur within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025). Of these sensitive plant species, 41 are not expected to occur and 4 have a low potential to occur within or immediately adjacent to the project site based the absence of suitable habitat, prevalence of developed and disturbed conditions, and lack of historical or known occurrences in the immediate vicinity. Attachment 6 provides an evaluation of all 45 sensitive wildlife species that were assessed for potential to occur. Sensitive species with a low potential to occur, such as Cooper's hawk (*Accipiter cooperii*) and western bluebird (*Sialia Mexicana*), typically are not addressed beyond the evaluation provided in Attachment 6; however, a brief discussion for Crotch's bumble bee and nesting birds is provided below.

Crotch's Bumble Bee

Crotch's bumble bee is a candidate for state-listing as an endangered species, which means CDFW is evaluating its current range, distribution, population, and other factors to determine if it meets the criteria to be listed as endangered. When a species is a candidate for listing it is temporarily afforded the same protections as a species that is already listed as threatened or endangered under CESA.

Crotch's bumble bee primarily occurs in cismontane southern and central California, with a small number of records in northern California and southwestern Nevada (CDFW 2019). This species utilizes a wide range of disturbed and natural habitats including, but not limited to, exotic and native grasslands, scrub lands, chaparral, desert margins, and semi-urban settings, but it is most frequently found in scrub or open grassland habitats. It primarily nests underground in abandoned small rodent burrows but may also nest in tufts of grass, old bird

nests, rock piles, or cavities in dead trees. This species feeds on the nectar of a variety of flowers, but it seems to prefer flowers with short corolla tubes (Williams et al. 2014).

Crotch's bumble bee was not observed during the biological reconnaissance survey or during focused surveys performed in 2025 (Attachment 7); however, multiple recent historical species occurrence records for this species occur within 5 miles of the project site – to the north in Torrey Pines State Natural Reserve and on the University of California San Diego campus, to the southwest in the Village of La Jolla, and to the south in Kate Sessions Memorial Park. While the survey area is entirely classified as urban/developed land, the project site has been unmaintained for several years, and there is a mix of native and non-native vegetation on-site that provides potential nectar sources for foraging and ground squirrel burrows on-site provide potential nesting opportunities. Crotch's bumble bee was not observed during the focused surveys performed in 2025; however, this species is still considered to have a low potential to occur within and immediately adjacent to the project site, based on guidance provided by the City that was developed through coordination with CDFW.

Nesting Birds

While the entire survey area was mapped as urban/developed, the project site has not been maintained for several years, and it currently supports landscaping that is dominated by ornamental species but also supports some native plants. Thus, the vegetation within and adjacent to the project site has the potential to support nesting birds during the avian breeding season (February 15 to September 15). While many nesting bird species do not meet the sensitivity criteria listed for sensitive wildlife above, most native bird species are protected under the MBTA and/or CFGC.

4.4.4 Wildlife Movement Corridors and Nursery Sites

Wildlife corridors are essential to maintain populations of healthy and genetically diverse plant and wildlife species. Wildlife corridors are considered sensitive by local, state, and federal resource and conservation agencies, because these corridors allow wildlife to move between adjoining open space areas that are becoming increasingly isolated as open space becomes fragmented from urbanization, rugged terrain, and/or changes in vegetation (Beier and Loe 1992). Wildlife nursery sites are areas where wildlife species regularly breed or rear young. Nursery sites may include rookeries, where large numbers of aquatic birds congregate to nest, or areas where large mammals such as deer give birth and breed.

The survey area does not serve as a wildlife movement corridor or nursery site. The project site and adjacent lands are mapped entirely as urban/developed land, and it is surrounded on all sides by residential development (Attachment 1: Figures 3 and 5). Furthermore, the project site is located approximately 0.25 mile southwest of the closest designated open space and approximately 0.85 mile northwest of the nearest MHPA (Attachment 1: Figure 4).

4.4.5 Potentially Jurisdictional Aquatic Resources

Jurisdictional aquatic resources (e.g., wetlands, navigable waterways, drainages, streambeds with ordinary high water marks) are considered sensitive and are regulated by the U.S. Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), and/or the City pursuant to several federal, state, and local regulations.

No potentially jurisdictional aquatic resources (e.g., drainages, wetlands, wetland indicators) were observed within the survey area.

5.0 MSCP CONSISTENCY ANALYSIS

The project site is located within the Urban Habitat Lands area per the City's MSCP Subarea Plan. The following sections address compliance with the City's MSCP Subarea Plan, including the MSCP General Management Directives (Section 1.5.2 of the City's MSCP Subarea Plan) and Specific Management Policies and Directives for Urban Habitat Lands (Section 1.5.7 of the City's MSCP Subarea Plan). The project site is located approximately 0.25 mile southwest of the closest designated open space and approximately 0.85 mile northwest of the nearest MHPA; therefore, the General Planning Policies and Design Guidelines (Section 1.4.2 of the MSCP) and MSCP Land Use Adjacency Guidelines (Section 1.4.3) would not apply to the project.

5.1 General Management Directives

Section 1.5.2 of the City's MSCP Subarea Plan includes general management directives that apply to all land within the City. These management directives are italicized below, and the project's compliance with these management directives follows each directive.

Mitigation

Mitigation, when required as part of project approvals, shall be performed in accordance with the City of San Diego Environmentally Sensitive Lands Ordinance and Biology Guidelines.

If required, any mitigation for this project is anticipated to comply with the City's Biology Guidelines (City 2018a) and City's ESL Regulations (City 2018b).

Restoration

Restoration or revegetation undertaken in the MHPA shall be performed in a manner acceptable to the City. Where covered species status identifies the need for reintroduction and/or increasing the population, the covered species will be included in restoration/revegetation plans, as appropriate. Restoration or revegetation proposals will be required to prepare a plan that includes elements addressing financial responsibility, site preparation, planting specifications, maintenance, monitoring and success criteria, and remediation and contingency measures. Wetland restoration/revegetation proposals are subject to permit authorization by federal and state agencies.

The project is not located within or adjacent to the MHPA and does not require restoration or revegetation. Therefore, this management directive does not apply.

Public Access, Trails, and Recreation

1. *Provide sufficient signage to clearly identify public access to the MHPA. Barriers such as vegetation, rocks/boulders or fencing may be necessary to protect highly sensitive areas. Use appropriate type of barrier based on location, setting and use. For example, use chain link or cattle wire to direct wildlife movement, and natural*

rocks/boulders or split rail fencing to direct public access away from sensitive areas. Lands acquired through mitigation may preclude public access in order to satisfy mitigation requirements.

2. *Locate trails, view overlooks, and staging areas in the least sensitive areas of the MHPA. Locate trails along the edges of urban land uses adjacent to the MHPA, or the seam between land uses (e.g., agriculture/habitat), and follow existing dirt roads as much as possible rather than entering habitat or wildlife movement areas. Avoid locating trails between two different habitat types (ecotones) for longer than necessary due to the typically heightened resource sensitivity in those locations.*

3. *In general, avoid paving trails unless management and monitoring evidence shows otherwise. Clearly demarcate and monitor trails for degradation and off-trail access and use. Provide trail repair/maintenance as needed. Undertake measures to counter the effects of trail erosion including the use of stone or wood crossjoints, edge plantings of native grasses, and mulching of the trail.*

4. *Minimize trail widths to reduce impacts to critical resources. For the most part, do not locate trails wider than four feet in core areas or wildlife corridors. Exceptions are in the San Pasqual Valley where other agreements have been made, in Mission Trails Regional Park, where appropriate, and in other areas where necessary to safely accommodate multiple uses or disabled access. Provide trail fences or other barriers at strategic locations when protection of sensitive resources is required.*

5. *Limit the extent and location of equestrian trails to the less sensitive areas of the MHPA. Locate staging areas for equestrian uses at a sufficient distance (e.g., 300-500 feet) from areas with riparian and coastal sage scrub habitats to ensure that the biological values are not impaired.*

6. *Off-road or cross-country vehicle activity is an incompatible use in the MHPA, except for law enforcement, preserve management or emergency purposes. Restore disturbed areas to native habitat where possible or critical or allow to regenerate.*

7. *Limit recreational uses to passive uses such as birdwatching, photography and trail use. Locate developed picnic areas near MHPA edges or specific areas within the MHPA, in order to minimize littering, feeding of wildlife, and attracting or increasing populations of exotic or nuisance wildlife (opossums, raccoons, skunks). Where permitted, restrain pets on leashes.*

8. *Remove homeless and itinerant worker camps in habitat areas as soon as found pursuant to existing enforcement procedures.*

9. *Maintain equestrian trails on a regular basis to remove manure (and other pet feces) from the trails and preserve system in order to control cowbird invasion and predation. Design and maintain trails where possible to drain into a gravel bottom or vegetated (e.g., grass-lined) swale or basin to detain runoff and remove pollutants.*

The project is not located within or adjacent to the MHPA, and it does not include any trails, access, and/or recreation. Therefore, these management directives do not apply.

Litter/Trash and Materials Storage

Priority 1:

1. *Remove litter and trash on a regular basis. Post signage to prevent and report littering in trail and road access areas. Provide and maintain trash cans and bins at trail access points.*

2. *Impose penalties for littering and dumping. Fines should be sufficient to prevent recurrence and also cover reimbursement of costs to remove and dispose of debris, restore the area if needed, and to pay for enforcement staff time.*

3. *Prohibit permanent storage of materials (e.g., hazardous and toxic chemicals, equipment, etc.) within the MHPA and ensure appropriate storage per applicable regulations in any areas that may impact the MHPA, due to potential leakage.*

4. *Keep wildlife corridor undercrossings free of debris, trash, homeless encampments, and all other obstructions to wildlife movement.*

Priority 2:

1. *Evaluate areas where dumping recurs for the need for barriers. Provide additional monitoring as needed (possibly by local and recreational groups on a "Neighborhood Watch" type program), and/or enforcement.*

The project is not located within or adjacent to the MHPA, and it will not result in an increase in litter/trash, materials storage, or dumping. Therefore, these management directives do not apply.

Adjacency Management Issues

1. *Enforce, prevent, and remove illegal intrusions into the MHPA (e.g., orchards, decks, etc.) on an annual basis, in addition to complaint basis.*

2. *Disseminate educational information to residents adjacent to and inside the MHPA to heighten environmental awareness, and inform residents of access, appropriate plantings, construction, or disturbance within MHPA boundaries, pet intrusion, fire management, and other adjacency issues.*

3. *Install barriers (fencing, rocks/boulders, vegetation) and/or signage where necessary to direct public access to appropriate locations.*

The project is not located within or adjacent to the MHPA, and it will not result in unauthorized intrusion into the MHPA. Therefore, these management directives do not apply.

Invasive Exotics Control and Removal

Priority 1:

1. *Do not introduce invasive non-native species into the MHPA. Provide information on invasive plants and animals harmful to the MHPA, and prevention methods, to visitors and adjacent residents. Encourage residents to voluntarily remove invasive exotics from their landscaping.*

2. *Remove giant reed, tamarisk, pampas grass, castor bean, artichoke thistle, and other exotic invasive species from creek and river systems, canyons and slopes, and elsewhere within the MHPA as funding or other assistance becomes available. If possible, it is recommended that removal begin upstream and/or upwind and move downstream/downwind to control reinvasion. Priorities for removal should be based on invasive species' biology (time of flowering, reproductive capacity, etc.), the immediate need of a specific area, and where removal could increase the habitat available for use by covered species such as the least Bell's vireo. Avoid removal activities during the reproductive seasons of sensitive species and avoid/ minimize impacts to sensitive species or native habitats. Monitor the areas and provide additional removal and apply herbicides if necessary. If herbicides are necessary, all safety and environmental regulations must be observed. The use of heavy equipment, and any other potentially harmful or impact-causing methodologies, to remove the plants may require some level of environmental or biological review and/or supervision to ensure against impacts to sensitive species.*

Priority 2:

1. *If funding permits, initiate a baseline survey with regular follow-up monitoring to assess invasion or re-invasion by exotics, and to schedule removal. Utilize trained volunteers to monitor and remove exotic species as part of a neighborhood, community, school, or other organization's activities program (such as Friends of Peñasquitos Preserve has done). If done on a volunteer basis, prepare and provide information on methods and timing of removal to staff and the public if requested. For giant reed removal, the Riverside County multi-jurisdictional management effort and experience should be investigated, and relevant techniques used. Similarly, tamarisk removal should use the Nature Conservancy's experience in the Southern California desert regions, while artichoke thistle removal should reference the Nature Conservancy's experience in Irvine. Other relevant knowledge and experience is available from the California Exotic Pest Plant Council and the Friends of Los Peñasquitos Canyon Preserve.*

2. *Conduct an assessment of the need for cowbird trapping in each area of the MHPA where cattle, horses, or other animals are kept, as recommended by the habitat management technical committee in coordination with the wildlife agencies.*

3. *If eucalyptus trees die or are removed from the MHPA area, replace with appropriate native species. Ensure that eucalyptus trees do not spread into new areas, nor increase substantially in numbers over the years. Eventual replacement by native species is preferred.*

4. *On a case by case basis some limited trapping of non-native predators may be necessary at strategic locations, and where determined feasible to protect ground and shrub-nesting birds, lizards, and other sensitive species from excessive predation. This management directive may be considered a Priority 1 if necessary to meet the conditions for species coverage. If implemented, the program would only be on a temporary basis and where a significant problem has been identified and therefore needed to maintain balance of wildlife in the MHPA. The program would be operated in a humane manner, providing adequate shade and water, and checking all traps twice daily. A domestic animal release component would be incorporated into the program. Provide signage at access points and noticing of adjacent residents to inform people that trapping occurs, and how to retrieve and contain their pets.*

The project is not located within or adjacent to the MHPA, and it will not result in an increase of invasive species within the MHPA. In addition, no invasive species removal will be required as part of the project. Therefore, these management directives do not apply.

Flood Control

Priority 1: Perform standard maintenance, such as clearing and dredging of existing flood channels, during the non-breeding or nesting season of sensitive bird or wildlife species utilizing the riparian habitat. For the least Bell's vireo, the non-breeding season generally includes mid-September through mid-March.

Priority 2: Review existing flood control channels within the MHPA periodically (every five to ten years) to determine the need for their retention and maintenance, and to assess alternatives, such as restoration of natural rivers and floodplains.

The project is not located within or adjacent to the MHPA, and there are no existing or proposed flood control channels within or adjacent to the project site. Therefore, these management directives do not apply.

5.2 Specific Management Policies and Directives for Urban Habitat Lands

Section 1.5.7 of the MSCP provides specific management directives for the Urban Area, in which the project site occurs. These specific management directives relate to management of preserved segments of the MHPA, including preparation and implementation of Natural Resource Management Plans for specific natural parks within the City. The project site is not located within or adjacent to the MHPA; therefore, these management directives do not apply.

6.0 PROJECT IMPACTS ANALYSIS

Biological resources may be impacted directly, indirectly, or cumulatively by a project. These types of impacts are defined as follows:

- **Direct impacts** are impacts occurring from any disturbance, alteration, or destruction of biological resources that could result from project-related activities. Examples of direct impacts include diverting surface water flows, encroaching into wetlands, clearing vegetation, and taking an individual species and/or its associated habitat.

- **Indirect impacts** are impacts on biological resources that are not a direct result of the project. They are often separated spatially or temporally from construction activities. Examples of indirect impacts include increased human activity, elevated noise and dust levels, decreased water quality, soil compaction, and the introduction of invasive animal (i.e., domestic cats and dogs) and plant species.
- **Cumulative Impacts** are those impacts which are incremental from two or more past, present, or probable future projects whose individual impacts can be individually minor but when combined are considerable. If a project complies with the City's MSCP Subarea Plan (City 1997), it typically would not result in cumulative impacts to vegetation communities or MSCP-covered species.

Potential biological impacts from the project were assessed according to the City's Biology Guidelines (2018a) and CEQA Significance Determination Thresholds (City 2022). In addition, the project was analyzed for consistency with all applicable measures provided in the Community Plan (City 2014). In accordance with the City's CEQA Significance Determination Thresholds (City 2022), a project would result in a significant or potentially significant impact on biological resources if it would:

- Cause a substantial adverse impact, either directly or through habitat modifications, to any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Cause a substantial adverse impact on any Tier I, Tier II, Tier IIIA, or Tier IIIB habitats as identified in the City's Biology Guidelines or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- Cause a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pools, riparian areas) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the City's MSCP Subarea Plan, or impede the use of native wildlife nursery sites;
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), NCCP or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region;
- Introduce a land use within an area adjacent to the MHPA that would result in adverse edge effects;
- Conflict with any local policies or ordinances protecting biological resources; and/or
- Introduce invasive species of plants in to natural open space.

As discussed in Sections 2 and 5, the project is anticipated to comply with all applicable local, state, and federal biological regulations. If applicable, appropriate avoidance and minimization measures (AMMs) will be implemented, and/or mitigation measures will identified to reduce significant impacts to sensitive biological resources to below a level of significance.

6.1 Impacts to Vegetation Communities and Environmentally Sensitive Lands

No sensitive vegetation communities or ESL occur within or adjacent to the project site. Therefore, the project would not result in impacts to sensitive vegetation communities or ESL.

As such, no AMMs or mitigation measures would be required for sensitive vegetation communities and/or ESL.

6.2 Impacts to Sensitive Plant Species

No sensitive plant species were observed or are expected to occur within or immediately adjacent to the project site. Therefore, the project would not result in impacts to sensitive plant species. As such, no AMMs or mitigation measures would be required for sensitive plant species.

6.3 Impacts to Sensitive Wildlife Species

No sensitive wildlife species were observed, and only four species have a low potential to occur within or immediately adjacent to the project site. Although sensitive species with a low potential to occur typically are not addressed beyond the evaluation provided in Attachment 6, Crotch's bumble bee is being addressed because it is currently a candidate for state-listing as an endangered species, and some foraging and nesting opportunities occur on-site. Crotch's bumble bee was not observed during the focused surveys performed in 2025; however, this species is still considered to have a low potential to occur within and immediately adjacent to the project site, based on guidance provided by the City that was developed through coordination with CDFW. Therefore, the applicable AMMs discussed in Section 7.0, below, would be required.

Nesting birds covered by the MBTA and CFGC have potential to occur within the survey area if project-related vegetation clearing or construction activities occur during the avian breeding season (February 15 to September 15). The project would comply with both the MBTA and CFGC; therefore, the project would not result in impacts to nesting birds covered by the MBTA and CFGC. As such, no additional AMMs or mitigation measure would be required for these species.

6.4 Impacts to Wildlife Corridors and Nursery Sites

No wildlife corridors or nursery sites occur within or adjacent to the project site. Therefore, the project would not result in impacts to wildlife corridors or nursery sites. As such, no AMMs or mitigation measures would be required for wildlife corridors or nursery sites.

6.5 Impacts to Potentially Jurisdictional Aquatic Resources

No potentially jurisdictional aquatic resources occur within or adjacent to the project site. Therefore, the project would not result in impacts to potentially jurisdictional aquatic resources. As such, no AMMs or mitigation measures would be required for potentially jurisdictional aquatic resources.

7.0 PROJECT AVOIDANCE AND MINIMIZATION MEASURES

The project has been designed to avoid potential impacts to Crotch's bumble bee through implementation of the following AMM-1. This AMM shall be included on all project plans and in contract specifications.

AMM-1: Crotch's Bumble Bee Avoidance Measures

Should Crotch's bumble bee no longer be a potential candidate for listing at the time of the issuance of the Notice to Proceed (NTP), then no AMMs for this species would be required.

BBS conducted a focused, presence/absence Crotch's bumble bee survey for the project in spring 2025 (Attachment 7) following the survey guidelines, titled *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (survey guidelines) and dated June 6, 2023 (CDFW 2023). Crotch's bumble bee was not detected during the spring 2025 survey; therefore, it is considered to have a low potential for occurrence within and adjacent to the property. The City provided the *CONDITION OF APPROVAL: Avoidance Measure for Crotch's Bumble Bee*, dated June 25, 2024 (Attachment 8). These measures are summarized below and provide general guidance to avoid and/or minimize impacts to the species; however, CDFW guidance for this species is being provided on a project-by-project basis.

Crotch's bumble bee was not observed within or adjacent to the project site during the spring 2025 survey; therefore, the following AMMs provided by the City (City 2024a) would be implemented to avoid impacts to Crotch's bumble bee should the species occur on the project site during construction.

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a NTP for Subdivisions, but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental Designee shall verify the following project requirements regarding the Crotch's bumble bee are shown on the construction permit:
    a. To avoid impacts on Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If the removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a pre-activity (defined as any habitat disturbance) survey no more than 3 days prior to the initiation of construction activities to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.
    b. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly [*Euphydryas editha quino*]) and have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee.
    c. The pre-activity survey shall consist of photographic surveys following the survey guidelines (CDFW 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding (MOU) is obtained.
    d. If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain the required authorization via a MOU or Scientific Collecting Permit (SCP) pursuant to the survey guidelines (CDFW 2023). Survey methods that involve lethal take of species are not acceptable.
    e. If pre-activity surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to establish, monitor, and maintain no-work buffers around the associated floral resources. The size and

configuration of the no-work buffer shall be based on the best professional judgment of the Qualified Biologist in consultation with CDFW. Construction activities shall not occur within the no-work buffers until the bees appear no longer active (i.e., associated floral resources appear desiccated and no bees are seen flying for three consecutive days indicating dispersal from the area). Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (CFGC section 86, 2062, 2067, 2068, 2080, 2085; California Code Regulations, Title 14, section 786.9) under CESA.

f. Survey data shall be submitted by the Qualified Biologist to the CNDDB in accordance with the MOU with CDFW, or SCP requirements, as applicable.

8.0 CONCLUSION

The project would not result in significant impacts to any sensitive biological resources and is anticipated to comply with AMM-1 (described above) and all other applicable federal, state, and local regulations.

On behalf of BBS, thank you for the opportunity to work with you on this project. Please do not hesitate to contact me at melissa@busbybiological.com or 858.334.9507 if you have any questions. Please see Attachment 10 for a summary of the preparers' qualifications.

Sincerely,

Melissa Busby
Owner/Principal Biologist

ATTACHMENTS

Attachment 1: Figures
Attachment 2: Representative Project Site Photographs
Attachment 3: Plant Species Observed
Attachment 4: Wildlife Species Detected
Attachment 5: Sensitive and Narrow Endemic Plant Species with Potential to Occur
Attachment 6: Sensitive Wildlife Species with Potential to Occur
Attachment 7: Crotch's Bumble Bee Survey Summary Report
Attachment 8: Draft Condition of Approval: Avoidance Measure for Crotch's Bumble Bee
Attachment 9: DRAFT Mitigation Measure
Attachment 10: Summary of Preparers' Qualifications

REFERENCES

Beier, P. and S. Loe,
1992 A checklist for evaluating impacts to wildlife movement corridors. Wildl. soc. bull. 20: 434-440.

Brenzel, K.N.
2012 The New Sunset Western Garden Book. Tim Home Entertainment. New York, NY.

California Department of Fish and Wildlife (CDFW)
2019 Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act. April 4.
2023 Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. June 6.
2025a California Natural Diversity Database (CNDDB). Accessed March.
2025b Special Vascular Plants, Bryophytes, and Lichens List. January.
2025c Special Animals List. January.

California Native Plant Society (CNPS)
2025 Inventory of Rare and Endangered Vascular Plants of California from http://www.rareplants.cnps.org/. Accessed March.

Chesser, R. T., S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, B. E. Hernández-Baños, A. W. Kratter, I. J. Lovette, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker.
2025 Checklist of North American Birds (online). Ornithological Society. http://checklist.aou.org/taxa/. Accessed March.

City of San Diego (City)
1997 Multiple Species Conservation Program, City of San Diego MSCP Subarea Plan. March.
2002 Guidelines for Conducting Biological Surveys. Revised July 2002.
2004 San Diego Municipal Code, Land Development Code, Steep Hillsides Guidelines. August.
2014 La Jolla Community Plan and Local Coastal Program. August.
2016 San Diego Municipal Code, Land Development Code, Landscape Standards. April.
2018a San Diego Municipal Code, Land Development Code, Biology Guidelines. Revised February 1.
2018b San Diego Municipal Code, Chapter 14: General Regulations, Article 3: Supplemental Development Regulations, Division 1: Environmentally Sensitive Lands Regulations. March.
2022 California Environmental Quality Act, Significance Determination Thresholds. September.
2024a CONDITION OF APPROVAL, Avoidance Measure for Crotch's Bumble Bee. June 25.
2024b DRAFT Mitigation Measure. November 15.

County of San Diego (County)
2025 SanBIOS GIS Database. Created in 2009. http://www.sangis.org/. Accessed March.

Crother, B. I., R.M. Bonett, J. Boundy, F.T. Burbrink, D. de Queiroz, D.R. Frost, R. Highton, J.B. Iverson, E.L. Jockusch, F. Kraus, K.L. Krysko, A.D. Leaché, E.M Lemmon, R.W. McDiarmid, K.R. Mendelson III, P.A. Meylan, T.W. Reeder, S. Ruane, M.E. Seidel
2017 Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding, Eighth Edition. Society for the Study of Amphibians and Reptiles Herpetological Circular No. 43.

Google Earth
2025 Google Earth Version 7.1.2.2041 elevation data. Accessed March.

Holland, R.F.
1986 Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, California.

iNaturalist
2025 iNaturalist database. https://www.inaturalist.org. Accessed March.

Klutz Biological Consulting
2023 Biological Letter Report, 8303 La Jolla Shores Drive, San Diego, CA 92037. April.

Oberbauer, T., M. Kelly, and J. Buegge.
2008 Draft Vegetation Communities of San Diego County. Based on “Preliminary Descriptions of the Terrestrial Natural Communities of California,” Robert F. Holland, Ph.D., October 1986.

Richardson, L.L.
2025 Bumble Bees of North America Occurrence Records Database. https://www.leifrichardson.org/bbna.html. Accessed March.

The Xerces Society for Invertebrate Conservation (Xerces Society), Defenders of Wildlife, Center for Food Safety
2018 Petition to List the Crotch bumble bee (*Bombus crotchii*), Franklin’s bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as an Endangered Species.

Tremor, S. and D. Stokes
2017 San Diego County Mammal Atlas. San Diego Natural History Museum. San Diego, CA.

U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)
1973 Soil Conservation Service map. Soil Survey of San Diego Area, California. Bowman, R.H. 1973. USDA. Soil Conservation Service, Washington, DC.

U.S. Fish & Wildlife Service (USFWS)
2025 All Species Occurrences Database. Accessed March.

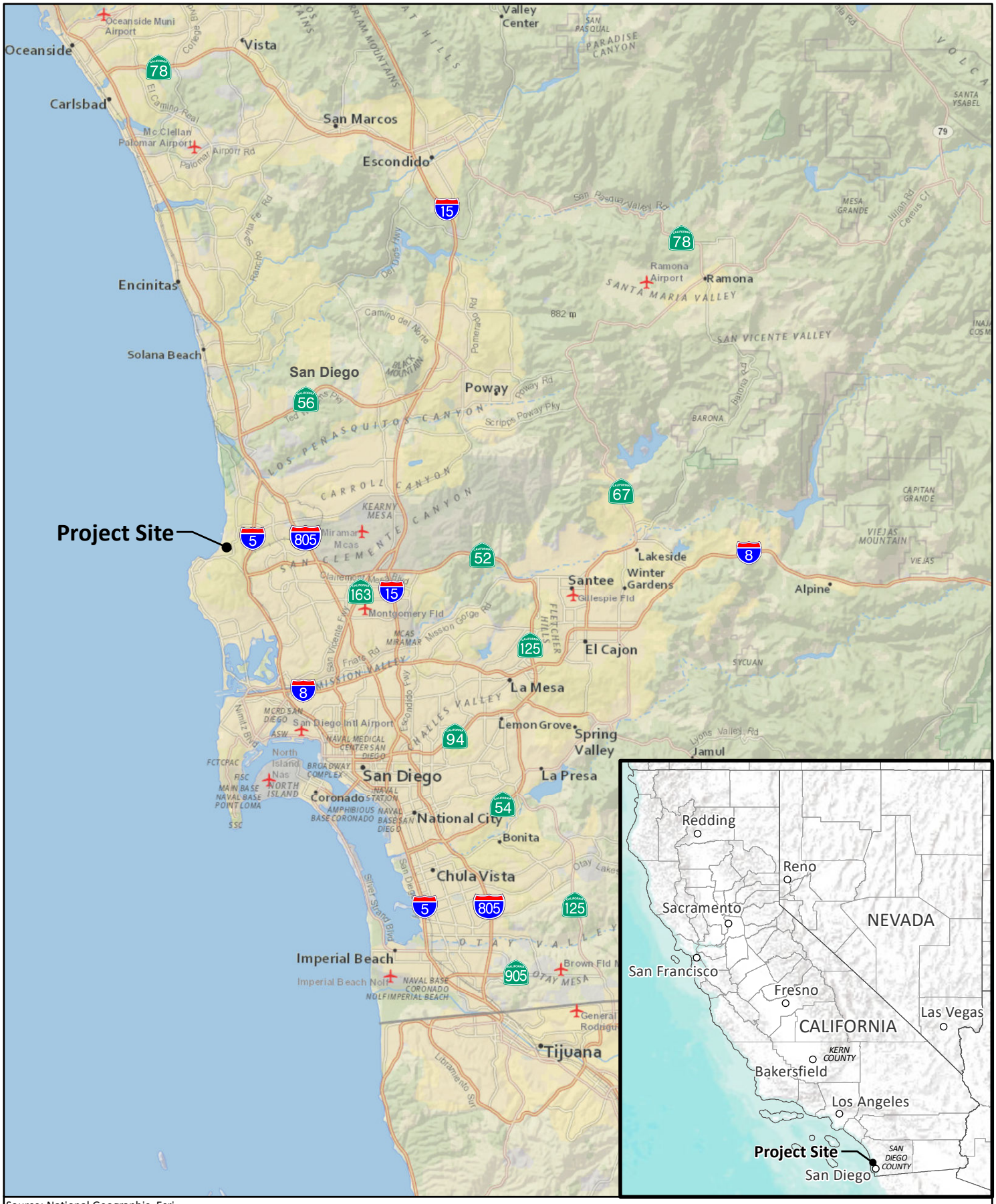
U.S. Geological Survey (USGS)
2025 La Jolla 7.5-minute quadrangle.

Unitt, P.
2004 San Diego County Bird Atlas. San Diego Natural History Museum. San Diego, CA.

University of California
2025 Jepson Flora Project, The Jepson eFlora. Berkeley: The Regents of the University of California. http://ucjeps.berkeley.edu/eflora/. Accessed March.

Williams, P., Thorp, R., Richardson, L., and Colla, S.
2014 Bumble Bees of North America. Princeton University Press. 208pp.

ATTACHMENT 1
Figures



Source: National Geographic, Esri

BUSBY Biological Services

N

0 3 6 Miles

Project Location

CIELO MAR SUBDIVISION PROJECT

Figure 1

Source: USGS 7.5' Quadrangles (La Jolla)

BUSBY Biological Services

N

0 1,000 2,000 Feet

Project Vicinity - USGS

CIELO MAR SUBDIVISION PROJECT

Figure 2

Aerial Photo: USDA NAIP 2022

BUSBY Biological Services

N 0 500 1,000 Feet

Project Vicinity - Aerial

CIELO MAR SUBDIVISION PROJECT

Figure 3

Aerial Photo: USDA NAIP 2022

BUSBY Biological Services

N

0 500 1,000 Feet

Conserved Lands

CIELO MAR SUBDIVISION PROJECT

Figure 4

Aerial Photo: Nearmap 2024

BUSBY Biological Services

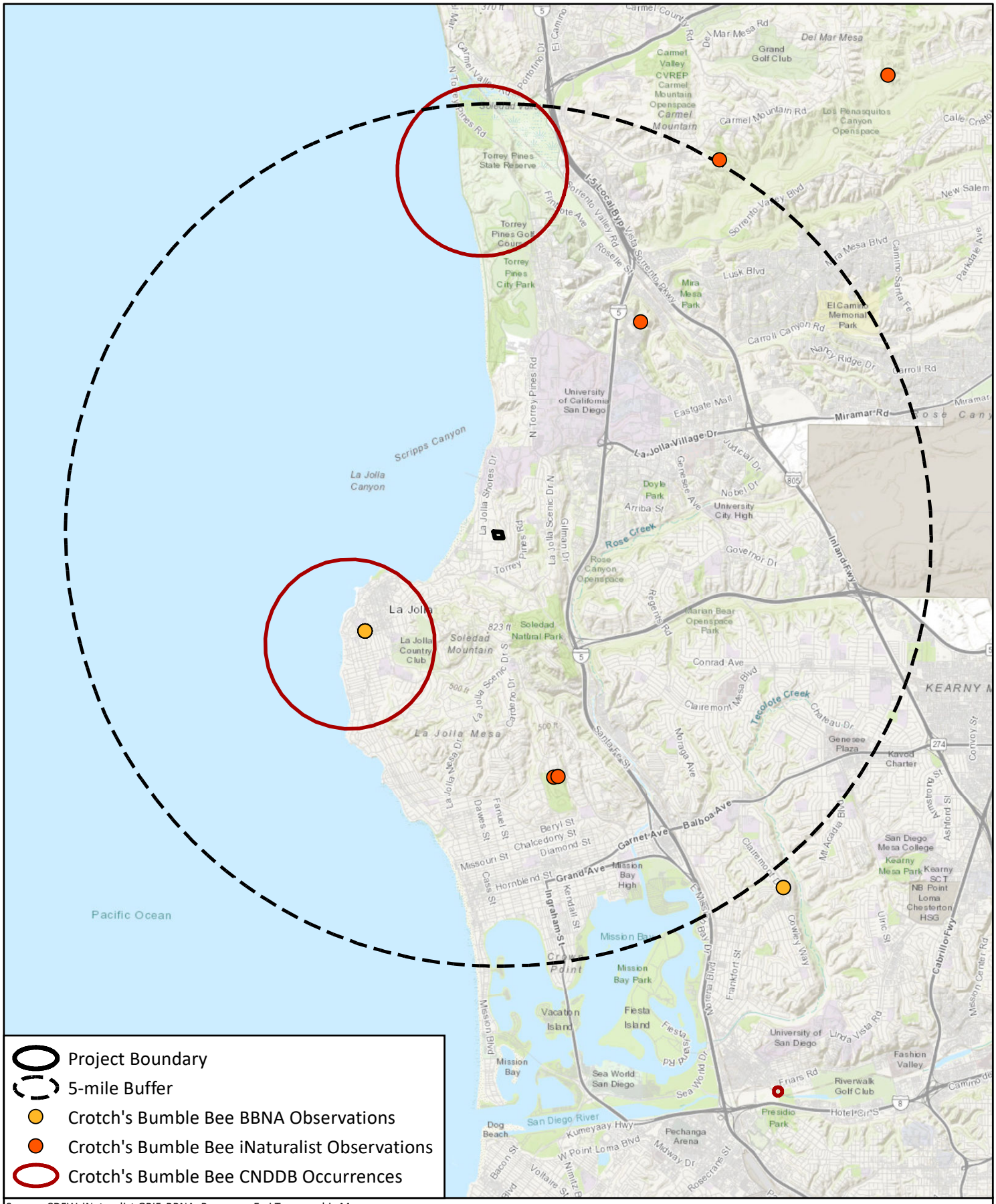
N

0 50 100 Feet

Existing Conditions

CIELO MAR SUBDIVISION PROJECT

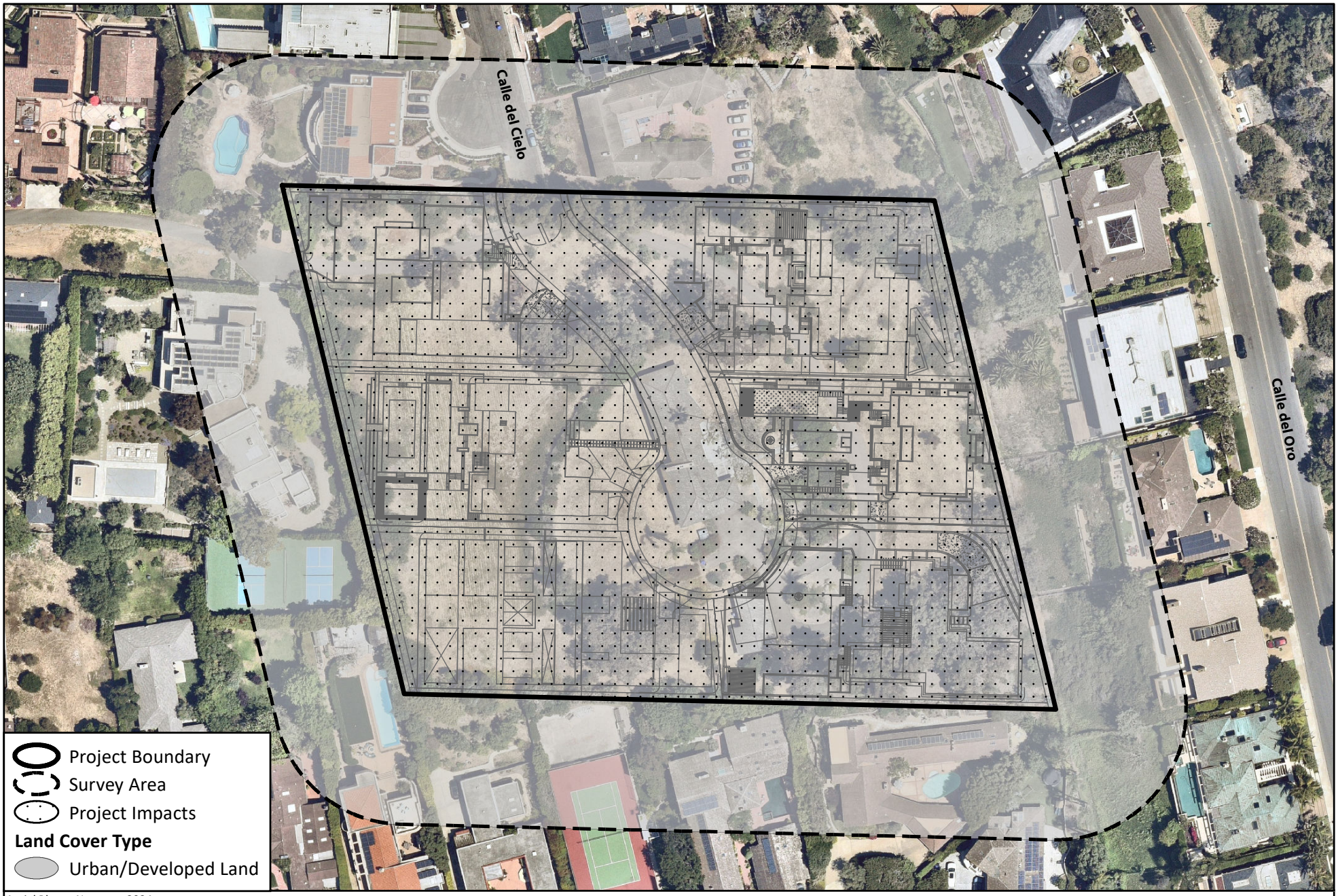
Figure 5



CBB Historical Database Records

CIELO MAR SUBDIVISION PROJECT

Figure 6



Aerial Photo: Nearmap 2024

BUSBY Biological Services

N

0 50 100 Feet

Impacts

CIELO MAR SUBDIVISION PROJECT

Figure 7

Aerial Photo: Nearmap 2024

BUSBY Biological Services

N

0 50 100 Feet

CBB Survey Area

CIELO MAR SUBDIVISION PROJECT

Figure 8

ATTACHMENT 2
Representative Project Site Photographs

Attachment 2. Representative Project Site Photographs

	Photograph 1. View of residence and associated landscape/hardscape in central portion of project site (Facing southwest; February 14, 2025).
	Photograph 2. View of residence and associated landscape/hardscape in central portion of project site (Facing north; February 14, 2025).
	Photograph 3. View of residence and associated landscape/hardscape in central and northeastern portions of project site (Facing southwest; February 14, 2025).

	Photograph 4. View of landscape/hardscape in northeastern portion of project site (Facing southeast. February 14, 2025).
	Photograph 5. View of landscape/hardscape in northwestern portion of project site (Facing east; February 14, 2025).
	Photograph 6. View of landscape in southwestern portion of project site (Facing north; February 14, 2025).

ATTACHMENT 3
Plant Species Observed

Attachment 3. Plant Species Observed

Family	Scientific Name	Common Name	Land Cover Type
Aizoaceae	*Carpobrotus edulis**	freeway iceplant	U/DL
Anacardiaceae	*Rhus integrifolia*	lemonade berry	U/DL
Anacardiaceae	*Schinus terebinthifolius**	Brazilian pepper tree	U/DL
Apocynaceae	*Nerium oleander**	oleander	U/DL
Araliaceae	*Hedera canariensis**	Algerian ivy	U/DL
Arecaceae	*Phoenix canariensis**	Canary Island date palm	U/DL
Arecaceae	*Syagrus romanzoffiana**	queen palm	U/DL
Arecaceae	*Washingtonia robusta**	Mexican fan palm	U/DL
Asparagaceae	*Asparagus* sp.*	asparagus	U/DL
Asteraceae	*Arctotheca calendula*#*	capeweed	U/DL
Asteraceae	*Artemisia californica*	California sagebrush	U/DL
Asteraceae	*Cynara cardunculus**	artichoke thistle	U/DL
Asteraceae	*Dimorphotheca fruticose*#*	African daisy	U/DL
Asteraceae	*Encelia californica*	California encelia	U/DL
Asteraceae	*Euryops chrysanthemoides*#*	African bush-daisy	U/DL
Asteraceae	*Glebionis coronaria*#*	garland daisy	U/DL
Asteraceae	*Hedypnois rhagadioloides*#*	Crete hedypnois	U/DL
Asteraceae	*Hypochaeris glabra**	smooth cats-ear	U/DL
Asteraceae	*Stephanomeria diegensis*	San Diego wreath-plant	U/DL
Aizoaceae	*Malephora lutea*#*	yellow ice plant	U/DL
Boraginaceae	*Amsinckia menziesii#*	common fiddleneck	U/DL
Boraginaceae	*Echium candicans**	pride-of-Madeira	U/DL
Asteraceae	*Encelia californica#*	California encelia	U/DL
Brassicaceae	*Sisymbrium irio*#*	London rocket	U/DL
Caprifoliaceae	*Lonicera* sp.*	honeysuckle	U/DL
Chenopodiaceae	*Atriplex semibaccata*	Australian saltbush	U/DL
Chenopodiaceae	*Salsola tragus**	Russian thistle	U/DL
Cistaceae	*Cistus* sp.*	ornamental rock rose	U/DL
Convolvulaceae	*Calystegia macrostegia*	morning-glory	U/DL
Crassulaceae	*Crassula ovata**	jade plant	U/DL
Fabaceae	*Acacia longifolia**	golden wattle	U/DL
Fabaceae	*Ceratonia siligua**	carob	U/DL
Fabaceae	*Medicago polymorpha**	burclover	U/DL
Fagaceae	*Quercus ilex**	holly oak	U/DL
Geraniaceae	*Erodium cicutarium**	redstem filaree	U/DL
Geraniaceae	*Pelargonium inquinans*#*	horticultural geranium	U/DL
Iridaceae	*Dietes iridioides*#*	African iris	U/DL

Liliaceae	*Aloe* sp.*	aloe	U/DL
Magnoliaceae	*Magnolia grandiflora**	southern magnolia	U/DL
Malvaceae	*Malva parviflora**	cheeseweed	U/DL
Myrtaceae	*Eucalyptus camaldulensis**	river red gum	U/DL
Myrtaceae	*Melaleuca* sp.*#	paperbark	U/DL
Myrtaceae	*Metrosideros* sp.*#	M*etrosideros*	U/DL
Nyctaginaceae	*Bougainvillea* sp.*	bougainvillea	U/DL
Oleaceae	*Olea europaea**	olive	U/DL
Oxalidaceae	*Oxalis pes-caprae**	Bermuda buttercup	U/DL
Pinaceae	*Pinus* sp.*	pine	U/DL
Pittosporaceae	*Pittosporum undulatum*#*	Victorian box	U/DL
Poaceae	*Avena barbata**	slender oat	U/DL
Poaceae	*Bromus diandrus**	common ripgut grass	U/DL
Poaceae	*Cynodon dactylon**	Bermuda grass	U/DL
Poaceae	*Stipa miliacea**	smilo grass	U/DL
Poaceae	*Stipa pulchra*	purple needlegrass	U/DL
Polygonaceae	*Eriogonum fasciculatum var. fasciculatum*	coastal California buckwheat	U/DL
Portulacaceae	*Portulacaria afra**	elephant bush	U/DL
Rosaceae	*Heteromeles arbutifolia*	toyon	U/DL
Rosaceae	*Pyracantha coccinea**	scarlet firethorn	U/DL
Rutaceae	*Citrus* sp.*	citrus	U/DL
Scrophulariaceae	*Myoporum laetum**	ngaio tree	U/DL
Strelitziaceae	*Strelitzia reginae**	bird of paradise	U/DL
Tropaeolaceae	*Tropaeolum majus*#*	nasturtium	U/DL

* non-native species, U/DL = urban/developed land

ATTACHMENT 4
Wildlife Species Detected

Attachment 4. Wildlife Species Detected

Family	Scientific Name	Common Name	Land Cover Type	Evidence of Occurrence
Birds				
Accipitridae	*Buteo lineatus*	red-shouldered hawk	N/A	FO
Laridae	Gull sp.	gull	N/A	FO
Trochilidae	*Calypte anna*	Anna's hummingbird	U/DL	O, V
Columbidae	*Zenaida macroura*	mourning dove	U/DL	O, V
Corvidae	*Corvus brachyrhynchos*	American crow	U/DL	V
Troglodytidae	*Thryomanes bewickii*	Bewick's wren	U/DL	V
Timaliidae	*Chamaea fasciata*	wrentit	U/DL	V
Fringillidae	*Haemorhous mexicanus*	house finch	U/DL	O, V
Parulidae	*Leiothlypis celata*	orange-crowned warbler	U/DL	O, V
Passerellidae	*Melospiza melodia*	song sparrow	U/DL	O, V
	Melozone crissalis	California towhee	U/DL	O, V
Tyrannidae	*Sayornis saya*	Say's phoebe	U/DL	V
Mammals				
Sciuridae	*Otospermophilus beecheyi*	California ground squirrel	U/DL	O, B

N/A = Not Applicable
U/DL = Urban/Developed Land
FO = Flyover
O = Observation
V = Vocalization
B = Burrows

ATTACHMENT 5
Sensitive and Narrow Endemic Plant Species with Potential to Occur

Attachment 5. Sensitive and Narrow Endemic Plant Species with Potential to Occur

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
San Diego thorn mint *Acanthomintha ilicifolia*	FT SE CRPR 1B.1 MSCP NE	Annual herb. Blooms Apr-Jun. Variable soils (clay, clay loam, silt loam, loam, sandy loam, bedrock). Often associated with vernal pools/freshwater wetlands in coastal sage scrub, chaparral, valley grassland, wetland-riparian Elev 35-3,150ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
Shaw's agave *Agave shawii var. shawii*	CRPR 2B.1 MSCP NE	Leaf succulent. Blooms Sep-May. Variable soils (loam, sandy loam, loamy sand). Coastal bluff scrub, coastal sage scrub, maritime succulent scrub. Elev 10-395ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
San Diego ambrosia *Ambrosia pumila*	FE CRPR 1B.1 MSCP NE	Perennial rhizomatous herb. Blooms Apr-Oct. Often in disturbed areas with clay, loam, sandy loam, sand. Chaparral, coastal sage scrub, grassland, vernal pools. Elev 65-1,360ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
aphanisma *Aphanisma blitoides*	CRPR 1B.2 MSCP NE	Annual herb. Blooms Mar-Jun. Coastal bluff scrub, coastal dunes, coastal sage scrub. Elev 0-656 ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
coastal dunes milk-vetch *Astragalus tener* var*. titi*	FE SE CRPR 1B.1 MSCP NE	Annual herb. Blooms Mar-May. Vernally mesic areas. Coastal dunes, coastal bluff scrub, coastal prairie. Elev 5-165ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
wart-stemmed ceanothus *Ceanothus verrucosus*	CRPR 2B.2 MSCP NE	Evergreen shrub. Blooms Jan-Apr. Chaparral. Elev 25-2,165ft.	**Not expected.** Although several historical occur records occur within 1 mile of the project site (CDFW 2025a, County 2025), they are all at least 0.5 mile from the project site, and no suitable habitat is present.
summer-holly *Comarostaphylis diversifolia* ssp. *diversifolia*	CRPR 1B.2	Evergreen shrub. Blooms Apr-Jun. Chaparral. Elev 100-2,690ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
snake cholla *Cylindropuntia californica* var. *californica*	CRPR 1B.1 MSCP NE	Perennial stem succulent. Blooms Apr-May. Sandy loam, loam. Chaparral, coastal sage scrub. Elev 100-490ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
Otay tarplant *Deinandra conjugens*	FT SE CRPR 1B.1 MSCP NE	Annual herb. Blooms May-Jun. Clay, clay loam, silt loam, loam, sandy loam. Coastal sage scrub, valley and foothill grassland. Elev 80-985ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
short-leaved dudleya *Dudleya brevifolia*	SE CRPR 1B.1 MSCP NE	Perennial herb. Blooms Apr-May. Sandstone, openings in maritime chaparral, coastal sage scrub. Elev 95-820ft.	**Not expected.** No suitable habitat is present, and only one historical occurrence record occurs within 1 mile of the project site, about 0.85 mile to the north in Skeleton Canyon just south of the University of California San Diego campus (CDFW 2025a, County 2025).
variegated dudleya *Dudleya variegata*	CRPR 1B.2 MSCP NE	Perennial herb. Blooms Apr-Jun. Clay. Vernal pools, chaparral, cismontane woodland, coastal sage scrub, and valley and foothill grassland. Elev 10-1,905ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
cliff spurge *Euphorbia misera*	CRPR 2B.2	Shrub. Blooms Dec-Aug. Rocky areas in coastal bluff scrub and coastal sage scrub. Elev 0-1,610ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
San Diego barrel cactus *Ferocactus viridescens*	CRPR 2B.1 MSCP	Stem succulent. Blooms May-Jun. Found in sandy or gravelly soils in chaparral, coastal sage scrub, grassland. Elev 25-1,245ft.	**Not expected.** Although several historical occur records occur within 1 mile of the project site (CDFW 2025a, County 2025), they are all at least 0.25 mile from the project site, and no suitable habitat is present.
decumbent goldenbush *Isocoma menziesii* var. *decumbens*	CRPR 1B.2	Shrub. Blooms Apr-Nov. Sandy, often disturbed, areas in coastal sage scrub. Elev 0-1,475ft.	**Not expected.** No suitable habitat is present, and only one historical occurrence record occurs within 1 mile of the project site, about 0.5 mile to the east (CDFW 2025a, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
sea dahlia *Leptosyne maritima*	CRPR 2B.2	Perennial herb. Blooms Mar-May. Sandstone cliffs near the ocean. Elev 15-625ft.	**Not expected.** No suitable habitat is present, and only one historical occurrence record occurs within 1 mile of the project site, about 0.5 mile to the east (CDFW 2025a, County 2025).
spreading navarretia *Navarretia fossalis*	FT CRPR 1B.1 MSCP NE	Annual herb. Blooms Apr-Jun. Clay loam, loam. Chenopod scrub, shallow freshwater marsh, playas, vernal pools. Elev 100-2,150ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
California Orcutt grass *Orcuttia californica*	FE SE CRPR 1B.1 MSCP NE	Annual herb. Blooms Apr-Aug. Vernal pools. Elev 50-2,165ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
San Diego mesa mint *Pogogyne abramsii*	FE SE CRPR 1B.1 MSCP NE	Annual herb. Blooms Mar-Jul. Loam. Vernal pools. Elev 295-655ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
Otay Mesa mint *Pogogyne nudiuscula*	FE SE CRPR 1B.1 MSCP NE	Annual herb. Blooms May-Jul. Clay loam. Vernal pools. Elev 295-820ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).
Nuttall's scrub oak *Quercus dumosa*	CRPR 1B.1	Evergreen shrub. Blooms Feb-Apr. Sandy or clay loam soils associated with chaparral and coastal sage scrub. Elev 45-6,855ft.	**Not expected.** No suitable habitat is present, and only one historical occurrence record occurs within 1 mile of the project site, about 0.5 mile to the southwest (CDFW 2025a, County 2025).
salt spring checkerbloom *Sidalcea neomexicana*	CRPR 2B.2	Perennial herb. Blooms Mar-Jun. Alkali and marshes associated with coastal sage scrub, creosote bush scrub, chaparral, pine forest, and riparian areas. Elev 30-4,920ft.	**Not expected.** No suitable habitat is present, and no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence

State Status Codes:
SE = State-listed endangered species

Local Status Codes:
MSCP = MSCP-covered species
NE = MSCP Narrow Endemic species

California Native Plant Society Rare Plant Ranking (CRPR):
1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
0.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
0.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat
0.3 = Species not very threatened in California (less than 20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

ATTACHMENT 6
Sensitive Wildlife Species with Potential to Occur

Attachment 6. Sensitive Wildlife Species with Potential to Occur

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
Invertebrates			
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE MSCP	Vernal pools, swales, ditches, road ruts. Adult emerge typically mid-December to early May.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Riverside fairy shrimp *Streptocephalus woottoni*	FE MSCP	Vernal pools, swales, ditches, road ruts that are long-lasting (i.e., several months).	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Thorne's hairstreak *Callophrys thornei*	MSCP	Southern interior cypress forest where larval host plant Tecate cypress (*Cupressus forbesii*) occurs. Adult emergence late February to March and June. Only known from Otay Mountain Tecate cypress stands.	**Not Expected.** No suitable habitat is present, there are no historical occurrence records within 1 mile of the project site, and the project site is outside the known range for this species (CDFW 2025a, USFWS 2025, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
monarch *Danaus plexippus plexippus* pop. 1 (overwintering)	PFT	Along the Pacific Coast, overwintering sites typically lie within 1.5 miles of the coast, at locales with shallow canyons or west to south facing slopes, which maximize winter sun exposure (Xerces Society for Invertebrate Biology [Xerces] 2016). These overwintering sites feature medium to large, moderately dense tree groves (typically eucalyptus, Monterey pines and Monterey cypress) with a diverse, layered understory that provide wind protection, dappled sunlight, high humidity, and moderate temperatures. The understories often have some ground vegetation and detritus, such as branches and shed bark, that provide insultation from cold temperatures and protection from predators if individual butterflies are dislodged from cluster trees during a wind event.	**Not Expected.** No suitable overwintering habitat is present. While the project site supports mature trees, the structure and understory are not extensive enough to support overwintering monarchs. In addition, only one historical occurrence record occurs within 1 mile of the project site, at Pottery Canyon Park about 0.49 mile to the east (CDFW 2025a, USFWS 2025, County 2025).
wandering (=saltmarsh) skipper *Panoquina errans*	MSCP	Found only in coastal salt marshes and coastal bluffs where its seashore saltgrass (*Distichlis spicata*) is found.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
Crotch's bumble bee *Bombus crotchii*	SCE	Found in grasslands, shrublands, chaparral, desert margins, and semi-urban settings where there are abundant floral resources for nectaring throughout spring and summer. Nests formed in thick leaf litter or small cavities in the ground, including abandoned rodent burrows.	**Low.** Not observed during focused surveys conducted for the project in 2025. Project site is dominated by marginally suitable urban/ developed land; however, native and non-native nectar sources that could be used for foraging and ground squirrel burrows that could be used for nesting are present. Several historical occurrence records are known from the project vicinity, with the closest one about 2 miles southwest of the project site (Richardson 2025, iNaturalist 2025, CDFW 2025a, County 2025).
Amphibians			
arroyo toad *Anaxyrus californicus*	FE SSC MSCP	Open streamside sand/gravel flats. Quiet, shallow pools along stream edges are breeding habitat. Nocturnal except during breeding season (March–July).	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
California red-legged frog *Rana draytonii*	FT SSC MSCP	Slow-moving streams, ponds, etc., with dense vegetation cover providing shade over water surface.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
western spadefoot *Spea hammondi*	PT SSC	Breeds in temporal pools and slow-moving sections of streams. Washes, river floodplains, alluvial fans, playas, alkali flats, temporary ponds, vernal pools, mixed woodlands, grasslands, coastal sage scrub, and chaparral.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Reptiles			

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
western pond turtle *Actinemys pallida*	PT SSC MSCP	Breeds on land; mating occurs April-May, and typically hibernates during the winter. Found ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland habitats. While in stream habitat, this species prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	MSCP	Semi-arid brushy areas, including washes, stream sides, rocky hillsides, and coastal chaparral that typically have loose soil and rocks.	**Low.** Only marginal habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
southern California legless lizard *Anniella stebbinsi*	SSC	Found in leaf litter and loose soil on beaches and in coastal scrub, chaparral, and open riparian habitats. Sandy washes and beach dunes are used for burrowing, while logs and leaf litter are used for cover and feeding.	**Not expected.** No suitable habitat is present, and only one historical occurrence record occurs within 1 mile of the project site, about 0.5 mile to the north and along the immediate coast (CDFW 2025a, USFWS 2025, County 2025).
coast horned lizard *Phrynosoma blainvillii*	SSC MSCP	Open chaparral, coastal sage scrub with sandy, loose soil. Partially dependent on harvester ants for forage.	**Not expected.** No suitable habitat is present, and only one historical occurrence record occurs within 1 mile of the project site, on Mount Soledad about almost 1 mile to the south (CDFW 2025a, USFWS 2025, County 2025).
Birds			
Canada goose *Branta canadensis*	MSCP	Large lakes or bodies of fresh water. Localized winter visitor. Rare vagrant in southern California.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
California brown pelican *Pelecanus occidentalis californicus*	(nesting colony & communal roosts) FDL SDL MSCP	Coastal salt water, open ocean; rare vagrant inland.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
reddish egret *Egretta rufescens*	MSCP	Shallow water within mud tidal flats, salt ponds, lagoons, and occasionally within coastal beaches, sparsely-vegetated freshwater marshes, and the shores of lake and reservoirs. Rare, non-breeding visitor.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
white-faced ibis *Plegadis chihi*	(nesting colony) MSCP	Freshwater ponds, irrigated fields, brackish lagoons. Migrant and winter visitor, rare in summer. Very localized breeding.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Cooper's hawk *Accipiter cooperii*	(nesting) MSCP	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas.	**Low.** The project site supports mature trees that could be used for nesting. However, no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025), and the project site is surrounded by residential development.
golden eagle *Aquila chrysaetos*	(nesting & wintering) FP WL BGEPA MSCP	Requires vast foraging areas in grassland, broken chaparral, or sage scrub. Nests in cliffs and boulders. In the county, wintering range does not differ greatly from breeding distribution. Uncommon resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
ferruginous hawk *Buteo regalis*	(wintering) MSCP	Require large foraging areas. Grasslands, agricultural fields. Uncommon winter visitor.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
Swainson's hawk *Buteo swainsoni*	(nesting) ST MSCP	Plains, range, open hills, sparse trees. Rare spring migrant. Local breeding population now extirpated. Rare migrant.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
northern harrier *Circus hudsonius*	(nesting) SSC MSCP	Coastal lowland, marshes, grassland, agricultural fields. Migrant and winter resident, rare summer resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
bald eagle *Haliaeetus leucocephalus*	(nesting & wintering) FP SE BGEPA MSCP	Rivers, lakes. Feeds mainly on fish. Rare winter visitor, rare fall migrant.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
American peregrine falcon *Falco peregrinus anatum*	(nesting) FDL SDL MSCP	Nests on cliff ledges, old raptor or raven nests, and man-made structures. Forages in open coastal areas, mud flats. Rare inland. Rare fall and winter resident, casual in late spring and early summer.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
light-footed Ridgway's rail *Rallus obsoletus levipes*	FE SE FP MSCP	Salt marshes primarily dominated by cordgrass. Rare resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
mountain plover *Charadrius montanus*	(wintering) SSC MSCP	Grasslands, fields, valleys. Localized winter resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
western snowy plover *Charadrius nivosus nivosus*	(nesting) FT SSC MSCP	Sandy beaches, lagoon margins, tidal mud flats. Migrant and winter resident. Localized breeding.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
long-billed curlew *Numenius americanus*	(nesting) MSCP	Tidal mud flats, salt marshes, bays. Breeds in grasslands. Fall and spring migrant, winter resident, rare in summer.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
California least tern *Sternula antillarum browni*	(nesting colony) FE SE FP MSCP	Bays, estuaries, lagoons, shoreline. Localized resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
elegant tern *Thalasseus elegans*	(nesting colony) MSCP	Mud flats, sandbars, dunes, bays, lagoons. Summer resident. Localized breeding. Breeds at the salt works in southern San Diego Bay.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
burrowing owl *Athene cunicularia*	(burrow sites & some wintering sites) SCE MSCP	Grassland, agricultural land, coastal dunes. Declining resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
southwestern willow flycatcher *Empidonax traillii extimus*	(nesting) FE SE MSCP	Nests in extensive willow-dominated riparian foists and woodlands. Occasionally oak woodlands. Rare spring and fall migrant, rare summer resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
least Bell's vireo *Vireo bellii pusillus*	(nesting) FE SE MSCP	Willow-dominated successional woodland or scrub, Baccharis scrub, mixed oak/willow woodland, and elderberry scrub in riparian habitat. Nests and forages in vegetation along streams and rivers that measures approximately 3 to 6 feet in height and has a dense, stratified canopy. Increasingly common migrant.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	SSC MSCP	Maritime succulent scrub, coastal sage scrub with Opuntia thickets. Rare localized resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
coastal California gnatcatcher *Polioptila californica californica*	FT SSC MSCP	Coastal sage scrub, maritime succulent scrub.	**Not expected.** Although several historical occur records occur within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025), no suitable habitat is present.
western bluebird *Sialia mexicana*	MSCP	Open woodlands, parks, farmlands, orchards.	**Low.** The project site supports ornamental landscaping that could be used by this species. However, no historical occurrence records occur within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025), and the project site is surrounded by residential development.
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	MSCP	Coastal sage scrub, chaparral, grassland, usually with little disturbance. Resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	SE MSCP	Salt marshes, lagoons dominated by *Salicornia*. Resident.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
large-billed savannah sparrow *Passerculus sandwichensis rostratus*	(wintering) SSC MSCP	Winters in coastal areas and marshes where it is seldom seen far from the intermediate shoreline. Very rare in San Diego County, typically south of Mission Bay.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
tricolored blackbird *Agelaius tricolor*	(nesting colony) ST MSCP	Freshwater marshes agricultural areas, lakeshores, parks. Localized resident. Breeding colonies well documented, inland San Diego County.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
Mammals			

Species Name	Status	Habitat Preferences/ Requirements	Potential for Occurrence
Mexican free-tailed bat *Tadarida brasiliensis mexicana*	SSC	Found in a wide range of habitats, including caves, abandoned mines, bridges, culverts, and even bat houses. Bat colonies tend to be large, reaching hundreds of thousands, even millions of bats.	**Not Expected.** No suitable habitat is present, and only one historical occurrence record from 1945 occurs within 1 mile of the project site, about 0.57 mile to the north (CDFW 2025a, USFWS 2025, County 2025).
dusky-footed woodrat *Neotoma macrotis*	SSC	Prefer habitats with dense vegetation (e.g., chaparral, oak woodlands, riparian areas) where they build large stick nests and forage for leaves, buds, stems, fruits, seeds, acorns, and nuts.	**Not Expected.** No suitable habitat is present, and only one historical occurrence record from occurs within 1 mile of the project site, about 0.85 mile to the southeast in Soledad National Park (CDFW 2025a, USFWS 2025, County 2025).
American badger *Taxidea taxus*	SSC MSCP	Grasslands, savannas, meadows, sparse scrublands.	**Not Expected.** No suitable habitat is present, and only one historical occurrence record from occurs within 1 mile of the project site with the general location of "north from Soledad Mtn to south of UC San Diego" (CDFW 2025a, USFWS 2025, County 2025).
mountain lion *Puma concolor*	MSCP	Typically, in remote, hilly or mountainous areas with forests, grasslands, and shrublands, but they can occasionally be found in the urban/wild land interface if both prey and cover are available.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).
southern mule deer *Odocoileus hemionus*	MSCP	Widespread throughout undeveloped portions of San Diego County in areas with woodlands, shrublands, meadows, grasslands, and riparian areas. Prefers areas where meadows and woodlands mix, where they can find both food and cover.	**Not Expected.** No suitable habitat is present, and there are no historical occurrence records within 1 mile of the project site (CDFW 2025a, USFWS 2025, County 2025).

Federal Status Codes:
FT = Federally Threatened
PFT = Proposed for listing as Federally Threatened
FDL = Federally Delisted
BGEPA = Bald and Golden Eagle Protection Act

State Status Codes:
SCE = Candidate for listing as State Endangered

SSC = Species of Special Concern
SDL = State Delisted

Local Status Codes:
MSCP = MSCP-covered species

ATTACHMENT 7
Crotch's Bumble Bee Survey Summary Report

BUSBY
Biological Services

May 29, 2025

Mr. Scott Sinnett
C/O Mr. Andy Fotsch
Cielo Mar La Jolla, LLC
7514 Girard Avenue, Suite 1315
La Jolla, California 92037

RE: 2025 Foraging Crotch's Bumble Bee Survey Summary Report for the Proposed Cielo Mar Residential Subdivision Project, Community of La Jolla, City of San Diego, California

Mr. Sinnett and Mr. Fotsch:

This letter report summarizes the 2025 focused survey for foraging Crotch's bumble bee (*Bombus crotchii*) conducted by Busby Biological Services, Inc. (BBS) on behalf of Cielo Mar La Jolla, LLC for the proposed Cielo Mar Residential Subdivision project (project) in the community of La Jolla, City of San Diego, California (Attachment 1: Figures 1 through 3).

The survey for foraging Crotch's bumble bee was conducted to supplement the Biological Letter Survey Report prepared by BBS (BBS 2025) and to determine the presence/absence of the species within the project site to be able to analyze potential project impacts to the species. The following report provides a brief description of the project and its location; information about Crotch's bumble bee; the methods used for the historical species occurrence database search, habitat assessment, and focused survey; and the results of the historical species occurrence database search, habitat assessment, and focused survey for the species.

PROJECT LOCATION & SITE DESCRIPTION

The project site lies within the community of La Jolla, which is located in the La Jolla Community Planning Area of the City (Attachment 1: Figures 1 through 3). It is situated on the U.S. Geological Survey (USGS) La Jolla 7.5-minute quadrangle (USGS 2025; Attachment 1: Figure 2) in Township 15S, Range 4W, and Section 24. It lies at 8303 La Jolla Shores Drive, approximately 0.38 mile east of La Jolla Shores Beach and the Pacific Ocean, 0.27 mile north of the La Jolla Parkway and Torrey Pines Road interchange, and 1.14 miles west of Interstate 5 (Attachment 1: Figures 2 and 3).

The project site is situated on an approximately 4.45-acre (194,016-square-foot) property that consists of three parcels - Assessor's Parcel Numbers (APNs) 346-250-08-00, 346-250-09-00, and 346-250-10-00. The project site is on a gentle, west-facing slope with elevations ranging from 68 feet above mean sea level (amsl) along the western boundary of the property to 144 feet along the eastern boundary of the property. It is located south of the current terminus of Calle Del Cielo, and it is bounded immediately to the northwest by Calle Frescota and to the north, east, south, and west by existing residential development (Attachment 1: Figures 3 and 4).

The project site is located within the Coastal Zone, but it is not located in or adjacent to any open space or conserved lands. The closest conserved land is the La Jolla Open Space located east of Torrey Pines Road, approximately 0.25-mile northeast of the project site (Attachment 1: Figure 3). The closest Multi-Habitat Planning Area, which is the City's habitat preserve, is the Pottery Canyon Natural Open Space Park also located east of Torrey Pines Road, approximately 0.85 mile southeast of the project site (Attachment 1: Figure 3).

The project site is currently comprised of a single-family residence, existing Accessory Dwelling Unit (ADU), and associated landscape/hardscape (Attachment 1: Figure 3). The proposed project would include (1) the demolition of the existing single-family residence, existing ADU, and associated landscape/hardscape; (2) the subdivision of the three parcels into six, single-family residential lots that range from approximately 0.48 acre (20,737 square feet) to 0.77 acre (33,717 square feet); (3) the extension of Calle De Cielo as a private road to serve the new development; and (4) the construction of six, single-family residences – one on each of the abovementioned residential lots – plus a small, Homeowners' Association facility.

CROTCH'S BUMBLE BEE SPECIES INFORMATION

Crotch's bumble bee is a candidate for state-listing as an endangered species, which means the California Department of Fish and Wildlife (CDFW) is evaluating its current range, distribution, population, and other factors to determine if it meets the criteria to be listed as endangered. When a species is a candidate for state-listing it is temporarily afforded the same protections as a species that is already listed as threatened or endangered under the California Endangered Species Act (CESA).

Crotch's bumble bee primarily occurs in cismontane southern and central California, with a small number of records in northern California and southwestern Nevada (CDFW 2019). This species

utilizes a wide range of disturbed and natural habitats including, but not limited to, exotic and native grasslands, scrub lands, chaparral, desert margins, and semi-urban settings, but it is most frequently found in scrub or open grassland habitats, with occurrences from sea level to at least 5,000 feet amsl. It primarily nests underground in abandoned small rodent burrows but may also nest in tufts of grass, old bird nests, rock piles, or cavities in dead trees in the vicinity of suitable nectaring habitat. This species feeds on the nectar of a variety of flowers, but it seems to prefer flowers with short corolla tubes such as milkweed (*Asclepias* spp.), deerweed (*Acmispon glaber*), pincushion (*Chaenactis* spp.), lupine (*Lupinus* spp.), phacelia (*Phacelia* spp.), sage (*Salvia* spp.), clarkia (*Clarkia* spp.), burclover (*Medicago polymorpha*), California poppy (*Eschscholzia californica*), and buckwheat (*Eriogonum* spp.; Williams et al. 2014).

Crotch's bumble bee colonies are annual, with queens hibernating during winter in soft, disturbed soil or under leaf litter or other debris (Williams et al. 2014). The queen flight period runs from February or March through October, with a peak in April, while the flight period for males and workers runs from late March through September, with a peak in early July (Thorp et al. 1983). The species has declined substantially because of habitat loss and degradation, pesticides, disease, and climate change.

METHODS

This section presents the methods used to conduct the historical species occurrence database search, habitat assessment, and focused survey for foraging Crotch's bumble bees, following the most recent survey guidelines issued by CDFW, titled *Survey Considerations for California*

Endangered Species Act (CESA) Candidate Bumble Bee Species and dated June 6, 2023 (referred to in this document as 'the 2023 survey guidelines').

Historical Species Occurrence Database Search

Prior to conducting the field habitat assessment and focused survey, BBS conducted a review of historical Crotch's bumble bee records following the 2023 survey guidelines (CDFW 2023). Databases reviewed include the California Natural Diversity Database (CNDDB; CDFW 2025), U.S. Fish and Wildlife Service (USFWS) all species occurrences database (USFWS 2025), SanBIOS (County of San Diego 2025), iNaturalist (2025), and the Bumble Bees of North America (BBNA; Richardson 2025). BBS used the data obtained during this background research to inform the habitat assessment and focused survey for the species.

Habitat Assessment

BBS conducted a habitat assessment of the project site on foot to document potential Crotch's bumble bee foraging habitat, following the 2023 survey guidelines (CDFW 2023). During the habitat assessment, BBS mapped vegetation communities, recorded dominant plant species, noted flowering or potentially flowering plants, and mapped and noted all areas that could be used by Crotch's bumble bee for foraging, nesting, and overwintering. Areas assessed and included as part of the focused survey were considered potentially suitable for Crotch's bumble bee because they contained native or non-native vegetation with sufficient nectar and pollen sources. Areas assessed and excluded from the focused survey were considered unsuitable for Crotch's bumble bee because they lacked nectar or pollen sources; contained developed, landscaped, hardscaped, and heavily maintained areas; and/or contained vegetation that was too dense to be surveyed without damaging the habitat or impacting other wildlife (e.g., nesting birds).

Focused Survey

The focused survey for foraging Crotch's bumble bee was conducted by a BBS qualified biologist following the 2023 survey guidelines. CDFW considers a qualified biologist to be someone with extensive flying invertebrate experience coupled with species-specific training or experience, such as coursework, bumble bee-specific workshops, and prior Crotch's bumble bee focused survey experience (CDFW 2023).

Prior to the start of the first survey, BBS provided a foraging Crotch's bumble bee survey plan and survey notification to CDFW. A BBS qualified biologist conducted a focused survey for foraging Crotch's bumble bee within suitable habitat that was identified during the habitat assessment. The 2023 survey guidelines require at least three survey passes to be completed during the peak blooming period of potential nectar and pollen sources and during the Colony Active Period, between April 1 and August 31, which is the most active flight period for Crotch's bumble bee (Thorp et al. 1983; Xerces Society et al. 2018).

Specific survey timing is determined on a project-by-project basis based on seasonality and when activity or foraging will most likely occur each year. Thus, the survey timing varies depending on the location, elevation, seasonal rainfall, average ambient air temperatures, and local seasonal weather conditions. The 2023 survey guidelines recommend that survey passes occur 2 to 4 weeks apart, between 1 hour after sunrise and 2 hours before sunset, with a target to survey between 0900 and 1300. Actual survey times are based on weather conditions, but all survey passes should be conducted on sunny days when the temperature was at least 65 degrees Fahrenheit but no hotter than 90 degrees Fahrenheit and when sustained winds are below 8 miles per hour. While the 2023

survey guidelines state that the survey passes may be conducted at a rate of 3 acres per hour, the time required to pursue an observed bumble bee and obtain photographic documentation cannot be included in the survey time.

During each survey pass, a BBS qualified biologist walked meandering transects focusing on areas with suitable Crotch's bumble bee nectar and pollen sources. All flowering plants were noted during each survey pass. Given that nectar and pollen source areas often shift during the blooming season, the biologists focused on the areas with sufficient nectar and pollen sources during each survey pass. Because the focused survey was focused on detecting foraging bumble bees, the biologist did not directly search for nesting (e.g., rodent burrows, cavities, brush piles, rock piles, fallen logs) or overwintering (e.g., leaf litter, debris piles, and/or soft soils) sites; however, if observed, the biologist noted any known or potential Crotch's bumble bee nesting sites or potentially suitable overwintering habitat.

During each survey pass, the BBS biologist collected the following data:

- start/end weather data and times,
- area surveyed with acreages,
- nectar/pollen source locations,
- a plant species list with an assessment of general abundance/percent cover of nectar/pollen sources attractive to bumble bees, and
- bumble bee and other invertebrate species observed.

The BBS biologist did not capture any bumble bees; instead, the biologist used a non-lethal, photographic voucher method to document all observed foraging bumble bees following one of the recommended methods in the 2023 survey guidelines. To the maximum extent possible, videos of any observed individual Crotch's bumble bee or any other observed bumble bee species were recorded with the use of a smartphone, making sure to capture species-specific identifying characteristics with sufficient quality and detail, and still photographs were taken from these videos to support the species identification.

If Crotch's bumble bee were detected, the BBS biologist would collect the following data:

- a Global Positioning Systems (GPS) point location,
- habitat type,
- list of nearby nectar/pollen source species,
- flowering stage and abundance of nearby nectar source species,
- bumble bee behavior,
- nest site nearby (if observed),
- weather conditions at the time of the observation,
- representative photograph of the habitat, and
- a photograph of the Crotch's bumble bee individual (if possible).

Following each survey pass, the BBS biologist who conducted the survey pass reviewed all videos and saved still photographs of any observed bumble bees to the project folder with the date and time of observation and the species in the file name. If photographs of bumble bees were taken, a separate BBS biologist reviewed the photographs and confirmed the species identification. While BBS biologists are extremely confident in their bumble bee identification skills based on their bumble bee trainings and previous bumble bee observations, if needed, BBS biologists would coordinate with David Faulkner or another entomologist from the San Diego Natural History Museum for verification of the identification of the bumble bees observed.

RESULTS

This section presents the results of the historical species database search, habitat assessment, and focused survey.

Historical Species Occurrence Database Search

BBS conducted a database records search within 5 miles of the project site, prior to the field habitat assessment and focused survey. No historical records of Crotch's bumble bee occurred within or immediately adjacent to the project site; however, the following species records occurred within the 5-mile search area (Attachment 1: Figure 5):

- One 2024 iNaturalist research-grade observation in Carmel Valley, approximately 5 miles northeast of the project site (iNaturalist 2025).
- One 2024 iNaturalist research-grade observation in Sorrento Valley, approximately 3 miles northeast of the project site (iNaturalist 2025).
- Two 2023 iNaturalist research-grade observations in Kate Sessions Memorial Park, approximately 3 miles south of the project site (iNaturalist 2025).
- One 1983 CNDDB observation in the Torrey Pines State Reserve, approximately 3.25 miles north of the project site (CDFW 2025).
- 11 specimens collected between 1901 and 1928 in La Jolla, displayed as one location adjacent to La Jolla Country Club, approximately 1.5 miles southwest of the project site (CDFW 2025; Richardson 2025).

Habitat Assessment

BBS Principal Biologist Darin Busby mapped the land cover types and documented areas of potentially suitable foraging habitat for Crotch's bumble bee during the initial biological reconnaissance survey and habitat assessment for the project site on February 14, 2025 (Table 1; BBS 2025). Photographs of the project site are included in Attachment 2.

The entire project site was mapped as urban/developed land (Attachment 1: Figure 4). In general, urban/developed land is a land cover type that includes areas with manufactured permanent or semi-permanent structures, pavement or hardscape, and/or landscaped areas. Within the project site, the urban/developed land includes the existing single-family residence, existing ADU, surrounding residential development, and the associated landscape/hardscape. The existing landscape within the project site is dominated by non-native, ornamental species, such as freeway iceplant (*Carpobrotus edulis*), Brazilian pepper tree (*Schinus terebinthifolius*), oleander (*Nerium oleander*), golden wattle (*Acacia longifolia*), carob (*Ceratonia siligua*), river red gum (*Eucalyptus camaldulensis*), bougainvillea (*Bougainvillea* sp.), ngaio tree (*Myoporum laetum*), and Bermuda grass (*Cynodon dactylon*); however, the site has not been maintained for several years and supports several native species, such as lemonade berry (*Rhus integrifolia*), toyon (*Heteromeles arbutifolia*), morning-glory (*Calystegia macrostegia*), and purple needlegrass (*Stipa pulchra*).

Approximately 4 acres of urban/developed land within the project site, including all of the landscaped areas, were included in the foraging Crotch's bumble bee survey, because these areas contained sufficient nectar and pollen sources that have not been subject to regular landscape maintenance for several years (Attachment 1: Figure 4). The remaining 0.45 acre of urban/developed land within the project site was excluded from the foraging Crotch's bumble bee survey because these areas contained permanent structures (i.e., single-family residence and ADU), pavement, and/or hardscape that lacked vegetation and nectar/pollen sources (Attachment 1: Figure 4).

Focused Survey

BBS Principal Biologist Melissa Busby provided a foraging Crotch's bumble bee survey plan and survey notification to CDFW Senior Environmental Scientist Heather Schmalbach via email on April 4, 2025. Once the survey plan was approved by CDFW, Mr. Busby conducted a total of three focused survey passes for foraging Crotch's bumble bee in suitable habitat within the project site between April 9 and May 22, 2025 (Table 1). A summary of the survey conditions and results is provided below, and survey notes are provided in Attachment 3.

Table 1. Survey Dates and Conditions

Survey	Date	Surveyor	Time		Weather			Survey Rate (ac/hr)	Plants in Flower (%)
					Temp (°F)	Wind (mph)	Clouds (%)		
Habitat Assessment	2/14/25	D. Busby	Start	0930	58	1-3	90	--	--
			Stop	1100	60	1-3	10		
Survey Pass 1	4/9/25	D. Busby	Start	1300	66	1-3	10	2	15
			Stop	1500	68	1-3	10		
Survey Pass 2	5/8/25	D. Busby	Start	1215	70	1-3	30	2	25
			Stop	1415	73	1-3	20		
Survey Pass 3	5/22/25	D. Busby	Start	1015	67	1-3	10	2	15
			Stop	1215	71	1-3	0		

Mr. Busby meets the required CDFW qualifications to conduct focused surveys for foraging Crotch's bumble bee because he has (1) acquired over 100 hours of experience surveying for foraging Crotch's bumble bee (with positive detections) during the 2023, 2024, and 2025 survey seasons, and (2) completed the Xerces Society/CDFW California Bumble Bee Atlas training and quiz in May 2023 and the San Diego Natural History Museum *Bombus of Southern California* workshop and quiz in March 2024. In addition, Mr. Busby holds a valid USFWS recovery permit for Quino checkerspot butterfly (*Euphydryas editha quino*) and he has acquired hundreds of hours of experience surveying for and detecting Quino checkerspot butterfly and other flying insects for more than 20 years.

No foraging Crotch's bumble bees were observed within the project site during the 2025 focused survey for the species. One species of bumble bee – yellow-faced bumble bee (*Bombus vosnesenskii*) – and five other flying invertebrates – western honeybee (*Apis mellifera*), Harford's sulphur (*Colias harfordii*), white checkered-skipper (*Pyrgus albescens*), an unidentified skipper, and an unidentified moth – were detected during the focused survey. The project site has not been subject to regular landscape maintenance for several years and, therefore, it contains scattered Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beecheyi*) burrows, which provide potential nesting sites for Crotch's bumble bee, and leaf litter beneath the stands of river red gum and other trees that provide potential overwintering habitat for Crotch's bumble bee.

A total of 62 plant species, including 11 (18 percent) native species and 51 (82 percent) non-native species, were observed within the project site during the habitat assessment and focused survey, 32 of which were in flower during all or a portion of the focused survey (Attachment 4). The average cover of plants in flower across the project site during the focused survey was 15 percent during survey pass 1, 25 percent during survey pass 2, and 15 percent during survey pass 3.

SUMMARY

No foraging Crotch's bumble bees were observed within or immediately adjacent to the project site during the 2025 focused survey for the species.

Please do not hesitate to contact me at darin@busbybiological.com or 858.334.9508 if you have any questions.

Sincerely,

Darin Parker
Principal Biologist/Owner
Busby Biological Services, Inc.

Attachments
Attachment 1: Figures
Attachment 2: Project Site Photographs
Attachment 3: Survey Notes
Attachment 4: Plant Species Observed

REFERENCES

Busby Biological Services, Inc. (BBS)
2025 Biological Letter Survey Report for the Proposed Cielo Mar Residential Subdivision located at 8303 La Jolla Shores Drive in the La Jolla Neighborhood of the City of San Diego, California. April 8.

California Department of Fish and Wildlife (CDFW)
2019 Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act. April 4.
2023 Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. June 6.
2025 California Natural Diversity Database (CNDDB). Accessed May.

County of San Diego (County)
2025 SanBIOS GIS Database. Available at: http://www.sangis.org. Accessed May.

iNaturalist
2025 iNaturalist database. https://www.inaturalist.org. Accessed May.

Richardson, L.L.
2025 Bumble Bees of North America Occurrence Records Database. https://www.leifrichardson.org/bbna.html. Accessed May.

Thorp, R. D.S. Horning, Jr., and L.L. Dunning
1983 Bumble Bees and Cuckoo Bumble Bees of California. Bulletin of the California Insect Society Volume 23.

United States Fish and Wildlife Service (USFWS)
2025 All Species Occurrences Database. Accessed May.

Williams, P., Thorp, R., Richardson, L., and Colla, S.
2014 Bumble Bees of North America. Princeton University Press. 208pp.

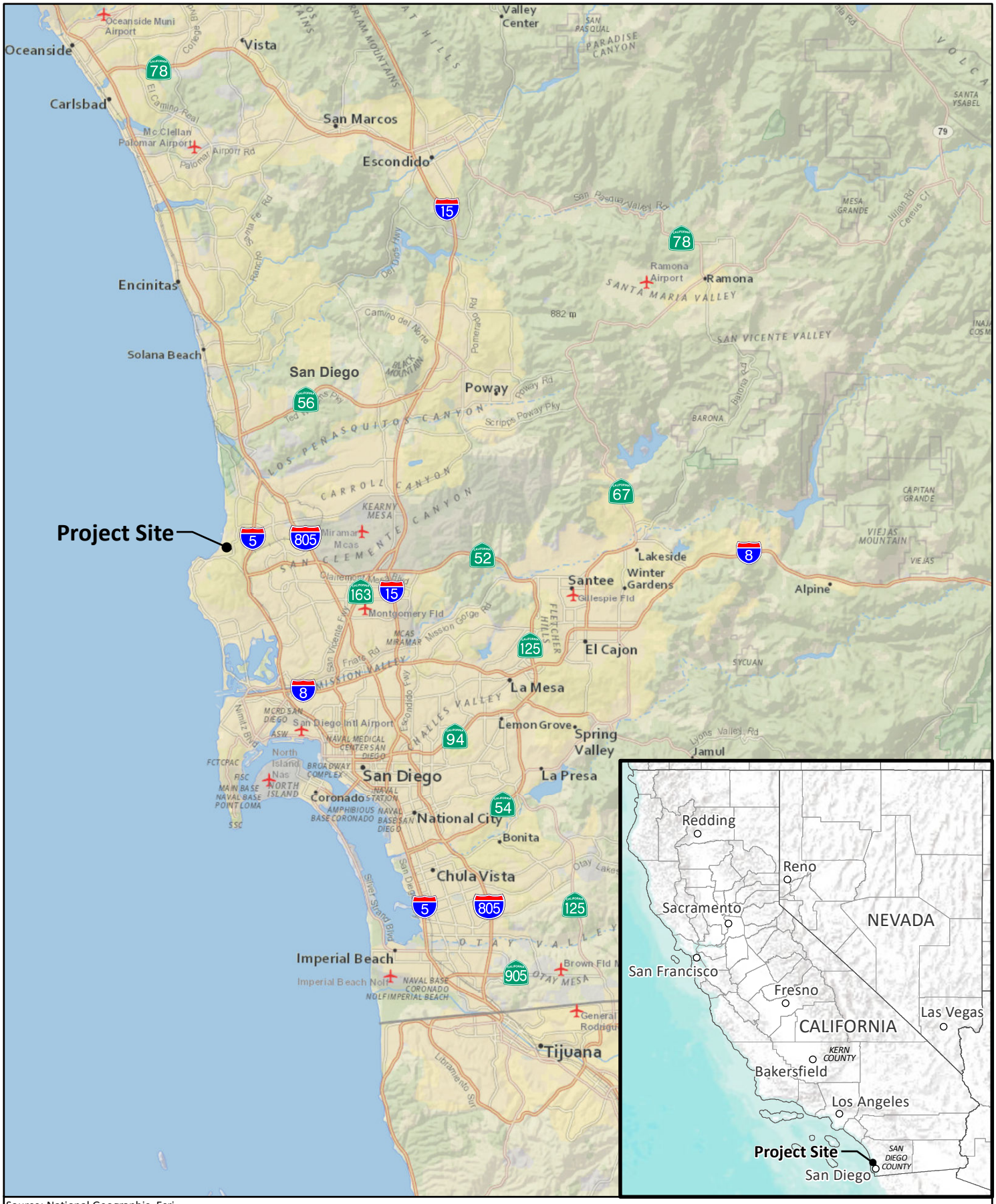
The Xerces Society for Invertebrate Conservation (Xerces Society), Defenders of Wildlife, Center for Food Safety
2018 Petition to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as an Endangered Species.

PROJECT BIOLOGIST SIGNATURE PAGE

The below biologist performing the focused survey for foraging Crotch's bumble bee met the qualifications per the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023). The undersigned biologist certifies this report to be a complete and accurate account of the findings and conclusions of the 2025 survey for the project.

Darin Busby
Principal Biologist/Owner
Busby Biological Services, Inc.

ATTACHMENT 1 – FIGURES



Source: National Geographic, Esri

BUSBY Biological Services

N

0 3 6 Miles

Project Location

CIELO MAR SUBDIVISION PROJECT

Figure 1

Source: USGS 7.5' Quadrangles (La Jolla)

BUSBY Biological Services

N

0 1,000 2,000 Feet

Project Vicinity - USGS

CIELO MAR SUBDIVISION PROJECT

Figure 2

Aerial Photo: USDA NAIP 2022

BUSBY Biological Services

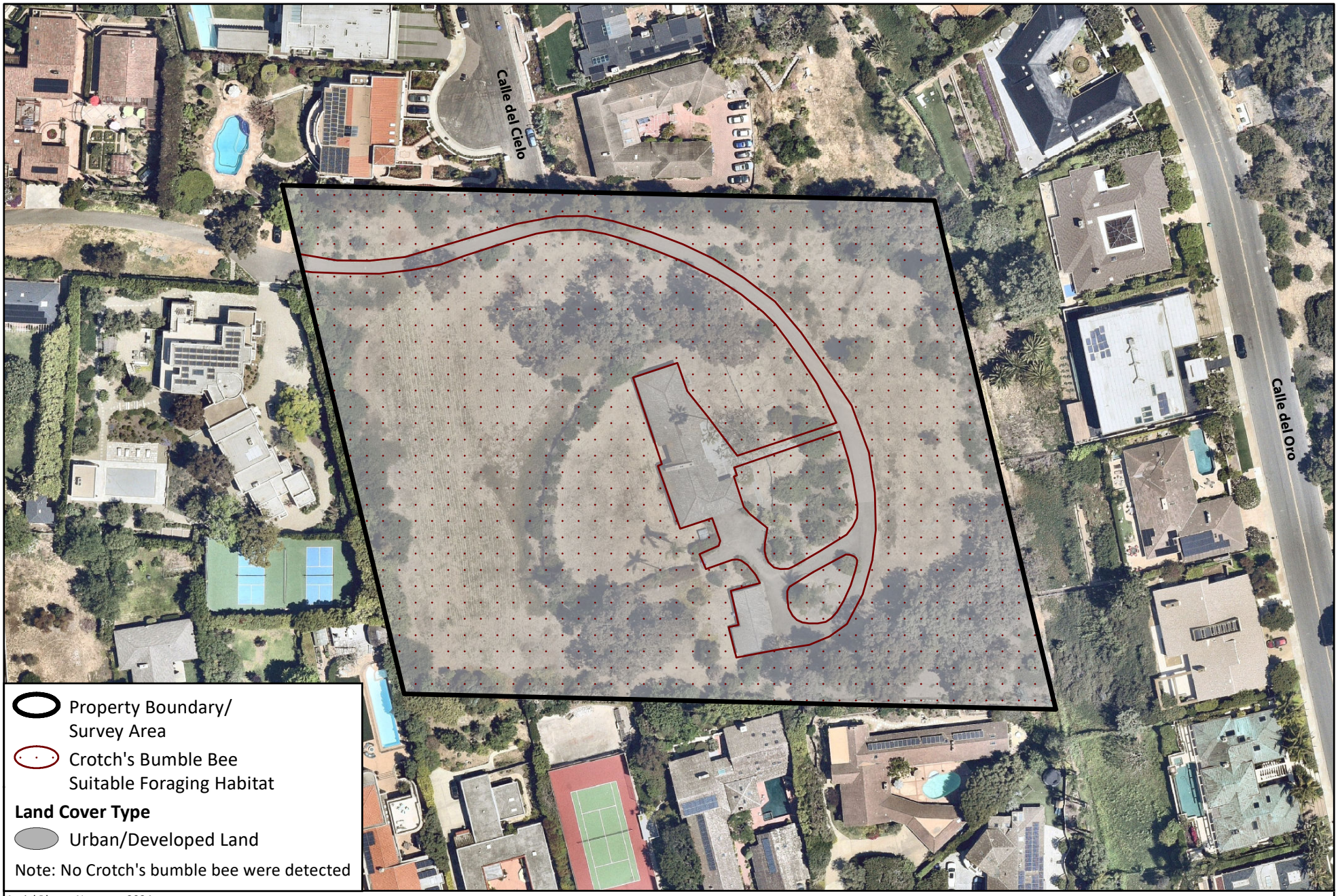
N

0 500 1,000 Feet

Conserved Lands

CIELO MAR SUBDIVISION PROJECT

Figure 3



Aerial Photo: Nearmap 2024

BUSBY Biological Services

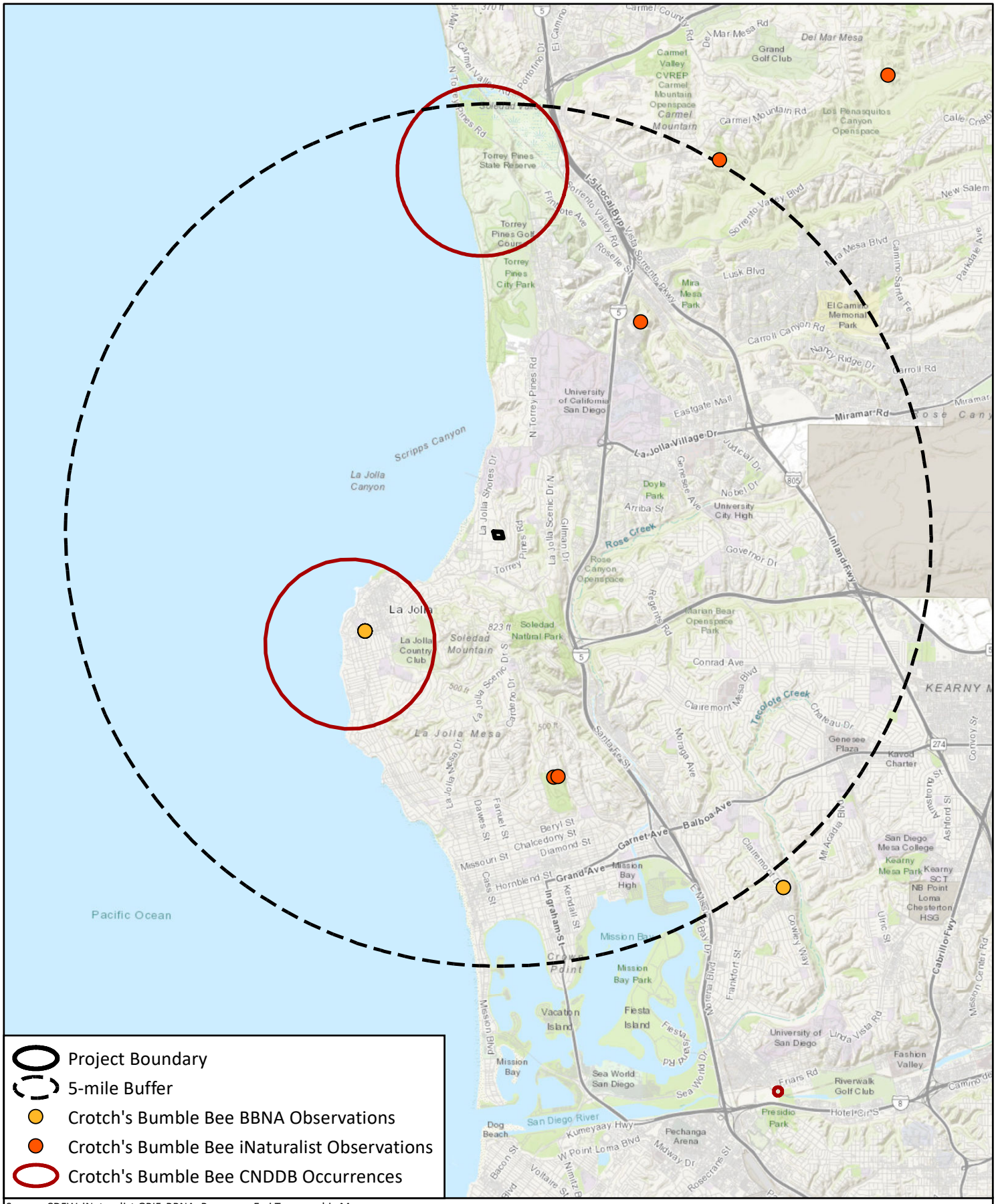
N

0 50 100 Feet

2025 Crotch's Bumble Bee Survey Results

CIELO MAR SUBDIVISION PROJECT

Figure 4



Crotch's Bumble Bee Historical Database Records

CIELO MAR SUBDIVISION PROJECT

Figure 5

BUSBY Biological Services

ATTACHMENT 2 – PROJECT SITE PHOTOGRAPHS

	Photograph 1. View of residence, landscape, and hardscape in central and eastern portions of project site (Facing southwest; April 9, 2025).
	Photograph 2. View of hardscape and landscape with flowering plants in northwestern portion of project site (Facing east; April 9, 2025).

	Photograph 3. View of flowering plants in northeastern portion of project site (Facing west; May 8, 2025).
	Photograph 4. View of one of several yellow-faced bumble bees observed within the project site (May 8, 2025).

ATTACHMENT 3 – SURVEY NOTES

BUSBY
Biological Services

Cielo Mar - CBB Survey 1

Date: 4/9/2025
Start: 1300, 66F, 1-3mph, sunny (10%cc)
End: 1500, 68F, 1-3mph, sunny (10%cc)

Inverts:
Honey bee 50
Skipper sp. 3
Moth sp. 1

Habitat:
Urban/Developed Land dominated by nonnative/ornamental spp. with scattered native spp. throughout

Flowers (15% cover):
Oxalis pes-caprae
Carpobrotus chilensis
Echium candicans
Rhus integrifolia
Malva multiflora
Bougainvillea spectabilis
Amsinckia menziesii
Dimorphotheca fruticosa
Encelia californica
Medicago polymorpha
Acacia longifolia
Calystegia macrostegia
Pelargonium inquinans
Myoporum laetum
Eucalyptus camaldulensis
Malephora lutea
Erodium cicutarium
Pittosporum undulatum
Sisymbrium irio
Euryops chrysanthemoides
Pyracantha sp.
Metrosideros sp.

Notes:
-Ground squirrel/gopher burrows scattered throughout
-Leaf litter primarily along perimeter of site and beneath Eucalyptus
-flowered scattered through site, most spp freshly flowering with some spp about to flower

BUSBY
Biological Services

Cielo Mar - CBB Survey 2

Date: 5/8/2025
Start: 1215, 70F, 1-3mph, sunny (30%cc)
End: 1415, 73F, 1-3mph, sunny (20%cc)

Inverts:
Bombus vosnesenskii 4
Honey bee 300+
Hartford's Sulphur 1
Skipper sp. 2
Moth sp. 3

Habitat:
-Urban/Developed Land dominated by nonnative/ornamental spp. with scattered native spp. throughout
-Flowers scattered throughout site, some in dense patches

Flowers (25% cover):
Oxalis pes-caprae
Carpobrotus chilensis
Echium candicans
Rhus integrifolia
Malva multiflora
Bougainvillea spectabilis
Amsinckia menziesii
Dimorphotheca fruticosa
Encelia californica
Medicago polymorpha
Acacia longifolia
Calystegia macrostegia
Pelargonium inquinans
Myoporum laetum
Eucalyptus camaldulensis
Malephora lutea
Erodium cicutarium
Pittosporum undulatum
Sisymbrium irio
Euryops chrysanthemoides
Pyracantha sp.
Metrosideros sp.
Tropaeolum majus
Melaleuca sp.
Cotoneaster pannosus
Arctotheca calendula
Dietes iridioides
Eriogonum fasciculatum
Hedypnois rhagadioloides
Glebionis coronaria
Encelia californica

Notes:
-Ground squirrel/gopher burrows scattered throughout
-Leaf litter primarily along perimeter of site and beneath Eucalyptus
-flowers scattered through site, most spp freshly flowering, some about to flower, and some spp already senescing

BUSBY
Biological Services

Cielo Mar - CBB Survey 3

Date: 5/22/2025
Start: 1015, 67F, 1-3mph, sunny (10%cc)
End: 1215, 71F, 1-3mph, sunny (0%cc)

Inverts:
Monarch 1
White checkered skipper 2
Bombus vosnesenskii 1
Honey bee 200+
Moth sp. 2

Habitat:
-Urban/Developed Land dominated by nonnative/ornamental spp. with scattered native spp. throughout
-Flowers scattered throughout site, some in dense patches

Flowers (15% cover):

Oxalis pes-caprae	Erodium cicutarium
Carpobrotus chilensis	Pittosporum undulatum
Echium candicans	Sisymbrium irio
Rhus integrifolia	Euryops chrysanthemoides
Malva multiflora	Pyracantha sp.
Bougainvillea spectabilis	Metrosideros sp.
Amsinckia menziesii	Tropaeolum majus
Dimorphotheca fruticosa	Melaleuca sp.
Encelia californica	Cotoneaster pannosus
Medicago polymorpha	Arctotheca prostrata
Acacia longifolia	Dietes iridioides
Calystegia macrostegia	Eriogonum fasciculatum
Pelargonium inquinans	Hedypnois rhagadioloides
Myoporum laetum	Glebionis coronaria
Eucalyptus camaldulensis	Encelia californica
Malephora lutea	Cistus sp.

Notes:
-Ground squirrel/gopher burrows scattered throughout
-Leaf litter primarily along perimeter of site and beneath Eucalyptus
-flowers scattered through site, some spp freshly flowering with some spp already senescing

ATTACHMENT 4 – PLANT SPECIES OBSERVED

Family	Scientific Name	Common Name	Land Cover Type
Aizoaceae	*Carpobrotus edulis**#*	freeway iceplant	U/DL
Anacardiaceae	*Rhus integrifolia#*	lemonade berry	U/DL
Anacardiaceae	*Schinus terebinthifolius**	Brazilian pepper tree	U/DL
Apocynaceae	*Nerium oleander**	oleander	U/DL
Araliaceae	*Hedera canariensis**	Algerian ivy	U/DL
Arecaceae	*Phoenix canariensis**	Canary Island date palm	U/DL
Arecaceae	*Syagrus romanzoffiana**	queen palm	U/DL
Arecaceae	*Washingtonia robusta**	Mexican fan palm	U/DL
Asparagaceae	*Asparagus* sp.*	asparagus	U/DL
Asteraceae	*Arctotheca calendula**#*	capeweed	U/DL
Asteraceae	*Artemisia californica*	California sagebrush	U/DL
Asteraceae	*Cynara cardunculus**	artichoke thistle	U/DL
Asteraceae	*Dimorphotheca fruticose**#*	African daisy	U/DL
Asteraceae	*Encelia californica#*	California encelia	U/DL
Asteraceae	*Euryops chrysanthemoides**#*	African bush-daisy	U/DL
Asteraceae	*Glebionis coronaria**#*	garland daisy	U/DL
Asteraceae	*Hedypnois rhagadioloides**#*	Crete hedypnois	U/DL
Asteraceae	*Hypochaeris glabra**	smooth cats-ear	U/DL
Asteraceae	*Stephanomeria diegensis*	San Diego wreath-plant	U/DL
Aizoaceae	*Malephora lutea**#*	yellow ice plant	U/DL
Boraginaceae	*Amsinckia menziesii#*	common fiddleneck	U/DL
Boraginaceae	*Echium candicans**#*	pride-of-Madeira	U/DL
Asteraceae	*Encelia californica#*	California encelia	U/DL
Brassicaceae	*Sisymbrium irio**#*	London rocket	U/DL
Caprifoliaceae	*Lonicera* sp.*	honeysuckle	U/DL
Chenopodiaceae	*Atriplex semibaccata*	Australian saltbush	U/DL
Chenopodiaceae	*Salsola tragus**	Russian thistle	U/DL
Cistaceae	*Cistus* sp.*#*	ornamental rock rose	U/DL
Convolvulaceae	*Calystegia macrostegia#*	morning-glory	U/DL
Crassulaceae	*Crassula ovata**	jade plant	U/DL
Fabaceae	*Acacia longifolia**#*	golden wattle	U/DL
Fabaceae	*Ceratonia siligua**	carob	U/DL
Fabaceae	*Medicago polymorpha**#*	burclover	U/DL
Fagaceae	*Quercus ilex**	holly oak	U/DL
Geraniaceae	*Erodium cicutarium**#*	redstem filaree	U/DL
Geraniaceae	*Pelargonium inquinans**#*	horticultural geranium	U/DL
Iridaceae	*Dietes iridioides**#*	African iris	U/DL
Liliaceae	*Aloe* sp.*	aloe	U/DL
Magnoliaceae	*Magnolia grandiflora**	southern magnolia	U/DL
Malvaceae	*Malva parviflora**#*	cheeseweed	U/DL

Myrtaceae	*Eucalyptus camaldulensis*#*	river red gum	U/DL
Myrtaceae	*Melaleuca* sp.*#	paperbark	U/DL
Myrtaceae	*Metrosideros* sp.*#	Metrosideros	U/DL
Nyctaginaceae	*Bougainvillea* sp.*#	bougainvillea	U/DL
Oleaceae	*Olea europaea**	olive	U/DL
Oxalidaceae	*Oxalis pes-caprae*#*	Bermuda buttercup	U/DL
Pinaceae	*Pinus* sp.*	pine	U/DL
Pittosporaceae	*Pittosporum undulatum*#*	Victorian box	U/DL
Poaceae	*Avena barbata**	slender oat	U/DL
Poaceae	*Bromus diandrus**	common ripgut grass	U/DL
Poaceae	*Cynodon dactylon**	Bermuda grass	U/DL
Poaceae	*Stipa miliacea**	smilo grass	U/DL
Poaceae	*Stipa pulchra*	purple needlegrass	U/DL
Polygonaceae	*Eriogonum fasciculatum var. fasciculatum#*	coastal California buckwheat	U/DL
Portulacaceae	*Portulacaria afra**	elephant bush	U/DL
Rosaceae	*Cotoneaster franchetii*#*	Cotoneaster	U/DL
Rosaceae	*Heteromeles arbutifolia*	toyon	U/DL
Rosaceae	*Pyracantha coccinea*#*	scarlet firethorn	U/DL
Rutaceae	*Citrus* sp.*	citrus	U/DL
Scrophulariaceae	*Myoporum laetum*#*	ngaio tree	U/DL
Strelitziaceae	*Strelitzia reginae**	bird of paradise	U/DL
Tropaeolaceae	*Tropaeolum majus*#*	nasturtium	U/DL

* = non-native species; # = flowering during focused survey; U/DL = urban/developed land

ATTACHMENT 8
Draft Condition of Approval: Avoidance Measure for Crotch's Bumble Bee

CONDITION OF APPROVAL

Avoidance Measure for Crotch's Bumble Bee
June 25, 2024

TO BE UTILIZED ONLY WHEN ALL THREE PRESENCE/ABSENCE PROTOCOL SURVEYS HAVE BEEN CONDUCTED AND NO OCCURRENCE OF CROTCH'S BUMBLE BEE (LOW POTENTIAL FOR OCCURRENCE)

Draft Crotch's bumble bee (CBB) guidance. CDFW guidance is being provided on a project-by-project basis. CDFW recommended specific edits, given that the protocol-level presence/absence surveys were already conducted within the last year. The edits removed references to those surveys and focused on the next steps to avoid impacts if CBB shows up later during construction.

**** MITIGATION IS REQUIRED WHEN THERE IS A MODERATE/HIGH POTENTIAL FOR OCCURRENCE OR IF CBB IS PRESENT**

CLEAN VERSION:

Biological Resources (Avoidance Measure for Crotch's Bumble Bee)
Should this species no longer be a potential candidate for listing at the time of the preconstruction meeting, then no avoidance measures shall be required.

1. Prior to issuance of any construction permits, including but not limited to, the first Grading Permit, Demolition Plans/Permits and Building Plans/Permits or a Notice to Proceed for Subdivisions (FOR PUBLIC UTILITY PROJECTS: prior to the preconstruction meeting), but prior to the first preconstruction meeting, whichever is applicable, the Assistant Deputy Director (ADD) Environmental Designee shall verify the following project requirements regarding the Crotch's bumble bee are shown on the construction permit (FOR PUBLIC PROJECTS: add to the white book):

2.

a. To avoid impacts on Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If the removal of habitat in the proposed area of disturbance must occur during the

Colony Active Period, a Qualified Biologist shall conduct a pre-activity (defined as any habitat disturbance) survey no more than three days prior to the initiation of construction activities to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

b. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee.

c. The pre-activity survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained.

   If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain the required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable.

d. If pre-activity surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to establish, monitor, and maintain no-work buffers around the associated floral resources. The size and configuration of the no-work buffer shall be based on the best professional judgment of the Qualified Biologist in consultation with CDFW. Construction activities shall not occur within the no-work buffers until the bees appear no longer active (i.e., associated floral resources appear desiccated and no bees are seen flying for three consecutive days indicating dispersal from the area). Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (Fish and Game Code section 86, 2062, 2067, 2068, 2080, 2085; California Code Regulations, Title 14, section 786.9) under CESA.

e. Survey data shall be submitted by the Qualified Biologist to the California Natural Diversity Database (CNDDB) in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

++

SOUL VERSION:

Should this species no longer be a potential candidate for listing at the time of the preconstruction meeting, then no avoidance measures shall be required.

A. To avoid impacts on Crotch's bumble bee, removal of habitat in the proposed area of disturbance must occur outside of the Colony Active Period between April 1 through August 31. If removal of habitat in the proposed area of disturbance must occur during the Colony

Active Period, a Qualified Biologist shall conduct a pre-activity (defined as any habitat disturbance) survey no more than three days prior to the initiation of construction activities to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

B. A Qualified Biologist must demonstrate the following qualifications: at least 40 hours of experience surveying for bee or other co-occurring aerial invertebrate species (such as Quino checkerspot butterfly) and who have completed a Crotch's bumble bee detection/identification training by an expert Crotch's bumble bee entomologist; or the biologist must have at least 20 hours of experience directly observing Crotch's bumble bee.

C. The pre-activity survey shall consist of photographic surveys following California Department of Fish and Wildlife (CDFW) guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023). The surveys shall consist of passive methods unless a Memorandum of Understanding is obtained.

   If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain the required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable.

D. If pre-activity surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to establish, monitor, and maintain no-work buffers around the associated floral resources. The size and configuration of the no-work buffer shall be based on the best professional judgment of the Qualified Biologist in consultation with CDFW. Construction activities shall not occur within the no-work buffers until the bees appear no longer active (i.e., associated floral resources appear desiccated and no bees are seen flying for three consecutive days indicating dispersal from the area). Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (Fish and Game Code section 86, 2062, 2067, 2068, 2080, 2085; California Code Regulations, Title 14, section 786.9) under CESA.

E. Survey data shall be submitted by the Qualified Biologist to the California Natural Diversity Database (CNDDB) in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

ATTACHMENT 9
Draft Mitigation Measure

DRAFT Mitigation Measure

November 15, 2024

THIS MITIGATION IS REQUIRED WHEN CBB IS OBSERVED ONSITE AND AN ITP IS REQUIRED

The "pre-activity" measure is for projects that have already completed the standard CBB survey (3 surveys spaced one week apart during the colony active period) or CBB is observed/ assumed present

This is only draft Crotch's bumble bee (CBB) guidance. CDFW guidance is being provided on a project-by-project basis and CDFW will also identify specific measures during the ITP process.

Direct Impact Avoidance for Crotch's Bumble Bee
Should this species no longer be a state candidate for listing or state listed as threatened or endangered at the time of the preconstruction meeting, then no avoidance measures shall be required.

1. Prior to the issuance of a Notice To Proceed (NTP) for construction permits, such as Demolition, Grading or Building, or beginning any construction-related activity on-site, the Development Services Department (DSD) Environmental Designee (ED) shall review and approve Construction Documents (CD) (plans, specification, details, etc.) to ensure the applicable MMRP requirements are incorporated into the design.

    A. The owner/permittee shall obtain an Incidental Take Permit (ITP) from the California Department of Fish and Wildlife (CDFW) prior to the issuance of Grading Permit, Demolition Plans/Permits and Building Plans/Permits. Take of any endangered, threatened, candidate species that results from the project is prohibited, except as authorized by State law (California Fish and Game Code §§ 86, 2062, 2067, 2068, 2080, 2085; California Code of Regulations, Title 14, §786.9) under the CESA.

    B. To avoid impacts on Crotch's bumble bee, removal of habitat in the proposed area of disturbance should occur outside of the Colony Active Period between April 1 through August 31, as feasible. If the removal of habitat in the proposed area of disturbance must occur during the Colony Active Period, a Qualified Biologist shall conduct a pre-activity survey no more than three days prior to the initiation of construction activities to determine the presence or absence of Crotch's bumble bee within the proposed area of disturbance.

    C. Surveys must be conducted by a Qualified Biologist meeting the qualifications discussed in the CDFW guidance (i.e., Survey Considerations for California Endangered Species Act [CESA] Candidate Bumble Bee Species, dated June 6, 2023).

    D. The pre-activity survey shall consist of photographic surveys following CDFW guidance (i.e., Survey Considerations for CESA Candidate Bumble Bee Species, dated June 6, 2023). In coordination with CDFW, the Qualified Biologist may be required to send all photo vouchers to a CDFW-approved taxonomist to confirm the identifications of the bumble bees encountered during surveys. The surveys shall consist of passive methods unless a

Memorandum of Understanding is obtained from CDFW. If additional activities (e.g., capture or handling) are deemed necessary to identify bumble bees of an unknown species that may be Crotch's bumble bee, then the Qualified Biologist shall obtain the required authorization via a Memorandum of Understanding or Scientific Collecting Permit pursuant to CDFW Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). Survey methods that involve lethal take of species are not acceptable. Survey results will be considered valid until the start of the next colony active period.

E. If pre-activity surveys identify Crotch's bumble bee individuals on-site, the Qualified Biologist shall notify and consult with CDFW to establish, monitor, and maintain no-work buffers around the associated floral resources or nest, as appropriate. The size and configuration of the no-work buffer shall be based on the best professional judgment of the Qualified Biologist in consultation with CDFW. Construction activities shall not occur within the no-work buffers until the bees appear no longer active (i.e., associated floral resources appear desiccated and no bees are seen flying for three consecutive days indicating dispersal from the area).

G. Survey data shall be submitted by the Qualified Biologist to the California Natural Diversity Database (CNDDB) in accordance with the Memorandum of Understanding with CDFW, or Scientific Collecting Permit requirements, as applicable.

THE FOLLOWING CBB HABITAT MITIGATION MAY OVERLAP WITH OTHER HABITAT MITIGATION REQUIREMENTS OF A PROJECT. IN LIEU OF INCLUDING A SEPARATE MEASURE, ELEMENTS OF THE FOLLOWING MAY BE INCORPORATED INTO A STANDARD HABITAT-BASED MITIGATION MEASURE.

Crotch's Bumble Bee Habitat Mitigation

Should this species no longer be a state candidate for listing or state listed as threatened or endangered at the time of the preconstruction meeting, then no Crotch's bumble bee habitat mitigation measure shall be required.

1. Prior to the issuance of a Notice To Proceed for construction permits, such as Demolition, Grading or Building, or beginning any construction-related activity on-site, the Development Services Department (DSD) Environmental Designee (ED) shall review and approve Construction Documents (CD) (plans, specification, details, etc.) to ensure the applicable MMRP requirements are incorporated into the design.
2. The owner/permittee shall mitigate for impacts to Crotch's bumble bee nesting and foraging habitat via XX-acres of creation/restoration/enhancement of Crotch's bumble bee nesting and foraging habitat within and/or adjacent to known occupied habitat, and preservation of XX-acres of Crotch's bumble bee occupied habitat to the satisfaction of the City and CDFW.
3. Any proposed creation/restoration/enhancement mitigation shall require the preparation of a Habitat Mitigation Plan to the satisfaction of the City and CDFW.

Creation/restoration/enhancement shall include a locally native plant palette that focuses on preferred nectar species of Crotch's bumble bee with a diversity of blooms across seasons (three preferred species per season with overlapping bloom periods). No pesticides (e.g., herbicides, insecticides, or rodenticides) shall be used during creation/restoration/enhancement activities or long-term maintenance of the mitigation site.

The creation/restoration/enhancement mitigation area shall be protected and managed/maintained in perpetuity. A long-term management plan shall be prepared by a Qualified biologist to ensure long-term habitat sustainability of any restored/created/enhanced bumble bee habitat. The plan shall include, at a minimum, an implementation strategy; appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; a two-year maintenance, monitoring, and reporting program; an estimated completion time; contingency measures; and identify a long-term funding source.

4. Any creation/restoration/enhancement mitigation area shall be covered by a Covenant of Easement to the benefit of the City or dedicated in-fee title to the City. The project proponent shall provide funding in an amount approved by the City based on a Property Analysis Record (PAR; Center for Natural Lands Management 1998), or similar cost estimation method, to secure the ongoing funding for the perpetual long-term management, maintenance, and monitoring of the creation/restoration/enhancement mitigation area pursuant to the long-term management plan by an agency, nonprofit organization, or other entity approved by the City.

5. Any proposed preservation mitigation area shall be covered by a Covenant of Easement to the benefit of the City or dedicated in-fee title to the City.

ATTACHMENT 10
Summary of Preparers' Qualifications

BUSBY
Biological Services

Melissa A. Busby, Owner/Principal Biologist

PROFESSIONAL SUMMARY

Ms. Busby has 30 years of biological experience, 26 years as an environmental consultant and 4 years as a research ecologist and wildlife educator. She has experience in project management for both small- and large-scale projects that have included general and focused sensitive plant and wildlife species surveys, vegetation mapping, habitat assessments, evaluation of impacts to sensitive species, and preparation of a variety of biological technical reports. Ms. Busby also has experience with wetland delineations, environmental training program development and implementation, construction monitoring, database management, and Quality Assurance/Quality Control (QA/QC) for data collection procedures and technical reports. She has worked on many projects for the City of San Diego and is familiar with the City of San Diego Biology Guidelines, Land Use Adjacency Guidelines, as well as other relevant guidance for biological resources. In addition, Ms. Busby has assisted a variety of clients through consultation with the various resource agencies to obtain the necessary project permits when federal and/or state-listed species may be impacted by a project.

Ms. Busby holds a Federal Endangered Species Act 10(a)(1)(A) permit and/or has been previously approved to survey for, monitor, and/or handle a variety of sensitive wildlife species, including fairy shrimp, Quino checkerspot butterfly, arroyo toad, coastal California gnatcatcher, least Bell's vireo, and nesting birds. In addition, she has worked with many other federally and state-listed plant and wildlife species that have the potential to occur within and adjacent to the City of San Diego. Ms. Busby also has extensive experience in wildlife movement studies and tracking.

PERMITS/CERTIFICATIONS/AUTHORIZATIONS

- USFWS Permit (TE-080779-4) – Approved to survey for coastal California gnatcatcher, Quino checkerspot butterfly, and all California vernal pool branchiopods (fairy shrimp)
- USFWS Approval – Previously approved to survey, handle, and monitor for desert tortoise and to survey, handle, and monitor for arroyo toad
- CDFW Scientific Collecting Permit (#10008) – Approved to survey for insects, herpetofauna, birds, small mammals, and plants
- Certification in Wetland Delineation Techniques, Management, and Advanced Hydric Soils

EDUCATION

B.A., Biological Anthropology, University of California, San Diego

BUSBY
Biological Services

Darin A. Busby, Owner/Principal Biologist

PROFESSIONAL OVERVIEW

Mr. Busby has over 30 years of biological experience in the fields of environmental consulting, wildlife research, and education. His primary areas of expertise include conducting focused surveys, habitat assessments, and monitoring for a variety of sensitive species; evaluating impacts to sensitive biological resources; performing biological compliance monitoring; designing, implementing, and managing field studies for biological surveys; performing wildlife movement studies; and conducting jurisdictional wetland delineations. In addition, Mr. Busby has experience preparing a variety of technical reports; managing project databases; mapping with Global Positioning Systems; and implementing quality control measures for data collection procedures and reports.

Mr. Busby has extensive experience performing pre-construction surveys, biological monitoring, and reporting for a variety of projects for the City of San Diego. Mr. Busby has an excellent working knowledge of the City of San Diego Biology Guidelines, Land Use Adjacency Guidelines, as well as other relevant guidance for biological resources. as well as other applicable local, state, and federal policies, regulations, and guidelines related to biological resources, environmental review, and technical studies throughout the City's jurisdiction. He has worked closely with the City and its contractors not only to provide data and guidance during planning and construction tasks but also to identify opportunities to balance the growth of the built environment with the natural landscape while avoiding and/or minimize impacts to sensitive natural resources. Mr. Busby holds a California Department of Fish and Wildlife Scientific Collecting Permit and Federal Endangered Species Act 10(a)(1)(A) permit that authorizes him to survey for, monitor, and/or handle a variety of sensitive species, including vernal pool brachiopods (fairy shrimp), Quino checkerspot butterfly, desert tortoise, arroyo toad, California black rail, coastal California gnatcatcher, and least Bell's vireo. In addition, he has authorizations, approvals, and experience to survey for a variety of other federally and state-listed plant and wildlife species.

PERMITS/CERTIFICATIONS/AUTHORIZATIONS

- USFWS Permit (ES-115373-5) – Approved to survey for coastal California gnatcatcher, Quino checkerspot butterfly, and vernal pool branchiopods (fairy shrimp)
- USFWS Approval – Previously approved to survey, handle, and monitor for desert tortoise and to survey, handle, and monitor for arroyo toad
- CDFW Scientific Collecting Permit (#006243) – Approved to survey for insects, herpetofauna, birds, small mammals, and plants
- Certification in Wetland Delineation Techniques and Advanced Hydric Soils.

EDUCATION

- B.S., Ecology & Evolution, University of California, Santa Barbara