Laguna Mountain Environmental, Inc.

March 5, 2025

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Biological Letter Report for a Biological Survey Report of the Parcel at 2072 Via Casa Alta, La Jolla, City of San Diego (Project No. 698915)

The following letter report includes the results of a biological survey and habitats identified at an undeveloped parcel at 2072 Via Casa Alta in the La Jolla area of the City of San Diego.

1.0 INTRODUCTION

Project Description

The project involves the construction of a single family home on a vacant parcel at 2072 Via Casa Alta, within an existing residential neighborhood. Design of the residence is proposed to incorporate fire resistance requirements for the elimination of fire buffer requirements and preservation of adjacent habitat. The project site is surrounded by residential development on three sides, but the area to the south is undeveloped. The property lies within the Urban Area of the Multiple Species Conservation Plan (MSCP) and includes a portion of the Multi-Habitat Planning Area (MHPA) Preserve System.

Project Location

The project area consists of a parcel within the community of La Jolla in the City of San Diego (Figure 1). The project area is located near the summit of Soledad Mountain on the northeastern slope. It is west of Interstate 5 and south of Via Capri. The parcel is located on the north side of Via Casa Alta at 2072 Via Casa Alta. The project area includes one parcel (APN 352-570-15-00) that totals 0.77 acres. The project area is in an unsectioned portion of the Pueblo of San Diego Lands within Township 15 South, Range 4 West, as shown on the La Jolla USGS 7.5' Quadrangle (Figure 2).

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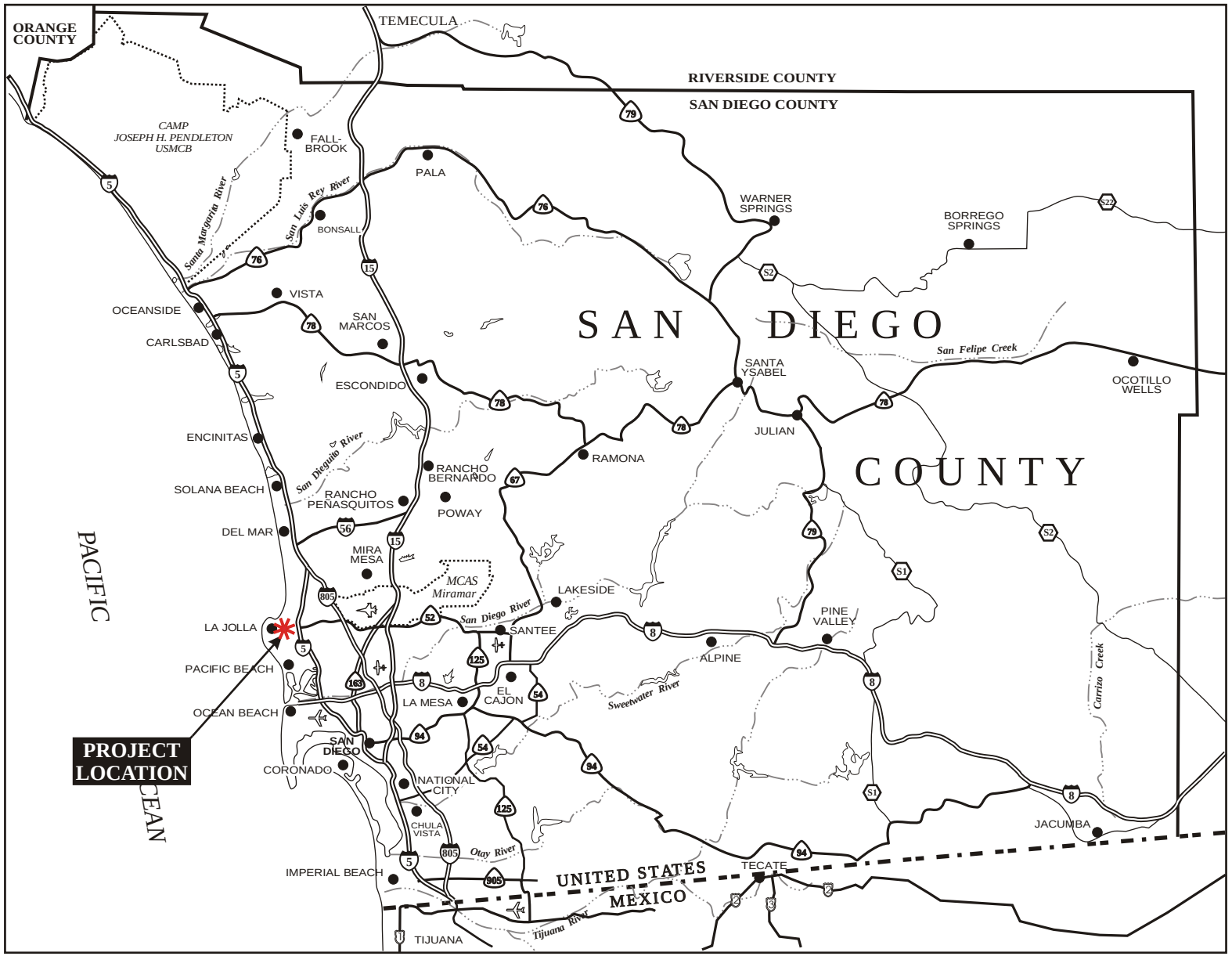

Figure 1
Regional Location Map

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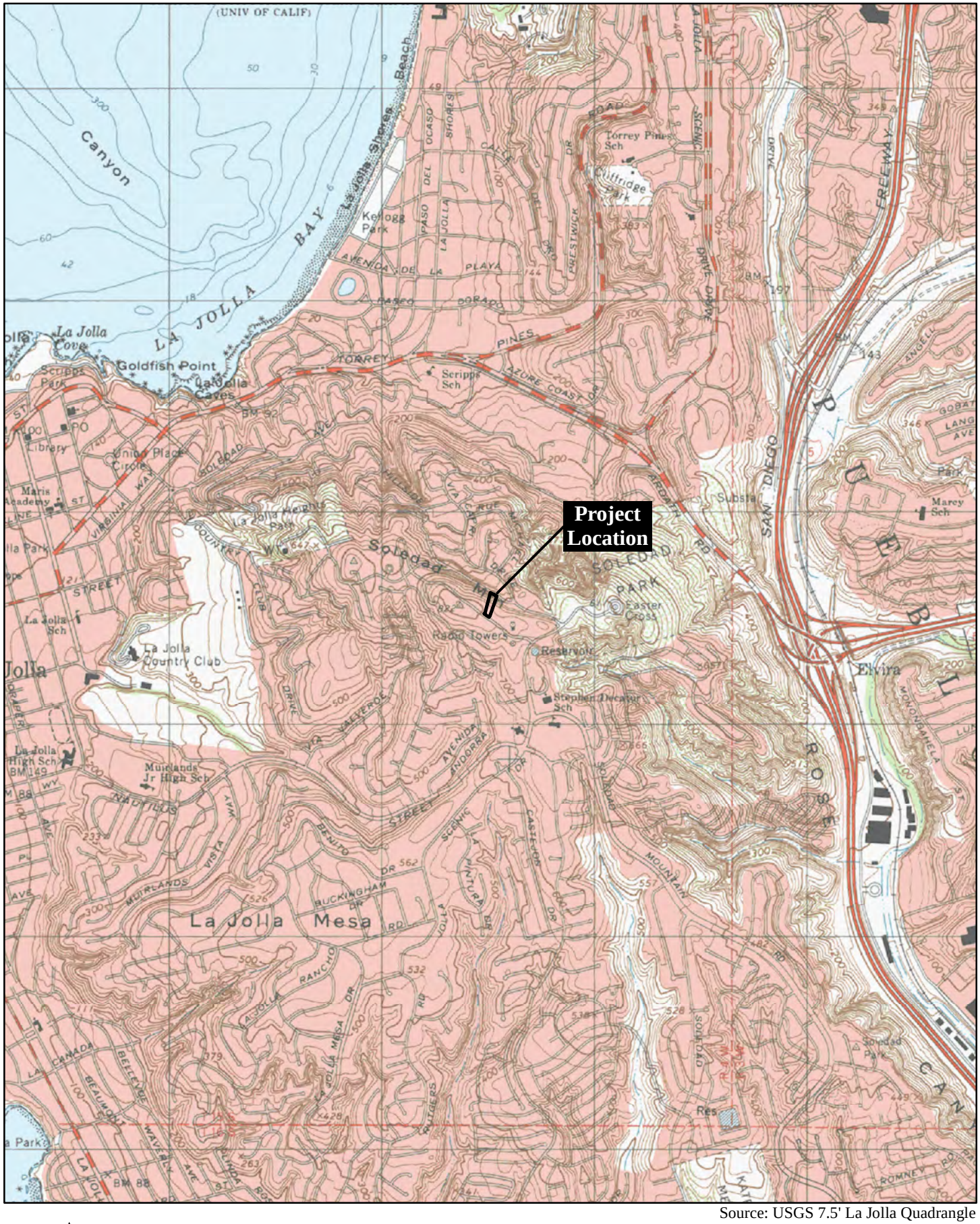

Figure 2
Project Location

0 1,000 2,000 Feet

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The proposed project includes the construction of a new residence on a currently vacant lot (Figure 3). The project includes a pool on the northern edge of the development area. The entire northern slope of the lot will remain undisturbed in open space.

2.0 PHYSICAL CHARACTERISTICS

Topography, Geology, and Soils

The project area is located on the northeastern slope of Soledad Mountain. Elevation within the project area ranges from approximately 710 to 795 feet above mean sea level. The topography of the southern portion of the project parcel has been altered through brush clearing that occurred between 1978 and 1980.

During the Eocene epoch, a series of marine transgressions and regressions along with sediment and rock deposition from major river systems to the east left behind a series of sandstone, shale, and conglomerate formations. These sedimentary rocks were later flattened by marine erosion to form the current coastal plain and mesas in the San Diego region.

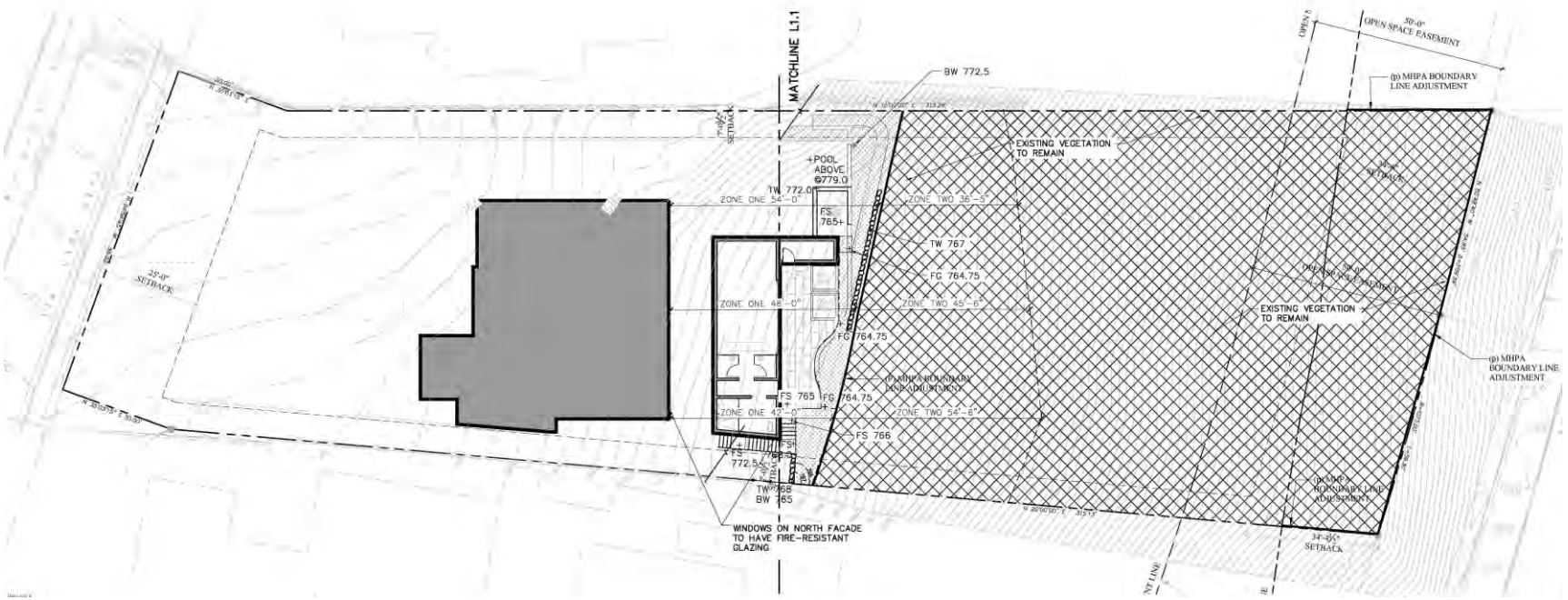
The geology of the project area itself includes Linda Vista Formation on the upper portions of the parcel and Cabrillo Formation on the slope (Kennedy 1975).

The upper portions of the project area are underlain by the nearshore deposits of the Pleistocene-age Linda Vista Formation (Kennedy 1975). These include conglomerate clasts derived from other Eocene-age formations in the area. These nearshore deposits lack the characteristic iron cemented sandstone of the beach deposits. The Cabrillo Formation is a Cretaceous-age marine sandstone and cobble conglomerate located on the steep slopes of the parcel (Kennedy 1975).

Soils within the project area are mapped as Altamont clay (Bowman 1973). The Altamont series consists of well-drained clays that formed in material weathered from calcareous shale. These soils are on uplands. In a representative profile, the surface layer is dark-brown, neutral to moderately alkaline heavy clay loam about 8 inches thick. Below this is soft calcareous shale (Bowman 1973).

3.0 SURVEY METHODOLOGY

The biological survey of the site was conducted by Andrew Pigniolo with a brief visit on June 15 from 3:30 PM to 4:00 PM and a longer visit on July 7, 2021 from 8:00 AM to 10:00 AM. The weather conditions on June 15 were sunny and clear. Wind was 6 to 9 mph and the temperature was approximately 64 degrees Fahrenheit. On July 7 skies were overcast, but bright. Wind was 0 to 3 mph and the temperature was approximately 65 degrees Fahrenheit. A follow-up visit to the site was conducted on November 2, 2021 from 9:00 AM to 11:00 AM. Skies were overcast, but bright. Wind was 0 to 3 mph and the temperature was approximately 60 degrees Fahrenheit. A subsequent visit to the site was conducted on May 22, 2023 from 9:00 AM to 10:00 AM. Skies were overcast, but bright. Wind was 0 to 3 mph and the temperature was approximately 64 degrees Fahrenheit.



Source: ICA Studio, Brush Management Plan (6/30/23)

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Figure 3
Proposed Project Plans

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Andrew Pigniolo has an M.A. degree in Anthropology from San Diego State University, and has more than 28 years of experience in the botany and biology of San Diego and southern California region. Mr. Pigniolo is a qualified biologist for work within the City of San Diego.

Surveys for plant and wildlife resources focused on potential sensitive plant and animal species, but all observed species were noted. Wildlife species were identified directly by sight and vocalization or indirectly by scat, tracks, nests, or burrows. The presence or absence of suitable habitat for sensitive species was also noted. Nomenclature for this report conforms to Rebman and Simpson (2014) for plants, Holland (1986) for plant communities and habitat types, American Ornithological Union (AOU 1982) for birds, Jennings (1983) and Stebbins (1985) for reptiles and amphibians, Jones (1992) for mammals, and Powell (1979) for insects.

4.0 EXISTING CONDITIONS

This section includes a summary of the survey results and existing biological conditions within and adjacent to the project area. It includes information on habitats and vegetation, wildlife, and sensitive biological resources onsite.

Habitats

The site and adjacent area currently supports three habitat types: Coastal Sage Scrub/Chaparral (CSC), Native Grassland (NG), and Non-native Grassland (NNG) (Figure 4). Urban/Developed habitat is adjacent in the buffer area to the east, west, and south. A revisit to the site on November 2, 2021 showed that some of these habitats had been cleared by City-required fire abatement. Most of the shrubs however will recover from cutting and the habitats should be considered unchanged. A complete list of plant species observed within the project area is included as Appendix A.

Coastal Sage Scrub/Chaparral (Holland Code 32500) (Tier II)

While MSCP maps show this area as chaparral, it is better described as dense Coastal Sage Scrub/Chaparral. The area is dominated by a single species (*Rhus integrifolia*) that represents roughly 95 percent of the cover.

Coastal Sage Scrub vegetation is typically dominated by low, soft-woody subshrubs up to 1 m in height. Most species are facultatively drought-deciduous and are most active in early spring. As mentioned above, most of the native vegetation is nearly monotypic Lemonadeberry (*Rhus integrifolia*) which is not drought-deciduous, but is a species associated with the coastal sage scrub community (Figures 5 and 6). Other major species in the project area included Toyon (*Heteromeles arbutifolia*), Johnston's honeysuckle (*Lonicera subspicata* var. *denudata*), Coast Monkey Flower (*Diplacus puniceus*), and Fuchsia-flower gooseberry (*Ribes speciosum*). The Coastal Sage Scrub/Chaparral vegetation qualifies as Tier II habitat.

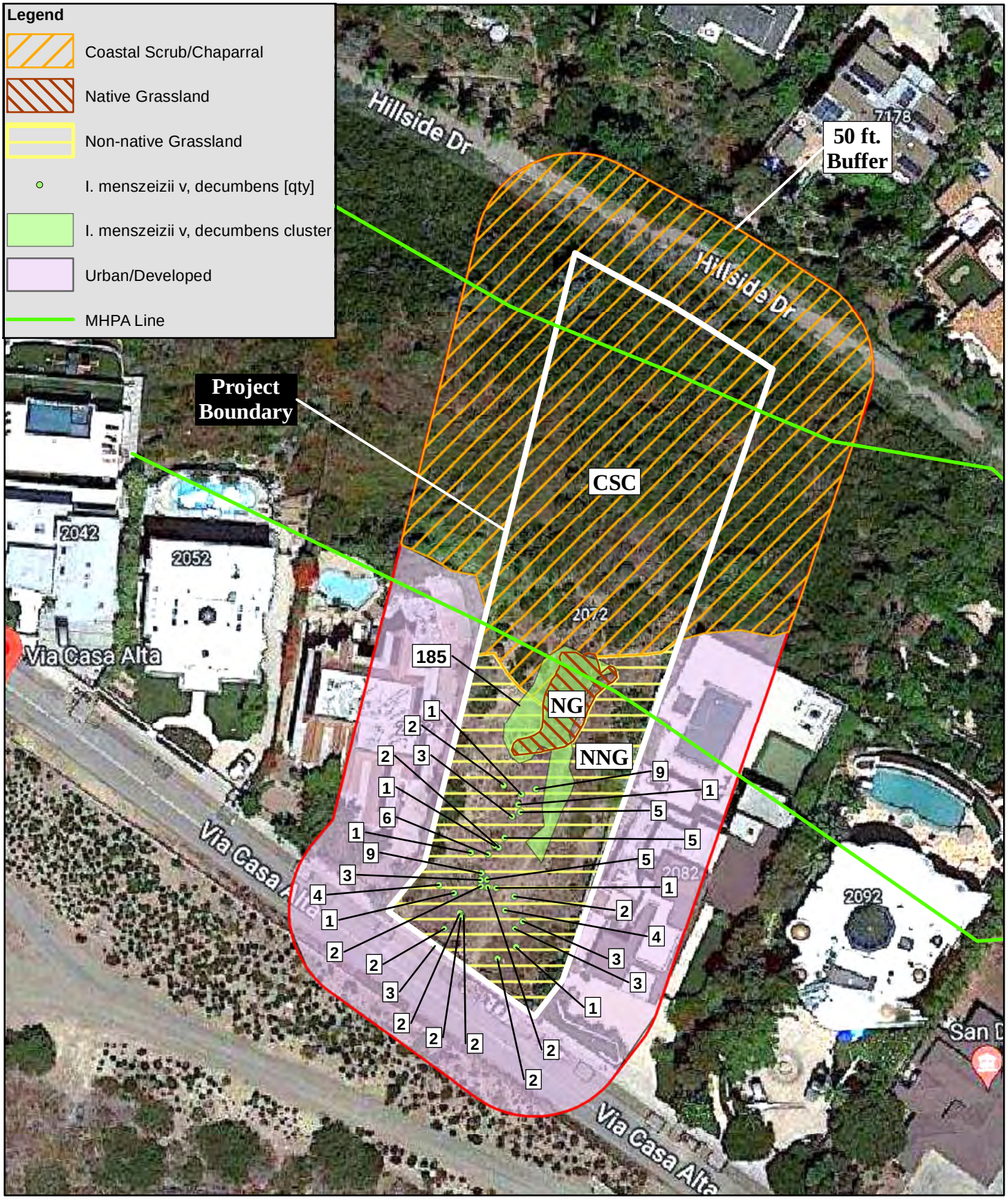

Figure 4
Project Habitats

0 30 60 Feet

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Figure 5. Coastal Sage Scrub/Chaparral Overview, Looking Northwest

Figure 6. Coastal Sage Scrub/Chaparral Overview, Looking Northeast

Native Grassland (NG) (Habitat Code: 42100) (Tier I)

The upper slope portion of the project appears to have been brushed in the past. Ground disturbance appears to have been minimal and portions of the area have recovered in native grassland species (Figure 7).

Native Grassland is dominated by perennial native grasses of the genus *Stipa*. It is often very open, but is considered native grassland if 20 percent of the coverage is native species. Dominant species in the project area included Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), Blue-eyed grass (*Sisyrinchium bellum*), and Nodding needle grass (*Stipa cernua*). The final field visit showed a high density of Common Goldenstar (*Bloomeria crocea* var. *crocea*) and Checker-Bloom (*Sidalcea sparsifolia*) within the native grassland habitat helping to better define it. These five species formed about 75 percent cover within the mapped area (Figure 8).

Figure 7. Native Grassland, Looking East

Figure 8. Native Grassland Close-up

Non-native Grassland (Habitat Code: 42200) (Tier IIIB)

Lots in the project vicinity appear to have been graded and developed sometime between 1978 and 1980 (NETR 1978, 1980). The project parcel was not developed at this time but the upper (southern) portion of the parcel was cleared of brush (NETR 1980). The flat, southernmost portion of the lot seems to have been the most significantly disturbed during clearing. Native vegetation in this area has been replaced by Non-native Grassland habitat.

Non-native Grassland is dominated by a dense to sparse cover of non-native annual grasses that are relatively short in stature. These habitats are often the result of past disturbance. Germination occurs in the spring and these areas are often dry and dead throughout the summer-fall dry season. Within the project area, non-native grassland includes both annual grasses and broad leaf herbs (Figure 9). Dominant plants observed include Ripgut grass (*Bromus diandrus*), Slender wild oat (*Avena barbata*), Purple false brome (*Brachypodium distachyon*), and Bristly ox-tongue (*Helminthotheca echioides*). Non-native Grassland habitat qualifies as disturbed Tier IIIB habitat.

Figure 9. Non-native Grasslands Overview, Looking North

Urban/Developed Habitat (Holland Code 12000) (Tier IV)

Urban/Developed habitat makes up most of the buffer areas to the east, west, and south of the southern portion of the parcel (see Figure 4). These areas consist of landscaped single family residences and roads. This habitat is not present within the project area itself, but only within the buffer zone. Urban/Developed habitat qualifies as disturbed Tier IV habitat.

Wildlife

Wildlife observed or detected during the site visits included 5 insect species, 1 mollusk, 1 reptile, 13 bird species, and 3 mammal species (Appendix B). All of the species are typical of native habitat within an urban area. Insects observed include the Argentine ants (*Linepithema humile*), Western honey bee (*Apis mellifera*), Pill bugs (*Armadillidium vulgare*), Cabbage butterfly (*Pieris rapae*), and the Common earwig (*Forficula auricularia*).

Crotch's bumble bee surveys were conducted within the project area (Appendix C). No Crotch's bumble bees (*Bombus crotchii*) were observed within the project area. The is moderate potential for Crotch's bumble bee foraging within the project area due to its presence in the Mt. Soledad region.

Due to the limited presence of trees on site, a relatively small number of bird species were observed or detected on site (13 species) (see Appendix B). Several of these species passed through the parcel with minimal use, while others focused use on adjacent habitat. No evidence of nesting activity was noted within the parcel. The Red-tailed hawk (*Buteo jamaicensis*) passed over the area.

Mammals on site included evidence of Audubon cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*).

5.0 RARE, THREATENED, ENDANGERED, ENDEMIC AND/OR SENSITIVE SPECIES OR MSCP COVERED SPECIES

Sensitive or special interest plant and animal species and habitats are those that are considered rare, threatened, or endangered within the state or region by local, state, or federal resources conservation agencies. Sensitive habitats, as identified by these same groups are those that generally support plant or wildlife species considered sensitive by resource protection agencies or groups. Sensitive species and habitats are so called because of their limited distribution, restricted habitat requirements, or particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive biological resources include: the City of San Diego MSCP Subarea Plan (City of San Diego 1997), U.S. Fish and Wildlife Service (USFWS) (USFWS 2010, 2011), California Department of Fish and Game (CDFG) (CDFG 2009, 2010a, 2010b, 2010c), and California Native Plant Society (CNPS online). The results of a California Natural Diversity Database (CNDDB) search for the area are included in Appendix D.

Sensitive Habitats

The City of San Diego MSCP Subarea Plan protects sensitive habitats. Sensitive habitats are those that are considered rare in the region, support sensitive plants or animals, or receive regulatory protection. Habitats within the MSCP are divided into four tiers of sensitivity with the first being the most sensitive and the fourth the lease sensitive. Tier I includes habitats classified as southern foredunes, Torrey pines forest, coastal bluff scrub, maritime succulent, succulent scrub, southern maritime chaparral, native grasslands, and oak woodlands. Tier II includes habitats classified as coastal sage scrub and coastal sage scrub/chaparral. Tier IIIA includes habitats classified as mixed chaparral and chamise chaparral. Tier IIIB includes habitats classified as non-native grassland. Tier IV, which is not considered sensitive, includes habitats classified as disturbed, agriculture, and eucalyptus (City of San Diego 2012).

Coastal Sage Scrub/Chaparral (CSC) habitat is Tier II, Native Grassland (NG) is Tier I, and Non-native Grassland (NNG) is a Tier IIIB habitat. Urban/Developed habitats within the project buffer are non-sensitive Tier IV habitats.

Sensitive Plants

Sensitive plants are those listed by the USFWS (2010, 2011), CDFG (2012, 2010c), and California Native Plant Society's Electronic Inventory of Rare and Endangered Vascular Plants of California database (CNPS online) and previous candidates for listing. The CNPS list is sanctioned by CDFG and essentially serves as its list of candidate species for listing. The City of San Diego's MSCP Subarea Plan stipulates that the City regulate populations of certain sensitive plants and animals within the boundaries circumscribed in the MSCP Subarea Plan. The Plan allows the City to authorize the incidental take of covered state and federally listed species, as designated within the plan, in accordance with the guidelines contained within the Plan. A California Natural Diversity Database (CNDDB) search for the project region (see Appendix D) identified a variety of sensitive species that could occur in the project area. Most of these species have low potential to occur due to project site conditions (see Appendix D).

One sensitive plant species was found on site and observed on public lands to the south and southeast. This is Decumbant goldenbush (*Isocoma menszeisii* var. *decumbans*) a California Rare Plant Rank 1B.2. A single Torrey Pine (*Pinus torreyana* ssp. *torreyana*) appears to be an intrusive tree on the property within the Coastal Sage Scrub/Chaparral habitat. Torrey Pines are California Rare Plant Rank 1B.2, State Rank S1, and Global Rank G1T1.

Other species that have greater, but still low, potential to occur in the area are Woven-spored lichen (*Texosporium sancti-jacobi*), Ashy spike moss (*Selaginella cinerascens*), Coast barrel cactus (*Ferocactus viridescens* var. *viridescens*), California adolphia (*Adolphia californica*), Western dichondra/ponyfoot (*Dichondra occidentalis*), Wart-stem lilac (*Ceanothus verrucosus*), and Nuttall's scrub oak (*Quercus dumosa*). All seven of these species occur in other areas of the Mount Soledad area.

Decumbant goldenbush (*Isocoma menszeisii* var. *decumbans*)

Decumbant goldenbush (*Isocoma menszeisii* var. *decumbans*) is a native perennial shrub typically found within disturbed coastal sage scrub habitats and wetland riparian habitats. This species has been previously documented in the project vicinity and was found to be relatively abundant in the upper portion of the project area.

A total of approximately 274 plants were observed within the project area on November 2, 2021 prior to City fire department required brush management mowing. Eighty-nine of these were in non-native grassland habitat and roughly 185 of these occurred in native grassland habitat (see Figure 4).

Torrey Pine (*Pinus torreyana* ssp. *torreyana*)

Torrey pines (*Pinus torreyana* ssp. *torreyana*) are perennial evergreen trees mostly associated with sandstone habitats in the Del Mar region to the north. They occur naturally in chaparral and coniferous forests. Use as landscaping trees and seed dispersal from these trees has resulted in their distribution beyond their original native habitat into canyons and slopes.

Narrow Endemic Plants

No narrow endemic species, as identified on the list of narrow endemic species adopted by the City Council, were identified onsite. No narrow endemics are anticipated to occur onsite due to the amount of previous disturbance and nature of the existing vegetation.

Sensitive Wildlife

Sensitive animal species include those species listed by the City of San Diego MSCP Subarea Plan (1997), USFWS (2010, 2011), CDFG (2009, 2010b), and Candidates for listing. The City of San Diego's MSCP Subarea Plan stipulates that the City regulate populations of certain sensitive animals within the boundaries circumscribed by the MSCP Subarea Plan.

No listed sensitive animal species were observed onsite. A Crotch's bumble bee (*Bombus crotchii*) survey was conducted and no Crotch's bumble bees (*Bombus crotchii*) were observed within the project area.

A CNDDB sensitive wildlife search for the project area is included in Appendix D. Sensitive wildlife species most likely to be present in the area could include Orange-throated whiptail lizard (*Cnemidophorus hyperythrus beldingi*), Coast horned lizard (*Phrynosoma coronatum* ssp. *blainvillii*), and Coastal California gnatcatcher (*Polioptila californica californica*). Although potential habitat for all three species occurs on site, none of these species were observed.

Potential for Raptor Nesting

Raptors are large predatory or scavenger birds that typically require tall trees for perching and nesting associated with adjacent open grasslands to forage. Due to declining habitat and the associated declining numbers of these species on the whole, raptor species, as a group, have been designated as California Species of Special Concern by the CDFG. These species are protected under the Migratory Bird Treaty Act (MBTA) and/or the California Fish and Game Code (§3503), especially during their critical nesting and wintering stages. Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), merlin (*Falco columbarius*), and American peregrine (*Falco peregrinus anatum*) all have potential to occur in the area, but site conditions indicate that the potential is low. Although some taller trees are present in neighboring yards outside the parcel no evidence of raptor nesting or perching was observed.

No direct impacts to nesting birds are permitted. No removal of any habitat with nests within the development area is proposed during the avian breeding season (February 1 through September 15). If nesting birds are present, construction shall be delayed until the end of the breeding season.

Wildlife Corridors

There are no known wildlife corridors in the project area. The existing habitat is part of an island of habitat in a larger urban landscape. It does not include any drainage systems that might act as wildlife corridors. Wildlife could move across the steep slope below the proposed development area, but the steepness of the terrain and density of vegetation suggest that corridor is not an appropriate term for the area.

6.0 REGULATORY REQUIREMENTS

The project will require compliance with the City of San Diego Subarea Plan of the MSCP and the Environmentally Sensitive Lands Regulations. The MSCP allows the City to issue approvals for incidental take of state and federally listed species that are covered under the Plan. This report addresses consistency with the MSCP.

The current mapping of the MHPA boundaries extend into the project parcel as indicated on Figure 4. The MHPA boundary crosses through and includes existing development on residential properties on either side of the current parcel. This is due to the regional scale of MHPA mapping used in the initial establishment of these boundaries. The adjacent development was present prior to the establishment of the MSCP boundary, but the mapping included what were existing developments (i.e., houses and hardscape).

The site has a potential to support nests that would be protected under the MBTA and/or the California Fish and Game Code (§3503) under which it is unlawful to "take, possess, or needlessly destroy" avian nests or eggs. The MBTA is a Federal law and the City of San Diego does not take management responsibility for its enforcement. It is anticipated that compliance with the MBTA will occur.

7.0 MHPA BOUNDARY LINE ADJUSTMENT

Existing residences on both sides of the property were constructed before 1980 and the current footprint of the adjacent buildings and related hardscape were present prior to the establishment and the adoption of the MSCP and its boundaries. Because the current parcel remained undeveloped, the proposed development footprint, although consistent with adjacent structures, will extend into the MHPA. The project would encroach into the MHPA beyond the allowable development area pursuant to Sections 143.0142 and 131.0250(b) of the Land Development Code and pages 13-15 of the City's Biology Guidelines, requiring a MHPA boundary line adjustment. MHPA Land Use Adjacency Guidelines have been included in the MSCP Consistency section of the report.

MHPA Adjustment

The proposed MHPA boundary line adjustment would incorporate an equal area of habitat on the northern end of the parcel into the MHPA area, resulting in no net loss of area or habitat to the MHPA (Figure 10). Table 1 summarizes the boundary adjustment acreages by habitat.

Removal of 0.006 acres of Tier 1 Native Grassland habitat from the MHPA would be mitigated through payment into the Habitat Acquisition Fund (HAF) as there is no feasible location for on-site mitigation due to the remaining intact Coastal Sage Scrub habitat within the on-site MHPA to remain. Mitigation through the HAF would result in preservation of Tier 1 habitat within the MHPA so a 1:1 mitigation ratio was used. No net loss of Tier 1 habitat within the MHPA will occur as a result of the boundary adjustment.

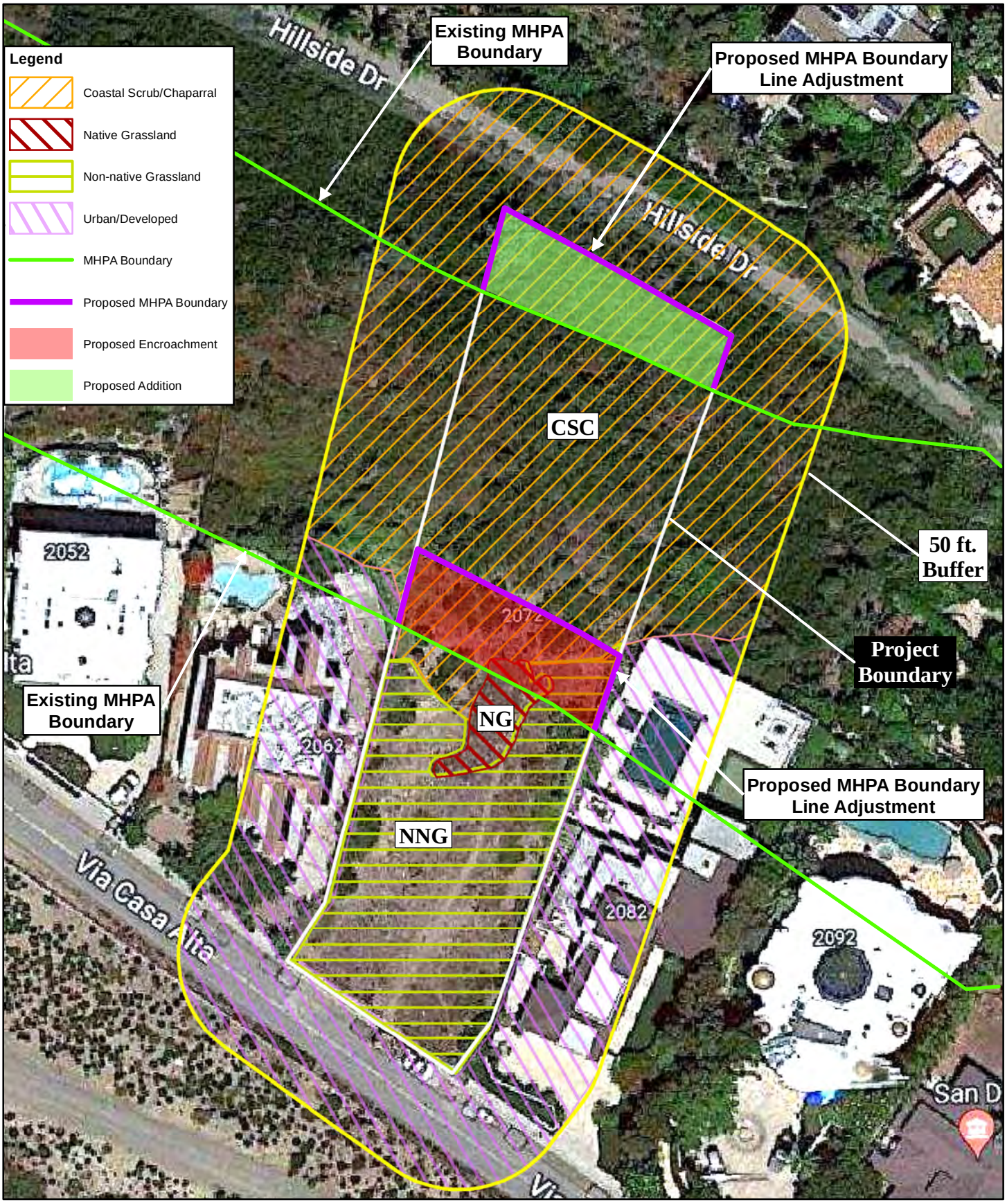

Figure 10
Boundary Line Adjustment

0 30 60 Feet

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Table 1. MHPA Boundary Adjustment Summary

Tier	Habitat	Existing MHPA	Proposed Encroachment	Proposed Addition	Net Change
Tier II	Coastal Sage Scrub/ Chaparral	0.342	0.053	0.075	0.022
Tier I	Native Grassland	0.006	0.006	0.000	-0.006
Tier IIIB	Non-native Grassland	0.016	0.016	0.000	-0.016
Tier IV	Developed/Disturbed	0.000	0.000	0.000	0.000
Total		**0.364**	**0.075**	**0.075**	**0.000**

The original MHPA boundary for the site was established as part of the regional MSCP mapping efforts, which became effective in March 1997. Under the City's MSCP Subarea Plan, an adjustment to the City's MHPA boundary is allowed only if the new MHPA boundary results in an exchange of lands that are functionally equivalent or higher in biological value.

A determination of functionally equivalent or higher biological value will be based on site-specific information (both quantitative and qualitative) that addresses the six boundary adjustment criteria outlined in Section 5.4.3of the Final MSCP Plan (August 1998), which are as follows:

1. Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly and sufficiently conserved habitats, as defined in Section3.4.2 [of the MSCP Plan]);

The current exchange maintains conservation configuration and status of significantly and sufficiently conserved habitats. The addition of contiguous habitat and removal of a small segment surrounded on two sides by existing development should result in improved conservation. The project also includes mitigation through easement dedication that will ensure future conservation of the MSCP lands.

The MHPA boundary line adjustment, as proposed, would maintain the conservation, general configuration, and status of significantly and sufficiently conserved habitats.

2. Effects on covered species (i.e., the exchange maintains or increases the conservation of covered species);

The project exchange does not affect covered species, therefore the exchange maintains the existing conservation of covered species.

3. Effects on habitat linkages and function of preserve areas (i.e., the exchange maintains or improves any habitat linkages or wildlife corridors);

The project exchange would not affect existing habitat linkages and function of preserve areas. The added northern extension of the preserve has native habitat on three sides, whereas the habitat being exchanged out has development on two sides and will be developed on a third side. This will provide greater connectivity with adjacent habitat.

4. Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection of biological resources);

The project exchange has minimal impact on preserve configuration, because it consists of adjacent lands and has a positive impact on management by providing access connectivity with an existing road easement.

The MHPA boundary line adjustment, as proposed, would maintain the conservation of covered species. It would maintain the habitat linkages and function of the preserve area. It would have little effect on preserve configuration and no effect on preserve management.

5. Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the preserve), and;

The project exchange does not affect ecotones or species diversity and maintains topographic and structural diversity and habitat interfaces of the preserve.

6. Effects on species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the federal or state ESAs).

The project will not significantly affect species of concern not on the covered species list. It will not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the federal or state ESAs.

The MHPA boundary line adjustment, as proposed, would maintain the existing ecotones and other conditions affecting species diversity. It would not result in any effects to species of concern not on the covered species list.

The proposed project will comply with the MSCP general management directives by avoiding significant impacts to, and maintaining, a system of canyons and open space that provide habitat for native species remaining in urban areas. The MHPA boundary line adjustment, as proposed, and the onsite and offsite mitigation proposed will not adversely affect the MHPA or species associated with the MSCP. No impacts to covered species are proposed by this project and the MHPA Preserve system will not be impacted by this project. The proposed project will comply with the MSCP general management directives through design and implementation of mitigation measures.

MHPA Land Use Adjacency

MHPA Land Use Adjacency Guidelines implementation would be included as conditions of project approval within the Site Development Permit.

Drainage

The Subarea Plan states:

> All new and proposed parking lots and developed areas in and adjacent to the preserve must not drain directly into the MHPA. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the MHPA. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.

As with any project, this project will be required to comply with all state and federal water quality requirements. In addition, the project will not create any new sources of toxins or other chemical runoff that would adversely affect the MHPA. All runoff will remain within the development footprint and will not enter the MHPA. Therefore, no significant drainage impacts on adjacent habitats would occur.

Toxics

The Subarea Plan requires:
Land uses, such as recreation and agriculture, that use chemicals or generate by-products such as manure, that are potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate measures to reduce impacts caused by the application and/or drainage of such materials into the MHPA. Such measures should include drainage/detention basins, swales, or holding areas with non-invasive grasses or wetland-type native vegetation to filter out the toxic materials. Regular maintenance should be provided. Where applicable, this requirement should be incorporated into leases on publicly owned property as leases come up for renewal.

The project does not propose the use of any toxic chemicals or land uses that would generate toxic byproducts, therefore no adverse effects associated with toxics would occur to the MHPA.

Lighting

The Subarea Plan states:

> Lighting of all developed areas adjacent to the MHPA should be directed away from the MHPA. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the MHPA and sensitive species from night lighting.

The proposed development will include a lighting design that does not affect the MHPA. None of the lighting for the structures or outdoor features will be directed toward, or will effect the MHPA.

Noise

The Subarea Plan states:

> Uses in or adjacent to the MHPA should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas, recreational areas, and any other use that may introduce noises that could impact or interfere with wildlife utilization of the MHPA. Excessively noisy uses or activities adjacent to breeding areas must incorporate noise reduction measures and be curtailed during the breeding season of sensitive species. Adequate noise reduction measures should also be incorporated for the remainder of the year.

Due to the site's location adjacent to the MHPA, construction noise will need to be avoided, during the breeding season of the California gnatcatcher (3/1-8/15). If construction is proposed during the breeding season for the species, U.S. Fish and Wildlife Service protocol surveys will be required in order to determine species presence/absence. If the species is not identified within the MHPA, no additional measures will be required. If present, measures to avoid noise related impacts to CAGN would be required, including but not limited to noise walls, berms and monitoring. Furthermore, if present, Noise levels from construction activities during the bird breeding season should not exceed 60 dBA hourly LEQ at the edge of the occupied MHPA, or if the ambient noise level if noise levels already exceed 60 dBA hourly LEQ.

Barriers

The Subarea Plan states:

> New development adjacent to the MHPA may be required to provide barriers (e.g., non-invasive vegetation, rocks/boulders, fences, walls, and/or signage) along the MHPA boundaries to direct public access to appropriate locations and reduce domestic animal predation.

The project would not result in any new public access points to native habitats or any introductions of domestic animals, therefore no significant access impact would occur. The proposed project includes walls along the MHPA boundary that will limit public access and reduce domestic animal predation.

Invasives

The Subarea Plan states:

> No invasive non-native plant species shall be introduced into areas adjacent to the MHPA. Many species that are commonly used in ornamental landscaping can invade native vegetation areas and impact native species. Numerous species common to ornamental landscaping (both annual and perennial) have been shown to directly compete with native vegetation, some of which have the potential to out-compete the native shrub species in just a few years, simply from passive invasion. The potential significant impacts due to invasion of ornamental species would be reduced or eliminated by requiring the landscape plan to use species that have been found not to be invasive and are approved by a native habitat ecologist for use in and around native vegetation. Appropriate post-construction fencing and signage shall be installed to prohibit access and avoid potential impacts to biological resources adjacent to the site.

No invasive, non-native plant species will be planted, seeded, or otherwise introduced to habitats adjacent to the project site. No myoporum, eucalyptus, acacia or any other invasive exotics will be used including those species on the most recent versions of Lists A and B of the California Exotic Pest Plant Council's list of "Exotic Pest Plants of Greatest Ecological Concern in California."

Brush Management

The brush management zones will be restricted to the existing parcel. Zone 1 will not extend into the MHPA area beyond the development area boundary. The house and associated structures have been designed in such a way that Zone 1 can extend directly up to the adjusted MHPA area boundary, but not beyond this line. The developed portion of the parcel must be maintained in a Zone 1 condition at all times. Zone 2 brush management is considered impact neutral and is permitted within privately owned portions of the MHPA (see Figure 11). Zone 2brush management required for the project site or adjacent properties will not extend into the project mitigation area. Brush management zones have been reduced to maximum extent feasible through use of alternative compliance measures.

Grading/Land Development

The Subarea Plan states: "Manufactured slopes associated with site development shall be included within the development footprint for projects within or adjacent to the MHPA." With the MHPA Boundary Line Adjustment, all grading and manufactured slopes are included within the development footprint and will be outside of the MHPA. All manufactured slopes are included within the development footprint and will be outside of the MHPA.

8.0 PROJECT IMPACT ANALYSIS

Impacts on biological resources can be characterized as direct, indirect, or cumulative. Direct impacts are a result of project implementation, and generally include: the loss of vegetation and sensitive habitats and populations, activity-related mortalities of wildlife, loss of foraging, nesting, or burrowing habitat, destruction of breeding habitats, and fragmentation of wildlife corridors.

Indirect impacts occur as a result of the increase in human encroachment in the natural environment and include: off-road vehicle use that impacts sensitive plant and animal species, harassment and/or collection of wildlife species, intrusion and wildlife mortality by pets in open space areas following residential development, and inadvertent increased wildlife mortalities along roads. Cumulative impacts are assessed on a regional basis and determine the overall effect of numerous activities on a sensitive resource over a larger area.

Impacts from Proposed Development

<u>Direct Impacts</u>

The southern portion of the project parcel will be impacted as a result of the proposed project. The development area will impact the Non-native Grassland, Native Grassland, and portions of the Coastal Sage Scrub/Chaparral habitat areas (Figure 11). Zone 2 brush management will extend into Coastal Sage Scrub/Chaparral habitat, but this is considered impact neutral and not a direct impact.

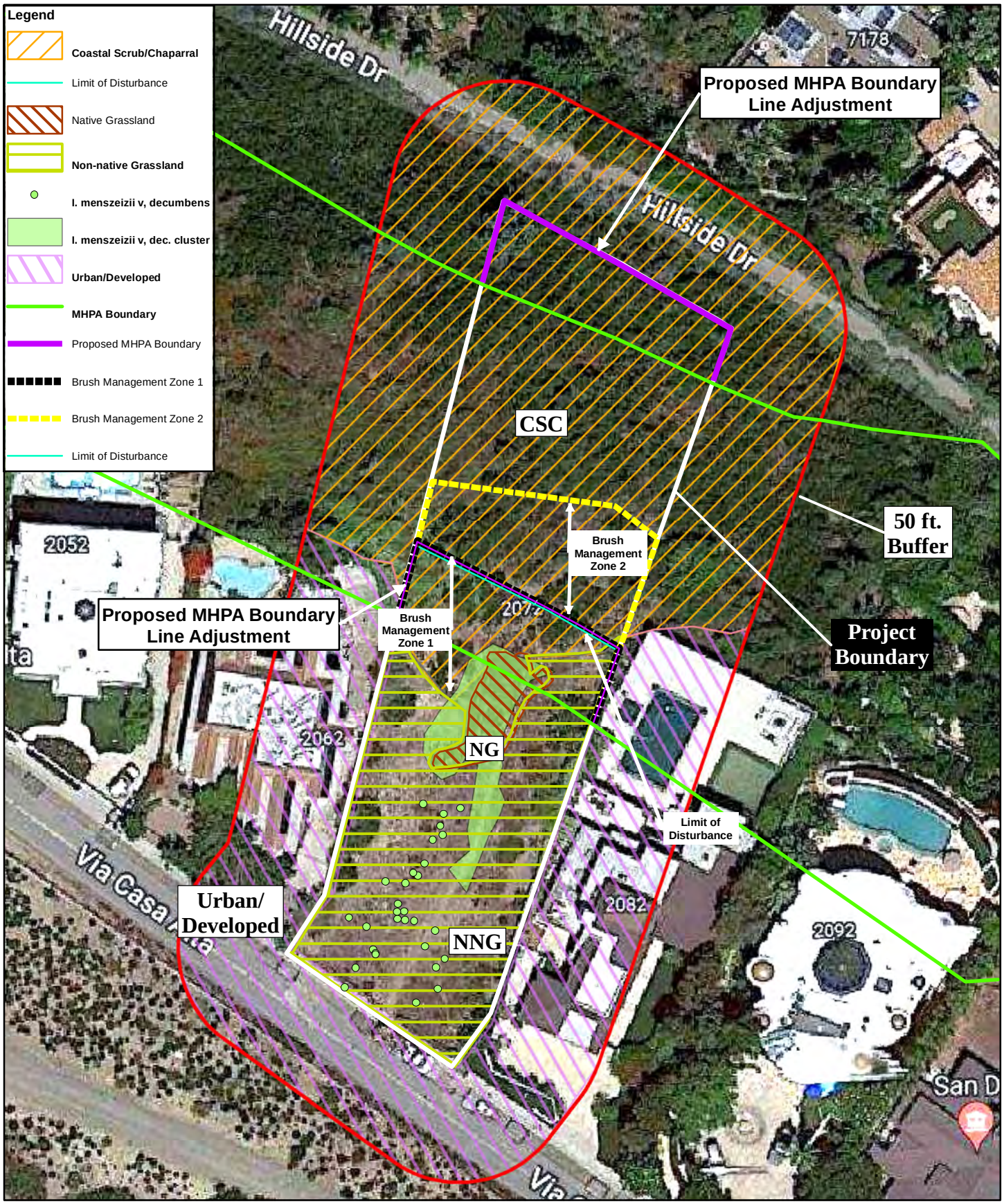

Figure 11
Project Impacts

0 30 60 Feet

Laguna Mountain Environmental, Inc.

Habitats

Because the project consists of a previously undeveloped parcel, direct impacts to Native Grassland and Non-native grassland habitats will occur (Table 2). As currently designed, small impacts to Coastal Sage Scrub/Chaparral habitats will also occur.

Table 2. Impacts to Sensitive Vegetation Communities

Habitat Tier Type	On-Site Acreage	Not Impacted Area	Project Impact Area	Mitigation Ratio†	On-Site MHPA Area Mitigation Required
Coastal Sage Scrub/Chaparral (Tier II)	0.44	0.37	0.07	1:1	0.07
Native Grassland (Tier I)	0.03	0.00	0.03	1:1	0.03*
Non-native Grassland (Tier IIIB)	0.30	0.00	0.30	0.5:1	0.15
Developed/Disturbed (Tier IV)	0.0	0.0	0.0	0:1	0
Total	**0.77**	**0.37**	**0.40**	**–**	**0.25**

† With BLA, mitigation ratios assume impacts outside of MHPA and mitigation inside MHPA.

* Tier 1 habitat mitigation would occur through payment into the Habitat Acquisition Fund and result in preservation of land inside the MHPA, but outside of the specific project area.

Sensitive Plant Species

Direct impacts will occur to approximately 274 Decumbant goldenbush (*Isocoma menszeizii* var. *decumbans*) plants within the project parcel. While numerous plants will be impacted, this species is present on public lands in the adjacent area and impacts do not represent a threat to the continued existence of this species. The single Torrey Pine (*Pinus torreyana* ssp. *torreyana*) tree is within the MHPA addition area and is located away from proposed development. No significant impacts will occur to sensitive plant species.

Sensitive Wildlife Species

No sensitive wildlife species were observed onsite. A Focused Survey Report for the Crotch's Bumble Bee (Appendix C) was prepared for the project. The open, southern portion of the project area contains sufficient habitat and nectar resources for foraging bumble bees. No Crotch's bumble bees were identified during any of the three focused surveys conducted in May 2024. No potential nesting habitat was observed onsite. Although the bumble bee was not observed onsite, suitable foraging resources are onsite. Therefore, an avoidance measure is required as a condition of approval to avoid potential impacts to foraging Crotch's bumble bees during construction. With implementation of the avoidance measure, no significant impacts will occur to sensitive wildlife species.

Wetlands

No seasonal drainages or wetlands exist onsite or will be impacted by the project.

Wildlife Corridors

No wildlife corridors exist onsite or will be impacted by the project.

Indirect Impacts

MHPA Land Use Adjacency Guidelines implementation would be included as conditions of project approval within the Site Development Permit. The project is consistent with adjacent land use made up of single family residential housing. No new indirect impacts will occur as a result of the proposed project. Brush management will occur on-site. Zone 1 brush management will be narrowed through project design standards and will not occur within the MHPA. Zone 2 brush management is permitted with the MHPA and is considered impact neutral and not a significant impact.

Construction-Related Impacts

Clearing during the bird breeding season will not occur during construction and no construction related impacts are anticipated.

Cumulative Impacts

No significant impacts will occur as a result of the proposed project. Therefore, the project will not result in cumulative impacts. If implemented, the proposed project would not result in a significant loss of habitat. Direct impacts to perennial native grassland that are greater than 0.1 acre are significant and cumulatively significant. The project would impact an area less than 0.1 acre threshold, so that no significant impacts will occur. Total direct impacts to upland habitat, Tiers I-III total 0.40 acres and are considered significant. Proposed mitigation would reduce impacts to below a level of significance.

Because the project would conform to the City of San Diego's MHPA Adjacency Guidelines, there would be no cumulatively significant upland habitat or species impacts offsite on the adjacent undeveloped slopes. With the use of pre- and post-construction Best Management Practices (BMPs), the project would not significantly impact water quality and thus no cumulative water quality impact would occur.

9.0 MITIGATION MEASURES

Direct impacts associated with this project would be mitigated through the dedication of the appropriate amount of vegetation, in the appropriate Tier, within the MHPA for habitat impacts.

Tier 1 habitat is not available within the MHPA area on-site. Direct impacts to 0.03 acres of Tier 1 Native Grassland habitat would be mitigated through payment into the Habitat Acquisition Fund (HAF). Mitigation through the HAF would be within the MHPA so a 1:1 mitigation ratio was used.

Required onsite mitigation within the MHPA portion of the parcel outside of the Zone 2 fire area would include approximately 0.22 acre of Coastal Sage Scrub/Chaparral (Tier II) habitat as mitigation for impacts to 0.3 acres of Non-native Grassland and 0.07 acres of Coastal Sage Scrub/Chaparral (Figure 12).

Per City requirements, the following measures would be implemented as conditions of the permit with respect to the on-site portions of the MHPA:

> a) Prior to issuance of any construction permits, the on-site MHPA shall be conveyed to the City's MCSP preserve through either fee title to the City or a covenant of easement granted in favor of the City and U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). Conveyance of any land in fee to the City shall require approval from the Parks and Recreation Department Open Space Division Deputy Director and shall exclude detention basins or other stormwater control facilities, brush management areas, landscape/revegetation areas, and manufactured slopes.
>
> b) To facilitate MHPA conveyance, any non-fee areas shall have covenant of easements for MHPA lands placed over them if located in the MHPA and be maintained in perpetuity by the owner/Permittee/Applicant unless otherwise agreed to by the City for acceptance of dedicated land in fee title.

There is moderate potential for Crotch's bumble bee foraging within the project area. Although the bumble bee was not observed onsite during any of the three focused surveys conducted, suitable foraging resources are onsite. Therefore, an avoidance measure is required as a condition of approval to avoid potential impacts to foraging Crotch's bumble bees during construction. .

10.0 CONCLUSION

Total direct impacts to upland habitat, Tiers I-III total 0.40 acres and are considered significant. Proposed mitigation would reduce impacts to below a level of significance. The project will not contribute to cumulatively significant impacts.

If you have any questions or need any additional information, please to not hesitate to call.

Sincerely,

Andrew R. Pigniolo
Principal Biologist

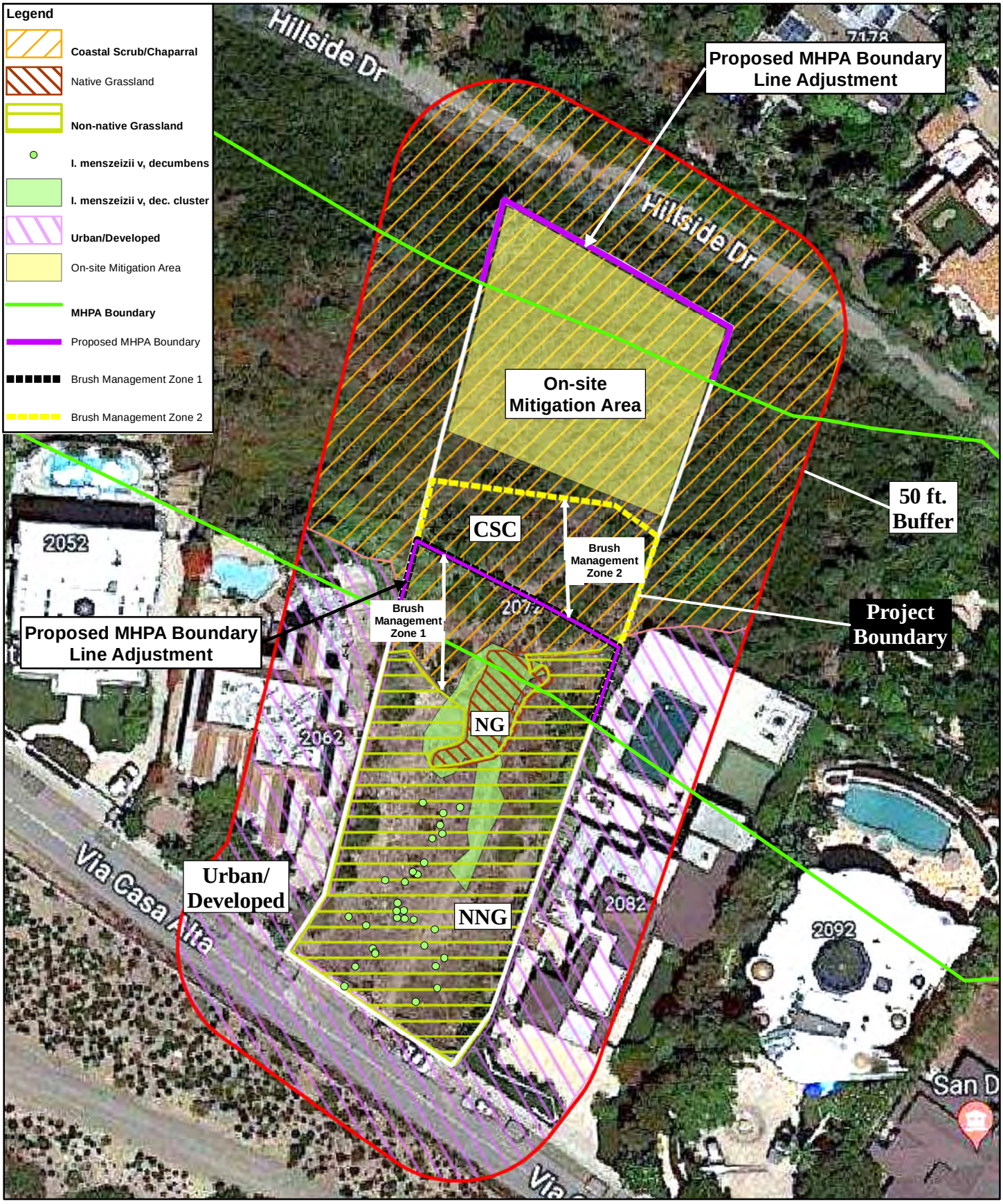

Figure 12
On-site Mitigation Area

0 30 60 Feet

Laguna Mountain Environmental, Inc.

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APPENDIX A
Plant Species Observed on the 2072 Via Casa Alta Residence Project

FAMILY	SPECIES AND REFERENCE	COMMON NAME	HABITATS
Pinaceae	*Pinus torreyana* Carrière subsp. torreyana	Torrey Pine	CSC
Aizoaceae	*Carpobrotus edulis* (L.) N.E. Br.*	Hottentot-Fig	NNG
Anacardiaceae	*Rhus integrifolia* (Nutt.) Rothr.	Lemonadeberry	CSC
Anacardiaceae	*Toxicodendron diversilobum* (Torr. & A. Gray) Greene	Western Poison-Oak	CSC
Apiaceae	*Foeniculum vulgare* Mill.*	Sweet Fennel	NNG
Araliaceae	*Hedera helix* L.*	English Ivy	NNG
Asteraceae	*Baccharis pilularis* DC. subsp. *consanguinea* (DC.) C.B. Wolf	Chaparral Broom, Coyote Brush	NNG/CSC
Asteraceae	*Carduus pycnocephalus* L. subsp. *pycnocephalus**	Italian Thistle	NNG/CSC
Asteraceae	*Corethrogyne filaginifolia* (Hook. & Arn.) Nutt. var. filaginifolia	California Aster	NNG/NG
Asteraceae	*Deinandra fasciculata* (DC.) Greene	Fascicled Tarweed	NNG
Asteraceae	*Hedypnois cretica* (L.) Dum. Cours.*	Crete Hedypnois	NNG
Asteraceae	*Helminthotheca echioides* (L.) Holub*	Bristly Ox-Tongue	NNG
Asteraceae	*Isocoma menziesii* (Hook. & Arn.) G.L. Nesom var. *decumbens* (Greene) G.L. Nesom	Decumbent Goldenbush	NNG/NG
Asteraceae	*Isocoma menziesii* (Hook. & Arn.) G.L. Nesom var. *sedoides* (Greene) G.L. Nesom	San Diego Goldenbush	NNG
Asteraceae	*Lactuca serriola* L.*	Prickly Lettuce	NNG
Asteraceae	*Pseudognaphalium biolettii* Anderb.	Bicolor Cudweed	NNG/CSC
Asteraceae	*Pseudognaphalium californicum* (DC.) Anderb.	California Everlasting	NNG
Asteraceae	*Sonchus asper* (L.) Hill subsp. *asper**	Prickly Sow-Thistle	NNG
Asteraceae	*Sonchus oleraceus* L.*	Common Sow-Thistle	NNG
Asteraceae	*Stephanomeria diegensis* Gottlieb	San Diego Wreath-Plant	NNG
Brassicaceae	*Hirschfeldia incana* (L.) Lagr.-Fossat*	Short-Pod Mustard	CSC
Cactaceae	*Opuntia littoralis* (Engelm.) Cockerell	Coast Prickly-Pear	CSC
Caprifoliaceae	*Lonicera subspicata* Hook. & Arn. var. *denudata* Rehder	Johnston's Honeysuckle	CSC
Chenopodiaceae	*Salsola australis* R. Br.*	Australian Tumbleweed	NNG
Convolvulaceae	*Calystegia macrostegia* (Greene) Brummitt	Morning-Glory	NG
Convolvulaceae	*Dichondra micrantha* Urb.*†	Asian Ponyfoot	NNG
Euphorbiaceae	*Euphorbia serpens* Kunth*	Creeping Spurge	NNG
Euphorbiaceae	*Ricinus communis* L.*	Castor Bean	NNG
Fabaceae	*Medicago polymorpha* L.*	California Burclover	NNG
Geraniaceae	*Erodium botrys* (Cav.) Bertol.*	Long-Beak Filaree/Storksbill	NNG
Grossulariaceae	*Ribes speciosum* Pursh	Fuchsia-Flower Gooseberry	CSC
Malvaceae	*Malva parviflora* L.*	Cheeseweed	NNG
Malvaceae	*Sidalcea sparsifolia* (C.L. Hitchc.) S.R. Hill	Checker-Bloom	NG
Myrsinaceae	*Anagallis arvensis* L.*	Scarlet Pimpernel, Poor Man's Weatherglass	NNG
Phrymaceae	*Diplacus puniceus* Nutt.	Coast Monkey Flower	CSC
Plumbaginaceae	*Limonium perezii* (Stapf) F.T. Hubb.*	Perez's Marsh-Rosemary	NNG
Polygonaceae	*Rumex crispus* L.*	Curly Dock	NNG
Rosaceae	*Heteromeles arbutifolia* (Lindl.) M. Roem.	Toyon, Christmas Berry	CSC
Scrophulariaceae	*Myoporum laetum* G. Forst.*	Ngaio, Mousehole Tree	CSC
Solanaceae	*Nicotiana glauca* Graham*	Tree Tobacco	NNG

APPENDIX A
Plant Species Observed on the 2072 Via Casa Alta Residence Project
(Continued)

FAMILY	SPECIES AND REFERENCE	COMMON NAME	HABITATS
Iridaceae	*Sisyrinchium bellum* S. Watson	Blue-Eyed-Grass	NG
Poaceae	*Avena barbata* Link*	Slender Wild Oat	NNG
Poaceae	*Brachypodium distachyon* (L.) P. Beauv.*	Purple False Brome	NNG
Poaceae	*Bromus diandrus* Roth*	Ripgut Grass	NNG
Poaceae	*Bromus hordeaceus* L.*	Soft Chess	NNG/NG
Poaceae	*Bromus rubens* L.*	Foxtail Chess, Red Brome	NNG
Poaceae	*Hordeum murinum* L.*	Barley	NNG
Poaceae	*Stipa cernua* Stebbins & Love	Nodding Needle Grass	NG/NNG
Poaceae	*Stipa miliacea* (L.) Hoover var. *miliacea**	Smilo Grass	NNG
Themidaceae	*Bloomeria crocea* (Torr.) Coville var. *crocea*	Common Goldenstar	NG

* Naturalized, not native to the County
† Not listed in Jepson II
§§ Strictly endemic to San Diego County; Status: 1B.2 S1 G1T1
Habitats: CSC - Coastal Sage Scrub/Chaparral; NNG - Non-native grassland; NG - Native grassland

APPENDIX B
Wildlife Species Observed in the 2072 Via Casa Alta Residence Project

FAMILY	COMMON NAME	SPECIES
INVERTEBRATES		
Formicidae	Argentine ant	*Linepithema humile*
Pieridae	Cabbage butterfly	*Pieris rapae*
Forficulidae	Common earwig	*Forficula auricularia*
Armadillidae	Common pillbug	*Armadillidium vulgare*
Apidae	Western honey bee	*Apis melifera*
MOLLUSKS		
Helicidae	Brown garden snail	*Cornu aspersum*
REPTILES		
Iguanidae	Western fence lizard	*Sceloporus occidentalis*
BIRDS		
Corvidae	American crow	*Corvus brachyrhynchos*
Trochilidae	Anna's hummingbird	*Calypte anna*
Tyrannidae	Black phoebe	*Sayornis nigricans semiatra*
Passerellidae	California towhee	*Melozone crissalis*
Passerellidae	Song sparrow	*Melospiza melodia*
Fringillidae	House finch	*Haemorhous mexicanus*
Fringillidae	Lesser goldfinch	*Spinus psaltria*
Passeridae	House sparrow	*Passer domesticus*
Passeridae	White-crowned sparrow	*Zonotrichia leucophrys*
Columbidae	Mourning dove	*Zenaida macroura marginella*
Mimidae	Northern mockingbird	*Mimus polyglottos polyglottos*
Accipitridae	Red-tailed hawk	*Buteo jamaicensis*
Icteridae	Hooded oriole	*Icterus cucullatus*
MAMMALS		
Leporidae	Audubon cottontail	*Sylvilagus audubonii*
Geomyidae	Botta's pocket gopher	*Thomomys bottae*
Sciuridae	California ground squirrel	*Spermophilus beecheyi*

APPENDIX C

Crotch's Bumble Bee Survey Report

FOCUSED SURVEY REPORT
FOR THE
CROTCH'S BUMBLE BEE
AT 2072 VIA CASA ALTA
IN LA JOLLA,
CITY OF SAN DIEGO, CALIFORNIA

Prepared for:

Kevin Javaheri
c/o Marengo Morton Architects
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La Jolla, CA 92037

Prepared by:

Laguna Mountain Environmental, Inc.
3421 Voltaire Street
San Diego, CA 92106

May 2024

Introduction

Laguna Mountain Environmental, Inc. (Laguna Mountain) performed surveys for the Crotch's bumble bee (*Bombus crotchii*),on a 0.77-acre parcel (APN 352-570-15-00) in the community of La Jolla on Mount Soledad, City of San Diego, California (Figure 1). The project area is in an unsectioned portion of the Pueblo of San Diego Lands within Township 15 South, Range 4 West, as shown on the La Jolla USGS 7.5' Quadrangle (Figure 2). The proposed project is for a single family residential development.

As part of the current study, three separate surveys were conducted in May 2024. No Crotch's bumble bees (*Bombus crotchii*) were identified during any of the surveys. This report documents the results of focused surveys conducted throughout the non-excluded habitat on the property.

Background

Crotch's bumble bee (*Bombus crotchii*) is one of four bumble bee species that are candidates for listing under the California Endangered Species Act (CESA). On-site surveys provide the most valuable information for determining potential impacts of proposed projects and activities on the four candidate bumble bee species, and subsequently developing measures to avoid or minimize take of these species. In order to help landowners in preventing an unknowing "take" of this species, the California Department of Fish and Wildlife (CDFW) is recommending that landowners have a survey conducted on their land prior to project implementation in order to determine the presence or absence of this species.

The Crotch's bumble bee (*Bombus crotchii*) is a southwestern short-tongued bumble bee species (Williams et al. 2014). The body size is large relative to other species. The eyes are also greatly enlarged and the antenna are long. The last abdomen segment is most often red-orange separating it from most of the other species in the area (Williams et al. 2014). The Colony Active Period for the Crotch's bumble bee occurs from April through August.

Methods

Crotch's bumble bee surveys were conducted by Andrew Pigniolo. Mr. Pigniolo has extensive experience in the field of southern California botany and entomology. Mr. Pigniolo has held a U.S. Fish and Wildlife Service permit to conduct Quino checkerspot butterfly habitat assessments and adult surveys for more than 14 years and has conducted numerous Hermes Copper butterfly surveys and habitat assessment surveys for Laguna Skipper. Mr. Pigniolo has viewed the California Bumble Bee Atlas training and passed the testing. He holds a California Bumble Bee Atlas permit that authorizes survey and monitoring for bumble bees. Mr. Pigniolo is an approved biologist for work in the City of San Diego.

Previous biological surveys of the project area were used as a habitat assessment evaluating the likelihood of bumble bees occurring within and adjacent to the project area. The open, southern portion of the project area contains sufficient habitat and nectar resources for bumble bees. Species in the Native Grassland habitat that could provide resources include Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), Blue-eyed grass (*Sisyrinchium bellum*), Common goldenstar (*Bloomeria crocea* var. *crocea*), and Checker-bloom (*Sidalcea sparsifolia*). In the Non-native Grassland habitat Hottentot-fig (*Carpobrotus edulis*) also provides a significant foraging resource during the Colony Active Season.

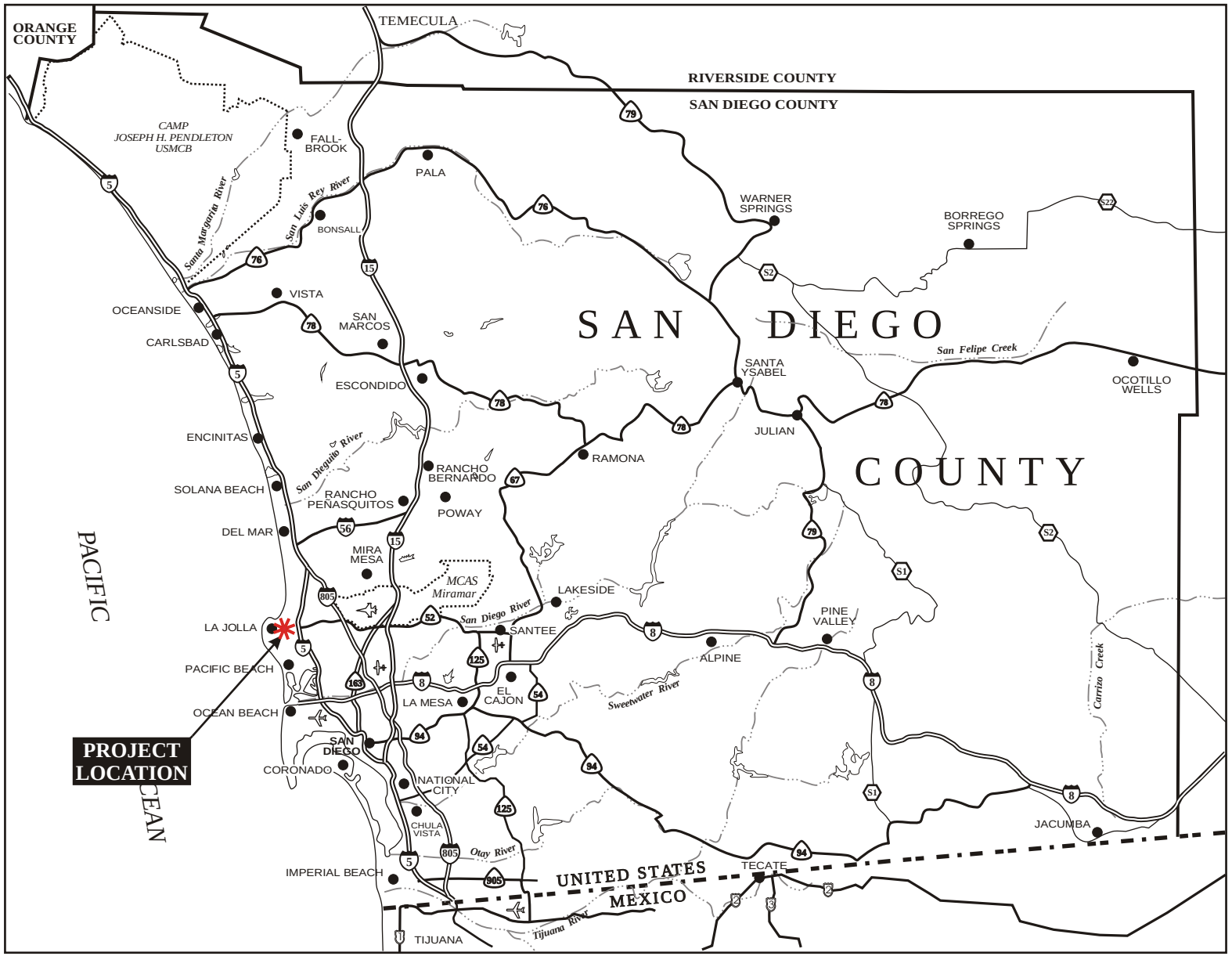


Figure 1
Regional Location Map

Laguna Mountain Environmental, Inc.

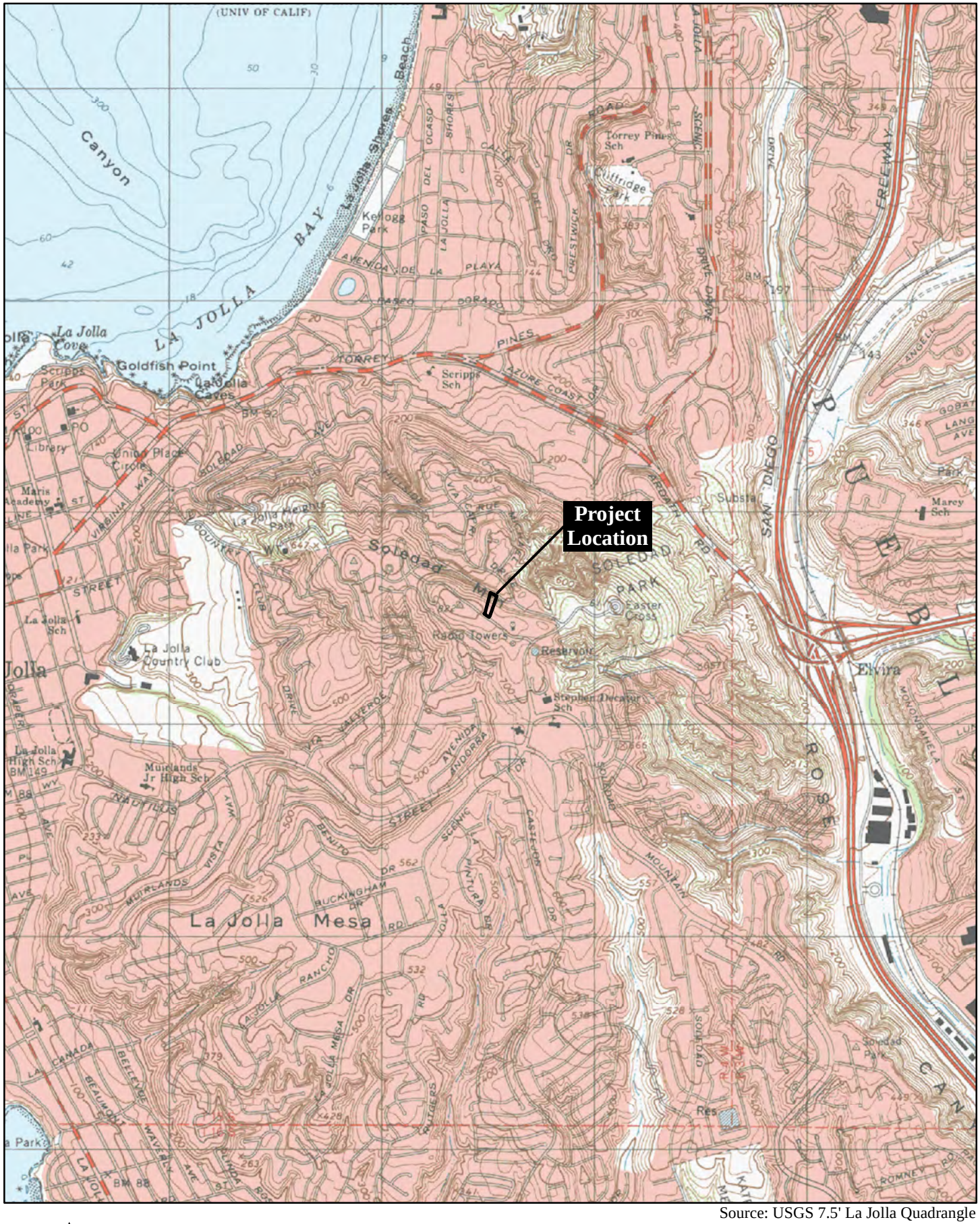


Figure 2
Project Location

0 1,000 2,000 Feet

Laguna Mountain Environmental, Inc.

Three surveys were made with two-week intervals between them. These surveys were conducted during the Colony Active Season at the peak of floral activity. The surveyor made meandering, roughly circular transects across the survey area several times during each survey (Figure 3). Use of a 35 mm digital camera with digital zoom and macro capabilities allowed for adequate photography and identification of each bumble bee observed without capture. Surveys were conducted during the day on warm, but not hot, (65-90° F), with low wind (less than 8 mph).

All bumble bees were photo-documented to adequately determine species. No nests were observed within the project area and flight patterns suggested that the nest for the bumble bees observed was located on the undeveloped property to the south of the project area. Survey times and weather conditions are summarized in Table 1.

Table 1. Crotch's Bumble Bee Survey Dates and Weather Conditions

Date	Time		Weather Conditions
April 26, 2024	Start: 1215	End: 1315	Start: Overcast, ground temp: 72° F, wind between 0 and 7 mph End: Partly Sunny, ground temp: 74° F, wind between 0 and 7 mph
May 10, 2024	Start: 1430	End: 1530	Start: Overcast, ground temp: 74° F, wind between 0 and 4 mph End: Overcast, ground temp: 76° F, wind between 0 and 8 mph
May 31, 2024	Start: 1345	End: 1445	Start: Partly cloudy, ground temp: 78° F, wind between 0 and 5 mph End: Overcast, ground temp: 80° F, wind between 0 and 5 mph

Physical Setting

The project area is located on the northeastern slope of Soledad Mountain. Elevation within the project area ranges from approximately 710 to 795 feet above mean sea level. The topography of the southern portion of the project parcel has been altered through brush clearing that occurred between 1978 and 1980.

Soils within the project area are mapped as Altamont clay (Bowman 1973). The Altamont series consists of well-drained clays that formed in material weathered from calcareous shale. These soils are on uplands. In a representative profile, the surface layer is dark-brown, neutral to moderately alkaline heavy clay loam about 8 inches thick. Below this is soft calcareous shale (Bowman 1973).

Vegetation

The project area currently supports three habitat types: Coastal Sage Scrub/Chaparral, Native Grassland, and Non-native Grassland. The southern portion of the project area is dominated by Native Grassland, and Non-native Grassland. This area is open and includes floral resources appropriate for bumble bee habitat. The remaining portion of the project is densely vegetated and not appropriate for bumble bee foraging.

Figure 3
Survey Area

0 30 60 Feet

Laguna Mountain Environmental, Inc.

Results

There is moderate potential for Crotch's bumble bee to occur in the project area because they have previously been identified in the Mt. Soledad area. However, no Crotch's bumble bees (*Bombus crotchii*) were detected during the surveys of the project area. No species closely resembling this species were observed. Yellow-faced bumble bees *(Bombus vosnesenskii*) were the dominant species observed throughout the surveys (Figure 4). Three individual Black-tailed bumble bees (*Bombus melanopygus*) were observed (Figure 5). One of these passed through the area quickly suggesting that it was relatively far from the nesting area. Bumble bee species observed are summarized in Table 2. Bumble bee numbers and diversity were relatively high within the project area due to the open nature of the vegetation and open habitat to the south.

Table 2. Bumble Bee Species Observed

Species	**Survey Dates**		
	4/26/24	**5/10/24**	**5/31/24**
Yellow-faced bumble bee (*Bombus vosnesenskii*)	4	7	6
Black-tailed bumble bee (*Bombus melanopygus*)	0	2	1
Total	**4**	**9**	**7**

Conclusion

The results of the focused surveys indicate that the Crotch's bumble bee does not occur in the project area. Areas of floral resources and open ground that would potentially serve as foraging habitat were searched during each survey with negative results. No potential nesting habitat was observed onsite. No Crotch's bumble bees were observed during the survey period.

Section 4.2 of the CDFW Survey Considerations for the CESA Candidate Bumblebee Species (CDFW 2023:7) states: If no CESA-protected bumble bees are found during the multiple rounds of focuses surveys, but the habitat assessment identified suitable nesting, foraging, or overwintering habitat within the project site, it is recommended that a biological monitor be onsite during vegetation or ground disturbing activities that take place during any of the Queen and Gyne Flight Period and Colony Activity Period.

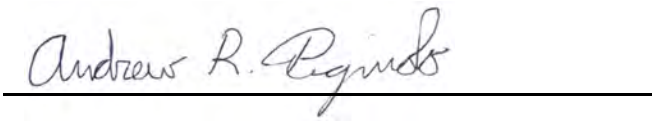
Figure 4. Yellow-faced Bumble Bee *(Bombus vosnesenskii*)

Figure 5. Black-tailed Bumble Bee (*Bombus melanopygus*) (male)

Certification

This concludes the report for a survey for the Crotch's bumble bee conducted at the 2072 Via Casa Alta Project.

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.



Andrew Pigniolo	Date

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APPENDIX D

Senstive Plants and Animals with the Potential to Occur on the 2072 Via Casa Alta Site

Species Name	Common Name	CRP	CA/US	MSCP	Habitat	Potential to Occur Onsite
PLANTS						
Adolphia californica	California adolphia	2B.1			Deciduous shrub. Blooms Dec-May. Chaparral. Elev 20-660 ft.	No Potential. Species is visible year round and would have been observed if present.
Aphanisma blitoides	Aphanisma	1B.2		X	Annual herb. Blooms Mar- Jun. Coastal bluff scrub, coastal dunes, and coastal sage scrub. Elev 3-1,000 ft.	Very Low Potential. Species restricted to immediate coastal bluffs.
Artemisia palmeri	San Diego sagewart	4.2			Deciduous shrub. Blooms May-Sep. Sandy, mesic areas in chaparral, coastal sage scrub, and riparian habitats. Elev 45-3,005 ft.	Very Low Potential. There are no mesic drainages in the project area.
Atriplex coulteri	Coulter's saltbush	1B.2			Perennial herb. Blooms Mar-Oct. Alkaline or clay soils in coastal dunes, coastal bluff scrub, coastal sage scrub, and grassland. Elev 10-1,510 ft.	Very Low Potential. Suitable habitat not present and species not detected
Atriplex pacifica	South Coast saltscale	1B.2			Annual herb. Blooms Mar- Oct. Playas, coastal dunes, coastal bluff scrub, and coastal sage scrub. Elev 0-460 ft.	Very Low Potential. Suitable habitat not present and species not detected
Brodiaea orcuttii	Orcutt's brodiaea	1B.1		X	Bulbiferous herb. Blooms Apr-Jul. Typically mesic, clay soils (sometimes serpentinite) in vernal pools associated with chaparral, cismontane woodland, closedcone coniferous forest, meadows, seeps, and grassland. Elev 30- 1,692 ft.	No Potential. No suitable habitat is present within the project study area.
Ceanothus verrucosus	wart-stemmed ceanothus	2B.2		X	Evergreen shrub. Blooms Dec-May. Chaparral. Elev 3-1,250 ft.	Very Low Potential. Species is visible year round and would have been observed if present.
Comarostaphylis diversifolia ssp. diversifolia	summer holly	1B.2			Evergreen shrub. Blooms Apr-Jun. Chaparral and cismontane woodland. Elev 95-2,595 ft.	Very Low Potential. Species is visible year round and would have been observed if present.
Corethrogyne filaginifolia var. incana	San Diego sand aster	1B.1		X	Perennial herb. Blooms Jun-Sep. Coastal bluff scrub, chaparral, and coastal sage scrub. Elev 10-380 ft.	Low Potential. No suitable habitat is present within the project study area and not detected
Dudleya brevifolia	short-leaved dudleya	1B.1		X	Perennial herb. Blooms Apr-May. Sandstone, openings in maritime chaparral, and coastal sage scrub. Elev 95-820 ft.	Low Potential. No maritime chaparral present onsite, soils are not the hardpan clays associated with this species.
Dudleya variegata	variegated dudleya	1B.2		X	Perennial herb. Blooms Apr-May. Clay soils associated with vernal pools in chaparral, cismontane woodland, coastal sage scrub, grassland. Elev 10-1,905ft.	Low Potential. Chaparral not present on site and there are no large openings typical of this species' habitat
Dudleya viscida	sticky dudleya	1B.2		X	Perennial herb. Blooms May-Jun. Rocky areas in coastal bluff scrub, chaparral, coastal scrub, and cismontane woodland. Elev 30-1,805 ft.	Low Potential. Chaparral not present on site and there are no large openings typical of this species' habitat
Euphorbia misera	cliff spurge	2B.2			Shrub. Blooms Dec-Aug. Rocky areas in coastal bluff scrub, coastal sage scrub, and Mojavean desert scrub. Elev 30-1,640 ft.	Very Low Potential. Species is visible year round and would have been observed if present.
Ferocactus viridescens	San Diego barrel cactus	2B.1		X	Stem succulent. Blooms May-Jun. Chaparral, coastal sage scrub, grassland, and vernal pools. Elev 10-1,480 ft.	Very Low Potential. Species is visible year round and would have been observed if present.
Heterotheca sessiliflora ssp. *sessiliflora*	beach goldenaster	1B.1			Perennial herb. Blooms Mar-Dec. Coastal dunes, chaparral, and coastal sage scrub. Elev 0-4,020 ft.	Very Low Potential. Species restricted to immediate coast
Isocoma menziesii var. *decumbens*	decumbent goldenbush	1B.2			Shrub. Blooms Apr-Nov. Sandy, often disturbed, areas in chaparral and coastal sage scrub. Elev 30-445 ft.	Present. Species observed and mapped as part of project

Species Name	Common Name	CRP	CA/US	MSCP	Habitat	Potential to Occur Onsite
Leptosyne maritima	sea dahlia	2B.2			Perennial herb. Blooms Mar-May. Coastal bluff scrub and coastal sage scrub. Elev 15-495 ft.	Very Low Potential. Suitable habitat not present onsite
Quercus dumosa	Nuttall's scrub oak	1B.1			Evergreen shrub. Blooms Feb-Apr. Sandy or clay loam soils associated with chaparral, coastal sage scrub, and closedcone coniferous forest. Elev 45-1,315 ft.	Low Potential. Chaparral not present on site
Senecio aphanactis	chaparral ragwort	2B.2			Annual herb. Blooms Jan- Apr. Chaparral, coastal sage scrub, and cismontane woodland. Elev 45-2,625 ft.	Very Low Potential. Species is very rare and limited. No suitable habitat present
INVERTEBRATES						
Bombus crotchii	Crotch's bumble bee		CS		Open areas with abundant nector resources	Moderate foraging habitat to to presence on Mt. Soledad
Helminthoglypta coelata	Mesa shoulderband		IUCN VU		Under leaf liter and shrubs of coastal dune scrub	Low; no suitable habitat onsite
REPTILES						
Aspidoscelis hyperythra	orange-throated whiptail		CSSC S2	X	Coastal sage scrub, mixed chaparral, grassland, riparian, and chamise chaparral habitats. Open hillsides with brush and rock, well drained soils.	Low; not observed, habitat and food sources occur onsite, but vegetation density is generally too high to provide suitable habitat
Charina trivirgata	rosy boa		S3S4		Habitats including coastal sage scrub, chaparral, grasslands, and agricultural fields. Moderate to dense vegetation and rocky cover	Low; limited rocky habitat onsite
Phrynosoma coronatum	coast horned lizard		CSSC S3	X	Coastal sage scrub with harvester ants	Low; not observed onsite, vegetation density is generally too high to provide suitable habitat
BIRDS						
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow		S2S3 WL	X	Sparse, mixed chaparral and coastal scrub habitats (especially coastal sage). Frequents relatively steep, often rocky hillsides with grass and forb patches.	Low; habitat onsite is not suitable.
Polioptila caliofornica californica	Coastal California gnatcatcher		CSSC CT		Diegan coastal sage scrub below 1,000 ft. elevation along coastal slopes	Low; not observed, habitat and food sources occur onsite, but vegetation density is generally too high to provide suitable habitat
MAMMALS						
Taxidea taxus	badger		CSSC S3	X	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats.	Low; no suitable habitat onsite

Listing Designations:

CNPS CA Rare Plant Rank (CRPR)
1B - Rare or Endangered
1 - seriously threatened
2 - moderately threatened

State Listing (CDFW 2019)
CE - California endangered
CT - California Threatened
CSSC - California Species of Special Concern
S1 - critically imperiled
S2 - imperelled
S3 - vulnerable
S4 - apparently secure
WL - Watch List
CS - Candidate species

Other
MSCP - X indicates covered by MSCP
IUCN - International Union for Conservation of Nature Red List
VU - vulnerable