200 North Las Posas Road Project

Biological Resources Assessment

prepared for

A & S Engineering
28405 Sand Canyon Rd Suite B
Canyon Country, California 91387

prepared by

Rincon Consultants, Inc.
2215 Faraday Avenue, Suite A
Carlsbad, California 92008

May 2022

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1 Introduction

This report provides information pertaining to the existing biological resources observed by Rincon Consultants Inc. (Rincon) for the Las Posas project located within the City of San Marcos (City). The purpose of this report is to document the existing conditions of the project site, provide a determination of the resources present or potentially present at the site and assess potential mitigation options.

1.1 Project Location

The project site is located in the City of San Marcos within northern San Diego County (Figure 1). The approximately 1.65-acre site is located southwest of the intersection of West Mission Road and North Las Posas Road and is identified as Assessor Parcel Number (APN) 219-122-03-00 (Figure 2). The project site can be found on the *San Marcos* U.S. Geologic Survey (USGS) 7.5-minute topographic quadrangle in Township 12 South, Range 3 West, in the northwest quarter of Section 10 (Figure 3).

1.2 Project Description

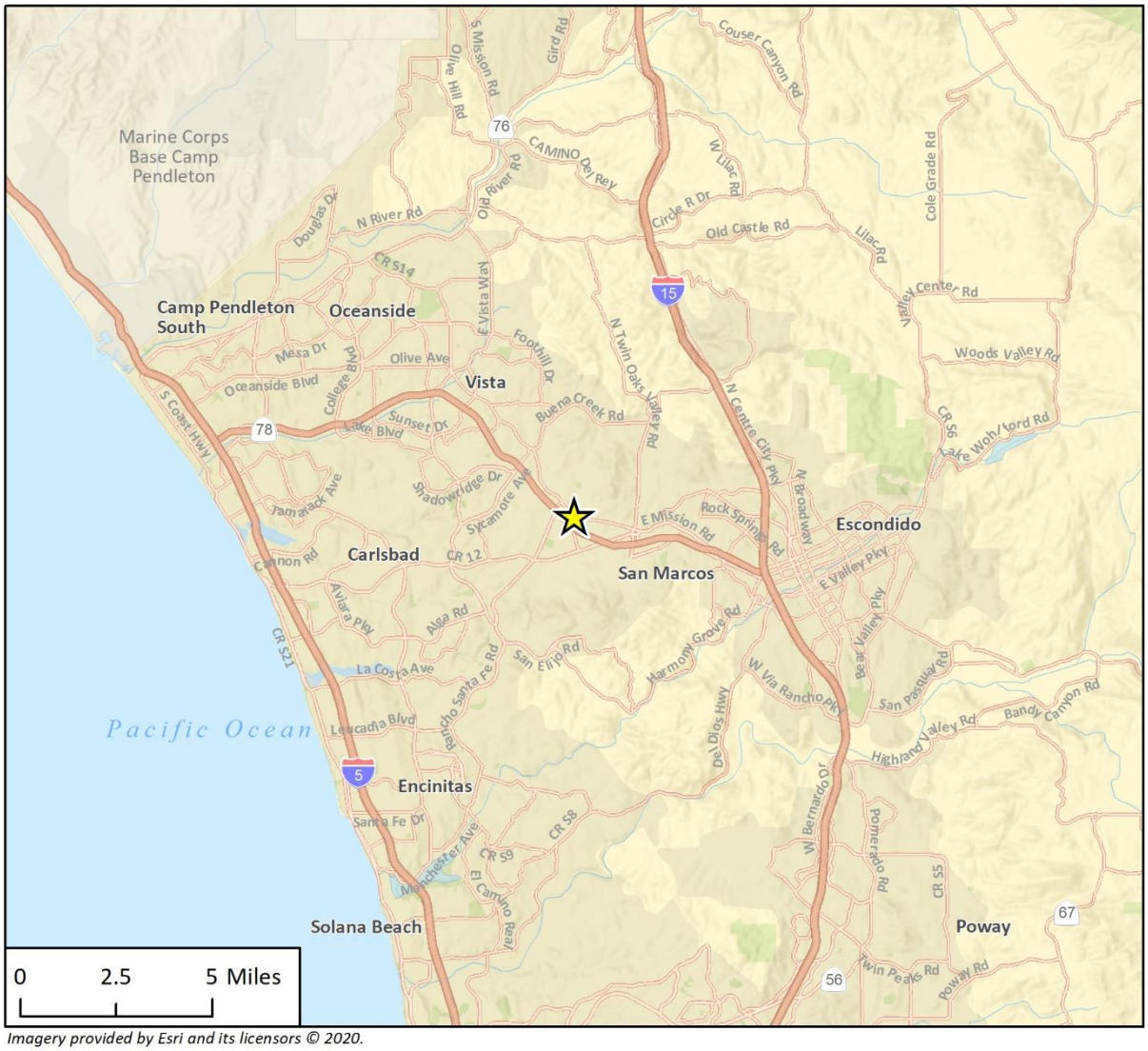
The project includes a 5,000 square foot (sf) food mart, 2,000 sf car wash (with 1,000 sf equipment room), and 6,232 sf gas station canopy with nine fuel dispensing pumps.

1.3 Local Policies

The San Diego Association of Governments (SANDAG) North County Multiple Habitat Conservation Program (MHCP) is a comprehensive, multi-jurisdictional planning program designed to create, manage, and monitor an ecosystem preserve in northwestern San Diego County intended to protect viable populations of native plant and animal species and their habitat while accommodating economic development and quality of life for San Diego residents. The MHCP encompasses the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. Its goal is to conserve approximately 19,000 acres of habitat, of which roughly 8,800 acres (46%) are already in public ownership, and contribute toward the habitat preserve system for the protection of more than 80 rare, threatened, or endangered species.

The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999. Although the Subarea Plan has not yet been approved by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), the plan is a component of the adopted MHCP, and is currently being used as a guide for open space design and

Figure 1 Regional Project Location



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Project Location

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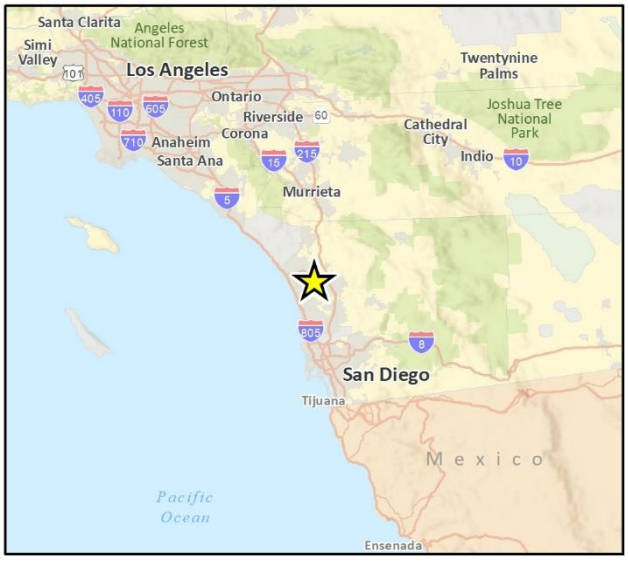

Figure 2 Project Location

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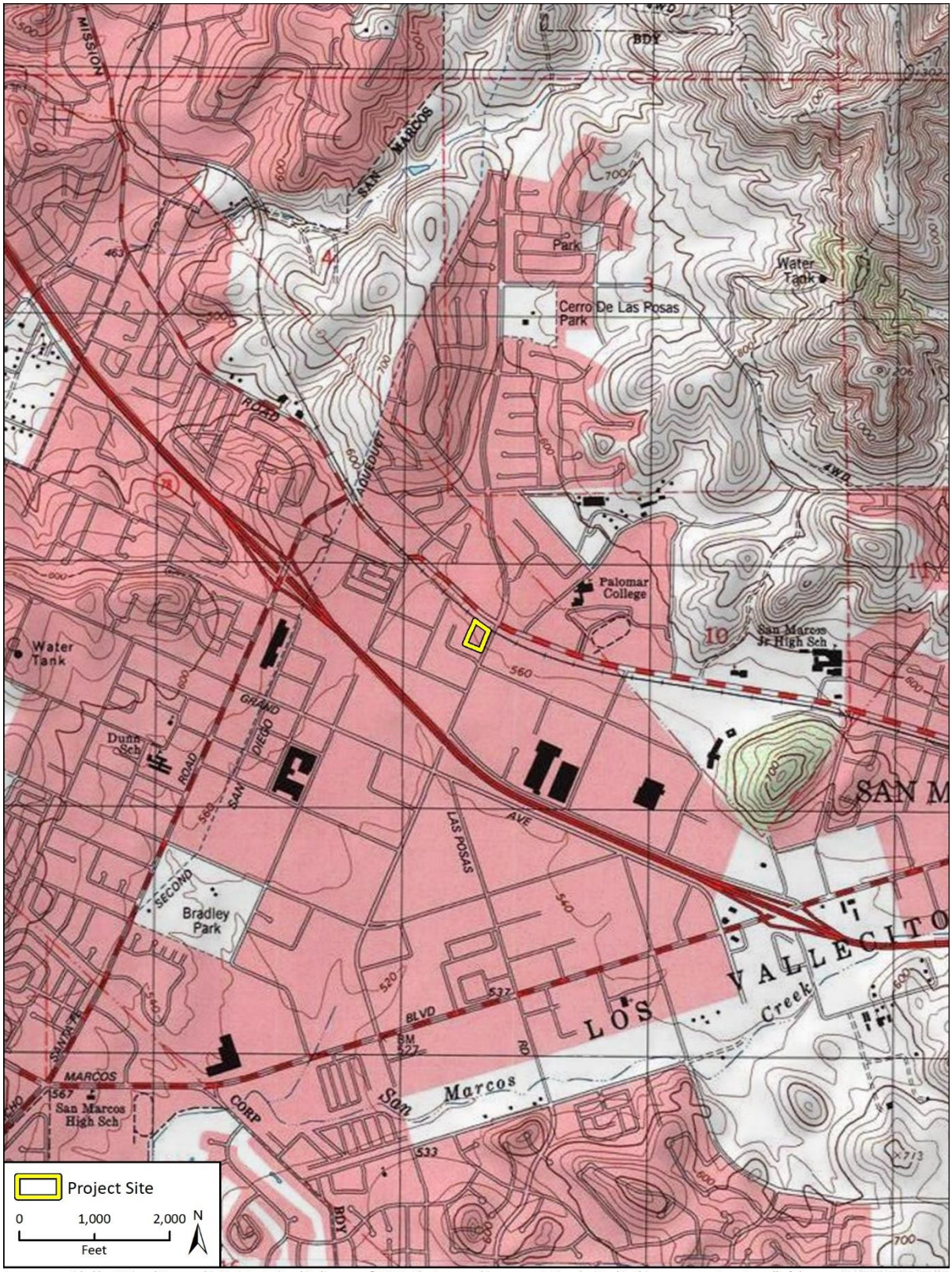
Fig 3 Project Site Overview

Figure 3 Topographic Map



Imagery provided by National Geographic Society, Esri and its licensors © 2020. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

preservation within the City. Volume I of the Final MHCP provides a framework for city subarea plans. Though the San Marcos Subarea Plan is currently in draft form, the MHCP is used as a reference for conservation planning purposes. The Plan has identified certain areas, known as focused planning areas (FPAs), which have parcel-level preserve goals which would contribute to achieving local and regional conservation. The FPAs are represented by a combination of "hardline" preserves, indicating lands that will be conserved and managed for biological resources, and "softline" planning areas, within which preserve areas will ultimately be delineated based on further data and planning. The property does not fall within a "hardline" or "softline" area.

1.4 Surrounding Land Uses and Setting

The project site is completely surrounded by existing commercial development and heavily travelled paved roadways. The site is immediately south of West Mission Road and west of North Las Posas Road. The Inland Rail Trail runs parallel to the northern border of the site and several commercial businesses are adjacent to the western and southern borders of the site.

2 Methodology

Biological conditions within the project site were evaluated by confirming applicable biological regulations, policies, and standards; reviewing biological literature and querying available databases pertinent to the project site and vicinity; and conducting a reconnaissance-level biological survey of the project site. The methods employed are described in detail below. The findings and opinions conveyed in this report are based on this methodology.

2.1 Background Research

Prior to the field survey, Rincon staff conducted background research to better characterize the nature and extent of biological resources on and adjacent to the project site. The research included the following:

- Current and historic topographic maps of *San Marcos, California* USGS 7.5-minute topographic quadrangle (USGS 2020a), Nationwide Environmental Title Research 2020)
- National Hydrography Dataset (USGS 2020b)
- Natural Resources Conservation Service's (NRCS) *Web Soil Survey* for soils mapped in the region (NRCS 2020)
- Google earth V 7.3.2.5776. (March 31, 2020). San Marcos, California. 33.147858°, -117.189764°. http://www.earth.google.com
- USFWS Critical Habitat Portal (USFWS 2020a)
- Information for Planning and Consultation online project planning tool (USFWS 2020b)
- National Wetlands Inventory (NWI) wetlands mapper (USFWS 2020c)
- California Native Plant Society's (CNPS) *Botanical Survey Guidelines* was reviewed (CNPS 2001)
- CNPS *Inventory of Rare and Endangered Plants of California* (online edition) was queried for special status plant species in the project region, defined as the *San Marcos, California* USGS 7.5-minute topographic quadrangle (CNPS 2020)
- Calflora's *What Grows Here* online application was queried for plant species that have been collected or observed in the project vicinity (Calflora 2020)
- CDFW's *California Natural Diversity Data Base* (CNDDB) was queried for special status plant and wildlife species recorded within a one-mile radius of the project site (CDFW 2020a)
- CDFW's Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020b) and Special Animal List (CDFW 2020c) were reviewed
- Final MHCP for the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista Volume I and II (SANDAG 2003)
- SANDAG *Parcel Lookup Tool* was reviewed to determine sites designated in the MHCP Subarea Plan (SANDAG 2020)
- SanGIS geographic information system data regarding biological resources was reviewed (SanGIS 2020)
- Natural Community Conservation Plan for the City of San Marcos (City of San Marcos 2001)
- City of San Marcos General Plan (City of San Marcos 2013)

2.2 Reconnaissance Survey

Rincon Biologist Christian Nordal conducted a field survey on October 7, 2020 to document the existing conditions of the project site. All accessible portions of the project site were covered on foot. Inaccessible adjacent areas were surveyed using binoculars. Vegetation communities were mapped, and the wildlife and plants observed were noted. Site photographs from the survey are provided in Appendix A.

2.2.1 Vegetation Communities

Vegetation classification was based on the classification systems provided in the *Draft Vegetation Communities of San Diego County* (Oberbauer et al. 2008) to provide consistency with the MHCP; and modified as appropriate to reflect the existing site conditions. Where applicable, vegetation communities were further classified using *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) to better identify the species composition and provide consistency with CDFW's preference. Sensitive vegetation community ranking is based on MHCP habitat groups (SANDAG 2003). In addition, special status vegetation communities are ranked globally (G) and sub-nationally (S) 1 through 5 (NatureServe's 2014).

2.2.2 Flora

All plant species observed within the project site were noted, and plants that could not be identified in the field were identified later using taxonomic keys (Baldwin et al. 2012). The reconnaissance survey included a directed search for special status plants that would have been apparent at the time of the survey.

2.2.3 Fauna

Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were documented. Zoological nomenclature for birds is in accordance with the California Birds Records Committee (CBRC) *Official California Checklist* (CBRC 2020); for mammals using *Mammals of the World* (Wilson and Reeder 2005); and for amphibians and reptiles using Society for the Study of Amphibians and Reptiles' (SSAR) *Checklist of the Standard English & Scientific Names of Amphibians & Reptiles* (SSAR 2017).

2.2.4 Survey Limitations

The survey was conducted outside of the typical blooming period for most common and special status plant species. Additionally, the biological survey was conducted during the fall; therefore, potentially occurring overwintering species, spring migrants and certain breeding birds may not have been observed. As the survey was performed during the day, identification of nocturnal animals was limited to sign if present on site. The potential presence of special status species is based on a literature review, existing site conditions and a general biological field survey to assess habitat suitability.

2.3 Special Status Species Assessments

Local, state, and federal agencies regulate special status species and may require an assessment of their presence or potential presence to be conducted prior to the approval of proposed

development on a property. Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the project site, previous reports for the project site, and the results of surveys of the project site. The potential for each special status species to occur in the project site was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the project site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, project site history, disturbance regime); for plants, the species has no recorded occurrences within 10 miles of the project site indicating that the project site may be outside of the range of the species (e.g., the species is known from coastal sage scrub, but only along the coastal margin); or, the species is conspicuous and would have certainly been identified on site if present (e.g., oak trees). The reconnaissance survey did not detect the species.
- **Low Potential.** The species is not likely to be found on the project site. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the project site is unsuitable or of very poor quality, and/or there are no recent records of the species within five miles of the project.
- **Moderate Potential**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the project site is unsuitable. The species has a moderate probability of being found on the project site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the project site is highly suitable. The species has a high probability of being found on the project site.
- **Present.** Species is observed on the project site or has been recorded (e.g., CNDDB, other reports) on the project site recently (within the last 5 years).

For the purpose of this report, special status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the federal Endangered Species Act (ESA); those listed as Threatened, Endangered, or Rare by the CDFW under the California Endangered Species Act (CESA) or the Native Plant Protection Act; those designated as Fully Protected species by the state; those recognized as Species of Special Concern (SSC) by the CDFW; Covered Species identified in the MHCP; and regulations and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system per the following definitions:

- **CRPR 1A** = Plants presumed extirpated in California and either rare or extinct elsewhere;
- **CRPR 1B** = Plants rare, threatened, or endangered in California and elsewhere;
- **CRPR 2A** = Plants presumed extirpated in California but common elsewhere; and
- **CRPR 2B** = Plants rare, threatened, or endangered in California but more common elsewhere.

Additionally, CNPS assigns the following threat codes:

- 0.1 - Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- 0.2 - Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat); and

- 0.3 - Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Special status species and vegetation communities are also ranked globally (G) and sub-nationally (S) 1 through 5 based on NatureServe's (2014) methodologies:

- **G1 or S1:** Critically Imperiled Globally or Subnationally (state)
- **G2 or S2:** Imperiled Globally or Subnationally (state)
- **G3 or S3:** Vulnerable to extirpation or extinction Globally or Subnationally (state)
- **G5 or S5:** Secure Globally or Subnationally (state)
- **?:** Inexact Numeric Rank
- **T:** Infraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- **Q:** Questionable taxonomy that may reduce conservation priority

3 Existing Conditions

3.1 Topography and Soils

The project site consists of a graded lot surrounded by commercial development. The site is relatively flat, with elevation ranging from 570 feet above mean sea level (AMSL) at the northern boundary of the project site to 566 feet at the southwestern corner of the project site. The site is bordered by three concrete-lined v-ditches that are approximately three feet wide which border the site along the entire length of the western and southern boundaries. The v-ditch along the eastern boundary begins at the southeastern corner and continues approximately 26 feet to the north. The v-ditches direct ephemeral stormwater to a culvert in the southeast corner of the site which conveys stormwater under Las Posas Road. Stormwater flowing from the properties north of the site originates from a culvert under West Mission Road into the v-ditch on the site's western border.

One soil type has been identified on the project site: Placentia sandy loam, 2 to 9 percent slopes (PeC) (Figure 4). The following is the official soil series description (NRCS 2020).

3.1.1 Placentia Series

Placentia sandy loam, 2 to 9 percent slopes, is mapped underlying the entire project site. The Placentia series are found on nearly level to moderately sloping sites as well as on fans and terraces. The soils formed in alluvium from granite and other rocks of similar composition and texture. Placentia series soils are well or moderately well drained, with slow to rapid runoff and very slow permeability. Placentia sandy loam, 2 to 9 percent slopes, has been classified as a hydric soil (NRCS 2020).

3.2 Vegetation Communities and Land Cover

A list of plant species observed on site is available in Appendix B. One land cover type was identified on the project site: disturbed land (Figure 5). Based on a review of aerial photography, the site was previously developed and has been regularly bladed since at least 1994. Current site observations from the October 2020 reconnaissance survey also indicated evidence of recent blading. As such, vegetation is limited to disturbance-adapted species and primarily consisted of shortpod mustard (*Hirschfeldia incana*) and telegraph weed (*Heterotheca grandiflora*). The v-ditches bordering the site are void of vegetation on the south and east and are overgrown with ruderal vegetation and a small tamarisk (*Tamarix ramosissima*) thicket on the west.

3.3 Common Wildlife

A list of the wildlife species observed during the reconnaissance survey is provided in Appendix B. Common species observed within or adjacent to the site include house finch (*Haemorhous mexicanus*), Anna's hummingbird (*Calypte anna*), western kingbird (*Tyrannus verticalis*), and mourning dove (*Zenaida macroura*). One common reptile, western fence lizard (*Sceloporus occidentalis*) and two common mammals, California ground squirrel (*Otospermophilus beecheyi*) and desert cottontail (*Sylvilagus audubonii*), were observed within the project site.

Figure 4 Soils

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Additional data provided by SSURGO, 2019.

Figure 5 Vegetation Communities and Land Cover

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4 Special Status Biological Resources

This section evaluates the potential for the project site to support special status biological resources. Appendix C provides the complete list of all special status resources with records in the CNDDB and CNPS within a one-mile radius of the project site and within the USGS topographic quadrangle query for the project site.

4.1 Sensitive Plant Communities

No sensitive plant communities were observed on site. The project site is mapped as disturbed land which falls within the City's "Other" habitat group and type (City of San Marcos 2001) and is considered Group F habitat per the MHCP (SANDAG 2003).

4.2 Special Status Plant Species

No special status plant species were observed on the project site during the survey. Many of the species with recorded occurrences near the project site are associated with habitats not found on the project site, including species associated with chaparral, coastal scrub, and vernal pools, which are not present on site. In addition, the project site has been previously developed and is heavily disturbed. Therefore, no special status plant species have potential to occur.

4.3 Special Status Wildlife Species

No special status wildlife species were observed on the project site during the survey. Many of the species with recorded occurrences in the project site vicinity are associated with habitats not found on the project site, such as coastal sage scrub. In addition, the project site is heavily disturbed and surrounded by existing development which further limits the suitability for wildlife species. Therefore, no special status wildlife species have potential to occur.

Habitat within and adjacent to the project site has the potential to support native nesting birds protected by California Fish and Game Code (CFGC) 3503 and the federal Migratory Bird Treaty Act (MBTA).

4.4 Jurisdictional Waters and Wetlands

No vernal pools or wetlands were identified within the project site. Three concrete v-ditches border the project site to the east, west, and south and convey stormflows through a culvert which travels under Los Posas Road and into the municipal stormdrain system. The concrete v-ditches are ephemeral and do not support riparian vegetation. Therefore, they do not meet the definition of waters of the U.S. nor streambeds and thus, are not anticipated to be regulated by the U.S. Army Corps of Engineers or CDFW. Although the ditches are artificial and concrete lined, and do not support significant aquatic resource functions, the San Diego Regional Water Quality Control Board (RWQCB) may elect to assert jurisdiction over these features as waters of the State pursuant to the Porter-Cologne Water Quality Control Act.

4.5 Wildlife Movement Corridors

Wildlife movement corridors are defined as sites that connect suitable wildlife habitat sites in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, and sites with vegetation cover provide corridors for wildlife travel.

The project site and vicinity are not identified as being within a wildlife corridor based on Figure 4-2 of the City of San Marcos General Plan (2013). The project site is also not within or adjacent to a Biological Core and Linkage Area (BCLA) as illustrated in Figure 2-3 of the MHCP (AMEC Earth & Environmental, Inc., et al. 2003a, 2003b). Finally, the project is not within or adjacent to an essential connectivity site or natural landscape block as identified by the California Essential Habitat Connectivity Project (Spencer et al. 2010).

The project site does not provide suitable habitat for special status species found in the vicinity and is surrounded on all sides by commercial development and heavily travelled roadways. Therefore, the site does not occur within a wildlife movement corridor.

4.6 Local Policies and Conservation Plans

The project site occurs within the SANDAG North County MHCP area. The site is not located within a BCLA or vegetation or ecological community listed in the MHCP for conservation.

5 Potential Impacts and Recommended Actions

5.1 Sensitive Vegetation Communities

No sensitive vegetation communities are present on site. The project would impact approximately 1.65 acres of disturbed land which falls under Group F. The MHCP dictates no mitigation for this habitat is required within or outside of an FPA. Therefore, no further actions are required.

5.2 Special Status Plants

No special status plant species have the potential to occur on the project site. Although most species would not have been detectable during the reconnaissance survey, habitat on site is unsuitable for special status plant species documented within the project site vicinity. No impacts to special status plants would occur and no further actions are recommended.

5.3 Special Status Wildlife

No special status wildlife were detected during the reconnaissance survey. The proposed project would impact disturbed land which is surrounded by existing development and is unsuitable for special status wildlife. No impacts to special status wildlife would occur.

Habitat within and adjacent to the project site has the potential to support nesting birds species protected by CFGC Sections 3503 and 3503.5, and the MBTA. If initial ground disturbance and vegetation trimming or removal is required during the nesting bird season, the following mitigation measure will be implemented:

BIO-1 Nesting Birds and Raptors Survey

If any construction or staging activities are conducted between February 1 and September 15, a qualified biologist shall conduct a nesting bird survey no more than three days prior to the start of such activities to identify nesting birds within the project site and a 300-foot buffer around the project site (500 feet for raptors). If any nests are found, their locations shall be flagged and an appropriate avoidance buffer, ranging in size from 25 to 50 feet for song birds, and up to 500 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No disturbance shall occur within this buffer until the qualified biologist confirms that breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist and with monitoring and management to ensure that nesting success is not jeopardized. If no nesting birds are observed during the survey, then no further actions shall be necessary.

5.4 Jurisdictional Waters and Wetlands

No vernal pools, wetlands, or riparian resources were identified within the project site and the project has been designed to avoid the concrete v-ditches bordering the site. Therefore, no direct impacts to these resources would occur. Erosion control best management practices (BMPs), such as straw wattles, should be installed along the edges of the ditches during construction to prevent discharge of sediment or other materials into the ditches.

5.5 Wildlife Movement Corridors

The project site is not within or adjacent to a wildlife movement corridor, BCLA or an essential connectivity site or natural landscape block and is surrounded by existing development. No impacts to wildlife movement corridors would occur and no further actions are recommended.

5.6 Local Policies and Conservation Plans

The project site is not within a BCLA or vegetation or ecological community listed in the MHCP for conservation. No impacts to resources protected by the MHCP would occur and no further actions are recommended.

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. The biological survey is limited also by the environmental conditions present at the time of the survey. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Site Photographs

Photograph 1. Representative photo of the ruderal conditions on the project site.

Photograph 2. Facing west, showing the railroad that runs north of the project site.

Photograph 3. Photo showing the western v-ditch overgrown with ruderal vegetation and a small tamarisk thicket.

Photograph 4. Photo showing the culvert on the southeast corner of the site that directs stormwater off site.

Photograph 5. Photo showing the concrete-lined v-ditch on the southern parcel border. Ground squirrel and desert cottontail individuals and burrows were observed on the slope.

Photograph 6. Photo showing ground squirrel burrow on site.

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Appendix B

Floral and Faunal Compendium

Table B-1 Plant Species Observed within the Project Site on October 7, 2020

Scientific Name	Common Name	Status	Native or Introduced
Plants			
Asteraceae: Sunflower Family			
Atriplex semibaccata	Australian saltbush	None	Introduced
Centaurea melitensis	star thistle	None	Introduced
Heterotheca grandiflora	telegraph weed	None	Native
Brassicaceae: Mustard Family			
Brassica nigra	black mustard	None	Introduced
Hirschfeldia incana	shortpod mustard	None	Introduced
Poaceae: Grass Family			
Bromus diandrus	ripgut brome	None	Introduced
Bromus madritensis spp. *rubens*	red brome	None	Introduced
Solanaceae: Nightshade Family			
Nicotiana glauca	tree tobacco	None	Introduced
Tamaricaceae: Tamarisk Family			
Tamarix ramosissima	saltcedar	None	Introduced

Table B-2 Wildlife Species Observed within the Project Site on October 7, 2020

Scientific Name	Common Name	Status	Native or Introduced
Birds			
Aphelocoma californica	California scrub-jay	None	Native
Calypte anna	Anna's hummingbird	None	Native
Corvus brachyrhynchos	American crow	None	Native
Haemorhous mexicanus	house finch	None	Native
Mimus polyglottos	northern mockingbird	None	Native
Tyrannus verticalis	western kingbird	None	Native
Zenaida macroura	mourning dove	None	Native
Reptiles			
Sceloporus occidentalis	western fence lizard	None	Native
Mammals			
Spermophilus beecheyi	California ground squirrel	None	Native
Sylvilagus audubonii	desert cottontail	None	Native

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Appendix C

Special Status Species Evaluation Table

Table C-1 Special Status Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Plants and Lichens				
Acanthomintha ilicifolia San Diego thorn-mint	Threatened/Endangered G1/S1 1B.1 MHCP NE	Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Endemic to active vertisol clay soils of mesas & valleys. Usually on clay lenses within grassland or chaparral communities. 25-945 m. annual herb. Blooms Apr-Jun	No Potential	No chaparral, coastal scrub or grassland habitat present on site. No vertisol clay soils or vernal pools present. Project site is heavily disturbed and dominated by ruderal species.
Adolphia californica California adolphia	None/None G3/S2 2B.1	Chaparral, coastal sage scrub, valley and foothill grassland. From sandy/gravelly to clay soils within grassland, coastal sage scrub, or chaparral; various exposures. 5-335 m. perennial deciduous shrub. Blooms Dec-May	No Potential	No chaparral, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Ambrosia pumila San Diego ambrosia	Endangered/None G1/S1 1B.1 MHCP NE	Chaparral, coastal scrub, valley and foothill grassland. Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m. perennial rhizomatous herb. Blooms Apr-Oct	No Potential	No chaparral, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Arctostaphylos glandulosa ssp. *crassifolia* Del Mar manzanita	Endangered/None G5T2/S2 1B.1 MHCP NE	Chaparral. Sandy coastal mesas and ocean bluffs; in chaparral or Torrey pine forest. 30-365 m. perennial evergreen shrub. Blooms Dec-Jun	No Potential	No chaparral habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Artemisia palmeri San Diego sagewort	None/None G3?/S3? 4.2	Coastal scrub, chaparral, riparian forest, riparian woodland, riparian scrub. In drainages and riparian sites in sandy soil within chaparral and other habitats. 15-915 m. perennial deciduous shrub. Blooms (Feb)May-Sep	No Potential	No coastal scrub, chaparral or riparian habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Asplenium vespertinum western spleenwort	None/None G4/S4 4.2	Chaparral, cismontane woodland, coastal scrub. Rocky sites. 180-1000 m. perennial rhizomatous herb. Blooms Feb-Jun	No Potential	Project site is below known elevation range of species. No rocky areas present. Project site is heavily disturbed and dominated by ruderal species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Baccharis vanessae Encinitas baccharis	Threatened/Endangered G1/S1 1B.1 MHCP NE	Chaparral, cismontane woodland. On sandstone soils in steep, open, rocky sites with chaparral associates. 60-900 m. perennial deciduous shrub. Blooms Aug,Oct,Nov	No Potential	No chaparral or woodland habitat present on site. No rocky sites present. Project site is heavily disturbed and dominated by ruderal species.
Brodiaea filifolia thread-leaved brodiaea	Threatened/Endangered G2/S2 1B.1 MHCP NE	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m. perennial bulbiferous herb. Blooms Mar-Jun	No Potential	No chaparral, woodland, coastal scrub or grassland habitat present on site. No clay soils or vernal pools present. Project site is heavily disturbed and dominated by ruderal species.
Brodiaea orcuttii Orcutt's brodiaea	None/None G2/S2 1B.1	Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps. Mesic, clay habitats; usually in vernal pools and small drainages. 30-1615 m. perennial bulbiferous herb. Blooms May-Jul	No Potential	No grassland, forest, woodland or chaparral habitat present on site. No mesic clay soils or vernal pools present. Project site is heavily disturbed and dominated by ruderal species.
Ceanothus verrucosus wart-stemmed ceanothus	None/None G2/S2? 2B.2	Chaparral. 25-470 m. perennial evergreen shrub. Blooms Dec-May	No Potential	No chaparral habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Centromadia parryi ssp. *australis* southern tarplant	None/None G3T2/S2 1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m. annual herb. Blooms May-Nov	No Potential	No marsh, grassland or vernal pool habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Chamaebatia australis southern mountain misery	None/None G4/S4 4.2	Chaparral. Gabbro or metavolcanic soils. 300-1020 m. perennial evergreen shrub. Blooms Nov-May	No Potential	Project site is below known elevation range of species. No gabbro or metavolcanics soils present. Project site is heavily disturbed and dominated by ruderal species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Comarostaphylis diversifolia ssp. *diversifolia* summer holly	None/None G3T2/S2 1B.2	Chaparral, cismontane woodland. Often in mixed chaparral in California, sometimes post-burn. 30-945 m. perennial evergreen shrub. Blooms Apr-Jun	No Potential	No chaparral or woodland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Convolvulus simulans small-flowered morning-glory	None/None G4/S4 4.2	Chaparral, coastal scrub, valley and foothill grassland. Wet clay, serpentine ridges. 30-700 m. annual herb. Blooms Mar-Jul	No Potential	No chaparral, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Deinandra paniculata paniculate tarplant	None/None G4/S4 4.2	Coastal scrub, valley and foothill grassland, vernal pools. Usually in vernally mesic sites. Sometimes in vernal pools or on mima mounds near them. 25-940 m. annual herb. Blooms (Mar)Apr-Nov	No Potential	No coastal scrub, grassland or vernal pool habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Dichondra occidentalis western dichondra	None/None G3G4/S3S4 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. On sandy loam, clay, and rocky soils. 50-500 m. perennial rhizomatous herb. Blooms (Jan)Mar-Jul	No Potential	No chaparral, woodland, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Eryngium aristulatum var. *parishii* San Diego button-celery	Endangered/Endangered G5T1/S1 1B.1	Vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub. 15-880 m. annual/perennial herb. Blooms Apr-Jun	No Potential	No vernal pool, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy sites within shrubland. 20-955 m. annual herb. Blooms Mar-May	No Potential	No chaparral, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Holocarpha virgata ssp. *elongata* curving tarplant	None/None G5T3/S3 4.2	Chaparral, coastal scrub, valley and foothill grassland, cismontane woodland. 60-1100 m. annual herb. Blooms May-Nov	No Potential	No chaparral, coastal scrub or grassland habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Hordeum intercedens vernal barley	None/None G3G4/S3S4 3.2	Valley and foothill grassland, vernal pools, coastal dunes, coastal scrub. Vernal pools, dry, saline streambeds, alkaline flats. 5-1000 m. annual herb. Blooms Mar-Jun	No Potential	No grassland, vernal pool, coastal dune or coastal scrub habitat present on site. No alkaline soils. Project site is heavily disturbed and dominated by ruderal species.
Horkelia truncata Ramona horkelia	None/None G3/S3 1B.3	Chaparral, cismontane woodland. Habitats in California include: mixed chaparral, vernal streams, and disturbed sites near roads. Clay soil; at least sometimes on gabbro. 380-1190 m. perennial herb. Blooms May-Jun	No Potential	No chaparral or woodland habitat present on site. No clay soils. Project site is heavily disturbed and dominated by ruderal species.
Isocoma menziesii var. *decumbens* decumbent goldenbush	None/None G3G5T2T3/S2 1B.2	Coastal scrub, chaparral. Sandy soils; often in disturbed sites. 1-915 m. perennial shrub. Blooms Apr-Nov	No Potential	No chaparral or coastal scrub habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	None/None G5T5/S4 4.2	Salt marshes, alkaline seeps, coastal dunes (mesic sites). Moist saline places. 3-900 m. perennial rhizomatous herb. Blooms (Mar)May-Jun	No Potential	No salt marsh, alkaline seep or coastal dune habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None G5T3/S3 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m. annual herb. Blooms Jan-Jul	No Potential	No chaparral or coastal scrub habitat present on site. Project site is heavily disturbed and dominated by ruderal species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Monardella hypoleuca ssp. *lanata* felt-leaved monardella	None/None G4T3/S3 1B.2	Chaparral, cismontane woodland. Occurs in understory in mixed chaparral, chamise chaparral, and southern oak woodland; sandy soil. 425-1585 m. perennial rhizomatous herb. Blooms Jun-Aug	No Potential	Project site is below known elevation range of species. No chaparral or woodland habitat present. Project site is heavily disturbed and dominated by ruderal species.
Navarretia fossalis spreading navarretia	Threatened/None G2/S2 1B.1 MHCP NE	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan & San Diego claypan vernal pools; in swales & vernal pools, often surrounded by other habitat types. 15-850 m. annual herb. Blooms Apr-Jun	No Potential	No vernal pool, chenopod scrub or marsh habitat present. Project site is heavily disturbed and dominated by ruderal species.
Psilocarphus brevissimus var. *multiflorus* Delta woolly-marbles	None/None G4T3/S3 4.2	Vernal pools. Also on flats. 10-500 m. annual herb. Blooms May-Jun	No Potential	No vernal pool habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Quercus dumosa Nuttall's scrub oak	None/None G3/S3 1B.1	Closed-cone coniferous forest, chaparral, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. 15-640 m. perennial evergreen shrub. Blooms Feb-Apr(May-Aug)	No Potential	No forest, chaparral or coastal scrub habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Quercus engelmannii Engelmann oak	None/None G3/S3 4.2	Cismontane woodland, chaparral, riparian woodland, valley and foothill grassland. 50-1300 m. perennial deciduous tree. Blooms Mar-Jun	No Potential	No woodland or chaparral habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Tetracoccus dioicus Parry's tetracoccus	None/None G2G3/S2 1B.2	Chaparral, coastal scrub. Stony, decomposed gabbro soil. 135-705 m. perennial deciduous shrub. Blooms Apr-May	No Potential	No chaparral or coastal scrub habitat present on site. Project site is heavily disturbed and dominated by ruderal species.
Invertebrates				
Branchinecta sandiegonensis San Diego fairy shrimp	Endangered/None G2/S2	Endemic to San Diego and Orange County mesas. Vernal pools.	No Potential	No vernal pools present. Project site is heavily disturbed and dominated by ruderal species.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Project Site	Habitat Suitability/ Observations
Birds				
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 CDFW_WL-Watch List	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	No Potential	No coastal scrub or chaparral habitat present. Project site is heavily disturbed and dominated by ruderal species.
Polioptila californica californica coastal California gnatcatcher	Threatened/None G4G5T2Q/S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all sites classified as coastal sage scrub are occupied.	No Potential	No coastal scrub habitat present. Project site is heavily disturbed and dominated by ruderal species.
Mammals				
Corynorhinus townsendii Townsend's big-eared bat	None/None G3G4/S2 SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	No Potential	No suitable roosting habitat present. Project site is subject to high levels of human disturbance.
Lasiurus cinereus hoary bat	None/None G5/S4	Prefers open habitats or habitat mosaics, with access to trees for cover and open sites or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	No Potential	No trees present on site for cover or roosting. No water present. Project site is heavily disturbed and surrounded by existing development.
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No Potential	No suitable shrub or forest habitat present. Project site is heavily disturbed and surrounded by existing development.
Sensitive Natural Communities				
San Diego Mesa Claypan Vernal Pool San Diego Mesa Claypan Vernal Pool	None/None GNR/SNR		No Potential	No vernal pools present on site. Project site is heavily disturbed and dominated by ruderal species.

Status: Federal/State

FE = Federal Endangered

FT = Federal Threatened

PFT = Proposed Federal Threatened

FDL = Federal Delisted

SE = State Endangered

ST = State Threatened

SR = State Rare

SDL = State Delisted

SSC = CDFW Species of Special Concern

FP = CDFW Fully Protected

WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank):

1A = Presumed Extinct in California

1B = Rare, Threatened, or Endangered in California and elsewhere

2 = Rare, Threatened, or Endangered in California, but more common elsewhere

3 = Need more information (a Review List)

4 = Plants of Limited Distribution (a Watch List)

CRPR Threat Code Extension:

.1 = Seriously endangered in California (>80% of occurrences threatened / high degree and immediacy of threat)

.2 = Fairly endangered in California (20-80% of occurrences threatened)

.3 = Not very endangered in California (<20% of occurrences threatened)

Other Statuses:

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant
GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Additional notations may be provided as follows:

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)

Q – Questionable taxonomy that may reduce conservation priority

? – Inexact numeric rank