

One Alexandria Square

Biological Technical Report

February 2022 | 00022.00007.001 (ARI-07)

Prepared for:

Alexandria Real Estate Equities, Inc.
10996 Torreyana Road Suite 250
San Diego, CA 92121

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

This page intentionally left blank

One Alexandria Square

Biological Technical Report

Prepared for:

Alexandria Real Estate Equities, Inc.
10996 Torreyana Road Suite 250
San Diego, CA 92121

Prepared by:

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942

February 2022 | 00022.00007.001 (ARI-07)

This page intentionally left blank

TABLE OF CONTENTS

Section	Page
1.0 INTRODUCTION.....	1
1.1 Purpose of the Report.....	1
1.2 Project Location	1
1.3 Project Description	1
2.0 SURVEY METHODS	2
2.1 Literature Review.....	2
2.2 General Biological Survey	2
2.3 Focused Species Surveys.....	3
2.3.1 Rare Plant Surveys	3
2.4 Jurisdictional Assessment	3
2.5 Survey Limitations.....	3
2.6 Nomenclature	3
3.0 RESULTS	4
3.1 Physical characteristics/setting.....	4
3.2 Disturbance	4
3.3 Topography and Soils.....	4
3.4 Vegetation Communities/Land Cover Types	4
3.5 Flora	5
3.6 Fauna.....	5
4.0 SENSITIVE BIOLOGICAL RESOURCES	5
4.1 Sensitive Vegetation Communities/Habitat Types	6
4.2 Special Status Plant Species.....	6
4.2.1 Special Status Plant Species Observed	6
4.2.2 Special Status Plant Species with Potential to Occur	7
4.3 Special Status Animal Species.....	7
4.3.1 Special Status Animal Species Observed or Otherwise Detected.....	7
4.3.2 Special Status Animal Species with Potential to Occur	8
4.4 Jurisdictional Waters and Wetlands	9
4.5 Habitat Connectivity and Wildlife Corridors	9
5.0 REGIONAL AND REGULATORY FRAMEWORK.....	9
5.1 Federal Government.....	9
5.1.1 Federal Endangered Species Act.....	9
5.1.2 Migratory Bird Treaty Act	10
5.1.3 Clean Water Act (Section 404) and Harbors Act.....	10

TABLE OF CONTENTS (cont.)

Section	Page
5.2	State of California 11
5.2.1	California Environmental Quality Act 11
5.2.2	California Endangered Species Act 11
5.2.3	California Coastal Act..... 11
5.2.4	Native Plant Protection Act 11
5.2.5	California Fish and Game Code..... 11
5.2.6	Section 401 Water Quality Certification / Porter-Cologne Water Quality Control Act 12
5.3	City of San Diego 12
5.3.1	Environmentally Sensitive Lands 12
5.3.2	Multiple Species Conservation Program..... 13
5.3.3	Local Coastal Program 13
6.0	MULTIPLE SPECIES CONSERVATION PROGRAM CONSISTENCY ANALYSIS..... 14
6.1	Land Use Adjacency Guidelines – Section 1.4.3 of the MSCP..... 14
6.2	General Management Directives – Section 1.5.2 of the MSCP 14
6.3	General Planning Policies and Design Guidelines – Section 1.4.2 of the MSCP 14
6.4	Conditions of Coverage for Sensitive Species..... 15
6.5	Vernal Pool Habitat Conservation Plan Consistency..... 16
7.0	ANALYSIS OF PROJECT IMPACTS 17
7.1	Criteria for Determining Impact Significance..... 17
7.1	Impacts to Vegetation Communities 18
7.2	Impacts Special Status Species 18
7.3	Impacts to Jurisdictional Resources..... 20
7.4	Wildlife Movement and Nursery Sites..... 20
7.5	Cumulative Impacts 20
8.0	MITIGATION MEASURES 20
8.1	Mitigation for Impacts to Sensitive Upland Habitats..... 20
8.2	Mitigation for Impacts to Special Status Species..... 22
8.2.1	Mitigation for Impacts to Special Status Plant Species 22
9.0	LIST OF PREPARERS 23
10.0	REFERENCES..... 24

TABLE OF CONTENTS (cont.)

LIST OF APPENDICES

- A Representative Site Photographs
- B Plant Species Observed
- C Animal Species Observed or Otherwise Detected
- D Special Status Plant Species Observed or with Potential to Occur
- E Special Status Animal Species Observed or with Potential to Occur
- F Explanation of Status Codes for Plant and Animal Species

LIST OF FIGURES

No.	Title	Follows Page
1	Regional Location.....	2
2	USGS Topography.....	2
3	Aerial Photograph.....	2
4	Regional Context.....	2
5	Site Plan.....	2
6	Soils.....	4
7	Vegetation Communities and Sensitive Resources.....	4
8	Vegetation and Sensitive Resources/Impacts.....	18
9	Callan Road Mitigation Site.....	20

LIST OF TABLES

No.	Title	Page
1	Survey Information.....	2
2	Existing Vegetation Communities/Land Cover Types.....	5
3	Vegetation Communities/Land Cover Type Impacts.....	18
4	Impacts and Mitigation Requirements.....	21
5	Callan Road Mitigation Site – Vegetation Communities/Land Cover Types.....	21

ACRONYMS AND ABBREVIATIONS

APN	Accessor Parcel Number
BCME	Biological Construction Mitigation/Monitoring Exhibit
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG Code	California Fish and Game Code
City	City of San Diego
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CSV	Consultant Site Visit Record
CWA	Clean Water Act
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESL	Environmentally Sensitive Lands
FESA	Federal Endangered Species Act
GPS	Global Positioning Unit
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
I-	Interstate
LCP	Local Coastal Program
LUAG	Land Use Adjacency Guidelines
MBTA	Migratory Bird Treaty Act
MHPA	Multiple Habitat Planning Area
MMC	Mitigation Monitoring Coordination
MSCP	Multiple Species Conservation Plan
NDP	Neighborhood Development Permit
NPPA	Native Plant Protection Act
NWI	National Wetland Inventory

ACRONYMS AND ABBREVIATIONS (cont.)

Porter-Cologne project project proponent	Porter-Cologne Water Quality Control Act One Alexandria Square Alexandria Real Estate Equities
RWQCB SDP SWRCB	Regional Water Quality Control Board Site Development Permit State Waters Resources Control Board
USACE USDA USFWS USGS	U.S. Army Corps of Engineers U.S. Department of Agriculture U.S. Fish and Wildlife Service U.S. Geological Survey
VPHCP	Vernal Pool Habitat Conservation Plan

This page intentionally left blank

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report presents the results of a biological resources study conducted by HELIX Environmental Planning, Inc. (HELIX) for the Alexandria Real Estate Equities' (project proponent) proposed One Alexandria Square Project (project). The study was conducted to provide the City of San Diego (City), resource agencies, and the public with current biological data for review of the proposed project under the California Environmental Quality Act (CEQA), and to demonstrate compliance with federal, state, and local regulations. This report describes the project site's current biological conditions, vegetation communities, plant and wildlife species observed, and identifies sensitive resources. It also identifies special status species with potential to occur within the project site. In addition, project impacts are assessed, and mitigation measures are proposed to offset the proposed project's unavoidable significant impacts to sensitive biological resources.

1.2 PROJECT LOCATION

The approximately 22-acre One Alexandria Square project site is located in the community of Torrey Pines in the City of San Diego, San Diego County, California (Figure 1, *Regional Location*). It lies within an unsectioned portion of Township 15 South, Range 4 West of the Del Mar U.S. Geological Survey (USGS) 7.5-minute quadrangle map (Figure 2, *USGS Topography*). The site is specifically located at 10933 North Torrey Pines Road (Accessor Parcel Numbers [APNs] 340-012-01, -02, -03, -04, and -05; and 340-010-34) south of Torrey Pines Preserve, east of the Pacific Ocean, and west of Interstate (I)-5, within the current Alexandria Tech Center property (Figure 3, *Aerial Vicinity*).

The site is within the boundary of the City's Multiple Species Conservation Program (MSCP) Subarea Plan but is located outside of the Multi-Habitat Planning Area (MHPA; Figure 4, *Regional Context*). The site is located within the Coastal Zone (Figure 4). U.S. Fish and Wildlife Service (USFWS)-designated critical habitat does not occur within or near the proposed project.

1.3 PROJECT DESCRIPTION

The project consists of the redevelopment of the current Alexandria Tech property, which is comprised of several commercial buildings used for office/scientific research uses; one building also contains a restaurant. The proposed project consists of a Site Development Permit (SDP) and Coastal Development Permit (CDP) to amend existing development permits, a Neighborhood Development Permit (NDP) to process setback deviations, and a Tentative Map to allow for the development of a ten-building Research and Development campus with supporting and ancillary uses, surface parking lots and parking structure (Figure 5, *Site Plan*). The project includes the complete demolition of the existing buildings located at 10931 North Torrey Pines Road, 10933 North Torrey Pines Road, and 10975 N Torrey Pines Road. Eight of the ten buildings are proposed to be new structures and two would include improvements to existing structures. The improved existing structures include the structure located at 10996 Torreyana Road and surface improvements along the frontage of the existing building located at 3010 Science Park Road. The total project gross floor area at build-out would be 428,160 square feet. All parking would be provided on-site.

2.0 SURVEY METHODS

2.1 LITERATURE REVIEW

Prior to conducting field surveys, HELIX conducted a thorough review of relevant maps, databases, and literature pertaining to biological resources known to occur within the project vicinity. Recent and historical aerial imagery, USGS topographic maps, soils maps (U.S. Department of Agriculture [USDA] 2020), and other maps of the project site and vicinity were acquired and reviewed to obtain updated information on the natural environmental setting.

In addition, a query of special status species and habitats databases was conducted, including the USFWS species records (USFWS 2019a), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB; CDFW 2019), Calflora database (Calflora 2019), SanBIOS (County of San Diego 2019), and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2019). The USFWS' National Wetlands Inventory (NWI) was also reviewed (USFWS 2019b). Any recorded locations of species, habitat types, wetlands, and other resources were mapped and overlaid onto aerial imagery using Geographic Information Systems.

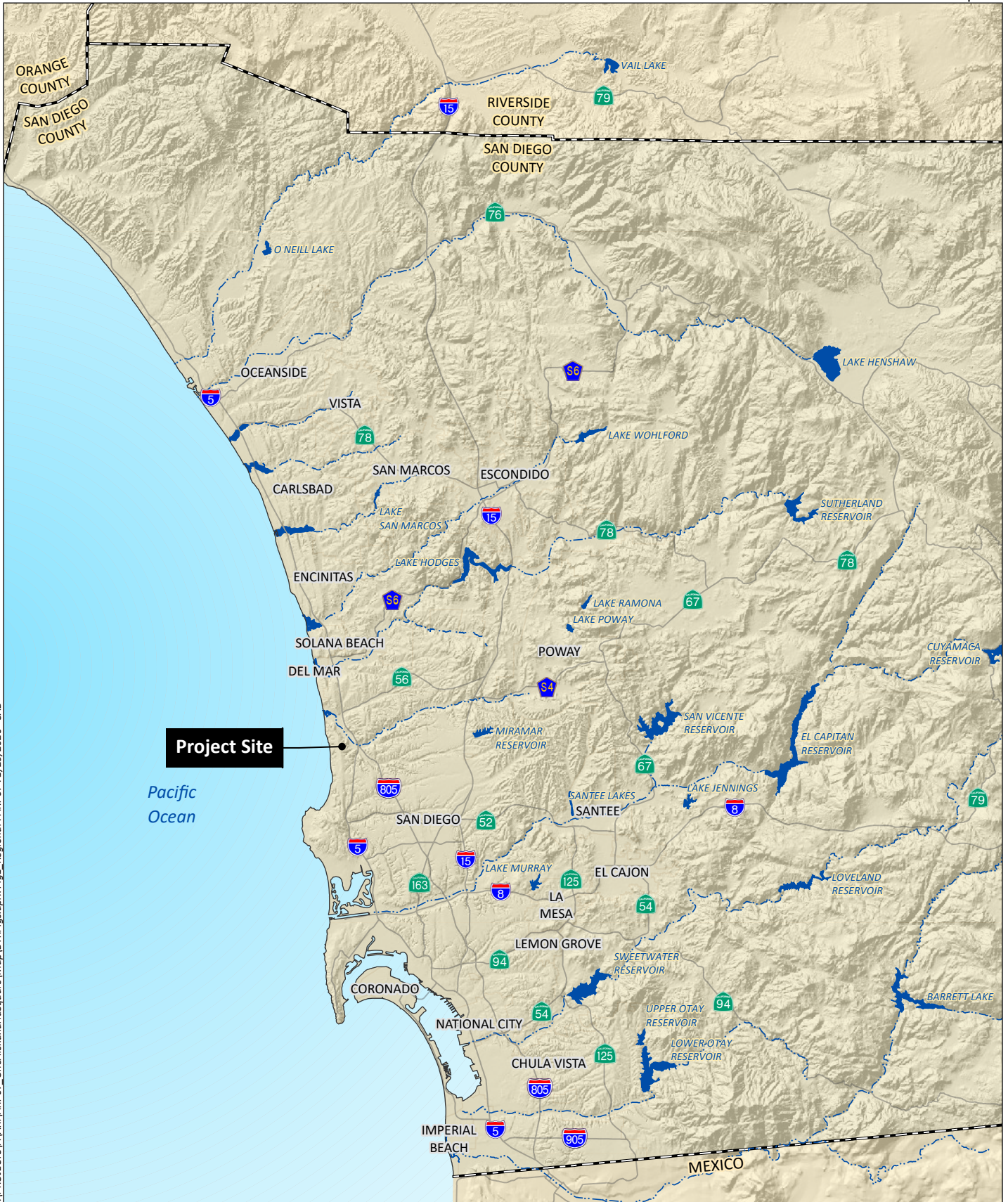
2.2 GENERAL BIOLOGICAL SURVEY

An initial general biological survey of the project site was conducted by HELIX biologist Mandy Mathews on December 12, 2019 and by Dane van Tamelen on June 19, 2020 (Table 1, *Survey Information*). Vegetation was mapped on a 1"=150' scale aerial of the site. A minimum mapping unit size of 0.10 acre was used when mapping upland habitat; 0.01 acre was used when mapping wetland and riparian habitat. The project site was surveyed on foot and with the aid of binoculars.

Table 1
SURVEY INFORMATION

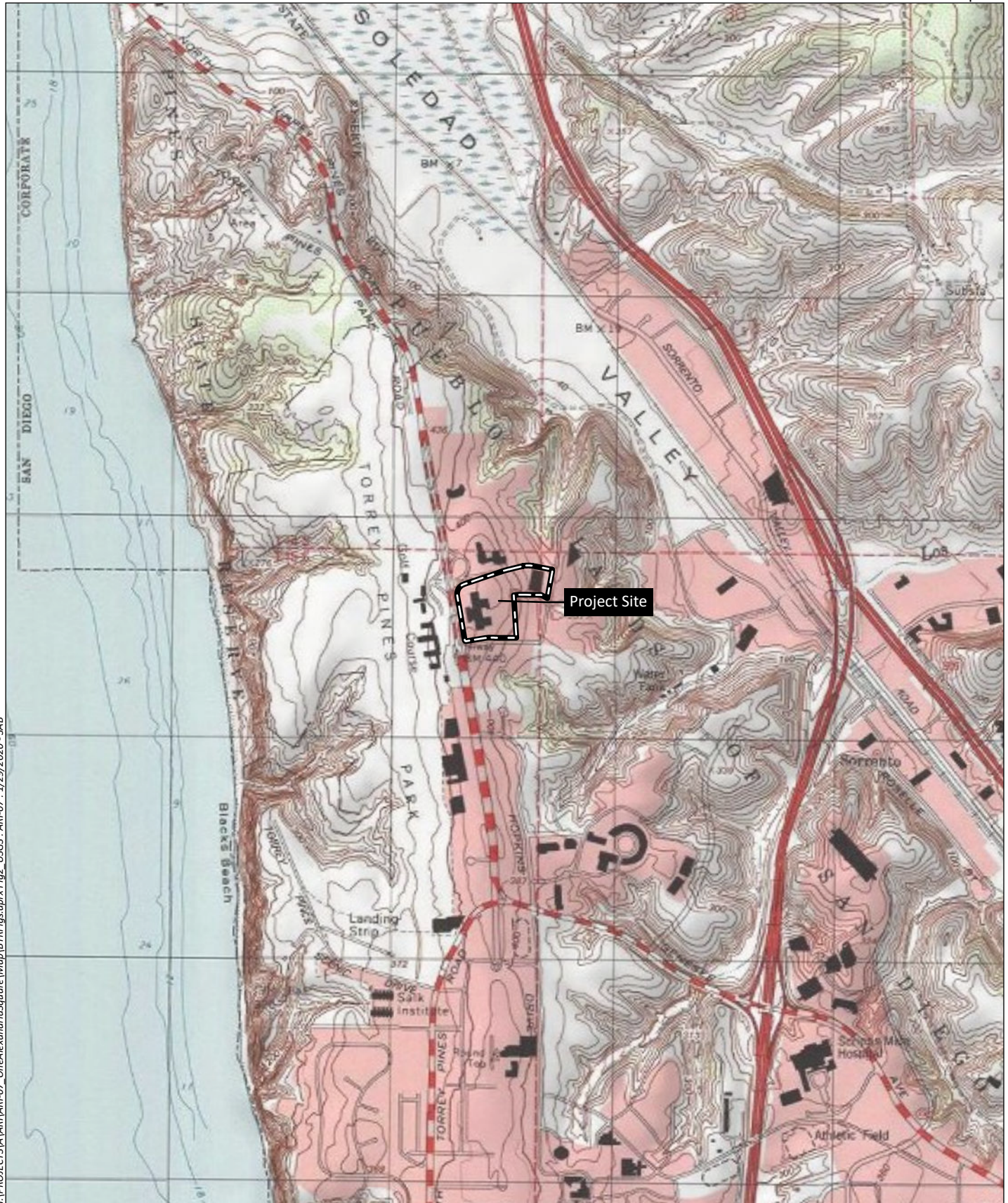
Date	Personnel	Survey Type
2019		
December 12, 2019	Mandy Mathews	General Biological Survey, Vegetation Mapping, Habitat Assessment
2020		
May 8, 2020	Dane van Tamelen	Spring Rare Plant Survey
June 19, 2020	Dane van Tamelen	Summer Rare Plant Survey, General biological inventory

Plant and animal species observed or otherwise detected were recorded in field notebooks. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. The locations of special status plant and animal species incidentally observed or otherwise detected were mapped. The project site was examined for evidence of potential jurisdictional waters and wetlands, including vernal pools. Photographs of the site are included in Appendix A, *Representative Site Photographs*.



I:\PROJECTS\A\ARI\ARI-07_OneAlexandriaSquare\Map\BTR\Figs.aprx Fig1_Regional : ARI-07 : 1/29/2020 - SAB


Source: Base Map Layers (SanGIS, 2016)



I:\PROJECTS\ARI\ARI-07_OneAlexandriaSquare\Map\BTR\Figs.aprx Fig2_USGS : ARI-07 : 1/29/2020 - SAB

Source: DEL MAR 7.5' Quad (USGS)






 Project Site

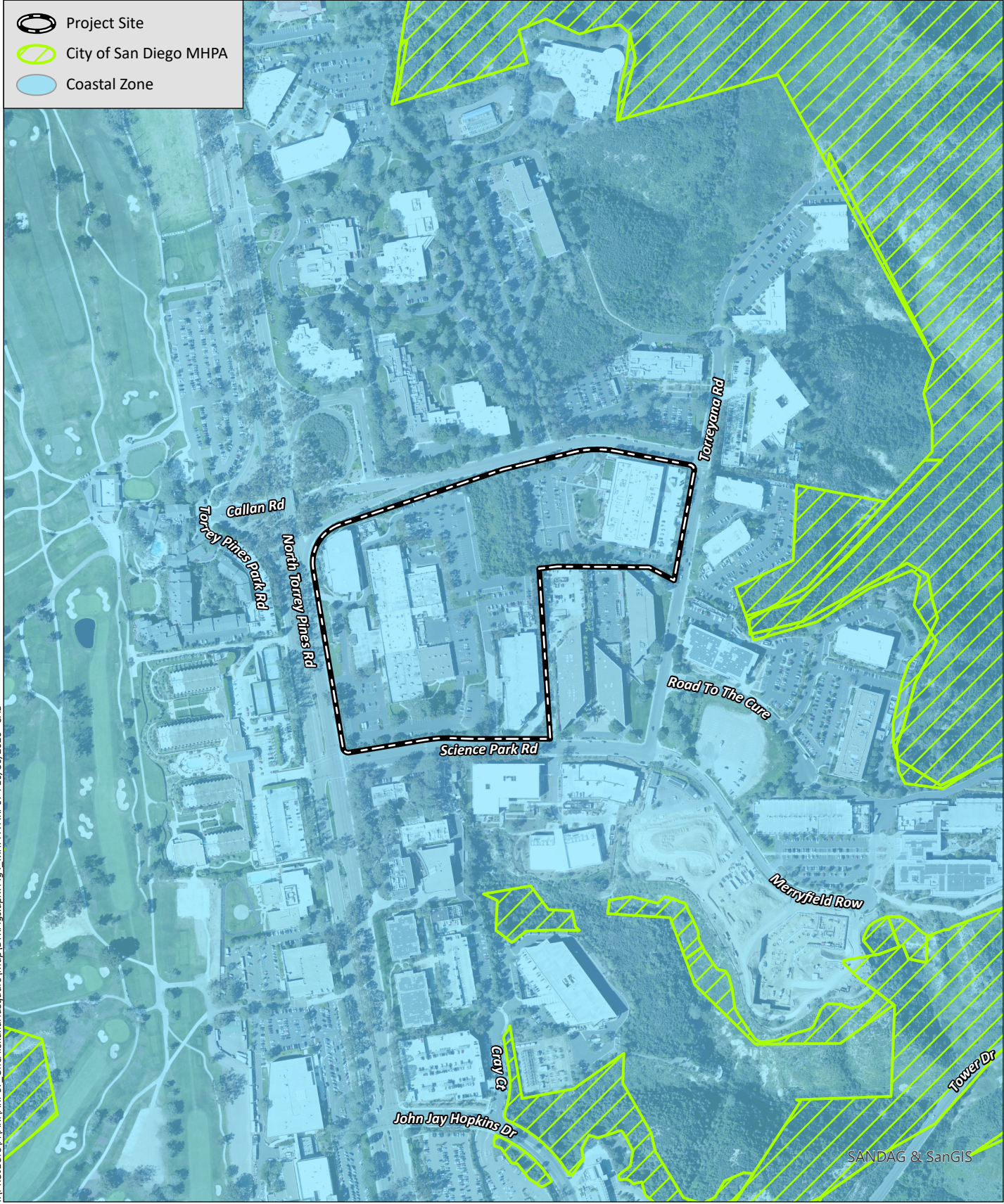


I:\PROJECTS\A\ARI\ARI-07_OneAlexandriaSquare\Map\BTR\Fig.aspx Fig.3_Aerial : ARI-07 : 4/29/2020 - SAB

SANDAG & SanGIS

Source: Aerial (SanGIS, 2017)

-  Project Site
-  City of San Diego MHPA
-  Coastal Zone

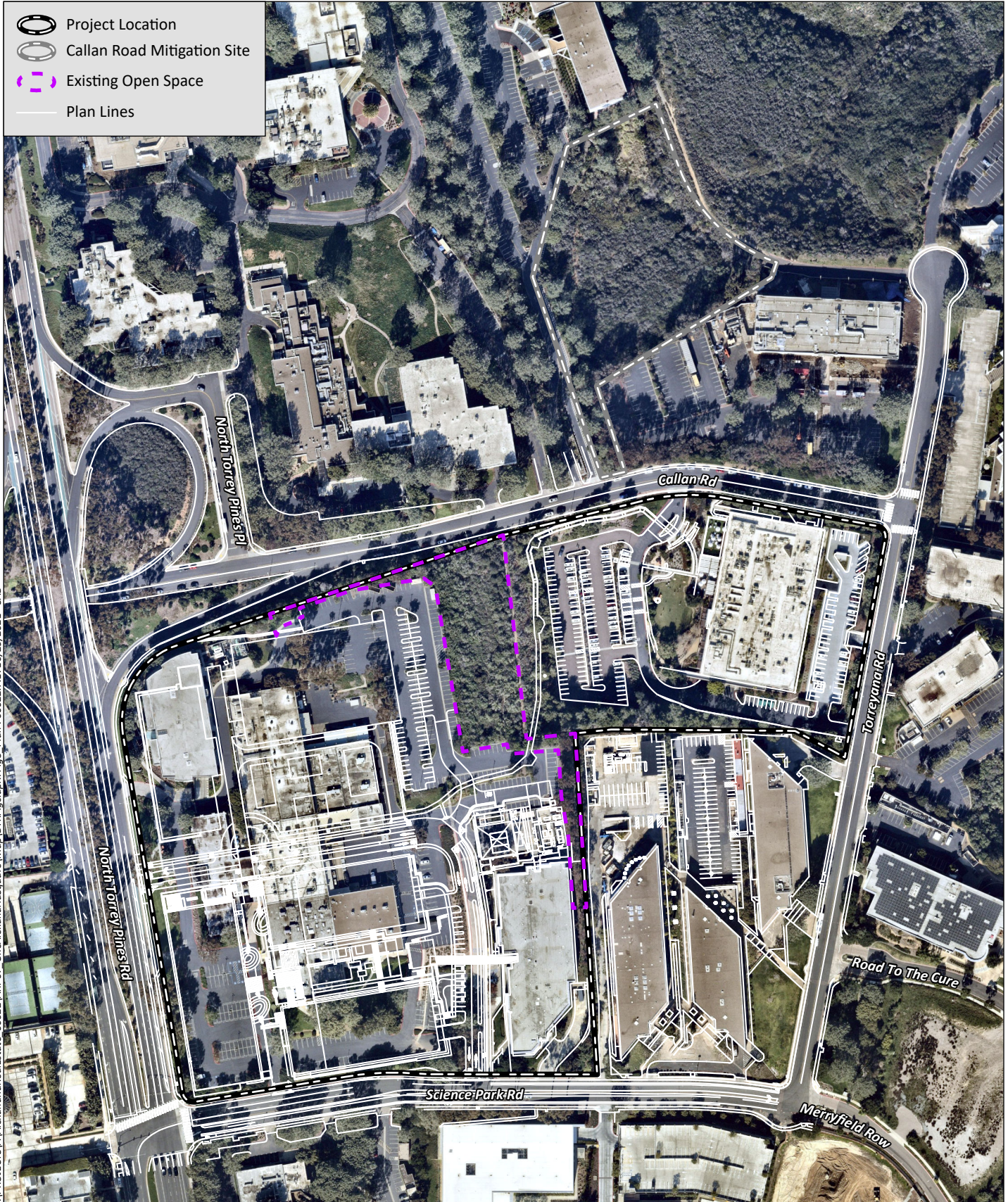


I:\PROJECTS\ARI\ARI-07_OneAlexandriaSquare\Map\BTR\Figs.aprx Fig4_MHPA : ARI-07 : 10/30/2020 - SAB

SANDAG & SanGIS

Source: Aerial (SanGIS, 2017)





I:\PROJECTS\IA\Alexandria\real\estate_00022\ARI-07_OneAlexandriaSquare\Map\BTR\Figs.aprx\Figs_Plan : 00022.7.1:10/29/2021 - SAB

Source: Aerial (NearMap, 2019)



2.3 FOCUSED SPECIES SURVEYS

2.3.1 Rare Plant Surveys

Surveys for special status plant species were conducted by HELIX biologist Dane van Tamelen on May 8 and June 19, 2020 (Table 1). Special status plant species include species that are: listed as threatened or endangered by the USFWS or the CDFW; those with a California Rare Plant Rank (CRPR) 1 through 4 as designated by the CNPS; and those that are listed as narrow endemic under the City Biological Guidelines (City 2018) and covered by the City's MSCP Subarea Plan (City 1997). The surveys were conducted on foot and include 100 percent visual coverage of the project site. Special status plant species encountered were mapped using a hand-held Global Positioning System (GPS) unit and/or on an aerial photograph. Special status plant species were also searched for opportunistically during other surveys and their numbers and locations were recorded when they were encountered.

2.4 JURISDICTIONAL ASSESSMENT

A preliminary assessment of potential water and wetland resources that may be regulated by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW was conducted concurrent with the general biological surveys (Table 1). Prior to conducting fieldwork, aerial photographs (1"=150' scale), topographic maps (1"=150' scale), and NWI maps were reviewed to assist in determining the presence or absence of potential jurisdictional areas within the project site. The purpose of the assessment was to identify and map water and wetland resources potentially subject to USACE jurisdiction pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344), RWQCB jurisdiction pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act, and streambed and riparian habitat potentially subject to CDFW jurisdiction pursuant to Sections 1600 et seq. of the California Fish and Game Code (CFG Code). The delineation was also conducted to determine the presence or absence of City Environmentally Sensitive Lands (ESL) wetlands and those meeting the single-parameter criteria for wetlands within the Coastal Overlay Zone. Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

2.5 SURVEY LIMITATIONS

Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other signs. However, the list of species identified are not necessarily a comprehensive account of all species that utilize the project site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed. Those species that are of special status and have high potential to occur in the project site, however, are still addressed in this report.

2.6 NOMENCLATURE

Nomenclature used in this report generally comes from the City's MSCP Subarea Plan (City 1997), Holland (1986) and Oberbauer (2008) for vegetation; Jepson eFlora (2020) and Baldwin et al. (2012) for plants; Society for the Study of Amphibians and Reptiles (2020) for reptiles and amphibians; American Ornithological Society (2020) for birds; and Bradley et al. (2014) and Tremor et al. (2017) for mammals. Plant species status is from the CNPS' Rare Plant Inventory (CNPS 2019), CDFW (2020a), and City (2018). Animal species status is from the CDFW (2020b) and City (2018).

3.0 RESULTS

3.1 PHYSICAL CHARACTERISTICS/SETTING

The project site is generally located within the Central Coast ecological region of the City of San Diego (San Diego Natural History Museum 2014). Mean annual precipitation is approximately 13 inches, and the mean annual temperature is approximately 62 degrees Fahrenheit. The frost-free season is 330 to 350 days. The site is situated in the community of Torrey Pines, in an area that has been heavily developed since the 1950s. The site is largely characterized by developed lands associated with commercial development.

A 1.5-acre open space parcel (APN 340-012-05) vegetated with native vegetation occurs within the north-central portion of the site. Based on a review of the Supplemental Environmental Impact Report (EIR) for the Calit-CBC project (City 1993; State Clearing House No. 89071907), the open space parcel was established to preserve a cultural resource site and offset significant biological impacts to sensitive vegetation and special status species. The current topography and vegetation within the open space parcel appear to have been planted as part of the site's original commercial development.

Surrounding land uses include commercial development, recreational development such as Torrey Pines Golf Course, and open space areas including the Torrey Pines State Nature Reserve. Interstate 5 is located east of the site.

3.2 DISTURBANCE


The project is generally confined to the existing developed areas north of Science Park Road, south of Callan Road, west of North Torrey Pines Road, and west of Torreyana Road. Historical aerials of the site indicated that ground disturbance activities, possibly related to agriculture, occurred prior to 1953 (HistoricalAerials.com 2020). Commercial development of the site originally occurred sometime between 1966 and 1980 and was further developed in the early 2000s as part of the Calit-CBC Project (City 1993).

3.3 TOPOGRAPHY AND SOILS







The project site is generally flat and located at sea level. Five soil types have been mapped within the study area (USDA 2020; Figure 6, *Soils*): Carlsbad gravelly loamy sand, 5 to 9 percent slopes, Carlsbad gravelly loamy sand, 9 to 15 percent slopes, Chesterton fine sandy loam, 5 to 9 percent slopes, Marina loamy coarse sand, 2 to 9 percent slopes, and steep gullied land.

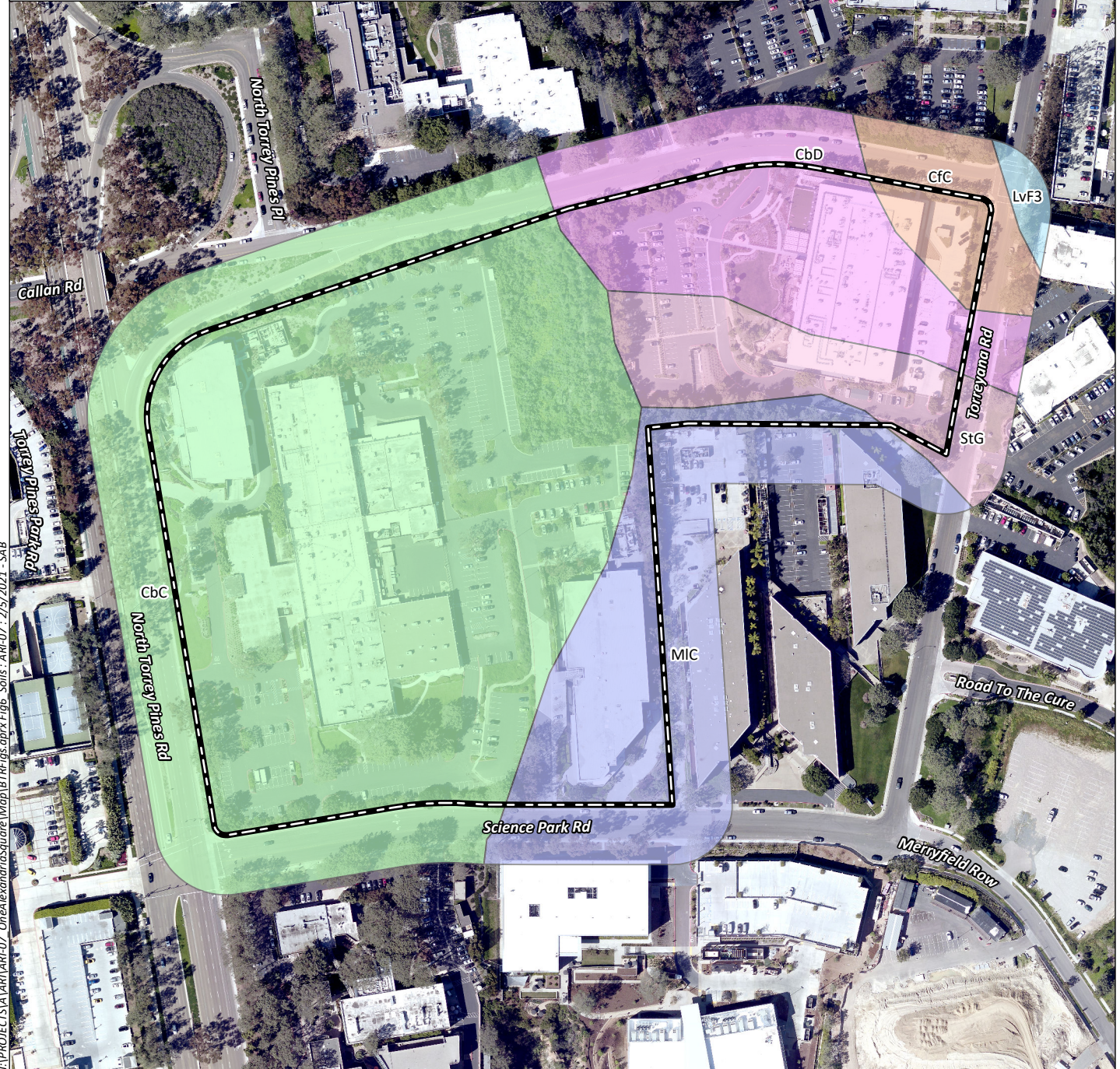
3.4 VEGETATION COMMUNITIES/LAND COVER TYPES

A total of two vegetation communities/land cover types were mapped within the project site (Figure 7, *Vegetation and Sensitive Resources*): southern maritime chaparral and developed land (Table 2, *Existing Vegetation Communities/Land Cover Types*). The numeric codes in parentheses following each vegetation community/land cover type name are from the City Land Development Code Biology Guidelines (City 2018), with further guidance from the Holland classification system (Holland 1986) and as expanded by Oberbauer (2008). The communities/habitat types are presented in Table 2 by MSCP Tier.






 Project Site

Mapped Soils

-  CbC, Carlsbad gravelly loamy sand, 5 to 9 percent slopes
-  CbD, Carlsbad gravelly loamy sand, 9 to 15 percent slopes
-  Cfc, Chesterton fine sandy loam, 5 to 9 percent slopes
-  LvF3, Loamy alluvial land-Huerhuero complex, 9 to 50 percent slopes, severely eroded
-  MIC, Marina loamy coarse sand, 2 to 9 percent slopes
-  StG, Steep gullied land



Source: Aerial (SanGIS, 2017), Soils (NRCS SSURGO)

-  Project Site
-  Existing Open Space
- Vegetation
 -  Southern Maritime Chaparral
 -  Urban/Developed
- Special Status Species Observations
 -  Wart-stemmed Ceanothus (*Ceanothus verrucosus*)



I:\PROJECTS\1\ARI\ARI-07_OneAlexandriaSquare\Map\BTR\Final.aprx Fig7_Veg_ARI-07_2/5/2021 - SAB

Source: Aerial (SanGIS, 2017)

Table 2
EXISTING VEGETATION COMMUNITIES/LAND COVER TYPES

Vegetation Community/Land Cover Type ¹	Habitat Tier ²	Acres ³		
		Project Site	Open Space Parcel	Total
Uplands				
Southern Maritime Chaparral (37C00)	I	0.2	0.7	0.9
Developed (12000)	IV	20.5	0.8	21.3
	TOTAL	20.7	1.5	22.2

¹ Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).

² Tiers refer to the City’s Biology Guidelines (2018) habitat classification system.

³ Acreages rounded to the nearest 0.1 acre for uplands; total reflects rounding.

Southern Maritime Chaparral

Southern maritime chaparral is restricted to the weathered sands within the coastal fog belt in San Diego County from La Jolla to Carlsbad. This low, fairly open, chaparral is dominated by wart-stemmed ceanothus (*Ceanothus verrucosus*) and thick-leaved Eastwood’s manzanita (*Arctostaphylos glandulosa*). This community occurs in the north-central portion of the site, south of Callan Road (Figure 7). A total of 0.9 acre of southern maritime chaparral was mapped within the project site, including 0.7 acre that occurs within the open space parcel.

Developed

Developed land occurs where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained. Developed land is the most prevalent land use within the project site totaling 21.3 acres, including 0.8 acre of which occur within the open space parcel. It consists of commercial development, landscaping, and parking lots (Figure 7).

3.5 FLORA

A total of 71 plant species were observed within the project site, of which 38 (54 percent) were native species and 33 (46 percent) non-native species (Appendix B, *Plant Species Observed*).

3.6 FAUNA

A total of 29 animal species were observed or detected within the project site including, 25 bird, and four mammal species (Appendix C, *Animal Species Observed or Detected*).

4.0 SENSITIVE BIOLOGICAL RESOURCES

According to City Municipal Code (Chapter 11, Article 3, Division 1) and Appendix I of the City’s Biology Guidelines (City 2018), sensitive biological resources refers to upland and/or wetland areas that meet any one of the following criteria:

- (a) Lands that have been included in the MHPA as identified in the City’s MSCP SAP and VPHCP;

- (b) Wetlands (as defined by Municipal Code Section 113.0103);
- (c) Lands that contain Tier I, Tier II, Tier IIIA, or Tier IIIB habitats;
- (d) Lands supporting species or subspecies listed as rare, endangered, or threatened;
- (e) Lands containing habitats with narrow endemic or vernal pool species as listed in the City's Biology Guidelines (City 2018); or
- (f) Lands containing habitats of Covered Species as listed in the City's Biology Guidelines (City 2018).

4.1 SENSITIVE VEGETATION COMMUNITIES/HABITAT TYPES

Sensitive vegetation communities/habitat types are defined as land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the State CEQA Guidelines.

Wetlands and Tier I through IIIB uplands are considered sensitive habitat types.

Sensitive vegetation communities/habitat types mapped within the project site include Tier I southern maritime chaparral.

Developed land does not meet the definition of sensitive habitat.

4.2 SPECIAL STATUS PLANT SPECIES

Special status plant species have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City (e.g., MSCP narrow endemic species), and may also be included in the CNPS Inventory of Rare and Endangered Plants. Their status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to a region) is geographically rare. A species may be generally abundant but occur only in very specific habitats. Lastly, a species may be widespread but exist naturally in small populations.

4.2.1 Special Status Plant Species Observed

Two special status plant species were observed in the project site during the general biological survey and rare plant surveys: wart-stemmed ceanothus (*Ceanothus verrucosus*) and Torrey pine (*Pinus torreyana* ssp. *torreyana*) and are discussed below. Neither species are federally, or state listed. Both species are covered under the City's MSCP Subarea Plan (City 1997). A list of all plant species observed is included as Appendix B.

Wart-stemmed ceanothus (*Ceanothus verrucosus*)**Listing:** --/--; CRPR 2B.2; MSCP Covered**Distribution:** Primarily San Diego County and Orange County. Uncommon in Riverside, San Bernardino, and Marin Counties.**Habitat(s):** Rocky slopes within chaparral, particularly southern maritime chaparral.**Presence within the Project Site:** A total of 31 individuals were found within the southern maritime chaparral habitat in the north-central portion of the project site (Figure 7).**Torrey pine (*Pinus torreyana* ssp. *torreyana*)****Listing:** --/--; CRPR 1B.2; MSCP Covered**Distribution:** Occurs in only two locations: along the coast near Del Mar (*Pinus torreyana* ssp. *torreyana*) and on Santa Rosa Island (*P. t.* ssp. *insularis*)**Habitat:** Torrey pine woodlands and southern maritime chaparral.**Presence within the Project Site:** Several cultivated individuals of this species are present within the developed portion of the project site in landscaped areas.

4.2.2 Special Status Plant Species with Potential to Occur

Special status plant species that were not observed but may have potential to occur on site are listed in Appendix D, *Special Status Plant Species Observed or With Potential Occur*. One species is listed with high potential to occur: ashy spike-moss (*Selaginella cinerascens*). Suitable habitat for ashy spike-moss, a CRPR 4.1 species, occurs within the project site, and the species has been reported within five miles of the project site. No additional species have a high potential to occur primarily due to the lack of suitable conditions. The study area does not support the vegetation associations, soils, or hydrology required by many of the special status plants known to the region.

Ashy spike-moss (*Selaginella cinerascens*)**Listing:** --/--; CRPR 4.1**Distribution:** Coastal regions from southern Los Angeles County south to San Diego County**Habitat:** Grows in sunny spots or under shrubs within coastal sage scrub and chaparral at elevations below 1,804 feet. Often associated with “red clay” soils.**Presence within the Project Site:** This species was not found to occur within the project site but has a high potential to occur within southern maritime chaparral on-site.

4.3 SPECIAL STATUS ANIMAL SPECIES

Special status animal species include those that have been afforded special status and/or recognition by the USFWS, CDFW, and/or the City. In general, the principal reason an individual taxon (species or subspecies) is given such recognition is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

4.3.1 Special Status Animal Species Observed or Otherwise Detected

No special status animal species were detected in project site during biological surveys. A list of animal species observed is included as Appendix C.

4.3.2 Special Status Animal Species with Potential to Occur

Special status animal species present on site or with potential to occur within project site are included in Appendix E, *Special Status Animal Species Observed or With Potential Occur*. They are grouped into invertebrates and vertebrates (fish, amphibians, reptiles, birds, and mammals) and alphabetized by scientific name. Three special status animal species that were not observed on the project site but were determined to have high potential to occur include: Belding's orange-throated whiptail, San Diego tiger whiptail (*Aspidoscelis tigris stejnegeri*), and Cooper's hawk (*Accipiter cooperii*). Suitable habitat for these species occurs within the project site. Belding's orange-throated whiptail and Cooper's hawk have been previously observed within the project site (City 1989), and San Diego tiger whiptail has been observed within 1-mile of the site. These species are further discussed in Appendix E.

Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*)

Status: --/WL; MSCP Covered

Distribution: Found within the southwestern portion of California in southern San Bernardino, western Riverside, Orange, and San Diego Counties on the western slopes of the Peninsular Ranges at elevations below 3,500 feet

Habitat: Suitable habitat includes coastal sage scrub, chaparral, juniper woodland, oak woodland, and grasslands along with alluvial fan scrub and riparian areas. Occurrence of the species correlated with the presence perennial plants which provides a food base for its major food source, termites.

Presence within the Project Site: This species was not found to occur within the project site but has a high potential to occur within suitable chaparral habitat on-site.

San Diegan tiger [coastal] whiptail (*Aspidoscelis tigris stejnegeri*)

Status: --/SSC

Distribution: Occurs along the coastal region of southern California from San Luis Obispo south to San Diego County

Habitat: Inhabits a wide variety of habitats, primarily in hot and dry open areas with sparse vegetation, from sea level up to 4,900 feet. Suitable habitat includes coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas with sandy or gravelly substrates.

Presence within the Project Site: This species was not found to occur within the project site but has a high potential to occur within suitable chaparral habitat on-site.

Cooper's Hawk (*Accipiter cooperii*)

Status: --/WL; MSCP Covered

Distribution: In California, breeds from Siskiyou County south to San Diego County and eastwards to Owens Valley at elevations below 9,000 feet.

Habitat: Inhabits forests, riparian areas, and more recently suburban and urban areas. Nests within dense woodlands and forests and isolated trees in open areas.

Presence within the Project Site: This species was not found to occur within the project site but has a high potential nest within landscaped eucalyptus (*Eucalyptus* spp.) trees present on-site.

No additional species have a high potential to occur, primarily due to the lack of suitable habitat and dense urban and residential development in the area. Appendix F, *Explanation of Status Codes for Plant and Animal Species*, includes explanations of sensitivity codes.

4.4 JURISDICTIONAL WATERS AND WETLANDS

The project site does not support waterways, wetlands, and riparian habitat that would be subject to USACE, RWQCB, and/or CDFW jurisdiction, or that would be considered City ESL wetlands or single-parameter wetlands within the Coastal Overlay Zone.

4.5 HABITAT CONNECTIVITY AND WILDLIFE CORRIDORS

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are made up of a fragmented archipelago arrangement of habitat over a linear distance.

The project is not located within an identified wildlife corridor or linkage and is located outside the MHPA (City 1997). The proposed project site is in a highly urbanized area and is primarily characterized by existing commercial development. An existing 1.5-acre open space parcel, vegetated with southern maritime chaparral and landscaped areas, occurs within the north-central portion of the site. However, this habitat is surrounded by roads and existing commercial development on all sides which isolates the open space parcel from adjacent open space areas in the vicinity. The small size of the open space parcel, presence of existing development, and physical distance from adjacent open spaces areas in the region hinders wildlife access and usage of the site, constrains wildlife movement within the surrounding area, and prevents the open space parcel from serving as a wildlife movement linkage or corridor.

5.0 REGIONAL AND REGULATORY FRAMEWORK

Biological resources within the project site are subject to regulatory administration by the federal government, state of California, and City.

5.1 FEDERAL GOVERNMENT

5.1.1 Federal Endangered Species Act

Administered by the USFWS, the Federal Endangered Species Act (FESA) 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 a “take” under the FESA. Section 9(a) of the FESA defines take as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” “Harm” and “harass” are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species’ behavioral patterns.

The USFWS designates critical habitat for endangered and threatened species. Critical habitat is defined as areas of land that are considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitats so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the FESA, federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat.

Sections 7 and 10(a) of the FESA regulate actions that could jeopardize endangered or threatened species. Section 7 generally describes a process of federal interagency consultation and issuance of a biological opinion and incidental take statement when federal actions may adversely affect listed species. In this case, take can be authorized via a letter of biological opinion issued by the USFWS for non-marine related listed species issues. A Section 7 consultation (formal or informal) is required when there is a nexus between endangered species' use of a site and there is an associated federal action for a proposed impact (e.g., the USACE would initiate a Section 7 consultation with the USFWS for impacts proposed to USACE jurisdictional areas that may also affect listed species or their critical habitat). Section 10(a) allows issuance of permits for incidental take of endangered or threatened species with preparation of a Habitat Conservation Plan (HCP) when there is no federal nexus. The term "incidental" applies if the taking of a listed species is incidental to, and not the purpose of, an otherwise lawful activity. An HCP demonstrating how the taking would be minimized and how steps taken would ensure the species' survival must be submitted for issuance of Section 10(a) permits. Pursuant to Section 10(a), the City was issued a take permit for federally listed species covered by its adopted MSCP Subarea Plan.

5.1.2 Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during the nesting season. In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. As a regulatory requirement, the project must comply with the regulations and guidelines of the MBTA.

5.1.3 Clean Water Act (Section 404) and Harbors Act

Federal wetland regulation (non-marine issues) is guided by the Rivers and Harbors Act of 1899 and the CWA. The Rivers and Harbors Act deals primarily with discharges into navigable waters, while the purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S. is overseen by the USACE under Section 404 of the CWA. Most development projects are permitted using Individual Permit or Nationwide Permit instruments.

Section 401 of the CWA requires that any applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. must obtain a Water Quality Certification, or a waiver thereof, from the state in which the discharge originates. In California, the RWQCB issues Water Quality Certifications.

5.2 STATE OF CALIFORNIA

5.2.1 California Environmental Quality Act

Primary environmental legislation in California is found in CEQA and its implementing guidelines (State CEQA Guidelines), which require that projects with potential adverse effects (or impacts) on the environment undergo environmental review. Adverse environmental impacts are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations.

5.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) established that it is state policy to conserve, protect, restore, and enhance state endangered species and their habitats. Under state law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. The CESA authorizes that private entities may “take” plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the CDFW certifies that the incidental take is consistent with CESA (CFG Code Section 2080.1[a]). For state-only listed species, Section 2081 of CFG Code authorizes the CDFW to issue an Incidental Take Permit for state-listed threatened and endangered species if specific criteria are met. The City was issued a take permit for state listed species covered by its adopted MSCP Subarea Plan pursuant to Section 2081.

5.2.3 California Coastal Act

The California Coastal Commission (CCC), through provisions of the California Coastal Act of 1976, is authorized to issue a CDP for projects located within the Coastal Zone. In areas where a local entity has a certified Local Coastal Program (LCP), the local entity can issue a CDP only if it is consistent with the LCP. The CCC, however, has appeal authority for portions of LCPs and retains jurisdiction over certain public trust lands and in areas without an LCP. The project site occurs in the Coastal Zone within the boundaries of the City’s certified North City Local Coastal Program Land Use Plan (LCP) (Figure 4).

5.2.4 Native Plant Protection Act

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in listed plants. The CESA followed the NPPA and covers both plants and animals determined to be endangered or threatened with extinction. Plants listed as rare under NPPA were designated rare under the CESA.

5.2.5 California Fish and Game Code

The CFG Code provides specific protection and listing for several types of biological resources. Sections 1600 *et seq.* of CFG Code require notification and, if required, a Streambed Alteration Agreement for any activity that would alter the flow, change or use any material from the bed, channel, or bank of any perennial, intermittent, or ephemeral river, stream, and/or lake. Typical activities that require notification include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

The CFG Code provides specific protection and listing for several types of biological resources. Pursuant to CFG Code Section 3503, 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. Raptors and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS. As a regulatory requirement, the project must comply with the regulations and guidelines of the CFG Code.

5.2.6 Section 401 Water Quality Certification / Porter-Cologne Water Quality Control Act

The State Water Resources Control Board (SWRCB) and RWQCB regulate the discharge of waste into waters of the state via the 1969 Porter-Cologne Water Quality Control Act (Porter-Cologne) as described in the California Water Code. The California Water Code is the state’s version of the federal CWA. Waste, according to the California Water Code, includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

State waters that are not federal waters may be regulated under Porter-Cologne. A Report of Waste Discharge must be filed with the RWQCB for projects that result in discharge of waste into waters of the state. The RWQCB will issue Waste Discharge Requirements or a waiver. The Waste Discharge Requirements are the Porter-Cologne version of a CWA Section 401 Water Quality Certification.

5.3 CITY OF SAN DIEGO

5.3.1 Environmentally Sensitive Lands

Impacts to biological resources in the City must comply with City ESL Regulations. The purpose of the regulations is to “protect, preserve, and, where damaged restore, the environmentally sensitive lands of San Diego and the viability of the species supported by those lands.” Environmentally sensitive lands are defined to include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains.

The ESL regulations require that impacts to wetlands be avoided unless the activities meet specific exemption criteria established in the ordinance. Impacts to City-defined wetlands require approval of deviation findings as required by ESL regulations. Impacts to wetlands must be mitigated in accordance with Section III(B)(1)(a) of the Land Development Manual Biology Guidelines (City 2018). The ESL regulations also require that buffers be maintained around all wetlands (as appropriate) to protect their functions and values. Buffer widths may either be increased or decreased as determined on a case-by-case basis, taking into consideration the size and type of project proposed, sensitivity of the wetland resource to detrimental edge effects, topography, specific functions and values of the wetland, as well as the need for transitional upland habitat.

In addition to restricting impacts to wetland habitats, the ESL regulations restrict development within the MHPA, including required impact avoidance areas around raptor nesting locations (specifically, Cooper’s hawk, golden eagle [*Aquila chrysaetos*], burrowing owl [*Athene cunicularia*], and northern harrier [*Circus cyaneus*]), and known locations of coastal California gnatcatcher and southwestern pond turtle (*Actinemys pallida*). The ESL regulations also impose seasonal restrictions on grading where development may impact the following bird species: coastal California gnatcatcher, least Bell’s vireo, southwestern willow flycatcher (*Empidonax traillii extimus*), tricolored blackbird (*Agelaius tricolor*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), western snowy plover (*Charadrius nivosus nivosus*), and California least tern (*Sternula antillarum browni*).

5.3.2 Multiple Species Conservation Program

In July 1997, the USFWS, CDFW, and City adopted the Implementing Agreement for the MSCP. This program allows the incidental take of threatened and endangered species as well as regionally-sensitive species that are adequately conserved by the agreement (covered species). The MSCP designates regional preserves that are intended to be mostly void of development activities, while allowing development of other areas subject to the requirements of the program. Impacts to biological resources are regulated by City ESL regulations.

The City’s MSCP Subarea Plan (City 1997) has been prepared to meet the requirements of the California Natural Communities Conservation Planning Act of 1992. This Subarea Plan describes how the City’s portion of the MSCP Preserve, the MHPA, will be implemented. The project site is not located within or adjacent to the MHPA. The nearest MHPA boundary is located approximately 300 feet east of the project site with commercial development occurring between the site and the MHPA boundary.

5.3.3 Local Coastal Program

In March 1981, the San Diego City Council adopted the North City Local Coastal Program Land Use Plan (LCP), revised in May 1985 and revised again in March 1987, which has been prepared to meet the requirement of the California Coastal Act of 1976. Development within the Coastal Zone boundaries are subject to the City’s LCP, Section 126.0702 City’s Municipal Code, and the California Coastal Act, and would be subject to a CDP. The City acts as the local permitting authority for the issuance of CDPs for projects within its Coastal Zone, with a few exceptions. There are areas of “deferred certification” where the state retains its permitting authority. All projects in the Coastal Zone would require review for consistency with the LCP and California Coastal Act prior to issuance of a CDP. This would ensure that infrastructure projects will be consistent with the LCP; individual components would require this review on a project-by-project basis to ensure that there would not be adverse impacts.

The project site is located within the Coastal Zone (Figure 4) within the boundaries of the University Community Plan (City 2019a). The project site does not occur within a floodplain area or along the coast and does not contain jurisdictional waters and wetlands (including estuarine habitats) that would be subject to additional development policies under the City’s LCP.

6.0 MULTIPLE SPECIES CONSERVATION PROGRAM CONSISTENCY ANALYSIS

The follow section details the project’s consistency with the City’s MSCP Subarea Plan applicable guidelines, management directives, and policies.

6.1 LAND USE ADJACENCY GUIDELINES – SECTION 1.4.3 OF THE MSCP

The City’s MSCP Subarea Plan addresses indirect impacts to preserve areas from adjacent development in Section 1.4.3, Land Use Adjacency Guidelines (LUAGs). The LUAGs provide requirements for land uses adjacent to the habitat preserve in order to minimize indirect impacts from drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading to the sensitive resources contained therein. Projects that are within or adjacent to the MHPA must demonstrate compliance with the LUAGs.

The project site is not located within or adjacent to the MHPA. The site is located approximately 300 feet east of the nearest MHPA boundary (Figure 4). In between the site and the MHPA boundary is commercial development. Given this distance and the land uses in between, development at the site would not impact the City’s MHPA and would not be subject to or require compliance with the MHPA adjacency guidelines.

6.2 GENERAL MANAGEMENT DIRECTIVES – SECTION 1.5.2 OF THE MSCP

The following general management directives apply to the project, as outlined in Section 1.5.2 of the City’s MSCP Subarea Plan (City 1997). The project will comply with these general management directives as outlined below:

Mitigation

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

Project impacts to sensitive vegetation communities will be mitigated in accordance with the ratios provided in Table 3 of the City’s Biology Guidelines (City 2018) through off-site preservation of existing habitat.

6.3 GENERAL PLANNING POLICIES AND DESIGN GUIDELINES – SECTION 1.4.2 OF THE MSCP

The MSCP establishes specific guidelines that limit activities that occur within the MHPA. In general, activities occurring within the MHPA must conform to these guidelines and, wherever feasible, should be located in the least sensitive areas. Utility lines (e.g., sewer, water, etc.), limited water facilities, and other essential public facilities in compliance with policies found in Section 1.4.2 of the City’s MSCP

Subarea Plan are considered conditionally compatible with the biological objectives of the MSCP and are thus allowed within the City's MHPA.

The project site is not located within or adjacent to the MHPA. Therefore, the project is not subject to or require compliance with any of the policies and guidelines from Section 1.4.2 of the MSCP.

6.4 CONDITIONS OF COVERAGE FOR SENSITIVE SPECIES

Two MSCP-covered plant species were observed within the project site: wart-stemmed ceanothus and Torrey pine. No MSCP-covered animal species were observed within the project; however, two MSCP-covered species were determined to have high potential to occur: Belding's orange-throated whiptail and Cooper's hawk. The MSCP includes conditions for coverage for these species, which are discussed below.

Wart-stemmed Ceanothus

Wart-stemmed ceanothus was determined to be conserved under the MSCP because 67 percent of the major populations would be conserved, and special management actions within preserve areas were anticipated to increase populations (City 1997). The MSCP's conditions for coverage for wart-stemmed ceanothus include the incorporation of the species in restoration and revegetation efforts within appropriate habitat types. Additionally, area specific management directives for the protected populations within preserve areas must include specific measures to increase populations, address the autecology and natural history of the species, and to reduce the risk of catastrophic fire.

The proposed project would impact a total of seven wart-stemmed ceanothus shrubs. As a condition of project approval, impacted individuals shall be replaced through the planting of seven individuals within the 3.2-acre Callan Road mitigation site (APN 340-010-45) located north of the project. The project would further comply with the conditions for coverage for this species through continued preservation of 24 wart-stemmed ceanothus within the existing 1.5-acre open space parcel, and off-site preservation of an additional 23 wart-stemmed ceanothus at the 3.2-acre Callan Road mitigation site (APN 340-010-45) located north of the project (see Section 9.0).

Torrey Pine

Torrey pine was determined to be adequately conserved under the MSCP because the single naturally occurring populations within Torrey Pines State Reserve was conserved and appropriately managed (City 1997). There are no conditions for coverage for Torrey pine. Furthermore, Torrey pine trees within the project site are comprised of cultivated trees that have been planted as part of the project's landscaping and do not represent a naturally occurring population.

Cooper's Hawk

Cooper's hawk is determined to be adequately conserved under the MSCP because 59 percent of potential foraging and 52 percent of potential nesting habitat is being conserved, including conservation of over 92 percent of the known populations (City 1997). The MSCP's conditions for coverage include 300-foot-wide impact avoidance areas around active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

As a condition of project approval, preconstruction surveys for Cooper's hawk would be required prior to the removal of habitat with potential to support active nests during the breeding season (generally February 1 to September 15). The proposed project would comply with the conditions for coverage for this species through establishment of the required 300-foot avoidance setback if nesting Cooper's hawk are found. The project would not impact oak woodlands or oak riparian forests as neither community occurs within the project site. This is consistent with the conditions of coverage for the Cooper's hawk that requires the minimization of disturbance to those habitats.

Orange-Throated Whiptail

The orange-throated whiptail was determined to be conserved under the MSCP because 59 percent of the potential habitat and 62 percent of the known point occurrences would be conserved, and habitat linkages between large blocks of protected lands would also be conserved in a functional manner (City 1996). The MSCP's conditions for coverage include measures to address edge effects.

Project development would not substantially add to edge effects already present in the existing condition. Installation of silt fencing around the perimeter of the construction area and biological monitoring would ensure the minimization of edge effects on this species during work activities would be avoided.

6.5 VERNAL POOL HABITAT CONSERVATION PLAN CONSISTENCY

In October 2009, the USFWS and City entered into a Planning Agreement for the development of the City's Vernal Pool Habitat Conservation Plan (VPHCP) (City 2019) covering vernal pool habitats and associated species in the City. This plan allows for the incidental take of the following seven threatened and endangered species (VPHCP covered species) that do not have federal coverage under the City's MSCP Subarea Plan:

- San Diego fairy shrimp
- San Diego button-celery
- San Diego Mesa mint
- Spreading navarretia (*Navarretia fossalis*)
- California Orcutt grass (*Orcuttia californica*)
- Otay Mesa mint (*Pogogyne nudiuscula*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)

The VPHCP is compatible with the MSCP and expands upon the City's existing MHPA with the conservation of additional lands that support vernal pools and vernal pool covered species. The City's Vernal Pool Management and Monitoring Plan (City 2020) outlines the VPHCP management and monitoring strategy and how it will be implemented by the City. It provides a framework plan that outlines site-specific management and monitoring actions for the vernal pool complexes that will be managed as part of the MHPA to achieve the VPHCP objectives.

The proposed project is located outside of the VPHCP Preserve. No vernal pools or VPHCP covered species occur within the project's study area. Soils mapped within the project's study area (Figure 5) are

unsuitable for the formation of vernal pools and seasonal ponds. The proposed project would not result in any impacts to vernal pools, VPHCP covered species, or VPHCP preserve areas.

VPHCP Avoidance and Minimization Measures

The City's VPHCP (City 2019) includes measures to avoid or minimize impacts to conserved vernal pools adjacent to development in Section 5.2.1, *Avoidance and Minimization Measures*. These measures provide requirements for land uses adjacent to the habitat preserve (VPHCP Hardline and MHPA) in order to minimize indirect impacts to the VPHCP covered species contained therein. The proposed project does occur within or adjacent to VPHCP preserve areas or vernal pool resources; therefore, these measures are not applicable to the project.

7.0 ANALYSIS OF PROJECT IMPACTS

This section describes potential direct and indirect impacts associated with implementation of the project. Direct impacts immediately alter the affected biological resources such as when those resources are eliminated temporarily or permanently. Indirect impacts consist of secondary effects of a project, including drainage and toxins (water quality), lighting, noise, and invasive plant species.

7.1 CRITERIA FOR DETERMINING IMPACT SIGNIFICANCE

The following guidance (Appendix I, City Biology Guidelines 2018) is used to determine potential significance of impacts on biological resources pursuant to the City's Significance Determination Thresholds (City 2018). A project would result in a significant or potentially significant biological resources impact if it would result in:

- A substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP, VPHCP, or other local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- A substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development Manual or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- A substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through the direct removal, filling, hydrological interruption, or other means;
- Substantial interference 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 MSCP Plan, VPHCP, or impediment of the use of native wildlife nursery sites;
- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local, regional, or state habitat conservation plan, either within the MSCP or VPHCP plan area or in the surrounding region;
- An introduction of land use within an area adjacent to the MHPA that would result in adverse edge effects;
- A conflict with any local policies or ordinances protecting biological resources; or

- An introduction of invasive plant species into a natural open space area.

7.1 IMPACTS TO VEGETATION COMMUNITIES

The proposed project would result in direct impacts to 20.7 acres of habitat or land cover types (Figure 8, *Vegetation and Sensitive Resources/Impacts*; Table 3, *Vegetation Communities/Land Cover Type Impacts*). These impacts include 0.2 acre of sensitive upland habitat comprised of Tier I southern maritime chaparral and 20.5 acres of non-sensitive habitat comprised of Tier IV developed land. Additionally, construction of a pedestrian walkway would impact less than 0.01 acre of developed land located within of the existing open space parcel (Table 3, Figure 8). Impacts to southern maritime chaparral are considered significant and require mitigation.

**Table 3
VEGETATION COMMUNITIES/LAND COVER TYPE IMPACTS**

Vegetation Community/Land Cover Type	Habitat Tier	Impacts ¹ (acres) ²		
		Outside Open Space	Within Open Space	Total
Sensitive Upland Habitat				
Southern Maritime Chaparral (37030)	I	0.2	--	0.2
<i>Sensitive Uplands Subtotal</i>		0.2	--	0.2
Non-Sensitive Upland Habitat				
Developed (12000)	IV	20.5	<0.1	20.5
<i>Non-Sensitive Upland Subtotal</i>		20.5	<0.1	20.5
TOTAL		20.7	<0.1	20.7

¹ Temporary and permanent impacts combined. All impacts occur outside of the MHPA.

² Acreages rounded to the nearest 0.1 acre; total reflects rounding.








Project construction would occur immediately adjacent to sensitive upland habitat. Inadvertent intrusion into these adjacent areas by construction vehicles, equipment, and personnel could result in additional disturbance if appropriate avoidance measures are not implemented. The project will be required to implement standard avoidance and minimization measures to ensure the avoidance of sensitive habitats located immediately adjacent to construction work areas. Therefore, potential indirect impacts to adjacent sensitive habitat would be avoided.

7.2 IMPACTS SPECIAL STATUS SPECIES

The proposed project has been specifically designed to occur within existing developed and disturbed areas associated with previous development and avoid impacts to sensitive biological resources to the greatest extent possible. However, portions of the proposed project footprint would impact sensitive uplands habitats where special status plant species have been detected and special status animal species have potential to occur. Project impacts on special status plant and animal species are described below.

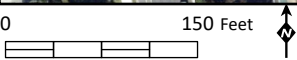
Special Status Plant Species

Two special status plant species were observed in the project site during the general biological survey: wart-stemmed ceanothus and Torrey pine. Neither of these species are federally or state listed or City

-  Project Site
-  Plan Lines
-  Existing Open Space
-  Impact Area
- Vegetation
-  Southern Maritime Chaparral
-  Urban/Developed
- Special Status Species Observations
-  Wart-stemmed Ceanothus (*Ceanothus verrucosus*)



I:\PROJECTS\AlexandriaRealEstate_00022\ARI-07_OneAlexandriaSquare\Map\BTR\figs.aprx Fig 8_Vealmps_ARI-07_10/29/2021_SAB



Source: Aerial (SanGIS, 2017)

narrow endemic plant species. Wart-stemmed ceanothus has a CRPR of 2B.2 and is covered under the MSCP. Torrey pine is listed as CRPR 1B.2 and is covered under the MSCP. Generally, impacts to plant species with a CRPR of 1 or 2 are considered potentially significant, whereas CRPR 3 and 4 species are relatively widespread and impacts to such species would not substantially reduce their populations in the region and are not typically significant.

A total of 31 wart-stemmed ceanothus were observed within project site during project surveys. Twenty-four of these individuals were observed within the 1.5-acre open space parcel in the north-central portion of the project site. The proposed project would result in impacts to a total of seven wart-stemmed ceanothus shrubs, all located outside of the open space parcel (Figure 8). Wart-stemmed ceanothus within the project site is part of a larger population that occurs within the surrounding area and does not represent a geographically isolated or significant population. The species occurs to the west of the site within the Torrey Pines State Nature Reserve. Project impacts to individual wart-stemmed ceanothus would not jeopardize the continued viability of wart-stemmed ceanothus within the region as the species would continue to persist both within the project site and within the surrounding preserved habitat. However, impacts to wart-stemmed ceanothus are still considered significant and require mitigation.

Torrey pine within the project site consists of cultivated trees that have been planted as part of the project's landscaping and do not represent a naturally occurring population. As such, these individuals are not considered sensitive and do not require protection. The project would not result in impacts to naturally occurring Torrey pine.

Special Status Animal Species

No special status animal species were detected within the project site during the general biological survey; however, the project would impact sensitive uplands habitats where special status animal species have potential to occur. Three animal species were determined to have a high potential to occur: Belding's orange whiptail, San Diego tiger whiptail, and Cooper's hawk. None of these are federally or state listed species or City narrow endemic species. Belding's orange-throated whiptail and Cooper's hawk are CDFW Watch List species and MSCP covered species. San Diego tiger whiptail is a CDFW Species of Special Concern.

The project could potentially impact Belding's orange-throated and San Diego tiger whiptail individuals through operation of heavy equipment within and adjacent to suitable upland habitat with potential to support these species. As a condition of project approval, biological monitoring shall be required including installation perimeter fencing. As such potential direct impacts to individuals would be less than significant. Potential impacts to Belding's orange whiptail and San Diego tiger whiptail are considered less than significant as suitable habitat for these species would continue to be preserved within the open space parcel. Furthermore, a sufficient amount of habitat for these species has already been conserved within the surrounding area (i.e., MHPA and Torrey Pines State Nature Reserve).

The project could result in impacts to Cooper's hawk, if individuals were determined to be nesting on or within 300 feet of the project site during project construction. To comply with the condition of coverage identified in Section 6.4, preconstruction surveys for nesting Cooper's hawk and a 300-foot avoidance buffer would be established prior to the removal of habitat with potential to support active nests during the breeding season (generally February 1 to September 15). This would be required as a condition of project approval. As such, potential impacts on nesting Cooper's hawk would be avoided.

7.3 IMPACTS TO JURISDICTIONAL RESOURCES

Jurisdictional wetlands or waterways are absent from the project site. Therefore, no impact to these resources would occur as a result of project implementation.

7.4 WILDLIFE MOVEMENT AND NURSERY SITES

The project site is surrounded by existing development, and as such, does not by itself function as, and does not contribute to, any wildlife corridors or linkages, or native wildlife nursery sites. Furthermore, the site is separated from open space areas to the north by Callan Road, thereby severing connectivity to larger blocks of contiguous habitat located to the west and northeast. Though the existing open space parcel does not function as a wildlife movement corridor or linkage, or native wildlife nursery site, it will be retained in place, though a pedestrian walkway shall be constructed in a small portion of the parcel (Figure 8). The project, therefore, would not impede the movement of any native, resident, or migratory fish or wildlife species; interfere with established native, resident, or migratory wildlife corridors, including linkages identified in the City's MSCP Subarea Plan; and would not impede the use of native wildlife nursery sites. No impact would occur.

7.5 CUMULATIVE IMPACTS













Adverse cumulative impacts are not expected from implementation of the proposed project. Projects which adhere to the City's MSCP Subarea Plan (City 1997) are not expected to have significant cumulative impacts to resources regulated and covered by these plans. The project would comply with the City's MSCP Subarea Plan, Biology Guidelines (City 2018), and ESL Regulations. Therefore, the project would not result in significant cumulative impacts.

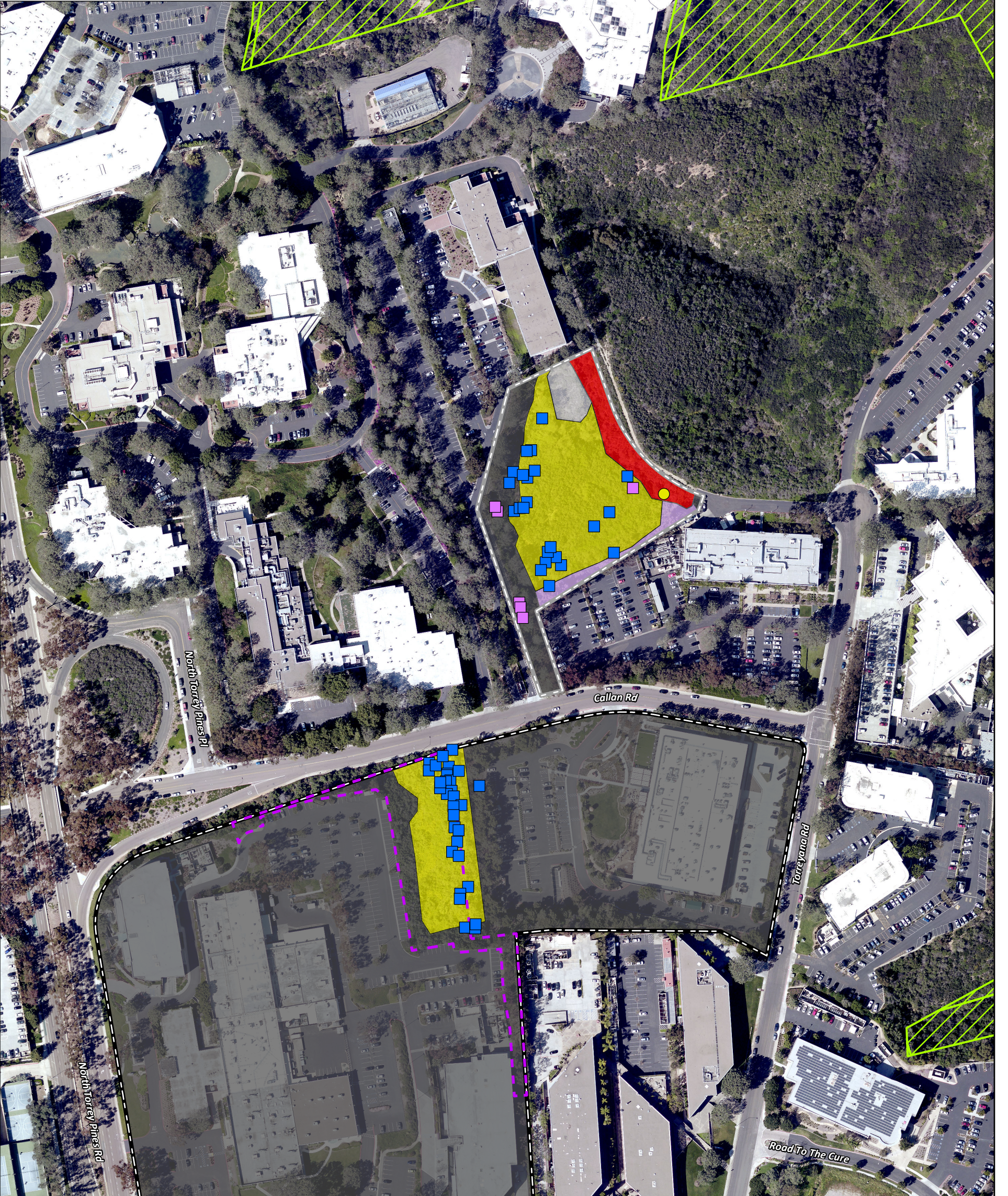
8.0 MITIGATION MEASURES

The following mitigation measures shall be implemented to reduce potentially significant impacts resulting from project implementation to below a level of significance.

8.1 MITIGATION FOR IMPACTS TO SENSITIVE UPLAND HABITATS

Mitigation for direct impacts to 0.2 acre of Tier I southern maritime chaparral, located outside of the MHPA, shall occur at a minimum 2:1 ratio in accordance with the City's Biology Guidelines (City 2018) which will reduce the impacts to below a level of significance (Table 4, *Impacts and Mitigation Requirements*).

-  Project Site
-  Callan Road Mitigation Site
-  Existing Open Space
-  City of San Diego MHPA
- Vegetation
-  Diegan Coastal Sage Scrub
-  Southern Maritime Chaparral
-  Eucalyptus Woodland
-  Disturbed Habitat
-  Urban/Developed
- Special Status Species Observations
-  San Diego tiger whiptail (*Aspidoscelis tigris stejnegeri*)
-  Wart-stemmed Ceanothus (*Ceanothus verrucosus*)
-  Nuttall's Scrub Oak (*Quercus dumosa*)



I:\PROJECTS\ARI\ARI-07 One Alexandria Square\Map\BTR\Map.aprx Fig9 Callan : ARI-07 - 2/5/2021 - SAB

Source: Aerial (SanGIS, 2017)

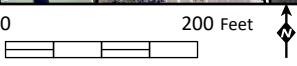


Table 4
IMPACTS AND MITIGATION REQUIREMENTS

Vegetation Community/Land Cover Type	Habitat Tier	Impacts (acres)	Mitigation Ratio ¹	Required Mitigation
Sensitive Upland Habitat				
Southern Maritime Chaparral (37030)	I	0.2	2:1	0.4
Sensitive Uplands Subtotal		0.2	--	0.4
Non-Sensitive Upland Habitat				
Developed (12000)	IV	20.5	0:1	--
Non-Sensitive Upland Subtotal		20.5	--	--
TOTAL		20.7	--	0.4

¹ Mitigation ratios per City Biology Guidelines. Assumes all mitigation will occur outside of the MHPA.

Mitigation shall be accomplished through the preservation of 0.4 acre of Tier I southern maritime chaparral at the Callan Road mitigation site (APN 340-010-4500), located outside of the MHPA (Figure 9, *Callan Road Mitigation Site*). The mitigation site is located immediately north of the project site, north of Callan Road. The Callan Road mitigation site is located outside of the MHPA, but it is in closer proximity to the MHPA than the project site (Figure 9). The site supports Tier I southern maritime chaparral and Tier II Diegan coastal sage scrub, as well as eucalyptus woodland, disturbed habitat, and developed land (Figure 9; Table 5, *Callan Road Mitigation Site – Vegetation Communities/Land Cover Types*). The mitigation site also supports special status plant and animal species. Two special status plant species were observed within the mitigation site: 23 wart-stemmed ceanothus and six Nuttall’s scrub oak shrubs. One special status animal species, San Diego tiger whiptail, was observed within the mitigation site. The mitigation site also supports native vegetation communities that provide suitable habitat for other special status plant and animal species known to occur in the surrounding area.

Table 5
CALLAN ROAD MITIGATION SITE – VEGETATION COMMUNITIES/LAND COVER TYPES

Vegetation Community/Land Cover Type	Habitat Tier	Available Acres	Project Mitigation Obligation (acres)	Preserved in Excess of Project Mitigation Obligation (acres) ¹
Southern Maritime Chaparral (37C00)	I	1.6	0.4	1.2
Diegan Coastal Sage Scrub (32500)	II	0.4	-	0.4
Eucalyptus Woodland (79100)	IV	0.2	-	0.2
Disturbed Habitat (11300)	IV	0.2	-	0.2
Developed (12000)	IV	0.8	-	0.8
TOTAL		3.2	0.4	2.8

¹ Acreage of preserved vegetation community/land cover type that remains available for future mitigation opportunities, subject to review and approval by the City during review and processing of future projects.

As a condition of permit approval, a covenant of easement will be recorded against the title of the property to preserve the Callan Road mitigation site in perpetuity. The project proponent will act as the resource manager to ensure the property is managed and monitored in a manner consistent with

Section 1.5 of the Preserve Management of the City’s MSCP Subarea Plan and area specific management directives.

In addition to the 0.4-acre of southern maritime chaparral credited as mitigation for the proposed project, the Callan Road mitigation site supports an additional 1.2 acres of Tier I southern maritime chaparral and 0.4 acre of Tier II Diegan coastal sage scrub (Table 5). The additional 1.2 acres of southern maritime chaparral and 0.4 acre of Diegan coastal sage scrub within the Callan Road mitigation site would be preserved in excess of the project’s mitigation obligation and would remain unassigned and available for future mitigation opportunities, subject to City review and approval on a project-by-project basis.

8.2 MITIGATION FOR IMPACTS TO SPECIAL STATUS SPECIES

8.2.1 Mitigation for Impacts to Special Status Plant Species

Mitigation for direct impacts to seven wart-stemmed ceanothus shrubs shall occur at a minimum 1:1 ratio in accordance with the City’s Biology Guidelines (City 2018) which will reduce the impacts to below a level of significance. Mitigation shall occur through the planting of at least seven wart-stemmed ceanothus shrubs at the Callan Road mitigation site (APN 340-010-4500). Individuals shall be maintained and monitored to ensure successful establishment and shall include a 100 percent survivorship success criterion to achieve a 1:1 replacement for individuals impacted. Preparation of a species-specific restoration plan to be approved by the City shall be a condition of project approval.

In addition, 23 wart-stemmed ceanothus would be preserved within the 3.2-acre off-site Callan Road mitigation site.

9.0 LIST OF PREPARERS

The following individuals contributed to the fieldwork and/or preparation of this report.

Katie Bellon‡	B.S., Biology, California State Polytechnic University, San Luis Obispo, 2009
Sean Bohac	Graduate Certificate, GIS Certificate Program, Mesa College, San Diego, California, 2003 B.S., Biology, The Evergreen State College, Olympia, Washington, 1998
Linda Garcia	M.A., English, National University, San Diego, 2012 B.A., Literatures in English, University of California, San Diego, 2003
Erica Harris*	B.S., Biology with an emphasis is Zoology, San Diego State University, 2009
Laura Moreton‡	M.S., Biodiversity Survey, University of Sussex, 2007 B.S., Biology, San Diego State University, 2006 A.S., Biology, Southwestern College, 2004
Karl Osmundson	B.S., Wildlife, Fish, and Conservation Biology, University of California, Davis, 2003

* Primary report author

‡ Contributing author

10.0 REFERENCES

- American Ornithological Society. 2019. AOU Checklist of North and Middle American Birds (online checklist). Retrieved from: <http://checklist.aou.org/taxa/>.
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.
- Bradley, R.D., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.D. Jones, C., Schmidly, D.J., Stangi, F.B., Van De Bussche, R.A., Wursig, B. (2014). Revised checklist of North American mammals north of Mexico. Museum of Texas Tech University Occasional Papers. 327:1-27.
- Calflora. 2019. Retrieved from: <http://www.calflora.org/>
- California Department of Fish and Wildlife. 2020a. California Natural Diversity Database (CNDDDB). Special Vascular Plants, Bryophytes, and Lichens List. September. Retrieved from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>.
- 2020b. California Natural Diversity Database (CNDDDB). Special Animal List. July. Retrieved from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>.
2019. RareFind Database Program, Version 5.
- California Invasive Plant Council. 2020. California Invasive Plant Inventory. February. Retrieved from: <http://www.cal-ipc.org/ip/inventory/index.php>.
- California Native Plant Society. 2019. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). Rare Plant Program. California Native Plant Society, Sacramento, CA. Retrieved from: <http://www.rareplants.cnps.org/>
- County of San Diego (County). 2019. SanBIOS Database. Land Use and Environment Group. Retrieved from: <http://www.sangis.org/>.
- Davenport, Ken. 2018. Lepidoptera of North America 15. Butterflies of southern California in 2018: updating Emmel and Emmel's 1973 Butterflies of southern California. Colorado State University. Department of Bioagricultural Sciences and Pest Management; C.P. Gillette Museum of Arthropod Diversity. April 20. Retrieved from: <https://mountainscholar.org/handle/10217/187314>.
- Historical Aerials. 2020. Accessed January 21. <https://www.historicaerials.com/viewer>.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, 156 pp.
- Jepson Flora Project (eds.) 2020. *Jepson eFlora*. Retrieved from: <http://ucjeps.berkeley.edu/eflora/>.

- 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," R. F. Holland, Ph.D., October 1986. March. Revised from 1996 and 2005. July.
- Pelham, Jonathon P. 2020. A Catalogue of Butterflies of the United States and Canada. University of Florida. Florida Museum of Natural History, McGuire Center for Lepidoptera and Biodiversity; University of Washington. Burke Museum of Natural History and Culture. Revised June 3. Retrieved from: <https://www.butterfliesofamerica.com/US-Can-Cat.htm>.
- San Diego, City of. 2020. Revised Final City of San Diego Vernal Pool Habitat Conservation Plan, Vernal Pool Management and Monitoring Plan. January. Retrieved from: https://www.sandiego.gov/sites/default/files/vpmpmp_final_020320.pdf.
- 2019a. University Community Plan. July. Retrieved from: https://www.sandiego.gov/sites/default/files/university_cp_07.11.19.pdf.
- 2019b. Revised Final City of San Diego Vernal Pool Habitat Conservation Plan. October. Retrieved from: https://www.sandiego.gov/sites/default/files/vphcp_revised_final.pdf.
2018. City of San Diego Municipal Code, Land Development Code, Biology Guidelines. Amended. February 1 by Resolution No. R-311507. Retrieved from: https://www.sandiego.gov/sites/default/files/amendment_to_the_land_development_manual_biology_guidelines_february_2018_-_clean.pdf.
1997. Multiple Species Conservation Program: City of San Diego MSCP Subarea Plan. March. Retrieved from: <https://www.sandiego.gov/sites/default/files/legacy/planning/programs/mscp/pdf/subareafullversion.pdf>
1993. Supplemental Environmental Impact Report (DEP No. 89-0928) for the Calbiochem-Balitt U.S. Holding Project. State Clearing House No. 89071908.
1989. Environmental Impact Report (DEP No. 89-0702) for the Calbiochem Community Plan Amendment Project. State Clearing House No. 89071907.
- San Diego Natural History Museum. 2014. Plant Atlas Project. Retrieved from: <http://www.sdplantatlas.org/>
- Society for the Study of Amphibians and Reptiles. 2020. North American Standard English and Scientific Names Database. Retrieved from: <https://ssarherps.org/cndb/>.
- Tremor, S., D. Stokes, W. Spencer, J. Diffendorfer, H. Thomas, S. Chives, and P. Unitt. 2017. San Diego Mammal Atlas. San Diego Natural History Museum.
- U.S. Department of Agriculture. 2020. Web soil survey. National Resources Conservation Service. Retrieved from: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

U.S. Fish and Wildlife Service (USFWS). 2019a. National Wetland Inventory, Wetlands Mapper. Retrieved from: <https://www.fws.gov/wetlands/data/mapper.html>.

2019b. Occurrence Information for Multiple Species within Jurisdiction of the Carlsbad Fish and Wildlife Office (CFWO). Retrieved from: <http://www.fws.gov/carlsbad/gis/cfwogis.html>.

Appendix A

Representative Site Photos



Photo 1. Existing development within project site. West side of existing on-site open space area (looking south).



Photo 2. Existing development within project site. West side of existing on-site open space area (looking southwest).

G:\Marketing Folder\Proposals\LETTER PROPOSALS\2019\One Alexandria Square\BIO\Reports\Constraints Analysis\Attachment A_Photos\Photos



Photo 3. Southern mixed chaparral within existing on-site open space south of Callan Road (looking southwest).



Photo 4. Southern mixed chaparral within existing on-site open space south of Callan Road (looking north).

G:\Marketing Folder\Proposals\LETTER PROPOSALS\2019\One Alexandria Square\BID\Reports\Constraints Analysis\Attachment A_Photos\Photos



Photo 5. Overview of southern mixed chaparral within southwest portion of the potential off-site mitigation parcel north of Callan Road (looking north).



Photo 6. Overview of Diegan coastal sage scrub in the northeastern portion of the potential off-site mitigation parcel north of Callan Road (looking northwest).

G:\Marketing Folder\Proposals\LETTER PROPOSALS\2019\One Alexandria Square\BID\Reports\Constraints Analysis\Attachment A_Photos\Photos

Appendix B

Plant Species Observed

Appendix B Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Adoxaceae	<i>Sambucus nigra</i>	black elderberry	SMaC
Agavaceae	<i>Agave americana</i>	American century plant	DEV
Aizoaceae	<i>Carpobrotus edulis</i> *	hottentot-fig	DEV
	<i>Delosperma litorale</i> *	delosperma	DEV
Alliaceae	<i>Allium</i> sp.	onion	DEV
Amaryllidaceae	<i>Tulbaghia violacea</i> *	society garlic	DEV
Anacardiaceae	<i>Malosma laurina</i>	laurel sumac	SMaC
	<i>Rhus integrifolia</i>	lemonadeberry	SMaC
	<i>Rhus ovata</i>	sugar bush	SMaC
	<i>Schinus molle</i> *	Peruvian pepper tree	DEV
Apiaceae	<i>Foeniculum vulgare</i> *	fennel	SMaC
Apocynaceae	<i>Vinca major</i> *	vinca	DEV
Araliaceae	<i>Hedera helix</i> *	English ivy	DEV
Arecaceae	<i>Washingtonia robusta</i> *	Mexican fan palm	DEV
	<i>Arctotis venusta</i> *	blue-eyed African daisy	DEV
	<i>Artemisia californica</i>	California sagebrush	SMaC
	<i>Baccharis pilularis</i>	coyote brush	SMaC
	<i>Baccharis salicifolia</i>	mulefat	SMaC
	<i>Centaurea melitensis</i> *	totalote	SMaC, DEV
	<i>Deinandra fasciculata</i>	clustered tarweed	SMaC
	<i>Dimorphotheca fruticosa</i> *	trailing African daisy	DEV
	<i>Encelia californica</i>	California encelia	SMaC
	<i>Erigeron canadensis</i>	Canada horseweed	SMaC, DEV
	<i>Eriophyllum confertiflorum</i>	golden yarrow	SMaC
	<i>Hazardia squarrosa</i>	sawtooth goldenbush	SMaC, DEV
	<i>Helianthus californicus</i>	California sunflower	SMaC
	<i>Helianthus gracilentus</i>	slender sunflower	SMaC
	<i>Helminthotheca echioides</i> *	bristly ox-tongue	SMaC
	<i>Hypochaeris glabra</i> *	smooth cats ear	SMaC, DEV
	<i>Isocoma menziesii</i>	Menzies' goldenbush	SMaC
	<i>Pseudognaphalium californicum</i>	ladies' tobacco	SMaC
	<i>Pseudognaphalium canescens</i>	Wright's cudweed	SMaC
	<i>Sonchus arvensis</i> *	sow thistle	SMaC, DEV
<i>Stephanomeria virgata</i>	twiggy wreath plant	SMaC, DEV	
Boraginaceae	<i>Cryptantha</i> sp.	cryptantha	SMaC
	<i>Echium candicans</i> *	pride of madeira	DEV
	<i>Eucrypta chrysanthemifolia</i>	common eucrypta	SMaC
	<i>Brassica nigra</i> *	black mustard	SMaC, DEV
	<i>Hirschfeldia incana</i> *	mustard	SMaC, DEV
Crassulaceae	<i>Dudleya pulverulenta</i>	chalk dudleya	DEV

Appendix B (cont.) Plant Species Observed

Family	Scientific Name ^{*,†}	Common Name	Habitat ¹
Cucurbitaceae	<i>Marah macrocarpa</i>	chilicothe	SMaC
Euphorbiaceae	<i>Euphorbia maculata</i> *	spotted spurge	SMaC, DEV
Fabaceae	<i>Acacia</i> sp.*	acacia	SMaC, DEV
	<i>Acmispon glaber</i>	deerweed	SMaC
	<i>Astragalus trichopodus</i> var. <i>lonchus</i>	Southern california milkvetch	SMaC
	<i>Melilotus indicus</i> *	yellow sweetclover	SMac, DEV
Fagaceae	<i>Quercus agrifolia</i>	coast live oak	DEV
Gentianaceae	<i>Zeltnera venusta</i>	charming centaury	SMaC
Lamiaceae	<i>Rosmarinus officinalis</i> *	rosemary	DEV
	<i>Salvia apiana</i>	white sage	SMaC
	<i>Salvia mellifera</i>	black sage	SMaC
Malvaceae	<i>Malacothamnus fasciculatus</i>	chaparral bush mallow	SMaC
Myrsinaceae	<i>Lysimachia arvensis</i> *	scarlet pimpernel	SMaC, DEV
Myrtaceae	<i>Eucalyptus camaldulensis</i> *	river red gum	DEV
Phrymaceae	<i>Diplacus aurantiacus</i>	sticky monkeyflower	SMaC
Pinaceae	<i>Pinus halepensis</i> *	Aleppo pine	DEV
	<i>Pinus torreyana</i> ssp. <i>torreyana</i> [†]	Torrey pine	DEV
Poaceae	<i>Bromus madritensis</i> *	red brome	SMaC, DEV
	<i>Lamarckia aurea</i> *	goldentop	DEV
	<i>Pennisetum setaceum</i> *	fountain grass	DEV
	<i>Polypogon monspeliensis</i> *	rabbitsfoot grass	SMaC
	<i>Stipa miliacea</i> *	smilo grass	DEV
Polygonaceae	<i>Eriogonum fasciculatum</i>	buckwheat	SMaC
Rhamnaceae	<i>Ceanothus verrucosus</i> [†]	wart-stemmed ceanothus	SMaC
Rosaceae	<i>Adenostoma fasciculatum</i>	chamise	SMaC
	<i>Heteromeles arbutifolia</i>	toyon	SMaC
Salicaceae	<i>Salix lasiolepis</i>	arroyo willow	SMaC
Scrophulariaceae	<i>Myoporum laetum</i> *	false sandalwood	DEV
	<i>Myoporum parvifolium</i> *	slender myoporum	DEV
Simaroubaceae	<i>Ailanthus altissima</i> *	tree of heaven	DEV
Strelitziaceae	<i>Strelitzia reginae</i> *	bird of paradise	DEV

† Special Status Species

* Non-native Species

¹ SMac = Southern Maritime Chaparral; DEV=Developed.

Appendix C

Animal Species Observed
or Otherwise Detected

Appendix C

Animal Species Observed or Otherwise Detected

Taxon		Scientific Name	Common Name
Order	Family		
VERTEBRATES			
Birds			
Apodiformes	Trochilidae	<i>Archilochus alexandri</i>	Black-chinned Hummingbird
		<i>Calypte anna</i>	Anna's Hummingbird
		<i>Selasphorus sasin</i>	Allen's Hummingbird
Charadriiformes	Laridae	<i>Larus occidentalis</i>	Western Gull
Passeriformes	Aegithalidae	<i>Psaltriparus minimus</i>	Bushtit
	Bombycillidae	<i>Bombycilla cedrorum</i>	Cedar Waxwing
	Corvidae	<i>Aphelocoma californica</i>	California Scrub-Jay
		<i>Corvus brachyrhynchos</i>	American Crow
		<i>Corvus corax</i>	Common Raven
	Fringillidae	<i>Haemorhous mexicanus</i>	House Finch
		<i>Spinus psaltria</i>	Lesser Goldfinch
	Icteridae	<i>Icterus bullockii</i>	Bullock's Oriole
	Mimidae	<i>Mimus polyglottos</i>	Northern Mockingbird
	Parulidae	<i>Leiothlypis celata</i>	Orange-crowned Warbler
		<i>Setophaga coronata</i>	Yellow-rumped Warbler
	Passerellidae	<i>Junco hyemalis</i>	Dark-eyed Junco
		<i>Melospiza melodia</i>	Song Sparrow
		<i>Pipilo maculatus</i>	Spotted Towhee
	Regulidae	<i>Regulus calendula</i>	Ruby-crowned Kinglet
	Sturnidae	<i>Sturnus vulgaris</i>	European Starling
Sylviidae	<i>Chamaea fasciata</i>	Wrentit	
Troglodytidae	<i>Thryomanes bewickii</i>	Bewick's Wren	
Turdidae	<i>Catharus guttatus</i>	Hermit Thrush	
Tyrannidae	<i>Sayornis nigricans</i>	Black Phoebe	
Piciformes	Picidae	<i>Dryobates nuttallii</i>	Nuttall's Woodpecker
Mammals			
Artiodactyla	Cervidae	<i>Odocoileus hemionus</i>	mule deer
Carnivora	Canidae	<i>Canis latrans</i>	coyote
	Mephitidae	<i>Mephitis mephitis</i>	striped skunk
	Procyonidae	<i>Procyon lotor</i>	raccoon

Appendix D

Special Status Plant Species
Observed or with Potential to Occur

Appendix D

Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>)	FT/SE CRPR 1B.1 MSCP Covered NE	Annual herb. Typically found on clay soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Flowering period: April to June. Elevation: below 3,150 feet (960 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable clay soils to support this species.
Nuttall's lotus (<i>Acemispom prostratus</i>)	--/-- CRPR 1B.1 MSCP Covered	Annual herb. Found in the coastal regions of southern California and Baja California. Habitats include coastal dunes, coastal scrub with sandy soils, and disturbed areas. Flowering Period: March to June. Elevation: below 33 feet (10 meters).	Moderate. Although this species has not been reported within five miles of the project site, suitable sandy soils, disturbed areas occur within the project area to support this species.
California adolphia (<i>Adolphia californica</i>)	--/-- CRPR 2B.1	Perennial shrub. Most often found in sage scrub but occasionally occurs in peripheral chaparral habitats, particularly hillsides near creeks on clay soils. Flowering period: December to April. Elevation: below 1,312 feet (400 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable clay soils to support this species. Furthermore, this conspicuous perennial shrub would have been apparent at the time of the survey.
Shaw's agave (<i>Agave shawii</i> var. <i>shawii</i>)	--/-- CRPR 2B.1 MSCP Covered NE	Perennial succulent. Most often found on coastal bluffs and along mesas and foothills. Flowering period: September to May. Elevation: below 984 feet (300 meters).	Low. Although this species has been reported within five miles of the project site, this conspicuous perennial succulent would most likely have been observed if present.
Singlewhorl burrobrush (<i>Ambrosia monogyra</i>)	--/-- CRPR 2B.2	Perennial shrub. Found on sandy soils within washes and dry riverbeds within chaparral communities. Flowering period: September to November. Elevation: below 1,640 feet (500 meters).	Low. Although this species has been reported within five miles of the project site and suitable sandy soils are present within the project site, this conspicuous perennial shrub would most likely have been observed if present.
San Diego ambrosia (<i>Ambrosia pumila</i>)	FE/-- CRPR 1B.1 MSCP Covered NE	Perennial herb. Occurs on sandy loam or clay, sometimes alkaline, soils. Found in native grassland, valley bottoms, dry drainages, stream floodplain terraces, and vernal pool margins. Also occurs on slopes, disturbed places, and in coastal sage scrub or chaparral. Flowering period: April to July. Elevation: 164 to 1,969 feet (50 to 600 meters).	Low. This species has been reported within five miles of the project site, and sandy loam soils within disturbed areas occur within the project site. However, the site lacks native grassland, natural drainages or vernal pools that are typically associated with this species
Aphanisma (<i>Aphanisma blitoides</i>)	--/-- CRPR 1B.2 MSCP Covered NE	Annual herb. Found coastally on bluffs and saline sand within sage scrub communities. Flowering period: June to September. Elevation: below 656 feet (200 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable coastal bluffs to support this species.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Del Mar manzanita (<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>)	FE/-- CRPR 1B.1 MSCP Covered	Perennial shrub. Found within Relatively open, coastal chaparral. At occasional inland sites it occurs in denser mixed chaparral vegetation. Elevation: below 1,200 feet. Flowering Period: December to June.	None. Although coastal chaparral habitat occurs within the project site, this conspicuous perennial shrub would have been apparent at the time of the survey. Furthermore, there are no reported occurrences of this species within five miles of the project site.
San Diego sagewort (<i>Artemisia palmeri</i>)	--/-- CRPR 4.2	Perennial herb. Typically found along stream courses, often beneath riparian woodland, on sandy and mesic soils. May occur in coast live oak woodland, coastal sage scrub, and southern mixed chaparral. Flowering period: June to October. Elevation: below 1,969 feet (600 meters).	Low. Although the project site consists partially of chaparral habitat, suitable natural stream habitat is absent from the project site. This species has been reported within five miles of the project site.
Western spleenwort (<i>Asplenium vespertinum</i>)	--/-- CRPR 4.2	Perennial rhizomatous herb. Occurs in chaparral, cismontane woodland, and coastal scrub along rocky bluffs. Flowering period: February to June. Elevation: 590 to 3,280 feet (180 to 1,000 meters).	Low. Although chaparral habitat occurs within the project site, the site lacks rocky bluffs to support this species. Furthermore, this species has not been reported within five miles of the project site.
Coastal dunes milk vetch (<i>Astragalus tener</i> var. <i>titi</i>)	FE/SE CRPR 1B.1 MSCP Covered NE	Annual herb. Occurs in coastal bluff scrub, coastal dunes, and coastal prairie. Associated with moist, sandy depressions of bluffs or dunes near the Pacific Ocean. Flowering period: March to May. Elevation: 1,610 to 5,840 feet (490 to 1,780 meters).	None. Although this species has been reported within five miles of the project site, suitable coastal bluffs and dunes are absent from the project site. Additionally, the site is located above the known elevation range of the species.
Coulter's saltbush (<i>Atriplex coulteri</i>)	--/-- CRPR 1B.2	Perennial herb. Occurs on alkaline or clay soils within coastal dunes, coastal bluffs, coastal sage scrub, and grasslands. Flowering periods March to October. Elevation: below 1,510 feet (460 meters).	None. Although this species has been reported within five miles of the project site, suitable alkaline and clay soils are not mapped within the project site.
South coast saltscale (<i>Atriplex pacifica</i>)	--/-- CRPR 1B.2 County List A	Annual herb. Found coastally on dunes and within playas in alkali sinks, sage scrub and wetland riparian communities. Flowering period: March to October. Elevation: below 984 feet (300 meters).	None. The project site lacks suitable coastal dunes, sage scrub, or wetland riparian communities to support this species. Furthermore, this species has not been reported within five miles of the project site.
Parish's brittlescale (<i>Atriplex parishii</i>)	--/-- CRPR 1B.1	Annual herb. Found in playas or vernal pools within shadscale scrub, alkali sinks, freshwater wetlands, or other wetland-riparian communities. Flowering period: June to October. Elevation: below 1,542 feet (470 meters).	None. The project site lacks suitable plays or vernal pools to support this species.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Encinitas baccharis (<i>Baccharis vanessae</i>)	FT/SE CRPR 1B.1 MSCP Covered NE	Perennial shrub. Grows on sandstone within chaparral, maritime chaparral, woodlands, and Torrey-pine forest understory. Flowering period: August to December. Elevation: 196 to 2,400 feet (60 to 720 meters).	None. Although this species has been reported within five miles of the project site, suitable sandstone soils are absent from the project site. Furthermore, this conspicuous perennial shrub would most likely have been observed if present.
San Diego County viguiera (<i>Bahiopsis laciniata</i>)	--/-- CRPR 4.3	Perennial shrub. Occurs on a variety of soil types within coastal sage scrub. Generally, shrub cover is more open than at mesic, coastal locales supporting sage scrub. Flowering period: February to August. Elevation: 295 to 2,461 feet (90 to 750 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable sage scrub habitat. Furthermore, this perennial shrub would have been apparent at the time of the survey.
Golden-spined cereus (<i>Bergerocactus emoryi</i>)	--/-- CRPR 2B.2	Stem succulent shrub. Occurs coastally on sandy open hills within chaparral, sage scrub, and closed-cone pine forests. Flowering period: May to June. Elevation: below 328 feet (100 meters).	None. Suitable sandy soils are mapped within the project site and this species has been reported within five miles of the project site; however, this succulent shrub likely would have been apparent at the time of the survey. Additionally, the site is located above the known elevation range of the species.
San Diego goldenstar (<i>Bloomeria clevelandii</i>)	--/-- CRPR 1B.1 MSCP Covered	Perennial bulbiferous herb. Occurs in valley grasslands and coastal scrub, particularly near mima mound topography or in the vicinity of vernal pools, on clay soils. Flowering period: April to May. Elevation: 164 to 1,526 (50 to 465 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable valley grasslands or coastal scrub in the vicinity of vernal pools or clay soils to support this species.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	FT/SE CRPR 1B.1 MSCP Covered NE	Perennial bulbiferous herb. Often associated with vernal pools and known from habitats including valley grassland, foothill woodland, coastal sage scrub, freshwater wetlands, and wetland-riparian. Flowering period: March to June. Elevation: 82 to 2821 feet (25 to 860 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pools or other habitat to support this species.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	--/-- CRPR 1B.1 MSCP Covered	Perennial bulbiferous herb. Occurs within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools. Prefers mesic or clay soils. Flowering period: May to July. Elevation: 98 to 5,550 feet (30 to 1,692 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable habitat or clay soils to support this species.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Brewer's calandrinia (<i>Calandrinia breweri</i>)	--/-- CRPR 4.2	Annual herb. Occurs within chaparral or coastal scrub on sandy or loamy soil, disturbed sites, and after burns. Flowering Period: January to June. Elevation: 32 to 4,000 feet (10 to 1,220 meters).	Moderate. Although this species has not been reported within five miles of the project site, the project site partially consists of suitable disturbed or chaparral habitat and sandy/loamy soils that could support this species.
Dunn's mariposa lily (<i>Calochortus dunnii</i>)	--/-- CRPR 1B.2 County List A MSCP Covered MSCP NE	Perennial bulbiferous herb. Found in closed-cone coniferous forest, chaparral, and valley and foothill grassland, typically on gabbroic, metavolcanics, or rocky soils. Flowering Period: Feb to June. Elevation: 600 to 6,000 feet (185 to 1,830 meters).	None. The project site lacks suitable habitat and soils to support this species, and this species has not been reported within five miles of the project site.
Lakeside ceanothus (<i>Ceanothus cyaneus</i>)	--/-- CRPR 1B.2 MSCP Covered	Perennial shrub. Occurs on slopes and ridgelines in closed cone coniferous forest and chaparral. Flowering period: April to June. Elevation: 770 to 2,540 feet (235 to 755 meters).	None. Although the project site partially consists of chaparral habitat, it lacks slopes or ridgelines where this species is typically found. Additionally, this perennial shrub would have been apparent at the time of the survey. Finally, this species has not been reported within five miles of the project site.
Wart-stemmed ceanothus (<i>Ceanothus verrucosus</i>)	--/-- CRPR 2B.2 MSCP Covered	Perennial shrub. Found on rocky slopes within chaparral, particularly southern maritime chaparral. Flowering period: December to May. Elevation: below 1,148 feet (350 meters).	Present. A total of 31 individuals were observed in the project site within southern maritime chaparral habitat in the north-central portion of the site.
Southern tarplant (<i>Centromadia parryi</i> ssp. <i>australis</i>)	--/-- CRPR 1B.1	Annual herb. Found at the margins of salt marshes, vernal mesic areas within grasslands, and vernal pools. Found in the coastal regional from Santa Barbara County south to San Diego County. Flowering Period: May to November. Elevation: below 1,575 feet (480 meters).	None. The project site lacks suitable vernal mesic areas or vernal pools where this species is typically found. Furthermore, this species has not been reported within five miles of the project site.
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	--/-- CRPR 1B.1	Annual herb. Occurs on alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland. Flowering Period: April to September. Elevation: below 2,100 feet (640 meters).	None. The project site lacks suitable habitat to support this species. Furthermore, this species has not been reported within five miles of the project site.
Orcutt's pincushion (<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>)	--/-- CRPR 1B.1	Annual herb. Found on coastal dunes and sandy coastal bluff scrub. Typically, in proximity to moist ocean breezes. Elevation: below 328 feet (100 meters). Flowering Period: January to August.	None. The project site lacks suitable habitat to support this species and occurs above the known elevation range for this species. Furthermore, this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Southern mountain misery (<i>Chamaebatia australis</i>)	--/-- CRPR 4.2	Perennial shrub. Occurs in chaparral on gabbroic or metavolcanics soils. Blooms November to May. Elevation: 980 to 3,350 feet (300 to 1,020 meters).	None. Although the project site partially consists of chaparral habitat, it lacks suitable gabbroic soils to support this species. Furthermore, this species has not been reported within five miles of the project site.
Orcutt's spineflower (<i>Chorizanthe orcuttiana</i>)	FE/SE CRPR 1B.1	Annual herb. Found in sandy openings of coastal sage scrub, chaparral, and coniferous forests. Flowering period: March to May. Elevation: below 410 feet (125 meters).	Moderate. The project site partially consists of suitable chaparral habitat and is comprised of suitable sandy soils to support this species. Furthermore, this species has been reported within five miles of the project site.
Long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	--/-- CRPR 1B.2	Annual herb. Occurs in chaparral, coastal scrub, and native grassland, often in sandy soils. Flowering period: April to June. Elevation: 98 to 4,920 feet (30 to 1,500 meters).	Moderate. The project site partially consists of suitable chaparral habitat and is comprised of suitable sandy soils to support this species. Furthermore, this species has been reported within five miles of the project site.
Delicate clarkia (<i>Clarkia delicata</i>)	--/-- CRPR 1B.2 County List A	Annual herb. Occurs in shaded areas or the periphery of oak woodlands and cismontane chaparral, often on gabbroic soils. Flowering period: April to May. Elevation: below 3,281 feet (1,000 meters).	None. The project site lacks suitable habitat and gabbroic soils to support this species. Furthermore, this species has not been reported within five miles of the project site.
Summer holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>)	--/-- CRPR 1B.2	Perennial shrub. Occurs in chaparral and cismontane woodland. Flowering period: May to June. Elevation: 328 to 1,804 feet (100 to 550 meters).	Low. Suitable chaparral habitat occurs within the project site and the species has been observed within five miles of the project site. However, this conspicuous perennial shrub would most likely have been observed if present.
Small-flowered morning-glory (<i>Convolvulus simulans</i>)	--/-- CRPR 4.2	Annual herb. Occurs on clay soils and serpentinite seeps in openings within chaparral, coastal scrub, and native grassland. Flowering period: April to June. Elevation: 98 to 2,871 feet (30 to 875 meters).	None. Although this species has been reported within five miles of the project site, suitable clay soils and serpentinite seeps are not mapped within the project site.
San Diego sand aster (<i>Corethrogyne filaginifolia</i> var. <i>incana</i>)	--/-- CRPR 1B.1	Perennial herb. Occurs within grasslands, coastal bluff scrub, coastal scrub, and chaparral. Flowering period: June to September. Elevation: 15 to 2,362 feet (5 to 720 meters).	Moderate. Although the project site partially consists of suitable chaparral habitat, this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Del Mar Mesa sand aster (<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>)	--/-- CRPR 1B.1 MSCP Covered	Perennial herb. Found on sandy soils and disturbed areas within southern maritime chaparral, coastal sage scrub, and coastal bluffs. Flowering Period: May to September. Elevation: below 492 feet (150 meters).	Moderate. Although the project site consists of suitable sandy soils and habitat that could support this species, it has not been reported within five miles of the project site.
Snake cholla (<i>Cylindropuntia</i> [<i>Opuntia</i>] <i>californica</i> var. <i>californica</i>)	--/-- CRPR 1B.1 MSCP Covered NE	Perennial stem succulent. Occurs in chaparral and coastal scrub. Flowering period: April to July. Elevation: 50 to 950 feet (15 to 290 meters).	Low. Suitable habitat occurs within the project site and this species has been reported within five miles of the project site. However, this conspicuous perennial stem succulent would most likely have been observed if present.
Western dichondra (<i>Dichondra occidentalis</i>)	--/-- CRPR 4.2 County List D	Perennial herb. Found among rocks and shrubs within grasslands, coastal sage scrub, chaparral, and oak woodlands. Often proliferates on recently burned slopes. Flowering period: March to June. Elevation: below 1,706 feet (520 meters).	None. Although portions of the project site consist of suitable chaparral habitat, the project site lacks rocks and/or grasslands often associated with this species. Furthermore, this species has not been reported within five miles of the project site.
Blochman's dudleya (<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>)	--/-- CRPR 1B.1 MSCP Covered NE	Perennial herb succulent. Grows on open, rocky slopes, often on serpentine or clay dominated soils in coastal sage scrub and valley grassland communities. Flowering period: April to June. Elevation: below 1,476 feet (450 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable rocky slopes and serpentine or clay soils.
Short-leaved dudleya (<i>Dudleya brevifolia</i>)	--/SE/NE CRPR 1B.1 MSCP Covered	Perennial herb. Occurs in open areas and sandstone bluffs of coastal scrub, chaparral, or Torrey pine forest. Flowering Period: April to May. Elevation: 98 to 820 feet (30 to 250 meters).	None. The project site lacks suitable sandstone bluffs to support this species, and this species has not been reported within five miles of the project site.
Variegated dudleya (<i>Dudleya variegata</i>)	--/-- CRPR 1B.2 MSCP Covered NE	Perennial herb succulent. Occurs on clay soils of dry hillsides and mesas within chaparral, valley grassland, foothill woodland and coastal sage scrub communities. Flowering period: April to June. Elevation: below 984 feet (300 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable clay soils required by this species.
Sticky dudleya (<i>Dudleya viscida</i>)	--/-- CRPR 1B.2 MSCP Covered	Perennial herb. Occurs in rocky areas within coastal bluffs, coastal sage scrub, chaparral, and woodlands. Grows primarily on very steep north-facing slopes. Flower period: May to June. Elevations below 1,800 feet.	None. Although portions of the project site consist of chaparral habitat, the project site lacks suitable rocky areas where this species is often found. Furthermore, this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Palmer's goldenbush (<i>Ericameria palmeri</i> var. <i>palmeri</i>)	--/-- CRPR 1B.1 MSCP Covered	Perennial Shrub. Found in mesic areas within coastal sage scrub and chaparral. Flowering period: September to November. Elevation: below 1,968 feet (600 meters).	None. The project site lacks suitable mesic areas within chaparral habitat to support this species. Furthermore, this species has not been reported within five miles of the project site, and this perennial shrub would have been apparent at the time of the survey.
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	FE/SE CRPR 1B.1 MSCP Covered VPHCP Covered VP species	Annual or perennial herb. Grows in vernal pools and other mesic areas, such as marshes. Flowering period: May to June. Elevation: below 2,313 feet (705 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pool or mesic habitat to support this species.
Sand-loving wallflower (<i>Erysimum ammophilum</i>)	--/-- CRPR 1B.2 MSCP Covered	Perennial herb. Found in open areas and sandy soils within coastal dunes, coastal strand, coastal sage scrub, and maritime chaparral. Flowering period: February to June Elevation: below 197 feet (60 meters).	Low. Although this species has not been reported within five miles of the project site, the project site consists of suitable sandy soils and chaparral habitat to support this species. However, the chaparral habitat on-site is dense and may not be suitable for this species, which is more often found in open areas.
Cliff spurge (<i>Euphorbia misera</i>)	--/-- CRPR 2B.2	Perennial shrub. Found in rocky areas of coastal bluffs, coastal sage scrub, and Mojavean desert scrub. Flowering period: December to August. Elevation: below 1,800 feet (500 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable rocky areas to support this species.
San Diego barrel cactus (<i>Ferocactus viridescens</i>)	--/-- CRPR 2B.1 MSCP Covered	Perennial (stem succulent) shrub. Grows in sandy to rocky areas within coastal scrub, chaparral, grasslands, and vernal pools. Flowering period: May to June. Elevation: below 1,480 feet (450 meters).	Moderate. Suitable habitat and soils occur within the project site and this species has been reported within five miles of the project vicinity.
Campbell's liverwort (<i>Geothallus tuberosus</i>)	--/-- CRPR 1B.1	Bryophyte. Grows in moist coastal scrub and vernal pools. Elevation: 30 to 1,970 feet (10 to 600 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable moist coastal scrub or vernal pools to support this species.
Mission Canyon bluecup (<i>Githopsis diffusa</i> ssp. <i>filicaulis</i>)	--/-- CRPR 3.1	Annual herb. Occurs in mesic and disturbed areas within chaparral. Flowers April to June. Flowering period: April to June. Elevation: 1,475 and 2,300 feet (450 to 700 meters).	None. The project site lacks suitable mesic areas and occurs outside of the known elevation range for this species. Furthermore, this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
San Diego gumplant (<i>Grindelia hallii</i>)	--/-- CRPR 1B.2	Perennial herb. Typically occurs with sunny openings of chaparral and lower montane coniferous forests. Also found in meadows and seeps, and grasslands. Prefers very wet locales in early spring, although such places usually dry quickly as spring turns to summer. Flowering Period: May to October. Elevation: 605 to 5,725 feet (185 to 1,745 meters).	None. The project site lacks suitable wet locales preferred by this species, and this species has not been reported within five miles of the project site.
Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	--/-- CRPR 4.2	Annual herb. Found in clay soils in annual grasslands and coastal sage scrub. Flowering period: March to May. Elevation: 65 to 3,100 feet (20 to 955 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable clay soils to support this species.
Beach goldenaster (<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>)	--/-- CRPR 1B.1	Perennial herb. Occurs in coastal chaparral, coastal dunes, and coastal scrub. Flowering Period: March to December. Elevation: below 4,020 feet (1,225 meters).	Moderate. Although this species has not been reported within five miles of the project site, the project site partially consists of suitable chaparral habitat to support this species.
Graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	--/-- CRPR 4.2	Annual herb. Occurs in grasslands, coastal scrub, chaparral, and cismontane woodland. Flowering period: May to November. Elevation: 66 to 3,675 feet (20 to 1,120 meters).	Moderate. A portion of the project site consists of suitable chaparral habitat to support this species, and this species has been reported within five miles of the project site.
Vernal barley (<i>Hordeum intercedens</i>)	--/-- CRPR 3.2	Annual herb. Occurs in vernal pools, alkaline flats, and dry, saline streambeds. Also found in saline flats and depressions within grasslands. Flowering period: March to June. Elevation: below 3,280 feet (1,000 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pool, alkaline flat, or dry, saline streambed habitat to support this species.
Ramona horkelia (<i>Horkelia truncata</i>)	--/-- CRPR 1B.3	Perennial herb. Occurs on clay and gabbroic soils within chaparral and woodlands. Flowering period: May to June. Elevation: 1,310 to 4,265 feet (400 to 1,300 meters).	None. The project site lacks suitable clay or gabbroic soils to support his species and falls outside of the known elevation range for this species. Furthermore, this species has not been reported within five miles of the project site.
Decumbent goldenbush (<i>Isocoma menziesii</i> var. <i>decumbens</i>)	--/-- CRPR 1B.2	Perennial shrub. Occurs in sandy soil and disturbed areas on the inland side of dunes, hillsides, and arroyos within coastal sage scrub and chaparral communities. Flowering period: July to November. Elevation: below 656 feet (200 meters).	Low. Suitable habitat and disturbed areas occur within the project site and this species has been reported within five miles of the project site. However, this conspicuous perennial shrub would most likely have been observed if present.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
San Diego marsh-elder (<i>Iva hayesiana</i>)	--/-- CRPR 2B.2	Perennial herb. Found in alkaline flats, depressions, and streambanks within wetland communities. Flowering period: April to October. Elevation: 32 to 1,640 feet (10 to 500 meters).	None. Suitable alkaline flats, streambanks, and other wetland habitat to support is absent from the project site. Although this species has been reported within five miles of the project site, this conspicuous perennial shrub would most likely have been observed if present.
Southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>)	--/-- CRPR 4.2	Perennial herb. Found in moist saline environments such as alkaline seeps and meadows, and coastal salt marshes and swamps. Flowering period: May to June. Elevation: below 984 feet (300 meters).	None. Suitable saline habitats, alkaline seeps and meadows, and marsh or swamp habitat to support is absent from the project site. Although this species has been reported within five miles of the project site, this conspicuous perennial shrub would most likely have been observed if present.
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	--/-- CRPR 1B.1	Annual herb. Grows in vernal pools, playas, and saline habitats within alkali sinks, coastal salt marshes, and wetland communities. Flowering period: April to May. Elevation: below 3,281 feet (1,000 meters).	None. The project site lacks suitable vernal pool or other wetland communities to support this species. Furthermore, this species has not been reported within five miles of the project site.
Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	--/-- CRPR 4.3	Annual herb. Grows in openings in sage scrub and chaparral at the coastal and foothill elevations. Typically observed in relatively dry, exposed locales rather than beneath a shrub canopy. Also, found in disturbed areas. Flowering period: March to June. Elevation: below 9,186 feet (2,800 meters).	Moderate. Suitable habitat occurs within the project site and this species has been reported within five miles of the project site. Suitable habitat may be considered only marginally suitable due to a lack of dry, exposed locales.
Sea dahlia (<i>Leptosyne maritima</i>)	--/-- CRPR 2B.2	Perennial herb. Occurs within coastal scrub and coastal bluffs scrub. Flowering period: March to May. Elevation: below 500 feet (150 meters).	None. Although this species has been reported within five miles of the project site, suitable coastal bluff habitat is absent from the project site.
Small-flowered microseris (<i>Microseris douglasii</i> ssp. <i>platycarpa</i>)	--/-- CRPR 4.2	Annual herb. Found on clay soils within coastal sage scrub, woodlands, and grasslands. Often near vernal pools or serpentine outcrops. Flower period: March to May. Elevation: 49 to 3,510 feet (15 to 1,070 meters).	None. The project site lacks suitable soils to support this species and this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Willow monardella (<i>Monardella viminea</i>)	FE/SE CRPR 1B.1 MSCP Covered	Perennial herb. Occurs within alluvial ephemeral washes within coastal scrub, chaparral, and riparian habitats. Generally, there is no canopy cover, and river cobbles may lie in close proximity. Flowering period: June to August. Elevations below 1,000 feet (305 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks natural alluvial, ephemeral washes to support this species.
Felt-leaved monardella (<i>Monardella hypoleuca</i> ssp. <i>lanata</i>)	--/-- CRPR 1B.2 County List A MSCP Covered	Perennial rhizomatous herb. Occurs on rocky, granitic slopes or hilltops within chaparral and woodlands. Flowering period: June to August. Elevation: 1,000 to 5,170 feet (300 to 1,575 meters).	None. The project site lacks suitable rocky, granitic slopes or hilltops required by this species and this species has not been reported within five miles of the project site.
Little mousetail (<i>Myosurus minimus</i> ssp. <i>apus</i>)	--/-- CRPR 3.1	Annual herb. Occurs in alkaline vernal pools within native grassland. Flowering period: March to June. Elevation: 65 to 2,100 feet (20 to 640 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pools within native grassland to support this species.
Spreading navarretia (<i>Navarretia fossalis</i>)	FT/-- CRPR 1B MSCP Covered VPHCP Covered VP species	Annual herb. Occurs in vernal pools, vernal swales, or roadside depressions. Population size is strongly correlated with rainfall. Depth of pool appears to be a significant factor as this species is rarely found in shallow pools. Flowering period: April to June. Elevation: 98 to 4,265 feet (30 to 1,300 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pools within native grassland to support this species.
Prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)	--/-- CRPR 1B.1	Annual herb. Occurs in mesic soil within vernal pools in coastal scrub, meadows, seeps, valleys, and foothill grasslands. Grows at mid-levels within the deeper pools to the basin bottoms of the shallower pools. Flowering period: April to July. Elevations below 4,000 feet (1,220 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pools within native grassland to support this species.
Coast woolly-heads (<i>Nemacaulis denudata</i> var. <i>denudata</i>)	--/-- CRPR 1B.2	Annual herb. Occurs within coastal dunes. The back dunes in mildly protected areas seem to be preferred. Flowering Period: April to September. Elevation: below 330 feet (100 meters).	None. The project site lacks suitable coastal dunes and this species has not been reported within five miles of the project site.
California adder's-tongue (<i>Ophioglossum californicum</i>)	--/-- CRPR 4.2 County List D	Perennial rhizomatous herb. Occurs within mesic areas of chaparral and grassland habitats, and along the margins of vernal pools. Flowering period: January to June. Elevation: 196 to 1,722 feet (60 to 525 meters).	None. The project site lacks suitable mesic areas or vernal pools to support this species and this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Orcutt's grass (<i>Orcuttia californica</i>)	FE/SE CRPR 1B.1 MSCP Covered VPHCP Covered VP species	Annual grass. Grows in vernal pools in valley grassland and wetland communities. Flowering period: April to August. Elevation: 197 to 2,165 feet (60 to 660 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pools within grassland to support this species.
Parish's broomrape (<i>Aphyllon [=Orobanche] parishii</i> ssp. <i>brachyloba</i>)	--/-- CRPR 4.2	Parasitic perennial herb. Grows on dunes in coastal strand areas or coastal sage scrub. Flowering period: April to October. Elevation: below 984 feet (300 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable coastal dunes or scrub to support this species.
Golden-rayed pentachaeta (<i>Pentachaeta aurea</i> ssp. <i>aurea</i>)	--/-- CRPR 4.2	Annual herb. Occurs in grassy areas within coastal scrub, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. Flowering period: March to July. Elevation: 260 to 6,100 feet (80 and 1,850 meters).	Low. Although chaparral habitat exists within the project site, it lacks suitable grassy areas to support this species. Furthermore, this species has not been reported within five miles of the project site.
Brand's star phacelia (<i>Phacelia stellaris</i>)	--/-- CRPR 1B.1	Annual herb. Occurs in sandy openings within coastal dunes and coastal scrub. Flowering Period: March to June. Elevation: below 1,315 feet (400 meters).	None. The project site lacks suitable coastal dunes to support this species and this species has not been reported within five miles of the project site.
Torrey pine (<i>Pinus torreyana</i> ssp. <i>torreyana</i>)	--/-- CRPR 1B.2 MSCP Covered	Perennial evergreen tree. Occurs within closed cone coniferous forest and chaparral atop sandstone soils. Elevation: 98 and 430 feet (30 to 131 meters).	Present. Several cultivated individuals of this species are present within the developed portion of the project site in landscaped areas.
Chaparral rein orchid (<i>Piperia cooperi</i>)	--/-- CRPR 4.2	Perennial herb. Generally found on dry sites within grasslands, chaparral, and cismontane woodland. Flowering period: March to June. Elevation: 50 to 5,200 feet (15 to 1,585 meters).	Low. Although suitable chaparral habitat exists within the project site, this species has not been reported within five miles of the project site.
San Diego mesa mint (<i>Pogogyne abramsii</i>)	FE/SE CRPR 1B.1 MSCP Covered VPHCP Covered VP Species	Annual herb. Occurs within vernal pools. Flowering period: March to July. Elevation: 295 and 660 feet (90 to 200 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable vernal pools to support this species.
Nuttall's scrub oak (<i>Quercus dumosa</i>)	--/-- CRPR 1B.1	Perennial shrub. Occurs on sandy or clay loam soils near the coast within coastal scrub, chaparral, cismontane woodland, and riparian woodland. Flowering period: March to May. Elevation: below 656 feet (200 meters).	Presumed Absent. The species was not observed during rare plant surveys conducted within the project site. This conspicuous perennial species would most likely have been observed if present.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Engelmann oak (<i>Quercus engelmannii</i>)	--/-- CRPR 4.2 County List D	Perennial tree. Occurs on slopes and foothills within grasslands, chaparral, oak woodland, and riparian woodlands. Flowering period: March to June. Elevation: 160 to 4,300 feet (50 to 1,300 meters).	Low. Although the project site partially consists of suitable chaparral habitat, it is a conspicuous perennial shrub that would have been apparent at the time of the survey. Furthermore, this species has not been reported within five miles of the project site.
Munz's sage (<i>Salvia munzii</i>)	--/-- CRPR 2B.2	Perennial shrub. Occurs within chaparral and coastal scrub. Flowering period: February to April. Elevation: 370 and 3,500 feet (115 to 1,065 meters).	Low. Suitable habitat occurs within the project site and there are reported occurrences within five miles of the project site. However, this conspicuous perennial shrub would most likely have been observed if present.
Ashy spike-moss (<i>Selaginella cinerascens</i>)	--/-- CRPR 4.1	Rhizomatous fern. Occurs in chaparral and coastal sage scrub. Elevation: below 1,804 feet (550 meters).	High. Suitable habitat exists within the project site and this species has been reported within five miles of the project site.
Chaparral ragwort (<i>Senecio aphanactis</i>)	--/-- CRPR 2B.2	Annual herb. Occurs on alkali flats and dry, open, rocky areas within foothill woodland, northern coastal scrub, and coastal sage scrub communities. Flowering period: February to May. Elevation: 33 to 1,804 feet (10 to 550 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable alkali flats and dry, open rocky areas to support this species.
Salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	--/-- CRPR 2B.2	Perennial herb. Occurs within chaparral, lower montane coniferous woodland, Mojavean desert scrub, playas, and coastal scrub. Flowering period: March to June. Elevation: 50 and 5,020 feet (15 to 1,530 meters).	Low. Suitable chaparral habitat occurs within the project site; however, this species is typically associated with mesic or wetland communities, which the project site lacks. This species has been reported within five miles of the project site.
Bottle liverwort (<i>Sphaerocarpos drewei</i>)	--/-- CRPR 1B.1	Bryophyte. Grows in shady areas in coastal sage scrub habitat. Elevation: 295 to 1,970 feet (90 to 600 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable coastal sage scrub habitat
San Diego County needle grass (<i>Stipa diegoensis</i>)	--/-- CRPR 4.2	Perennial herb. Found in rocky, mesic soils near streams or along the coast within coastal scrub and chaparral. Flowering period: February to June. Elevation: 30 to 2,600 feet (10 to 800 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable rocky, mesic soils and natural stream habitat to support this species.
Estuary seablite (<i>Suaeda esteroa</i>)	--/-- CRPR 1B.2	Perennial herb. Found in coastal salt marshes and swamps. Flowering period: May to October. Elevation: below 16 feet (5 meters).	None. The project site lacks suitable coastal salt marshes or swamps to support this species. Furthermore, this species has not been reported within five miles of the project site.

Appendix D (cont.) Special Status Plant Species Observed or With Potential to Occur

Species	Status ¹	Habit, Ecology and Life History	Potential to Occur ²
Woven-spored lichen (<i>Texosporium sancti-jacobi</i>)	--/-- CRPR 3	Lichen. Grows in arid to semiarid shrub steppe, grassland, or savannah communities. Elevation: below 3,300 feet (1,000 meters).	None. Although this species has been reported within five miles of the project site, the project site lacks suitable habitat to support this species.
Rush-like bristleweed (<i>Xanthisma junceum</i>)	--/-- CRPR 4.3	Perennial herb. Grows on dry hillsides within coastal sage scrub and chaparral. Flowering period: May to January. Elevation: 785 to 3,280 feet (240 to 1,000 meters).	None. The project site occurs outside of the known elevation range for this species and this species has not been reported within five miles of the project site.

¹ Listing codes as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare

CRPR = California Native Plant Society Rare Plant Rank: 1A – presumed extirpated in California and either rare or extinct elsewhere; 1B – rare, threatened, or endangered in California and elsewhere; 2A – presumed extirpated in California, but more common elsewhere; 2B – rare, threatened, or endangered in California, but more common elsewhere; 3 – more information needed; 4 – watch list for species of limited distribution. Extension codes: .1 – seriously endangered; .2 – moderately endangered; .3 – not very endangered.

MSCP Covered Species: Covered Species under City Multiple Species Conservation Plan (MSCP) Subarea Plan; VPHCP Covered Species: Covered Species under the City Vernal Pool Habitat Conservation Plan (VPHCP); NE = Narrow Endemic Species; VP Species = Vernal Pools Species listed under the VPHCP.

² Potential to Occur is assessed as follows: **None:** There are no present or historical records of the species occurring on or in the immediate vicinity of the project site and the diagnostic habitats and soils associated with the species do not occur on or in the immediate vicinity of the project; **Low:** Suitable habitat is present in the project site and a historical record of the species occurs in the immediate vicinity but existing conditions such as elevation, soils, density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, and/or isolation substantially reduce the possibility that the species may occur; **Moderate:** The diagnostic habitats associated with the species occur on or in the immediate vicinity of the project site, but there is not a recorded occurrence of the species within the immediate vicinity. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity; **High:** Suitable habitat occurs in the project site and the species has been recorded recently on or in the immediate vicinity but the species was not observed during project surveys; **Present:** The species was observed during biological surveys for the project and is assumed to occupy the project site; **Presumed Absent:** Species would be visible all year and would have been observed if present.

Appendix E

Special Status Animal Species
Observed or with Potential to Occur

Appendix E

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Invertebrates			
San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	FE/-- MSCP Covered VPHCP Covered	Restricted to vernal pools and other ephemeral basins in southern California from coastal Orange County to San Diego County. Found in seasonally astatic pools which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	None. The project area lacks suitable vernal pool habitat required by this species.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE/-- MSCP Covered	Occurs in California from western Riverside County southwards to southern San Diego County. Inhabits open and sparsely vegetated areas that contain larval host plant species (principally dot-seed plantain [<i>Plantago erecta</i>], woolly plantain [<i>Plantago patagonia</i>] but also Coulter's snapdragon [<i>Antirrhinum coulterianum</i>], and rigid bird's beak [<i>Cordylanthus rigidus</i>]) and nectar sources. Often found on rounded hilltops, ridgelines, and occasionally rocky outcrops. Occurs within a wide range of open-canopied habitats including vernal pools, sage scrub, chaparral, grassland, and open oak and juniper woodland communities.	Not Expected. Suitable chaparral habitat occurs within the project site and this species has been historically reported within five miles of the project site; however, there are no recent observations of the species in the vicinity of the project likely due to its disturbed nature and landscape position, which is isolated from core populations. The project site occurs outside the recommended quino survey area (USFWS 2014).
Amphibians			
Western spadefoot toad (<i>Spea hammondi</i>)	--/SSC	Occurs from northern California southward to San Diego County, and to the west of the Sierra Nevada at elevations below 4,500 feet. Terrestrial species requiring temporary pools for breeding. Suitable upland habitats include coastal sage scrub, chaparral, and grasslands. Most common in grasslands with vernal pools or mixed grassland-coastal sage scrub areas. Breeds in temporary pools formed by heavy rains, but also found in riparian habitats with suitable water resources. Breeding pools must lack exotic predators such as fish, bullfrogs, and crayfish for the species to successfully reproduce. Estivates in burrows within upland habitats adjacent to potential breeding sites.	Not Expected. This species has been historically reported within five miles; however, the project site lacks topography that would support temporary pools required by this species for breeding.

Appendix E (cont.)
Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Reptiles			
Southwestern Pond Turtle (<i>Actinemys pallida</i>)	--/SSC MSCP Covered	Occurs in most major coast-facing drainages below 4,700 feet from Washington south to Baja California, Mexico. In California, occurs from the central coast south of the San Francisco Bay area to San Diego County, including the Mojave River (San Bernardino County) and Andreas Canyon (Riverside County). Habitat generalist that occurs within many types of water from freshwater to brackish environments and permanent to intermittent waterbodies. Inhabit creeks, slow moving rivers, marshes, ponds, lakes, reservoirs, vernal pools, canals and even sewage treatment plants. Prefers habitats with slow flowing water particularly where basking sites (such as rocks, downed logs, or emergent vegetation), deep water retreats, and egg laying areas are readily available. Leaves water and travels to surrounding upland habitats to nest, over-winter, and aestivate.	None. Although this species has been historically reported within five miles of the project site, the project site lacks suitable habitat to support this species.
San Diegan legless lizard (<i>Anniella stebbinsi</i>)	--/SSC	Occurs in southern California from San Barbara County south to San Diego County, and east into Antelope Valley of the western Mojave Desert. An isolated population is found in the Tehachapi and Piute mountains of Kern County. Inhabits sparsely vegetated areas with moist warm, loose soil with plant cover; moisture is essential. Common in several habitats but especially in beach dunes, coastal scrub, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Found primarily in areas with sandy or loose organic soils or where there is plenty of leaf litter. Sometimes found in suburban gardens in southern California.	Low. Suitable habitat is present within the project site; however, there are no recent reported occurrences of the species within the project vicinity. The most recent report of this species occurs in the 1975.

Appendix E (cont.)
Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Reptiles (cont.)			
California glossy snake (<i>Arizona elegans occidentalis</i>)	--/SSC	Occurs along the coastal regions from San Francisco south to San Diego County; though it is absent along the central coast of California. Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers open areas and areas with soils loose enough for easy burrowing.	Low. Suitable habitat occurs within the project site; however, there are no recent reported occurrences of the species within the project vicinity. The most recent recorded observation is from the La Jolla area in 1946.
Belding's orange-throated whiptail (<i>Aspidoscelis hyperythra beldingi</i>)	--/WL MSCP Covered	Found within the southwestern portion of California in southern San Bernardino, western Riverside, Orange, and San Diego Counties on the western slopes of the Peninsular ranges below 3,500 feet. Suitable habitat includes coastal sage scrub, chaparral, juniper woodland, oak woodland, and grasslands along with alluvial fan scrub and riparian areas. Occurrence of the species correlated with the presence perennial plants (such as California buckwheat, California sagebrush, black sage, or chaparral) to provide a food base for its major food source, termites.	High. Suitable chaparral habitat occurs within the project site and there are multiple reported observations of the species within the project vicinity.
San Diego tiger whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	--/SSC	Occurs along the coastal region of southern California from San Luis Obispo south to San Diego County. Inhabits a wide variety of habitats, primarily in hot and dry open areas with sparse vegetation, from sea level to 4,900 feet. Associated habitats include coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas with sandy or gravelly substrates.	High. The project site consists of suitable chaparral habitat to support this species and the species has been recently observed within the project vicinity.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Reptiles (cont.)			
Red diamond rattlesnake (<i>Crotalus ruber</i>)	--/SSC	Occurs in the southwestern portion of California from San Bernardino County southward to San Diego County at elevations below 5,000 feet. Has a wide tolerance for varying environments including the desert, dense foothill chaparral, warm inland mesas and valleys, and cool coastal zones. Most commonly found near heavy brush with large rocky microhabitats. Chamise and red shank chaparral associations may offer better structural habitat for refuges and food resources.	Low. Though chaparral habitat occurs within the project site, rocky areas are absent and the site is isolated from larger contiguous open space areas. Historical records of this species occur within five miles of the project site; however, the most recent of these occurred in 2002.
Blainville's horned lizard (<i>Phrynosoma blainvillii</i>)	--/SSC MSCP Covered	Occurs from southern California to northern Baja California. In California, the species predominately occurs from Kern County south to San Diego County west of the desert at elevations below 8,000 feet. Inhabits a wide variety of vegetation types including sagebrush scrub, chaparral, grasslands, forests, and woodlands but is restricted to areas with suitable sandy, loose soils with open areas for basking. Diet primarily composed of native harvester ants (<i>Pogonymyrmex</i> sp.) and are generally excluded from areas invaded by Argentine ants (<i>Linepithema humile</i>).	Low. Suitable chaparral habitat occurs within the project site, though loose soils are absent and the open space within the project site is isolated from larger contiguous open space areas. Historical records of this species occur within five miles of the project site; however, the most recent of these occurred in 2002.
Coronado skink (<i>Plestiodon skiltonianus interparietalis</i>)	--/WL	Occurs from in coastal and inland portions of southern San Diego County, though the can occur up into Riverside County where it intergrades with Skilton's skink (<i>Plestiodon skiltonianus skiltonianus</i>). Suitable habitats include grassland, woodlands, pine forests, and chaparral, especially in open sunny areas such as clearings and edges of creeks or rivers. Prefers rocky areas near streams with lots of vegetation but can also be found in areas away from water. Occasionally seen foraging in leaf litter but more commonly found underneath surface objects, such as bark or rocks, where it lives in extensive burrows.	Low. Suitable chaparral habitat occurs within the project site, though rocky areas are absent and the site is isolated from larger contiguous open space areas. Historical records of this species occur within five miles of the project site; however, the most recent of these occurred in 2002.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Reptiles (cont.)			
Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	--/SSC	Occurs in the coastal regions of California from the northern Carrizo Plains in San Luis Obispo County south to San Diego County at elevations below 7,000 feet. Inhabits semi-arid shrubby areas such as chaparral and desert scrub. Also found along washes, sandy flats, canyons, and rocky areas. Takes refuge and overwinters in burrows and woodrat nests.	Low. Suitable chaparral habitat occurs within the project site, though washes, sandy flats, canyons, and rocky areas are absent, and the site is isolated from larger contiguous open space areas. Historical records of this species occur within five miles of the project site but the most recent of these occurred in 1967.
Two-striped garter snake (<i>Thamnophis hammondi</i>)	--/SSC	Found in California from Monterey County south along the coast to San Diego County and into northern Baja California at elevations below 7,000 feet. Commonly inhabits perennial and intermittent streams with rocky beds bordered by riparian habitats dominated by willows and other dense vegetation. The species has also been found in stock ponds and other artificially created aquatic habitats if bordered by dense vegetation and potential prey, such as amphibians and fish, are present.	None. Suitable aquatic habitat to support the species is absent from the project site. There are several historic observations recorded within five miles of the project site; however, the most recent record occurred in 1997.
Birds			
Cooper's hawk (<i>Accipiter cooperii</i>)	--/WL MSCP Covered	In California, the species breeds from Siskiyou County south to San Diego County and east to the Owens Valley at elevations below 9,000 feet. Inhabits forests, riparian areas, and more recently suburban and urban areas nesting within dense woodlands and forests and isolated trees in open areas.	High. Suitable habitat occurs within the project site and there are numerous occurrences of the species reported within the project vicinity.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	--/WL MSCP Covered	Restricted to southwestern California occurring from Santa Barbara County southwards to San Diego County at elevations below 5,000 feet. Generally found on moderate to steep slopes vegetated with grassland, coastal sage scrub, and chaparral. Prefer areas with California sagebrush but area also generally absent from areas with dense stands of coastal sage scrub or chaparral. May occur on steep grassy slopes without shrubs if rock outcrops are present.	Not Expected. Although chaparral occurs within the project site, the site is generally flat and lacking suitable sloped areas to support the species. Furthermore, the chaparral found on-site is very dense. There are historic records of this species within five miles of the project site; however, the most recent observation was recorded in 2000.

Appendix E (cont.)
Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Birds (cont.)			
Grasshopper sparrow (<i>Ammodramus savannarum</i>)	--/SSC	In California, generally occurs west of the Cascade and Sierra Nevada foothills from Del Norte County south to San Diego County below 4,900 feet. Primarily a grassland species that prefers short to middle-height, moderately open grasslands with scattered shrubs. More likely to be found in large tracts of habitat instead of small fragments.	None. The project site lacks suitable grassland habitat required by this species.
Bell's sparrow (<i>Artemisiospiza belli</i>)	BCC/WL	Non-migratory resident on the coastal ranges of California and western slopes of the central Sierra Nevada mountains. Occurs year-round in southern California. Breeds in dry coastal sage scrub and chaparral, desert scrub, and similar other open, scrubby habitats. In foothill chaparral, they tend toward younger, less dense stands that are recovering from recent fires; less common in older, taller stands that have remained unburned.	Not Expected. Potentially suitable chaparral habitat occurs within the project site; however, the most recent observation within five miles of the project site was recorded in 2000. Furthermore, the isolated nature of the suitable chaparral habitat makes this species unlikely to occur within the project site.
Coastal Cactus Wren (<i>Campylorhynchus brunneicapillus sandiegensis</i>)	BCC/SSC (San Diego and Orange Counties) MSCP Covered	One of seven subspecies occurring in southern California from southern Orange County south to San Diego County. Occupies native scrub vegetation with thickets of mature cacti consisting of cholla (<i>Cylindropuntia</i> spp.) or prickly-pear cactus (<i>Opuntia littoralis</i>). Cacti must be tall enough to support and protect the bird's nest (typically 3 feet or more in height). Surrounding vegetation usually consists of coastal sage scrub habitat with shrubs normally below the level of nest placement.	None. The project site lacks suitable cacti required by this species. One historical record of this species occurs within five miles of the project site and was recorded in 1998.

Appendix E (cont.) Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Birds (cont.)			
Western Snowy Plover (<i>Charadrius nivosus nivosus</i>)	FT,BCC/SSC MSCP Covered	Breeds primarily on coastal beaches from southern Washington to southern Baja California. Nesting habitat includes sand spits, dune-backed beaches, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Usually prefer sand, silt or dry mud with even surface, avoiding rocky or broken ground. Exhibits high breeding site fidelity. In winter, found on many of the beaches used for nesting, as well as others where they do not nest. Also occur in man-made salt ponds and on estuarine sand and mud flats.	None. The project site lacks suitable habitat to support this species. This species has been recorded within five miles of the project site as recently as 2008 at Los Penasquitos Lagoon.
Northern Harrier (<i>Circus cyaneus</i>)	--/SSC MSCP Covered	Occurs as a year-round resident in California. Inhabits open areas including wetlands, marshes, marshy meadows, grasslands, riparian woodlands, desert scrub, and pastures and agricultural areas. Breeding populations in southern California from Ventura County to San Diego County are highly fragmented with many local populations extirpated mostly likely as a result of habitat loss and degradation. Nests on the ground in wetlands and uplands within patches of dense, often tall, vegetation in undisturbed areas.	Not Expected. Although this species has been reported within five miles of the project site, the project site lacks suitable wetlands, marshes, meadows, grassland, riparian woodland, desert scrub, or pastures to support this species.
White-tailed Kite (<i>Elanus leucurus</i>)	--/FP	Year-long resident of California residing along the coasts and valleys west of the Sierra Nevada foothills and southeast deserts, though the species has also been documented breeding in arid regions east of the Sierra Nevada and within Imperial County. Inhabits low elevation grasslands, wetlands, oak woodlands, open woodlands, and is associated with agricultural areas. Breeds in riparian areas adjacent to open spaces nesting isolate trees or relatively large stands.	Not Expected. Although this species has been reported within five miles of the project site, the project site lacks suitable grasslands, wetlands, oak woodlands, open woodlands, or agricultural areas to support this species.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Birds (cont.)			
Peregrine Falcon (<i>Falco peregrinus</i>)	BCC/FP MSCP Covered	In California, the species breeds and winters throughout the State, except for desert areas. Very uncommon breeding resident and uncommon as a migrant. Active nesting sites of this species within California are known from along the coast north of Santa Barbara, in the Sierra Nevada, and other mountains of northern California. Few nest sites are known anecdotally for southern California mostly at coastal estuaries and inland oases. Inhabits a large variety of open habitats including marshes, grasslands, coastlines, and woodlands. Typically nest on cliff faces in remote rugged sites where adequate food is available nearby, but the species can also be found in urbanized areas nesting on man-made structures.	Low. Although this species has been reported within five miles of the project site, the project site lacks suitable cliff faces typically required by this species; though the species could nest on suitable man-made structures that are found within the project site.
California Black Rail (<i>Laterallus jamaicensis coturniculus</i>)	BCC/ST, FP	In California, breeds in the Sacramento-San Joaquin River delta, San Francisco Bay area, Bolinas Lagoon and Tomales Bay in Marin County, Morro Bay in San Luis Obispo County, White Slough in San Joaquin County, the Salton Sea area, and the Lower Colorado River Valley. Inhabits salt marshes, freshwater marshes, and wet meadows. Associated with pickleweed, bulrush, alkali heath, and cordgrass. Requires dense cover of upland vegetation in tidal areas which allows for protection when rails must leave marsh habitats during high tide events.	None. Although this species has been historically reported within five miles of the project site, it is presumed extirpated from San Diego County. Furthermore, the site lacks suitable salt marshes, freshwater marshes, and wet meadows to support this species.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Birds (cont.)			
Osprey (<i>Pandion haliaetus</i>)	--/WL	Within California, breeding populations reside in the Cascade and Sierra mountain ranges, though small numbers of the species also breed within San Diego County. Although widely seen on the coast, these birds are rare transients in the interior portions of southern California. Restricted to large water bodies such as rivers, lakes, and reservoirs supporting fish with suitable nesting habitat such as rocky pinnacles or large trees and snags. Build their large nests, often in dead tops of older trees and man-made structures.	Not Expected. Although this species has been reported within five miles of the project site, the project site and immediate vicinity lacks suitable rivers, lakes, or reservoirs required by this species for nesting and/or foraging.
Belding's Savannah Sparrow (<i>Passerculus sandwichensis beldingi</i>)	--/SE MSCP Covered	Year-round resident of coastal salt marshes within southern California from Santa Barbara County south to San Diego County. Particularly associated with salt marsh habitat dominated by dense pickleweed (<i>Salicornia</i> sp.) within which most nests are found.	None. Although this species has been reported within five miles of the project site, the project site lacks suitable salt marsh habitat to support this species.
Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	FT/SSC MSCP Covered	Year-round resident of California occurring from Ventura County south to San Diego County, and east to the western portions of San Bernardino and Riverside Counties. Typically occur in arid, open sage scrub habitats on gently slopes hillsides to relatively flat areas at elevations below 3,000 feet. The composition of sage scrub in which gnatcatchers are found varies; however, California sagebrush is at least present as dominant or co-dominant species. The species is mostly absent from areas dominated by black sage, white sage, or lemonadeberry, though the species may occur more regularly in inland regions dominated by black sage.	None. Suitable coastal sage scrub habitat is absent from the project site.
Light-footed Ridgway's Rail (<i>Rallus obsoletus levipes</i>)	FE/SE, FP MSCP Covered	One of six recognized subspecies occurring as a resident in coastal salt marshes and lagoons from Santa Barbara County south to Baja California. The species is found primarily in tall, dense cordgrass (<i>Spartina foliosa</i>) and occasionally pickleweed (<i>Salicornia pacifica</i>) in the low marsh zone. Also found in freshwater marshes in winter.	None. Although this species has been reported within five miles of the study area, the study area lacks suitable salt marsh, lagoon, or freshwater marsh habitat to support this species.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Birds (cont.)			
California Least Tern (<i>Sternula antillarum browni</i>)	FE/SE, FP MSCP Covered	Occurs locally along California coastal regions breeding in colonies from San Francisco Bay south to San Diego County. Wintering areas in unknown areas of South America. Nests on relatively bare or sparsely vegetation beaches and mudflats near water. Forage in the bays and estuaries near their colonies, on the ocean near shore, and at inland lakes in the coastal lowland.	None. Although this species has been reported within five miles of the project site, the project site lacks suitable beaches or estuaries to support this species.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE/SE MSCP Covered	Breeds within California and northern Baja California, wintering in southern Baja California. In California, breeds along the coast and western edge of the Mojave Desert from Santa Barbara County south to San Diego County, and east to Inyo County, San Bernardino, and Riverside Counties. Breeding habitat consists of early to mid-successional riparian habitat, often where flowing water is present, but also found in dry watercourses within the desert. A structurally diverse canopy and dense shrub cover is required for nesting and foraging. Dominant species within breeding habitat includes cottonwood and willows with mule fat, oaks, and sycamore, and mesquite (<i>Prosopis glandulosa</i>) and arrowweed (<i>Pluchea sericea</i>) within desert habitats. The species can be tolerant of the presence of non-native species such as tamarisk.	None. Although this species has been reported within five miles of the project site, it is not expected to occur within the project site due to lack of suitable riparian habitat.
Mammals			
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	--/SSC	Occurs throughout southwestern California from western Riverside County south to San Diego County at elevations below 6,000 feet. Inhabits coastal sage scrub, grasslands, and chaparral communities, and generally exhibits a strong microhabitat affinity for moderately gravelly and rocky substrates. Forage for seeds from California sagebrush, California buckwheat, lemonadeberry, and grasses under shrub and tree canopies, or around rock crevices.	Not Expected. Although suitable chaparral habitat is present within the project site, the site lacks suitable gravelly or rocky soils. Furthermore, there are only historic records of this species within five miles of the project site. The most recent observation was recorded in 2001.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Mammals (cont.)			
Western mastiff bat (<i>Eumops perotis californicus</i>)	--/SSC	In California, the species occurs from Monterey County south to San Diego County from the coast eastward to the Colorado Desert. Found in open, semi-arid to arid habitats including coastal and desert scrub, grasslands, woodlands, and palm oases. Prefers to roost in high situations above the ground on vertical cliffs, rock quarries, outcrops of fractured boulders, and occasionally tall buildings.	Low. Although this species has been recorded within five miles of the project site, the project site lacks suitable coastal or desert scrub, grassland, woodlands, or palm oases to support this species. The most recent observation of this species near the project site is from Los Penasquitos Canyon Preserve in 2003.
Spotted bat (<i>Euderma maculatum</i>)	--/SSC	Occurs throughout western North America but is patchily distributed and considered rare. In California, the species has been found in a small number of localities in the foothills, mountains, and desert regions at elevations below 10,000 feet. Inhabits rocky arid and semi-arid environments including forested mountains, open shrublands, and deserts. Roosts in rock crevices along cliffs adjacent to wide expanses of open habitat. Occasionally roosts in caves and buildings.	Not Expected. Although this species has been recorded within five miles of the project site, the project site is not located in foothills, mountains, or desert regions of San Diego County. The most recent record of this species is from 1955 on the University of California San Diego campus.
Western red bat (<i>Lasiurus blossevillii</i>)	--/SSC	In California, the species is locally common occurring from Shasta County south to San Diego County and west of the Sierra Nevada/Cascade Range and deserts. Mainly occurs in riparian woodlands populated by willows, cottonwoods, sycamores, and oak trees but can be found in non-native vegetation such as tamarisk, eucalyptus, and orchards. Primarily roosts in trees preferring heavily shaded areas that are open underneath.	Not Expected. Although this species has been recorded within five miles of the project site, preferred riparian habitat does not currently occur on site. One historical report from 2003 is recorded from Los Penasquitos Creek.

Appendix E (cont.)

Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Mammals (cont.)			
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	--/SSC	Occurs along the coastal regions of southern California south to northern Baja California. Found in arid regions preferring grasslands, agricultural fields, and sparse scrub. Typically absent from areas with high-grass or dense brush, such as closed-canopy chaparral, primarily occupying short-grass and open scrub habitats.	Not Expected. Although this species has been recorded within five miles of the project site, the project site lacks suitable open, sparse vegetation to support this species. Furthermore, the project site is isolated from other contiguous patches of habitat. One historical report from 2002 recorded this species within the Carmel Mountain area.
San Diego Bryant's (formerly desert) woodrat (<i>Neotoma bryanti [formerly lepida] intermedia</i>)	--/SSC	Occurs along the coastal regions of California being found as far north as San Luis Obispo County, south to San Diego County, and in the western portions of San Bernardino and Riverside Counties. Inhabits a variety of shrub and desert habitats such as coastal sagebrush scrub, chaparral, pinyon-juniper woodland, and Joshua tree woodland among others. Often associated with rock outcroppings, boulders, cacti patches, and areas with dense understories. Construct dens used for shelter, food storage, and nesting around rock outcroppings and cacti using various materials such as twigs, sticks, and other debris.	Moderate. Suitable chaparral habitat occurs within the project site but rock outcroppings and cacti where dens are constructed are absent from the site. There are several reports of the species within Torrey Pines Reserve and Torrey Pines State Park.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	--/SSC	Rare in California occurring from Los Angeles County eastwards to San Bernardino County, and southwards to San Diego County. Closely associated with their preferred roosting habitats consisting of vertical cliffs, quarries, and rocky outcrops. Sometimes roosts under tiled roofs and observed utilizing bat boxes. Habitat generalists foraging in grasslands, shrublands, riparian areas, oak woodlands, forests, meadows, and ponds favoring larger water bodies for drinking.	Low. Potentially suitable foraging habitat occurs within the project site, but the site lacks large bodies of water nearby for drinking. Preferred roosting habitat is absent, although this species may roost in man-made structures found on-site. There is one report of this species recorded in Del Mar in 2007.

Appendix E (cont.) Special Status Animal Species Observed or With Potential to Occur

Species	Status ¹	Habitat Associations	Potential to Occur ²
Mammals (cont.)			
Pacific pocket mouse (<i>Perognathus longimembris pacificus</i>)	--/SSC	Occurs from the San Joaquin Valley south to San Diego County. Typically found in open habitats associated with gentle terrain including grasslands and coastal sage scrub. Also found in alluvial fans and desert scrub in desert regions. Prefers habitats with friable soils with scattered shrubs and mixed grasses.	Not Expected. Although this species has been recorded within five miles of the project site, the site lacks suitable open grassland or coastal sage scrub habitat to support this species. One report of this species was recorded in 1994 in Del Mar.
American badger (<i>Taxidea taxus</i>)	--/SSC MSCP Covered	Uncommon, permanent resident found through California, except for the extreme north coast areas. Associated with large blocks of undeveloped land composed of open valleys, alluvial fans, meadows, grasslands, and sandy desert. Dens function as sites for resting and parturition. Friable, easily crumbled soils are important for denning.	Not Expected. Although this species has been reported within five miles of the project site, the project site support only a fragmented, isolated patch of suitable habitat. The most recent observation of this species within the project vicinity was recorded in 1953.

¹ Listing codes are as follows: F = Federal; S = State of California; E = Endangered; T = Threatened; CE = Candidate Endangered; R = Rare; BCC = Federal Bird of Conservation Concern; SSC = State Species of Special Concern; FP = State Fully Protected; WL = Watch List

MSCP Covered Species: Covered Species under City Multiple Species Conservation Plan (MSCP) Subarea Plan; VPHCP Covered Species: Covered Species under the City Vernal Pool Habitat Conservation Plan (VPHCP); NE = Narrow Endemic Species; VP Species = Vernal Pools Species listed under the VPHCP.

² Potential to Occur is assessed as follows: **None:** Species is so limited to a particular habitat that it cannot disperse on its own, and habitat suitable for its establishment and survival does not occur in the project site; **Not Expected:** There are no present or historical records of the species occurring on or in the immediate vicinity of the project site. The species moves freely and might disperse through or across the site, but suitable habitat for residence or breeding does not occur; **Low:** Suitable habitat is present in the project site and there is a historical record of the species in the project vicinity, but no sign of the species was observed during surveys. Existing conditions such as elevation, species composition, density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, and/or isolation may substantially reduce the possibility that the species may occur; **Moderate:** Diagnostic habitats associated with the species occur on or adjacent to the project site, but there is not a recorded occurrence of the species within the immediate vicinity. Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity; **High:** Suitable habitat associated with the species occurs in the project site and the species has been recorded recently on or near the project, but was not observed during biological surveys; **Present:** The species was observed during biological surveys for the project and is assumed to occupy the project site.

Appendix F

Explanation of Status Codes for Plant and Animal Species

Appendix F Explanation of Status Codes for Plant and Animal Species

FEDERAL AND STATE CODES

U.S. Fish and Wildlife Service (USFWS)

BCC	Bird of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act
FC	Federal candidate species
FE	Federally listed endangered
FPD	Federally proposed for delisting
FPE	Federally proposed endangered
FPT	Federally proposed threatened
FT	Federally listed threatened

USFWS Birds of Conservation Concern (BCC)

The primary legal authority for Birds of Conservation Concern (2008) is the Fish and Wildlife Conservation Act of 1980 (FWCA), as amended. Other authorities include the Endangered Species Act, Fish and Wildlife Act (1956) and 16 USC §701. A FWCA 1988 amendment (Public Law 100-653, Title VIII) requires the Secretary of the Interior through the USFWS to “identify species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973.” The 2008 BCC report is the most recent effort by the USFWS to carry out this proactive conservation mandate.

The BCC report aims to identify accurately the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the USFWS’ highest conservation priorities and draw attention to species in need of conservation action. The USFWS hopes that by focusing attention on these highest priority species, the report will promote greater study and protection of the habitats and ecological communities upon which these species depend, thereby ensuring the future of healthy avian populations and communities. Birds of Conservation Concern 2008 lists are available online at <https://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>.

USFWS Federal Candidate (FC) Species

Federal candidate species are those for which the USFWS has on file “sufficient information on biological vulnerability and threats to support a proposal to list as endangered or threatened, but for which preparation and publication of a proposal is precluded by higher-priority listing actions. [The USFWS] maintain[s] this list for a variety of reasons: to notify the public that these species are facing threats to their survival; to provide advance knowledge of potential listings that could affect decisions of environmental planners and developers; to provide information that may stimulate conservation efforts that will remove or reduce threats to these species; to solicit input from interested parties to help us identify those candidate species that may not require protection under the [Endangered Species Act] or additional species that may require the Act’s protections; and to solicit necessary information for setting priorities for preparing listing proposals” (Federal Register 70:90 [May 11, 2005]).

Appendix F (cont.) Explanation of Status Codes for Plant and Animal Species

USFWS Federal Proposed Endangered (FPE) Species

Any species the Service has determined is in danger of extinction throughout all or a significant portion of its range and the Service has proposed a draft rule to list as endangered. Proposed endangered species are not protected by the take prohibitions of section 9 of the ESA until the rule to list is finalized. Under section 7(a)(4) of the ESA, federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species.

USFWS Federal Proposed Threatened (FPT) Species

Any species the Service has determined is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and the Service has proposed a draft rule to list as threatened. Proposed threatened species are not protected by the take prohibitions of section 9, consistent with any protective regulations finalized under section 4(d) of the ESA, until the rule to list is finalized. Under section 7(a)(4) of the ESA, federal agencies must confer with the Service if their action will jeopardize the continued existence of a proposed species.

USFWS Bald and Golden Eagle Protection Act (BGEPA)

In 1782, Continental Congress adopted the bald eagle as a national symbol. During the next one and a half centuries, the bald eagle was heavily hunted by sportsmen, taxidermists, fisherman, and farmers. To prevent the species from becoming extinct, Congress passed the Bald Eagle Protection Act in 1940. The Act was extremely comprehensive, prohibiting the take, possession, sale, purchase, barter, or offer to sell, purchase, or barter, export or import of the bald eagle “at any time or in any manner.”

In 1962, Congress amended the Eagle Act to cover golden eagles, a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. The golden eagle, however, is accorded somewhat lighter protection under the Act than the bald eagle. Another 1962 amendment authorizes the Secretary of the Interior to grant permits to Native Americans for traditional religious use of eagles and eagle parts and feathers.

California Department of Fish and Wildlife (CDFW)

SCE	State candidate for listing as endangered
SCT	State candidate for listing as threatened
SE	State listed endangered
SR	State listed rare
ST	State listed threatened
SSC	State species of special concern
WL	Watch List
FP	Fully Protected species refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Data Base regardless of legal or protection status. These species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFW.
Special Animal	Refers to all vertebrate and invertebrate taxa of concern to the Natural Diversity Database regardless of legal or protection status.

Appendix F (cont.) Explanation of Status Codes for Plant and Animal Species

OTHER CODES AND ABBREVIATIONS

California Native Plant Society California Rare Plant Rank (CRPR) Codes

Lists

1A = Presumed extirpated in California and either rare or extinct elsewhere. Eligible for state listing.

1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.

2A = Presumed extirpated in California but common elsewhere. Eligible for state listing.

2B = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.

3 = Review List: Plants about which more information is needed. Some eligible for state listing.

4 = Watch List: Plants of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

List/Threat Code Extensions

.1 = Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

A "CA Endemic" entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.

Appendix F (cont.) Explanation of Status Codes for Plant and Animal Species

City of San Diego

Multiple Species Conservation Program (MSCP) Covered

Multiple Species Conservation Program covered species for which the City has take authorization within the MSCP area.

MSCP Narrow Endemic (NE)

Some native species (primarily plants with restricted geographic distributions, soil affinities, and/or habitats) are referred to as a narrow endemic species. For vernal pools and identified narrow endemic species, the jurisdictions will specify measures in their respective subarea plans to ensure that impacts to these resources are avoided to the maximum extent practicable.

Vernal Pool Habitat Conservation Plan (VPHCP) Covered

Threatened and endangered vernal pool species covered under the City's Vernal Pool Habitat Conservation Plan that do not currently have federal coverage under the City's Multiple Species Conservation Program Subarea Plan. The Vernal Pool Vernal Pool Habitat Conservation Plan is compatible with the MSCP and expands upon the City's existing Multi-Habitat Planning Area to conserve additional lands with vernal pool resources.