Biological Technical Report for
Town Center at Moreno Valley Project

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ACRONYMS, ABBREVIATIONS, AND GLOSSARY OF TERMS

APN's	Assessor's Parcel Numbers
BLM	United States Bureau of Land Management
BMPs	Best Management Practices
BUOW	Burrowing Owl
CBOC	California Burrowing Owl Consortium
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
City	City of Moreno Valley
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Federal Clean Water Act
ELMT	ELMT Consulting
ESA	Federal Endangered Species Act
FGC	Fish and Game Code
I	Interstate
LLC	Limited Liability Company
mmhos/cm	millimhos/centimeter
MSHCP	Western Riverside Multiple Species Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MSL	mean sea level
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High Water Mark
Project	Town Center at Moreno Valley Project
RWQCB	Regional Water Quality Control Board
SKR	Stephens' Kangaroo Rat
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
sq. ft.	square feet
SSC	Species of Special Concern
SR	State Route
U.S.	United States
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VCS	VCS Environmental
WBWG	Western Bat Working Group
WDR	Water Discharge Requirement

WL	Watch List
WOS	Waters of the State
WOUS	Waters of the United States
WQC	Section 401 Water Quality Certification

1.0 INTRODUCTION

On behalf of Lewis Management Corp, VCS Environmental (VCS) prepared this Biological Technical Report, which incorporates the findings from a general biological survey conducted by VCS on June 29, 2021 and reverified on March 8, 2024. Additionally, four focused burrowing owl surveys were conducted by ELMT Consulting (ELMT) on August 5, 12, 18, and 24, 2021.

VCS prepared this report to support California Environmental Quality Act (CEQA) documentation for the Town Center at Moreno Valley Project [herein after referred to as the "Project"] with the City of Moreno Valley (City) as the lead agency.

1.1 Purpose and Approach

This report provides a summary of the conditions present during the June 29, 2021 and March 08, 2024 general biological surveys, which included an assessment of the potential presence of sensitive biological resources, and an analysis of the potential impacts to those resources with implementation of the Project. This report presents the current biological resources present within the Project Footprint including habitat communities, potential jurisdictional waters, and the potential occurrence of listed and special status plant and wildlife species. The potential biological impacts in view of federal, state, and local laws and regulations are also identified in this report. While general biological resources are discussed, the focus of this assessment is on those resources considered to be sensitive. The report also recommends, as appropriate, Best Management Practices (BMPs), avoidance, minimization, and mitigation measures to reduce or avoid potential impacts. This report was prepared based upon results of a literature review and field survey.

1.2 Terms

The following terms will be used throughout this document and are defined as follows:

- Project site: the approximately 63.24-acre property assessed during the biological survey that will be permanently impacted by the proposed Project;
- Offsite Improvements: the 7.03 acres of right-of-way improvements outside the Project Site;
- Project Footprint: The 70.27-acre area comprised of the Project Site and Offsite Improvements.

1.3 Project Site Location

The approximately 70.27-acre Project is located in the City of Moreno Valley, Riverside County, California. The site is regionally accessible from State Route 60 (SR-60) to the north and Interstate 215 (I-215) to the west (Figure 1, *Regional Map)*. Cottonwood Avenue borders the Project site to the north, Alessandro Boulevard borders the Project site to the south, and Nason Street borders the Project site to the east (Figure 2, *Aerial Map*). The Project consists of two parcels including Assessor Parcel Numbers (APNs) 487-470-031 and 487-470-030. The Project site is located within Section 9, Township 3 South, Range 3 West of the United States Geological Survey (USGS) Sunnymead 7.5-minute quadrangle map (Figure 3, *USGS Topographic Map*).

2.0 PROJECT DESCRIPTION

The Project Specific Plan proposes residential and non-residential components including up to eight hundred homes, a neighborhood commercial center, public park areas, future library site and utilities and infrastructure improvements including public streets and facilities. The entire approximately 63-acre property is planned to be developed and will be impacted during Project construction.

2.1 Current Conditions

The Project site is surrounded by existing development to the north and west, as well as a mix of herbaceous maintained fields and development to the south and east. The Project site has generally flat topography with a small hill located in the southeastern corner. The Project site supports low growing herbaceous vegetation mixed with native and non-native species. A majority of the site is maintained as part of weed abatement. Site photographs are attached as Appendix A.

The Project site elevations range from 1,590-1,640 feet (486-500 meters) above mean sea level (MSL) (Google Earth 2021).

3.0 REGULATORY CONTEXT

The following is a list of the relevant federal, state, and local laws and regulations that apply to protecting plant communities, plants, wildlife, and water quality from impacts within the Project site.

Agency/ Organization	Laws/Regulations	Notes
Federal	Clean Water Act (CWA) Section 404	Jurisdictional Waters of the United States (WOUS) are not present within the Project Footprint and will not be impacted during Project activities; therefore, a Section 404 Permit from the United States Army Corps of Engineers (USACE) is not required.
	CWA Section 401	Jurisdictional WOUS and Waters of the State (WOS) are not present within the Project Footprint and will not be impacted during Project activities; therefore, a Section 401 Water Quality Certification (WQC) from the Regional Water Quality Control Board (RWQCB) is not required.
	CWA Section 408	No facilities subject to Section 408 occur within the Project Footprint.
	Migratory Bird Treaty Act (MBTA)	Compliance with the MBTA will be achieved with pre-construction surveys for nesting birds within three days prior to initiation of work within the nesting bird season.
	Endangered Species Act (ESA)	No federally listed species were observed within the Project Footprint during the 2021 or 2024 surveys.
State	Section 1600 of the Fish and Game Code (FGC)	Jurisdictional WOS are not present within the Project Footprint and will not be impacted during Project activities; therefore, a Section 1600 Permit through the California Department of Fish and Wildlife (CDFW) is not required.
	California Endangered Species Act (CESA)	There is potential for burrowing owl to exist in the Project Footprint, which at the time of this document is a candidate endangered species and would receive the full protections as a California listed endangered species. CDFW may require an Incidental Take Permit (ITP) or Burrowing Owl Relocation and Mitigation Plan, if found within the Project Footprint. Compliance would be maintained with focused surveys, which have been conducted and confirmed no burrowing owl occupation to date, and through a pre-construction survey. If burrowing owl is found during the pre-construction survey, agency coordination would be required. If burrowing owl is no longer a candidate or listed species under CESA at the time of project construction, permits shall not be required.

Agency/ Organization	Laws/Regulations	Notes
	Sections 3503, 3503.5, and 3513 of the FGC	These FGC sections offer protection of nesting birds, birds-of-prey, and migratory birds. Compliance will be maintained with a pre-construction survey for nesting birds (including birds-of-prey and migratory birds) within three days prior to initiation of work.
	Section 4150 of the FGC	Prohibits incidental or deliberate "take" of non-game mammals, including bats. Potential impacts to bats will be avoided with a pre-construction survey conducted prior to initiation of work as described in Section 8.0 below.
	Porter-Cologne Water Quality Control Act and Water Discharge Requirements (WDR)	WOS and WOUS are not present within the Project Footprint and will not be impacted during Project activities; therefore, a Water Quality Certification is not required.
Local Plans	Western Riverside Multiple Species Habitat Conservation Plan (MSHCP)	The Project is within the MSHCP boundary. The Project is not located within a Criteria Cell, Public or Quasi Public Conserved Lands, or the following Survey Areas: Narrow Endemic Plant Species, Criteria Area Species, Amphibians, or Mammals. The Project is not located within or near any areas currently identified as or anticipated in the future as MSHCP conservation. A portion of the Project Footprint is within the Burrowing Owl Survey Area for the MSHCP; therefore, a habitat assessment, focused burrow, and focused Burrowing owl [BUOW] surveys are required for the Project. A habitat assessment was completed at the time of the biological survey during the June 2021 and March 2024 site visits. Suitable burrowing owl habitat was identified within the Project Footprint; therefore, subsequent burrow and burrowing owl surveys were conducted in August 2021 by ELMT according to MSHCP protocol. No burrowing owl were observed during the focused surveys. The Project will be responsible for demonstrating consistency with the MSHCP.
	Stephens' Kangaroo Rat Habitat Conservation Plan	The Project is located within the SKR HCP; therefore, the Project will be required to comply with applicable provisions of the SKR HCP (which includes payment of a mitigation fee).
City of Moreno Valley	CEQA	Compliance with mitigation measures recommended in Section 8.0 of this report as adopted or amended by the CEQA lead agency in the certified CEQA document will be required.
	City of Moreno Valley Municipal Code Title 3, Chapter 3.48 [Western Riverside County MSCHP Plan Fee]	The City is a Permittee of the MSHCP and is responsible for implementation of the MSHCP. This code establishes a local development mitigation fee as part of the City's implementation of the MSHCP to assist in the maintenance of biological diversity and the natural ecosystem processes that support this diversity. Fees are collected for any development within the City.

Agency/ Organization	Laws/Regulations	Notes
	City of Moreno Valley Municipal Code Title 3, Chapter 8.60 [Habitat Conservation]	Addresses the implementation of the SKR HCP which requires a per-acre local development mitigation fee pursuant to the City's adopted "The Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California" and as established pursuant to Fee Resolution 89-92. During the biological assessment, no SKR individuals were observed. The site provides low potential habitat for the species.
	City of Moreno Valley Municipal Code Title 9, Section 9.17.030(G) [Landscape and Water Efficiency Requirements]	Outlines the definition of "Heritage Trees" and details protections and guidelines for removal. There are 18 trees within the Project Footprint on the northwest portion of the project subject to further review.

4.0 VEGETATION

4.1 Literature Review

4.1.1 Sensitive Plant Communities

Sensitive plant communities (sensitive habitats) as defined below, are of limited distribution statewide or within a county or region and are often vulnerable to the environmental effects of projects. Sensitive habitats are often threatened with local extirpation and are therefore considered valuable biological resources. Plant communities are considered "sensitive" by the California Native Plant Society (CNPS) and CDFW if they meet any of the following criteria listed below.

- The habitat is recognized and considered sensitive by CDFW, United States Fish and Wildlife Service (USFWS), and/or special interest groups such as CNPS.
- The habitat is under the jurisdiction of the USACE pursuant to Section 404 of the CWA.
- The habitat is under the jurisdiction of the CDFW pursuant to Sections 1600 through 1612 of the FGC.
- The habitat is known or believed to be of high priority for inventory in the California Natural Diversity Database (CNDDB).
- The habitat is considered regionally rare.
- The habitat has undergone a large-scale reduction due to increased encroachment and development.
- The habitat supports special status plant and/or wildlife species (defined below).
- The habitat functions as an important corridor for wildlife movement.

The most current version of CDFW's List of California Sensitive Natural Communities indicates which natural communities are sensitive given the current state of the California classification (CDFW, 2024b).

4.1.2 Special Status Plants

Species of plants are afforded "special status" by federal agencies, state agencies, and/or non-governmental organizations (e.g., USFWS, CDFW, CNPS, and United States Forest Service [USFS]) because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to

collectively as "special status" species. Plant species were considered "special status" species if they meet any of the following criteria:

- Taxa with official status under ESA, California Endangered Species Act (CESA), and/or the Native Plant Protection Act (NPPA).
- Taxa proposed for listing under ESA and/or CESA.
- Taxa identified as sensitive, unique or rare, by the USFWS, CDFW, USFS, and/or the Bureau of Land Management (BLM).
- Plants that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA) §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:
  - Species considered by CNPS and CDFW to be "rare, threatened or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B and 2; CNPS, 2024). A majority of the CRPR 3 and CRPR 4 plant species generally do not qualify for protection under CESA and NPPA.
  - Species that may warrant consideration on the basis of local significance or recent biological information.
  - Some species included on the CNDDB Special Vascular Plants, Bryophytes, and Lichens List (CDFW, 2024c).
- Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a region (CEQA §15125(c)) or is so designated in local or regional plans, policies, or ordinances. Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

Available literature and databases were reviewed regarding sensitive habitats and special status plant species. Special status plant species that have the potential to occur within the immediate region of the Project Footprint were identified. Several agencies, including the USFWS, CDFW, and CNPS publish lists of particular taxa (species and subspecies) and the associated level of protection or concern associated with each. Reviewed and consulted literature and databases focused on the Project Footprint and included the following sources listed below:

- The CNDDB, a CDFW species account database that inventories status and locations of rare plants and wildlife in California, was used to identify any sensitive plant communities and

special status plants that may exist within a two-mile radius of the Project Footprint (CDFW, 2024a).

- Online CNPS Inventory of Rare and Endangered Plants of California (CNPS, 2024). A search for the United States Geological Survey (USGS) 7.5-Minute Topographic Map Sunnymead Quadrangle provided information regarding the distribution and habitats of special status vascular plants in the vicinity of the Project.
- A map of the USFWS Critical Habitat to determine species with Critical Habitat mapped in the general vicinity of the Project (USFWS, 2024a).
- The USFWS's Information for Planning and Consultation online tool, which identifies species and Critical Habitat under USFWS jurisdiction that are known or expected to be on or near the Project area (USFWS, 2024b).
- Pertinent maps, scientific literature, websites, and regional flora and fauna field guides.

As noted previously, species occurrence and distribution information are often based on documented occurrences where opportunistic surveys have taken place; therefore, a lack of records does not necessarily indicate that a given species is absent from the Impact area.

4.2 Field Methodology

The general biological survey was conducted within the Project Footprint on June 29, 2021 by VCS biologists Wade Caffrey and Chris Eljenholm, and on March 08, 2024 by VCS biologist Wade Caffrey. During the surveys, the VCS biologists walked the entirety of the Project site paying special attention to those areas that could host sensitive vegetation communities or had the potential to provide suitable habitat for special status plant species. Plant species were identified using plant field and taxonomical guides, such as The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al., 2012). All plant species encountered during the field survey were identified and recorded in field notes.

The vegetation communities and habitat conditions were inspected to confirm presence and habitat quality of the vegetation found within the Project Footprint. Where appropriate, descriptions of vegetation communities from the Manual of California Vegetation (Sawyer et al., 2009) were also utilized. Any deviations from standard vegetation classifications were made on best professional judgment when areas did not fit into a specific habitat description provided by the Manual. Vegetation communities were mapped using field observations and utilizing aerial imagery.

4.3 Results

4.3.1 Vegetation Communities/Land Cover

Vegetation/land cover mapping and acreages for each vegetation community and land type within the Project Footprint can be found in Table 1 and Figure 4, *Vegetation/Land Cover*. The majority of the vegetation within the Project Footprint is characterized by maintained open fields comprised of disturbed annual grassland cover vegetated with a variety of non-native and early successional weedy plant species. Vegetation management activities (mowing) had occurred within the majority of the Project site prior to the site visit.

Representative photographs of the Project site are included as Appendix A.

Table 1. Vegetation Communities/Land Cover

Vegetation Community/Land Cover Type	Project Site (acres)	Offsite Improvements (acres)	Total
Herbaceous Non-native Forbs and Grasses	4.42	-	4.42
Disturbed/Developed/Maintained Grassland	58.82	7.03	65.85
Total	63.24	7.03	**70.27**

4.3.1.1 Herbaceous Non-native Forbs and Grasses

Approximately 4.42 acres of herbaceous non-native forbs and grasses was mapped within the southeastern portion of the Project Footprint. This portion of the site appears to undergo less frequent disturbance. This area has still undergone historical disturbance; however, weed abatement activities appear to occur at less frequent intervals. The vegetation within this area is largely consistent with the vegetation observed in the Disturbed/Developed/Maintained Grassland area. One Peruvian pepper tree cluster (*Schinus mole*) with multiple trunks was observed within this land cover.

4.3.1.2 Disturbed/Developed/Maintained Grassland

Approximately 65.85 acres of Disturbed/Developed/Maintained Grassland land cover, consisting of both paved roadways and maintained grassland fields, was mapped within the Project Footprint. This habitat is characterized by weedy non-native annual herbaceous species with a low density of common, weedy native species intermixed. Native species throughout this area included common fiddleneck (*Amsinckia intermedia*), sunflower (*Helianthus annuus*), and sacred datura (*Datura wrightii*). Non-native species observed consisted of brome grasses (*Bromus madritensis*, *Bromus diandrus and Bromus hordeaceus.*), silver leaf nightshade (*Solanum elaeagnifolium*), short-pod mustard (*Hirschfeldia incana*), stinknet (*Oncosiphon piluliferum*), prickly lettuce (*Lactuca serriola*), and Russian thistle (*Salsola tragus*). Additionally, adjacent to the

northern border of the Project Fooprint, some non-native ornamental trees are present at a low cover including olive trees (*Olea europea*) and Mexican fan palms (*Washingtonia robusta*). This vegetation community appears to be subject to regular disturbance, potentially for weed abatement, based on the short, cut stature of the majority of the herbaceous plants.

4.3.1.3 Special Status Vegetation Communities

No special status vegetation communities were observed within the Project site during the June 2021 and March 2024 general biological surveys. Additionally, no special-status vegetation communities designated by CDFW were reported in the CNDDB within two miles of the Project site.

4.3.2 Plants

A total of 20 plant species were observed within the Project site during the general biological assessment and are listed in Appendix B of this report.

4.3.2.1 Sensitive Plant Species Occurring Onsite

No sensitive plant species were identified on the Project site.

4.3.2.2 Sensitive Plant Species with Potential to Occur

Sensitive plant species include federally, or state listed threatened or endangered species and those species listed on CNPS's rare and endangered plant inventory. Species with the potential to occur within the Project Footprint were analyzed based on distribution, habitat requirements, and existing site conditions, and are listed in Appendix C of this report.

Based on the habitat found within the Project Footprint, only one special status plant species, San Diego tarplant (*Deinandra paniculata*), was determined to have a moderate potential to occur within the Project site. The remaining special status plant species analyzed have been determined not likely to occur within the Project Footprint, primarily based on the absence of suitable habitat and/or the Project site is well outside known elevations for the species.

San Diego tarplant

San Diego tarplant is a California Rare Plant Rank (CRPR) 4.2: Plants of limited distribution – A watch list. This species occurs as a dominant or co-dominant plant in the herbaceous layer of grasslands, forblands, openings of coastal sage scrub and oak woodland habitat. It occurs in elevations ranging from 25 to 950 meters and can be found blooming from March to December. San Diego tarplant is known to occur throughout Moreno Valley and the Project site contains grassland habitat that could support the species; however, during the general biological assessment, the San Diego tarplant was not observed within the Project Footprint.

5.0 WILDLIFE

5.1 Literature Review

Species of wildlife are afforded "special status" by federal agencies, state agencies, and/or non-governmental organizations because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to collectively as "special status" species. Wildlife species were considered "special status" species if they meet any of the following criteria:

- Taxa with official status under ESA or CESA.
- Taxa proposed for listing under ESA and/or CESA.
- Taxa designated a species of special concern by CDFW.
- Taxa designated a state fully protected species by CDFW.
- Taxa identified as sensitive, unique or rare, by USFWS, CDFW, USFS, and/or BLM.
- Taxa that meet the definition of rare or endangered under the CEQA §15380(b) and (d).
- Species considered locally significant; that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a region (CEQA §15125(c)) or is so designated in local or regional plans, policies, or ordinances. Examples include a species at the outer limits of its known range.

Special status wildlife species that have the potential to occur within the immediate region of the Project site were identified. Several agencies, including the USFWS and CDFW publish lists of particular taxa (species and subspecies) and the associated level of protection or concern associated with each. Reviewed and consulted literature and databases focused on the Project site and included the following sources listed below:

- The CNDDB was used to identify any special status wildlife that may exist within a two-mile radius of the Project site (Figure 5, *CNDDB Occurrences and Critical Habitat*) [CDFW 2024a]. CNDDB records are generally used as a starting point when determining what special status species, if any, may occur in a particular area. However, these records may be old, lack data not yet entered, and do not represent all the special status species that could be in that particular area.

- A map of the USFWS Critical Habitat to determine species with Critical Habitat mapped in the general vicinity of the Project (USFWS, 2024a).

- The USFWS's Information for Planning and Consultation online tool, which identifies species and Critical Habitat under USFWS jurisdiction that are known or expected to be on or near the Project area (USFWS, 2024b).

- Pertinent maps, scientific literature, websites, and regional flora and fauna field guides.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the Project site, as well as the surrounding area. Although the inventory list of special status wildlife species was not exhaustive of all species that might be of concern for the property, it provided a wide range of species that are representative of the wildland habitats in the area. Species occurrence and distribution information is often based on documented occurrences where opportunistic surveys have taken place; therefore, a lack of records does not necessarily indicate that a given species is absent from the Project site.

5.2 Field Methodology

During the June 2021 and March 2024 general biological surveys, VCS biologists analyzed the Project site for habitat areas that could be suitable for special status wildlife species. The location of the Project is within the general distributional range of several special status wildlife species. Many of the sensitive terrestrial wildlife species that could occur within the Impact area are not subject to specific published survey protocols and/or are covered under the MSHCP[1]. The purpose of the June 2021 and March 2024 general biological assessments were to note those species observed, ascertain general site conditions, and identify habitat areas that could be suitable for special status wildlife species.

All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Signs of wildlife species including wildlife tracks, burrows, nests, scat and remains, were also recorded. Binoculars were used to aid in the identification of observed wildlife and in areas not accessible on foot. Wildlife field guides and photographs were used to assist with identification of wildlife species during the field survey, as necessary. A one-day survey cannot be used to conclusively determine presence or absence of a species; therefore, assessments of presence/absence and potential for occurrence were made based on presence of suitable habitat to support the species, diagnostic signs (burrows, scat, tracks, vocalizations, and nests), known records or occurrence within the area, known distribution and elevation range, and habitat utilization from the relevant literature.

Burrowing Owl (BUOW) Habitat Assessment and Focused Surveys

Projects within the MSHCP Burrowing Owl Survey Area are subject to the MSHCP burrowing owl (*Athene cunicularia*) survey requirements. The Project site is within the MSHCP Burrowing Owl Survey Area (Figure 6, *MSHCP Designation Map*). A burrowing owl habitat assessment was performed during the general biological surveys in June 2021 and March 2024, by VCS biologists.

[1] An MSHCP covered species is a species that is adequately conserved by MSHCP implementation. There are 146 covered species in the MSHCP, of which 40 species are identified that may require additional surveys. A Project receives "take" coverage for these covered species when it is determined to be consistent with the MSHCP requirements.

The burrowing owl assessment followed the guidelines identified in *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006). The burrowing owl habitat assessment involved walking the Project site and accessible areas within a 500-foot buffer to determine if any areas hosted suitable habitat for burrowing owls. Soil conditions, topography, vegetative communities, and habitat quality were documented. A majority of the 500-foot buffer area surrounding the Project site was inaccessible due to legal access limitations; these areas were viewed through binoculars. Burrowing owl focused surveys were conducted by ELMT biologists Travis J. McGill and Jacob H. Lloyd Davies in August 2021. The survey methodology is detailed in the Burrowing Owl Focused Survey Report (2021) (Appendix D). All suitable burrows/sites including rock piles and non-natural substrates were thoroughly examined for signs of burrowing owl presence.

5.3 Results

A total of 16 wildlife species or signs thereof were observed during the 2021 and 2024 biological surveys. All wildlife species observed on the Project site are listed in Appendix B.

5.3.1 Sensitive Wildlife Species with Potential to Occur

Sensitive wildlife species include the following classifications: federally or state listed threatened or endangered species, California species of special concern, MSHCP covered species and fully protected and protected species (as designated by CDFW). Species with the potential to occur within the Project Footprint were analyzed based on distribution, habitat requirements, and existing site conditions.

A complete list of sensitive wildlife species analyzed with potential to occur within the Project site are included in Appendix C. One sensitive species, Cooper's hawk (*Accipiter cooperii*), was observed within the Project site. This species is listed as a CDFW Watch List (WL) species.

Two additional special status species were determined to have at least a "low to moderate" potential of occurring within the Project site but were not observed during the biological assessment, including:

- Burrowing owl (Athena cunicularia), a candidate species for CESA, a CDFW Species of Special Concern (SSC), a USFWS Bird of Conservation Concern (BCC), a U.S. Bureau of land Management Sensitive species (BLMS), and MSHCP Group 3 species.
- western mastiff bat (*Eumops perotis californicus*), a CDFW SSC, Western Bat Working Group Medium Priority, Bureau of Land Management Sensitive Species; and

The two sensitive species noted above with at least moderate or low to moderate potential to occur within the Project site and Cooper's hawk, which was observed on the Project site, are

discussed below. Burrowing owl is a covered species under the MSHCP and a candidate species under CESA, which may require an ITP or a Burrowing Owl Relocation and Mitigation Plan if found.

5.3.1.1 Burrowing Owl

The burrowing owl is a small, tan, ground-dwelling owl that occupies and nests in underground burrows. The species is associated with grasslands and other arid open terrain throughout much of the western United States. A disjunct population of this owl also occurs in Florida.

Burrowing owls are opportunistic in their selection of burrows, typically utilizing the burrows of small mammals, drainpipes, culverts and other suitable cavities at or below ground level. In California, the species often occurs in association with colonies of the California ground squirrel (*Spermophilus beecheyi*), where it makes use of the squirrel's burrows. A burrow can be up to 10 feet in length with an enlarged terminal nesting chamber. The entrance of the burrow is often adorned with animal dung, feathers, debris, and other small objects. The species is active both at day and at night and may be seen perching conspicuously on fence posts or standing at the entrance of their burrows.

Due to the characteristic fossorial habits of burrowing owls, burrows are a critical component of their habitat. In southern California, burrowing owls are not only found in undisturbed natural areas, but also fallow agricultural fields, margins of active agricultural areas, berms to flood control and creek channels, livestock farms, airports, and vacant lots. Declines in burrowing owl populations are attributed to loss and degradation of habitat, to ongoing residential and commercial development, and to rodent control programs.

Suitable BUOW habitat is present within the Project site and surrounding areas. The Project site contains burrows that could support burrowing owl; however, no burrowing owls were observed within the Project site. Additionally, no burrowing owls or signs thereof were identified during the four focused surveys conducted in August 2021. The results of the focused surveys are further detailed in the focused survey report, Appendix D.

5.3.1.2 Western Mastiff Bat

This species ranges throughout California in a wide range of habitat types, typically below 9,000 feet in elevation. Distribution is correlated with suitable rock features required for roosting. Western mastiff bats are non-migratory; however, may move short distances within their home ranges. This bat species does not hibernate and is active periodically throughout the winter. Western mastiff bat is generally a cliff-dwelling species, but also uses building crevices for day roosts.

The western mastiff bat usually forages in open areas such as chaparral, oak woodland, open ponderosa pine forest, flood plains grassland, montane meadows, and agricultural areas, and

requires large lakes or ponds at least 100 feet long for drinking. Western mastiff bat generally roosts high above the ground, allowing a clear vertical drop of at least seven feet for flight. Maternity colonies range from 30 to several hundred individuals and generally include adult males. This species has an audible echolocation call and is easily detected while foraging. Breeding occurs from October to March.

Potentially suitable day roosting habitat on the Project site is marginal and consists of palm trees along the northern border. However, no water sources are present within the Project Footprint. Approximately 2.5 miles south of the Project site, rocky mountainous habitat exists and may support populations that could use the Project site as foraging grounds. Additionally, approximately one-mile northeast of the Project site is Pettit Hill which contains large boulders and rocky outcroppings that could potentially support roosting bats.

5.3.1.3 Cooper's Hawk

This hawk species occurs in forest and woodland habitats. These lanky hawks are a regular sight in parks, quiet neighborhoods, over fields, at backyard feeders, and even along busy streets if there are trees around. This species is also known to use urban areas, utility poles as perches, and occupying mature trees associated with residential development. Some of the mature trees within the Project Footprint, such as the Peruvian pepper trees, provide marginal foraging habitat for Cooper's hawk; however higher quality habitat is located within the trees on the adjacent properties to the east of the Project site. No suitable nesting habitat for Cooper's hawk is present within the Project site.

5.3.2 Critical Habitat

The USFWS's online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California was reviewed to determine if the Project occurs within any species designated Critical Habitat. No Critical Habitat occurs on or adjacent to the Project site. The nearest Critical Habitat is designated for the Stephen's Kangaroo Rat is approximately 6.5 miles southeast of the Project site.

5.3.3 Wildlife Movement

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Corridors effectively act as links between different populations of a species. An increase in a population's genetic variability is generally associated with an increase in a population's health.

Corridors mitigate the effects of habitat fragmentation by:

- Allowing wildlife to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity;
- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and
- Serving as travel routes for individual wildlife species as they move within their home ranges in search of food, water, mates, and other needs (Fahrig and Merriam, 1985; Simberloff and Cox, 1987; Harris and Gallagher, 1989).

Wildlife movement activities usually fall into one of three movement categories:

- Dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions);
- Seasonal migration; and
- Movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover).

The Project site is bordered by roads and urban development. The Project site may play a role in local wildlife dispersal and foraging; however, the site is not likely located within a significant wildlife movement corridor. Common wildlife species such as coyotes, skunks, opossums, and raccoons may travel through the site and neighboring developed areas, but the site does not provide connectivity between large areas of open space on a local or regional scale.

5.3.4 Avian Nesting, Bat Roosts, and Crotch's bumble bee

There is potential for avian nesting within the Project site. The scattered trees provide suitable habitat for avian species that nest in trees. The disturbed/developed/maintained grassland area may provide suitable nesting habitat for ground-nesting avian species. There is low potential for bat roosting to occur within the Project site. The biologist did not observe signs of nesting or roosting activity within the Project site during the biological surveys.

Crotch's bumble bee (*Bombus crotchii*) was also analyzed due to the recent protections provided for this species under CESA as a Candidate Species. The database review indicates no sightings within the 2-mile radius, which is the common standard assessment area, with the nearest sighting being over 4 miles away. The field review also paid close attention to suitable habitat for this species. Suitable habitat typically includes burrows that would be suitable for nesting and abundant nectar sources from the following plant genera: *Antirrhinum, Phacelia, Clarkia, Cordylanthus, Dendromecon, Eschscholzia, Eriogonum, Hypericum, Lantana, Lupinus, Salvia, Asclepias, Cirsium, Monardella, Keckiella, Acmispon, Euthamia, Ehrendorferia, Vicia, and/or*

Trichostema. While marginal potential would result from the existence of some rodent burrows, the significant distance to the nearest sighting, the lack of sufficient nectar sources, and the regular disturbance to both the site and the surrounding properties severely limits any potential for Crotch's bumble bee to occupy the Project site. Impacts to this species are not anticipated as a result of the Project.

6.0 JURISDICTIONAL WATERS

6.1 Literature Review

The following sources were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, lakes, and their location within the watersheds associated with the Project site, and other features that might contribute to federal or state jurisdictional authority located within watersheds associated with the Project site:

- National Wetlands Inventory (NWI) maps (USFWS, 2024c). The NWI database indicates potential wetland areas based on changes in vegetation patterns as observed from satellite imagery. This database is used as a preliminary indicator of wetland habitats because the satellite data are not precise;
- USGS National Hydrography Dataset. Provides the locations of "blue-line" streams as mapped on 7.5-Minute Topographic Map coverage;
- Aerial Imagery;
- USGS 7.5-Minute Topographic Maps; and
- Natural Resource Conservation Service (NRCS) Soil Survey.

6.2 Field Methodology

During the June 2021 and March 2024 general biological surveys, the VCS biologist assessed the presence or absence of potential jurisdictional streams/drainages and conducted a wetland delineation on the Project site. During the field survey, the Project site was assessed for jurisdictional wetland and non-wetland Waters of the United States (WOUS). To determine the presence of a wetland, three indicators are required: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The RWQCB has exceptions to this methodology in situations where a site has soils and hydrology, but no vegetation is present; these areas may be considered wetlands by the RWQCB. The methodology published in the United States Army Corps of Engineers 1987 Wetland Delineation Manual and the Arid West Supplement sets the standards for meeting each of the three indicators, which normally require that 50 percent or more dominant plant species typical of a wetland, soils exhibiting characteristics of saturation, and hydrological indicators be present. Jurisdictional non-wetland WOUS are typically determined through the observation of an Ordinary High Water Mark (OHWM), which is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." Projects with impacts to Waters of the United States are regulated under Sections 401 and 404 of the Clean Water Act.

On June 22, 2020, a revised Navigable Waters Protection Rule regarding jurisdictional WOUS went into effect. The revised rule stated that Waters of the United States do not include ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools. Consistent with the U.S. District Court for the District of Arizona's August 30, 2021, order vacating and remanding the Navigable Waters Protection Rule, the regulatory agencies have halted implementation of the Navigable Waters Protection Rule and were interpreting Waters of the United States consistent with the pre-2015 regulatory regime. On May 25, 2023, the United States Supreme Court issued its decision in Sackett v. Environmental Protection Agency, significantly narrowing the scope of federal jurisdiction over wetlands under the Clean Water Act (USACE 2023):

> *To assert jurisdiction over an adjacent wetland under the CWA, a party must establish "first, that the adjacent [body of water constitutes] . . . 'water[s] of the United States' (i.e., a relatively permanent body of water connected to traditional interstate navigable waters); and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the 'water' ends and the 'wetland' begins."*

As identified in the Sackett ruling, WOUS must also be a relatively permanent body of water.

The following guidance documents were utilized in making this determination:

- Field Guide to OHWM Determinations in the Arid West (August 2008);
- Updated OHWM Datasheet for the Field Guide to OHWM Determinations in the Arid West (July 2010); and
- Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region (2011).

The CDFW and the RWQCB take jurisdiction over Waters of the State (WOS) and Riparian/Riverine resources (California Fish and Game Code §§1600 et seq.; California Code of Regulations, Title 14, §720). Section 1602 of the FGC applies to natural rivers, streams, and lakes:

"An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake."

The Project site was assessed for jurisdictional WOS during the field survey using guidance from Section 1600 of the FGC and Brady and Vyverberg (2013), which defines a stream as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators." CDFW

regulates wetland areas only to the extent that those wetlands are part of a stream, river, or lake as defined by the CDFW.

6.3 Results

6.3.1 National Wetland Inventory

No aquatic features are mapped within the Project site boundary on the USFWS's National Wetland Inventory (USFWS [2024b]).

6.3.2 Hydrology

The Project site is generally flat but generally slopes downward from north to south. No drainages are present within the Project site, and it is likely that water would generally sheet flow from north to south on the Project site. The westerly half of the Project site drains onto Alessandro Blvd. while the easterly half sheet flows into a storm drain system within Nason Street.

6.3.3 Soils

The United States Department of Agriculture NRCS (NRCS, 2024) identifies three soil types present within the Project site as depicted on Figure 7, *Soil Map*.

Greenfield sandy loam

Greenfield sandy loam is a well-drained soil class typically found in alluvial fans and terraces. The soils are deposited as alluvium derived from granite and have a low runoff class. These soils are typically nonsaline but can be very slightly saline (0.0 to 2.0 mmhos/cm). The restrictive layer in these soils is typically more than 80 inches in depth. Eighty-five percent of the soils within the greenfield sandy loam category are greenfield and similar soils while 15 percent are minor components. These minor components include three percent Pachappa, three percent unnamed, three percent Hanford, three percent Ramona and three percent Arlington.

Hanford Coarse Sandy Loam

Handford Coarse Sandy Loam is a well-drained soil class typically found in alluvial fans. The soils are deposited as alluvium derived from granite and have a low runoff class. The restrictive layer in these soils is typically more than 80 inches in depth. These soils are comprised of 85 percent Hanford and similar soils and 15 percent minor components. These minor components include five percent Greenfield, five percent Ramona, two percent Tujunga and three percent unnamed soils.

Ramona Sandy Loam

Romano Sandy Loam is a well-drained soil class typically found on terraces and alluvial fans. The soils are alluvium derived from granite and typically have a restricted layer more than 80 inches deep. The soils within the Romana series on the Project site have minor components of four (4) percent Hanford, four (4) percent Arlington, four (4) percent Greenfield, and three (3) percent Tujunga series soils.

6.3.4 Jurisdictional Waters

The Project site is generally flat with very little change in topography. During the June 2021 and March 2024 general biological assessments, no potential jurisdictional waters were identified within the Project site.

6.3.5 Riparian/Riverine Areas and Vernal Pools

Section 6.1.2 of the MSHCP states that "riparian/riverine resources are lands which contain habitat dominated by trees, shrubs, persistent emergent [wetland plant species], or emergent mosses and lichens, which occur close to or which depend upon moisture from a nearby freshwater source; or areas with freshwater after flow during all or a portion of the year" and "Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season."

To determine the areas where "Riparian/Riverine Areas and Vernal Pools" are present, VCS biologists, during the June 2021 and March 2024 general biological surveys, walked the entire site and reviewed historical aerial imagery. Based on the collective results of these investigations, there was no evidence of riparian/riverine resources subject to the MSHCP on the Project site. Additionally, no vernal pools or seasonal depressions were observed within the Project site. There was no evidence of ponding water, such as visible surface water, cracked soils, or hydric soils, and no features were identified within the Project Footprint where water might collect and persist, like road ruts or other closed depressions. The soil on the Project site is classified as a well-draining, sandy loam. Based on the lack of typical features that could collect water (e.g., road ruts, depression, vernal pools), the lack of ponding water evidence and presence of well-draining soils that are not likely to support retention of water.

7.0 SIGNIFICANCE DETERMINATION AND PROPOSED MITIGATION

7.1 Regulatory Setting

As mentioned above in Sections 4 and 5 of this report, sensitive species are provided protection by either Federal or State resource management agencies, or both, under provisions of the ESA and CESA.

There are a number of performance criteria and standard conditions that must be met as part of any review and approval of the proposed Project. These include compliance with all of the terms, provisions, and requirements with applicable laws that relate to Federal, State, and local regulating agencies related to potential impacts to sensitive plant and wildlife species, wetlands, riparian habitats, and blue lined stream courses. Impacts are sometimes locally important but not significant because, although they would result in an adverse alteration of existing local conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

7.2 Impacts Terminology

Potential impacts to biological resources that could result from implementation of the proposed Project are discussed in each of the Vegetation, Wildlife, and Jurisdictional Waters sections presented in this report.

Biological resources may be either directly or indirectly impacted by a project. Furthermore, direct and indirect impacts may be either permanent or temporary in nature. These impact categories are defined below. These terms will be used throughout the document.

- Direct Impact: Any loss, alteration, disturbance, or destruction of biological resources that would result from project-related activities is a direct impact. Examples include vegetation clearing, encroaching into wetlands, diverting natural surface water flows, and the loss of individual species and/or their habitats. Direct impacts are long-term.

- Indirect Impact: As a result of project-related activities, biological resources may also be affected in a manner that is not direct. Examples of indirect impacts include elevated noise, light, and dust levels, increased human activity, decreased water quality, erosion created by the removal of vegetation, and the introduction of invasive plants and unnatural predators (e.g., domestic cats and dogs). These indirect impacts may be both short-term and long-term in their extent.

- Permanent Impacts: All impacts that result in the long-term or irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.

- Temporary Impacts: Any impacts considered to have reversible effects on biological resources can be viewed as temporary. Examples include the generation of fugitive dust during construction, removing vegetation, and either allowing the natural vegetation to recolonize or actively revegetating the Project site.

The determination of impacts in this analysis is based on both the proposed Project development plan and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Any recommended mitigation measures to address impacts are discussed below.

7.3 Threshold BIO-A

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

Less than significant with mitigation incorporated

7.3.1 Sensitive Plant Species

No special status plants were observed on the Impact area during the surveys. However, San Diego tarplant has a moderate potential to occur within the Impact area. San Diego tarplant is ranked as a CRPR 4.2, which means that the species has a limited distribution or is infrequent throughout a broader area in California. CNPS recommends that CRPR 4.2 species should be analyzed based on the following reasons:

- The type locality of CRPR rank 4 plants
- Occurrences at the periphery of a species' range
- Areas where the species is especially uncommon
- Areas where the species has sustained heavy losses
- Occurrences exhibiting unusual morphology or occurring on unusual substrates
- Species maintained on BLM, USFWS, or USFS sensitive species lists
- And species associated with a habitat that is declining in California at a significant rate

The Project site is not on the periphery of the range of San Diego tarplant. Additionally, San Diego tarplant is relatively common in Riverside County. Based on the plant's CRPR 4.2 status (watch list plant of limited distribution and "not very threatened in California [less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known/species frequently observed in the area]") and its distribution within Riverside County, this species does not clearly meet CEQA standards and thresholds for impact consideration. Additionally, there is low or very low potential for other special status plants to occur within the Impact area; therefore,

no significant direct and/or indirect impacts to special status plants are anticipated with Project implementation.

7.3.2 Sensitive Wildlife Species

One sensitive wildlife species, Cooper's hawk, was previously observed within the Project site. Two additional wildlife species have at least moderate (or low to moderate) potential to occur including the burrowing owl and western mastiff bat.

The burrowing owl is a species covered by the western Riverside MSHCP. An MSHCP Covered Species is a species that is conserved by MSHCP implementation. There are 146 covered species in the MSHCP, of which 40 species are identified that may require additional surveys. The burrowing owl require additional mitigation if the Project site is located within designated survey areas.

Burrowing owl has the potential to occur within the Project site. Additionally, the Project is located within the MSCHP survey area for burrowing owl. During the June 2021 and March 2024 general biological assessments, no burrowing owls were observed in the Project site, however, focused surveys were required due to the presence of suitable habitat for burrowing owl on the Project site. Follow up focused surveys were conducted on August 5, 12, 18, and 24, 2021, following the initial assessment, and no burrowing owls were identified within the Project Footprint. The March 2024 general biological assessment confirmed site conditions have not substantially changed since the 2021 focus surveys and those focus surveys remain accurate. Therefore, burrowing owl are assumed to be absent. However, a preconstruction survey will be required as described in MM BIO-1 below.

Cooper's hawk was observed within the Project site during the June 2021 survey and is considered a Watch list species by CDFW. Watch List species are species that were previously designated as a species of special concern but no longer merit that status, or which do not yet meet the species of special concern criteria, but for which there is a concern and a need for additional information to clarify status. The most suitable habitat for Cooper's hawk on and adjacent to the Project site, is limited to the trees, which provide limited potential habitat for Cooper's hawk. To avoid impacts to Cooper's hawks, preconstruction surveys as described in MM BIO-2 would be implemented. No impacts to Cooper's hawk are anticipated during Project activities with mitigation measures incorporated.

The removal of the palm trees and Peruvian pepper trees within the Project Footprint, which provide potential foraging habitat for the western mastiff bat, have the potential to impact this species. Additionally, indirect impacts during construction including increased noise activity on the Project site could occur as a result of Project implementation. To reduce any potential direct or indirect impacts to less than significant, avoidance and minimization measures shall be

implemented including preconstruction surveys and habitat assessments as described in MM BIO-3.

With the implementation of Mitigation Measures MM BIO-1 through MM BIO-3 below, impacts to sensitive wildlife species are considered less than significant.

MM BIO-1: Prior to the issuance of grading permits, the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure. A pre-construction presence/absence survey for BUOW within the Project area where suitable habitat is present shall be conducted by a qualified biologist within 30 days prior to the commencement of ground-disturbing activities. If active BUOW burrows are detected during the breeding season, all work within an appropriate buffer (typically a minimum of 300 feet) of any active burrow will be halted. If there is an active nest at the burrow, work will not proceed within the buffer until that nesting effort is finished. The onsite biologist will review and verify compliance with these boundaries and will verify the nesting effort has finished. Work can resume in the buffer when there are no occupied/active BUOW burrows found within the buffer area. If there are occupied burrows within the buffer area and avoidance of burrowing owls is not possible, no work shall occur within the buffer area until the appropriate course of action is determined and implemented in accordance with applicable regulations related to burrowing owl at the time of project construction. CDFW may require an Incidental Take Permit (ITP) or a Burrowing Owl Relocation and Mitigation Plan, in accordance with applicable regulations at the time of project construction. If burrowing owl is no longer a candidate or listed species under CESA at the time of project construction, permits shall not be required.

MM BIO-2: Prior to the issuance of grading permits, the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure. If the removal of any trees, shrubs or any other potential nesting and foraging habitat for avian species, including sensitive species and raptor nests, is to be conducted within the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors), a nesting bird survey shall be required within three days prior to start of work. If active nests are identified, the biologist will establish appropriate buffers around the area (typically 500 feet for raptors and sensitive species, and 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite biologist will review and verify compliance with these nesting boundaries and verify the nesting effort has finished. Work can resume within the buffer area when no other active nests are found. Alternatively, a

qualified biologist may determine that certain work can be permitted within the buffer areas and develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). If vegetation clearing is not initiated within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds. If vegetation removal occurs outside of nesting season or if no nesting birds are found, no further action will be required.

MM BIO-3: Prior to the issuance of grading permits, the Property Owner/Developer shall provide the City with proof of retention of a qualified biologist to implement this mitigation measure. Pre-construction surveys shall be conducted by a qualified bat biologist no more than 30 days prior to the initiation of vegetation removal and ground-disturbing activities if within the maternity season (March 1 to August 31). If no active roosts are present, then trees shall be removed within two weeks following the survey. If active bat roosts are found, then the following shall be implemented, as appropriate:

BIO-3(a): If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special-status species and the roost is not being used as a maternity roost and direct removal of active roosts is required, then the bats may be evicted from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans. If special-status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost.

BIO-3(b): If special-status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement

roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.

BIO-3(c): All potential roost trees shall be removed in a manner approved by a qualified bat biologist, which may include presence of a biological monitor.

BIO-3(d): All construction activity in the vicinity of an active maternity roost shall be limited to daylight hours.

BIO-3(e): Results of the survey shall be submitted to the City prior to removal of the trees. If additional measures are required under BIO-3(a) through BIO-3(d), the submittal to the City will include those additional measures.

7.4 Threshold BIO-B

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

Less than significant

The Project site contains disturbed/developed/maintained grassland and herbaceous non-native forbs and grasses habitat. Potential impacts to vegetation communities due to implementation of the Project includes the direct permanent impact of approximately 70.27 acres of land within the Project site, as shown on Figure 4, and described in Table 2 below.

Table 2. Potential Impacts to Vegetation Communities

Vegetation Community/Land Cover Type	Project Site (acres)	Offsite Improvements (acres)	Total
Herbaceous Non-native Forbs and Grasses	4.42	-	4.42
Disturbed/Developed/Maintained Grassland	58.82	7.03	65.85
Total	63.24	7.03	**70.27**

The impacts to disturbed/developed/maintained grasslands and herbaceous non-native forbs and grasses would not be considered significant, as these vegetation communities are not sensitive communities identified in any local or regional plans, policies, regulations or by CDFW or USFWS.

No riparian habitat or other sensitive natural communities identified in local or regional plans are present within the Project site. No impacts to sensitive natural communities will occur.

7.5 Threshold BIO – C

Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact

No wetlands occur within the Project site. Additionally, no features that would be considered Waters of the U.S. are present within the Project site and the Project site does not contain any features that are considered Waters of the State. Therefore, the Project would not impact any federally protected wetlands or jurisdictional features subject to Section 404 of the Clean Water Act.

7.6 Threshold BIO - D

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?

Less than significant with mitigation incorporated

The Project site and surrounding areas have the potential to support nesting birds and/or roosting bats. The trees within the Project Footprint provide habitat for tree nesting avian species while the herbaceous grassland habitats have potential to support ground nesting species. The palm trees in the northern portion of the Project site have the potential to support roosting bat species. Due to the potential for bird nesting and/or bat roosting, Project construction could result in impacts to nesting birds that would be in violation of the MBTA and FGC and/or result in impacts to protected bat maternity roosts if construction activities are to take place during nesting or maternity roosting season. With implementation of avoidance and minimization measures as outlined in MM BIO-1 through MM BIO-3 above, impacts to nesting birds and roosting bats are expected to be less than significant.

7.7 Threshold BIO – E

Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than significant with mitigation incorporated

The City of Moreno Valley Municipal Code Title 3, Chapter 3.48 [Western Riverside County MSHCP Plan Fee] requires that a local development mitigation fee be paid to assist in the maintenance of

biological diversity and the natural ecosystem processes that support this diversity, specifically so that the City can be in compliance with the MSHCP. Additionally, the City of Moreno Valley Municipal Code Title 3, Chapter 8.60 [Habitat Conservation] addresses the implementation of the Stephens' Kangaroo Rat Habitat Conservation Plan which requires a per-acre local development mitigation fee pursuant to the City's adopted "The Habitat Conservation Plan for the Stephens' Kangaroo rat in Western Riverside County, California".

The City of Moreno Valley Municipal Code Section 9.17.030(G) also outlines protection for "Heritage Trees". There are 18 trees present that have potential to qualify as Heritage Trees, 9 olive trees and 9 palms. These are located offsite within the project footprint. If impacts are required to trees considered protected pursuant to the City of Moreno Valley Municipal Code, then a permit and/or coordination with the City of Moreno Valley will be required for impacts to the trees as detailed in MM BIO-4 below. MM BIO-4 requires that a tree survey be prepared by a qualified arborist for the proposed regulated tree removals and ensures that tree removals would occur in accordance with the provisions of MVMC Section 9.17.030(g). Tree removal would adhere to the City's requirements for tree removal, including tree replacement, as outlined in the tree removal permit.

With mandatory payment of fees and compliance with the City's Municipal Code Section 9.17.030(G), as described above, the Project will not conflict with any local policies or ordinances protecting biological resources.

MM BIO-4: Prior to any removal of trees potential regulated by the City of Moreno Valley Municipal Code, a qualified arborist shall conduct a tree survey in the area on the Project site in which regulated trees are proposed to be removed. Data to be collected on appropriate data forms include the exact location of the tree, species, diameter at breast height, and information on the general character and health of the tree. All regulated trees to be removed shall be flagged in the field and entered into a GIS database. This information shall be included in an arborist report to be submitted to the City.

Pursuant to Section 9.17.03 of the City of Moreno Valley Municipal Code the removal of existing trees with four-inch or greater trunk diameters at breast heigh (dbh) shall be replaced at a 3:1 ratio, with a minimum 24-inch box size trees of the same species, or a minimum 36-inch box for a 1:1 replacement, in locations approved by the City.

7.8 Threshold BIO – F

Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local regional or state habitat conservation plan?

Less than Significant with Mitigation Incorporated

The Project site lies within the boundaries of the MSHCP. The MSHCP designates a Criteria Cells, which are a series of grids utilized by the Riverside Conservation Authority (RCA) to organize and track development and conservation within the Criteria Area. The Project site is not located within any Criteria Cells designated for conservation within the MSHCP. Additionally, the Project is not located within Public or Quasi Public Conserved Lands, or the Narrow Endemic Plant Species, Criteria Area Species, Amphibian, or Mammal Survey Areas listed by the MSHCP.

However, the Project is located within the Burrowing Owl Overlay of the MSHCP which requires additional survey protocols. Focused Burrowing Owl Surveys were conducted according to MSHCP requirements in August 2021. No burrowing owls or signs thereof were identified during the focused surveys, therefore burrowing owl were considered absent from the Project site. With the implementation of preconstruction surveys as described in MM BIO-1 above, the Project will be in compliance with the MSHCP and CESA burrowing owl procedures.

No riparian areas that would be considered Riverine/Riparian by the MSHCP are present on the Project site. Additionally, no vernal pools or depression, such as road ruts, that could provide suitable habitat for fairy shrimp species are present within the Project site. Therefore, the Project is consistent with the MSHCP requirements.

Additionally, the Project lies within the boundaries of the Stephen's Kangaroo Rat Habitat Conservation Plan. The Stephen's Kangaroo Rat Habitat Conservation Plan requires that a fee be paid for local development. The Project would not conflict with any local habitat conservation plans.

8.0 CUMULATIVE IMPACTS

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed Project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the proposed project is consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(b)(1)(B)]. CEQA also states that no further cumulative impact analysis is necessary for impacts of a proposed project consistent with an adopted general, specific, master, or comparable programmatic plan [Section 15130(d)].

The Project site has been anticipated for development by the city of Moreno Valley. Additionally, the MSHCP has set aside areas for conservation in order to address the cumulative impact of

development within Riverside County. The Project is consistent with the MSHCP, therefore, the Project's cumulative impacts would not be considered significant.

9.0 BEST MANAGEMENT PRACTICES (BMPS)

The Western Riverside MSHCP Volume 1, Appendix C outlines standard BMPs which are intended in part to reduce impacts to plant communities, special status plant and wildlife species, and jurisdictional waters. As the Project Footprint is located within the MSHCP boundary, the Project will be required to comply with applicable standard BMPs found in Appendix C of the MSHCP. The Project will comply with the following, which are based on the standard MSHCP BMPs:

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and Project Footprint boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from

entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, CDFW, and RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor vegetation clearing to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the Project Footprint shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

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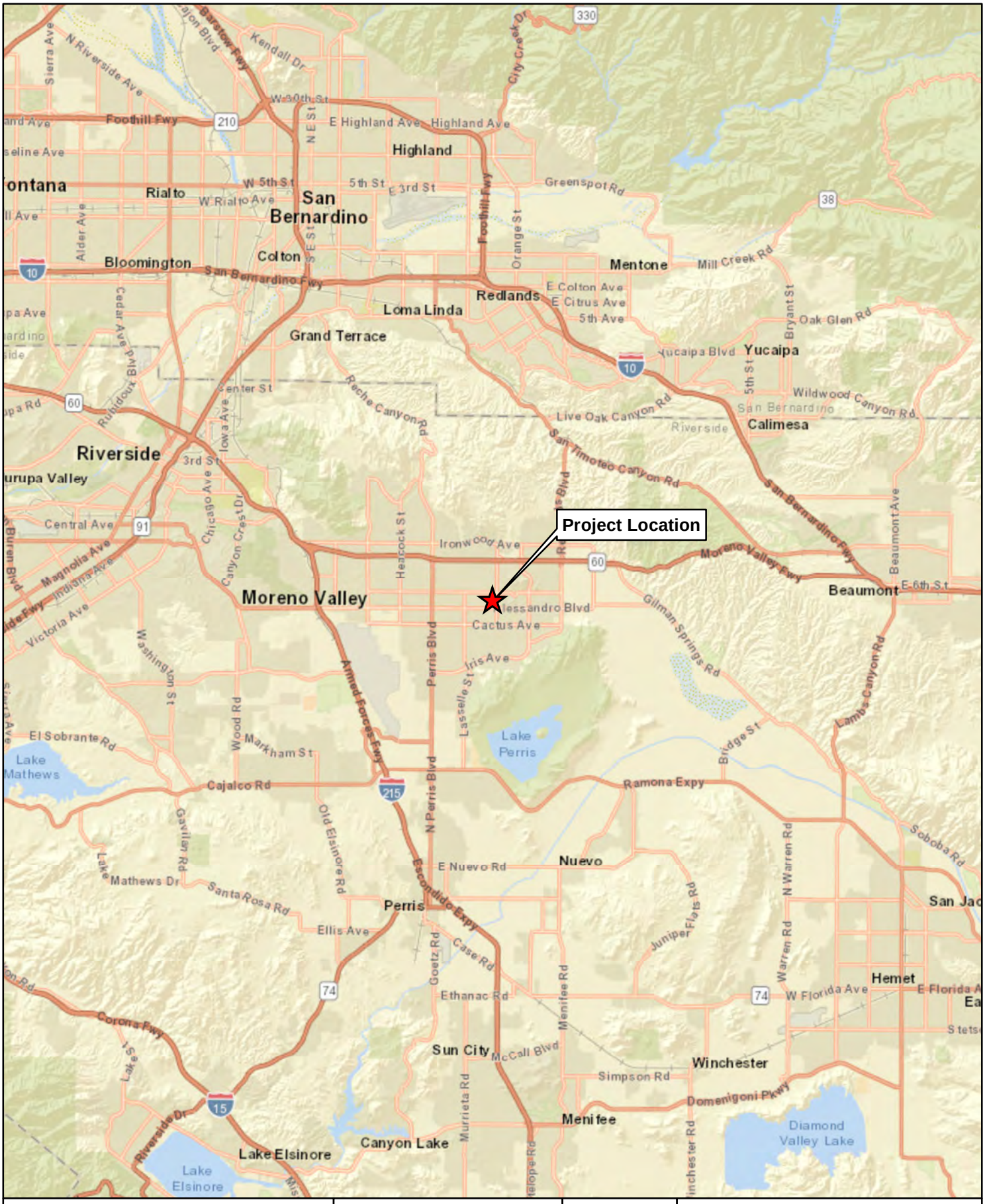
FIGURES



Prepared By:
VCS Environmental

Map Created: October 2022
Data Sources: ESRI, Cannon

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Moreno Valley Town Center

Figure 1 Regional Map

Prepared By:
VCS Environmental

Map Created: March 2024
Data Sources: ESRI, Cannon

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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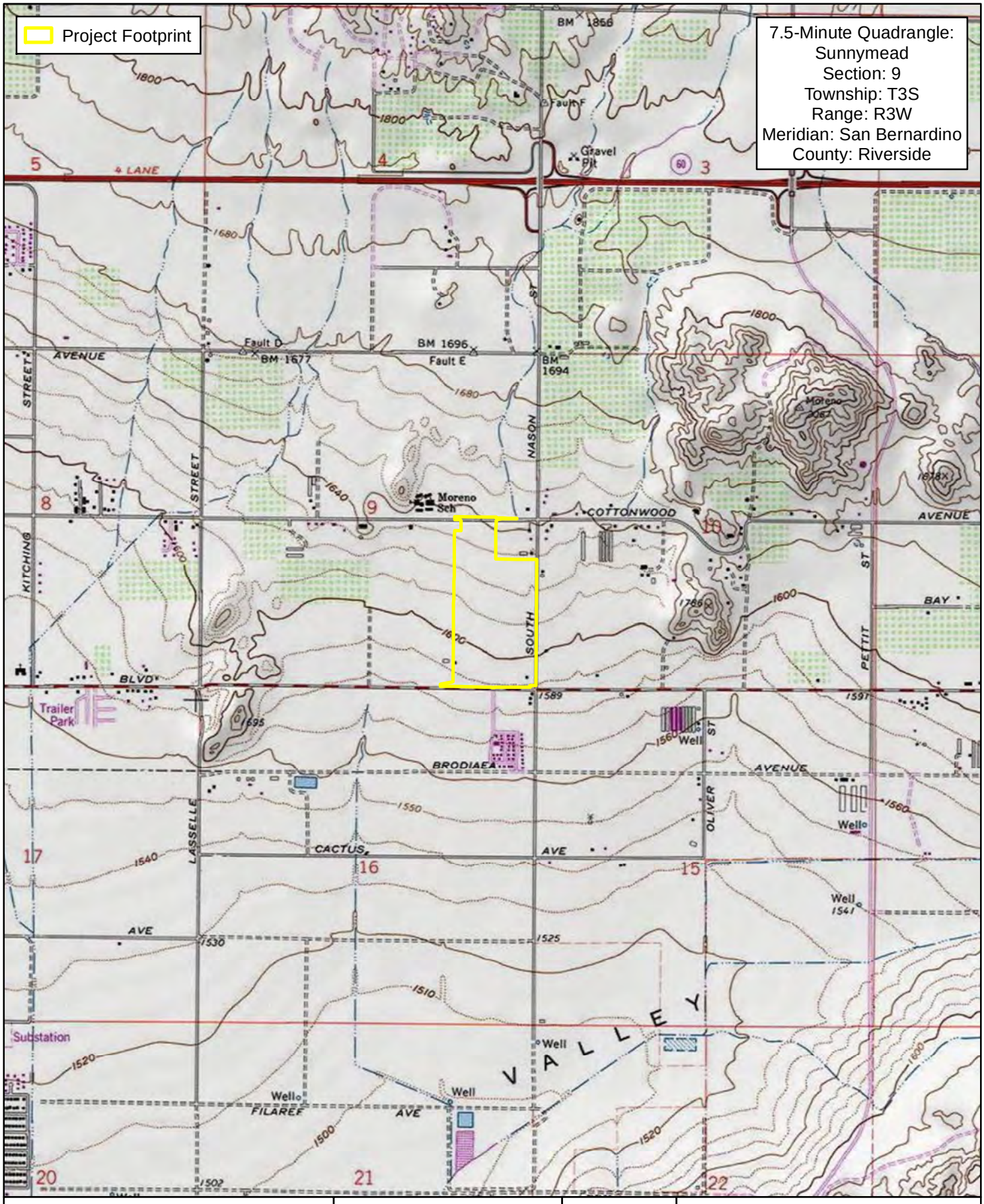
Figure 2 Aerial Map



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Map Created: March 2024
Data Sources: ESRI, Cannon, USGS

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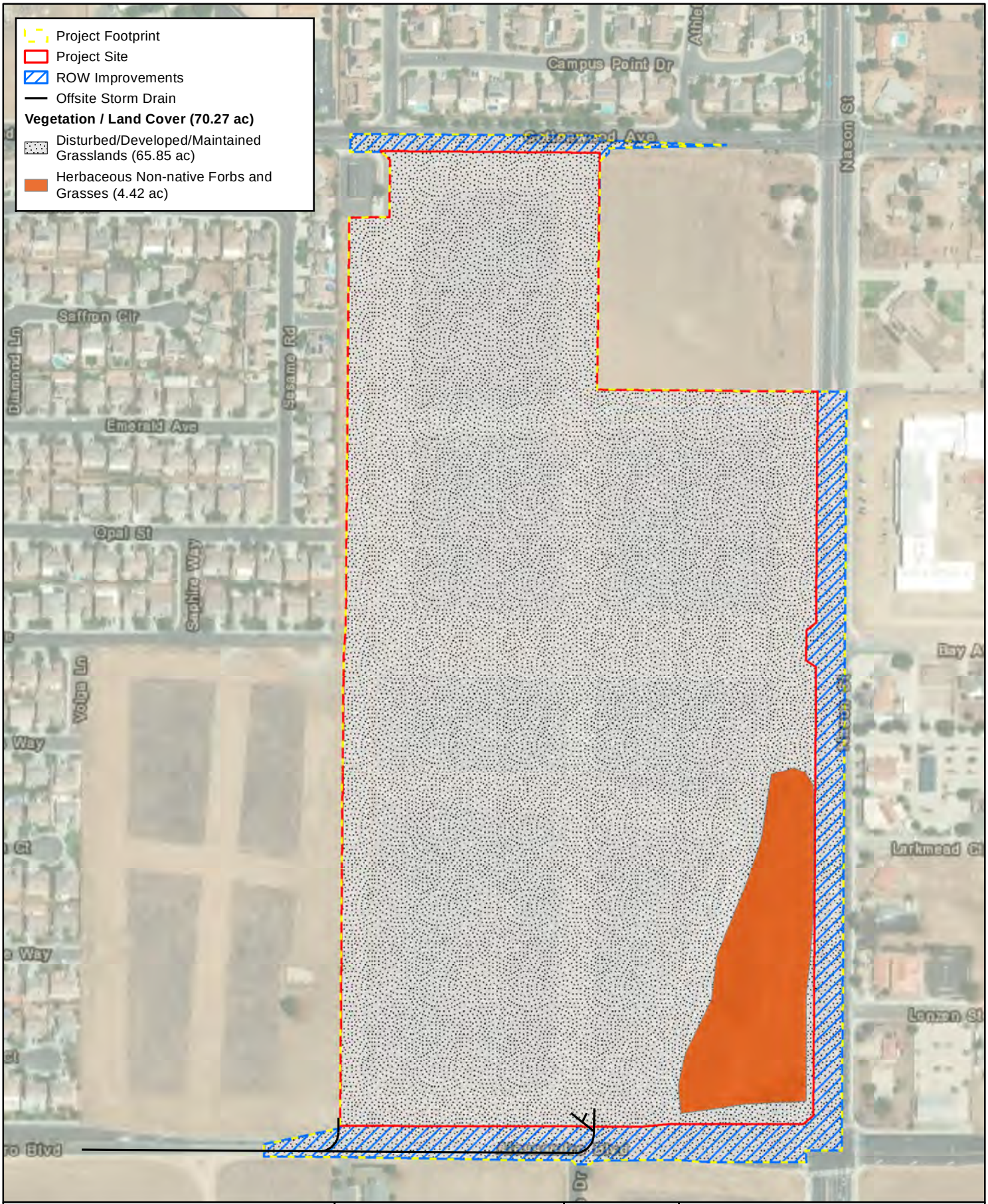
Moreno Valley Town Center

Figure 3 USGS Topographic Map



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VCS Environmental

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Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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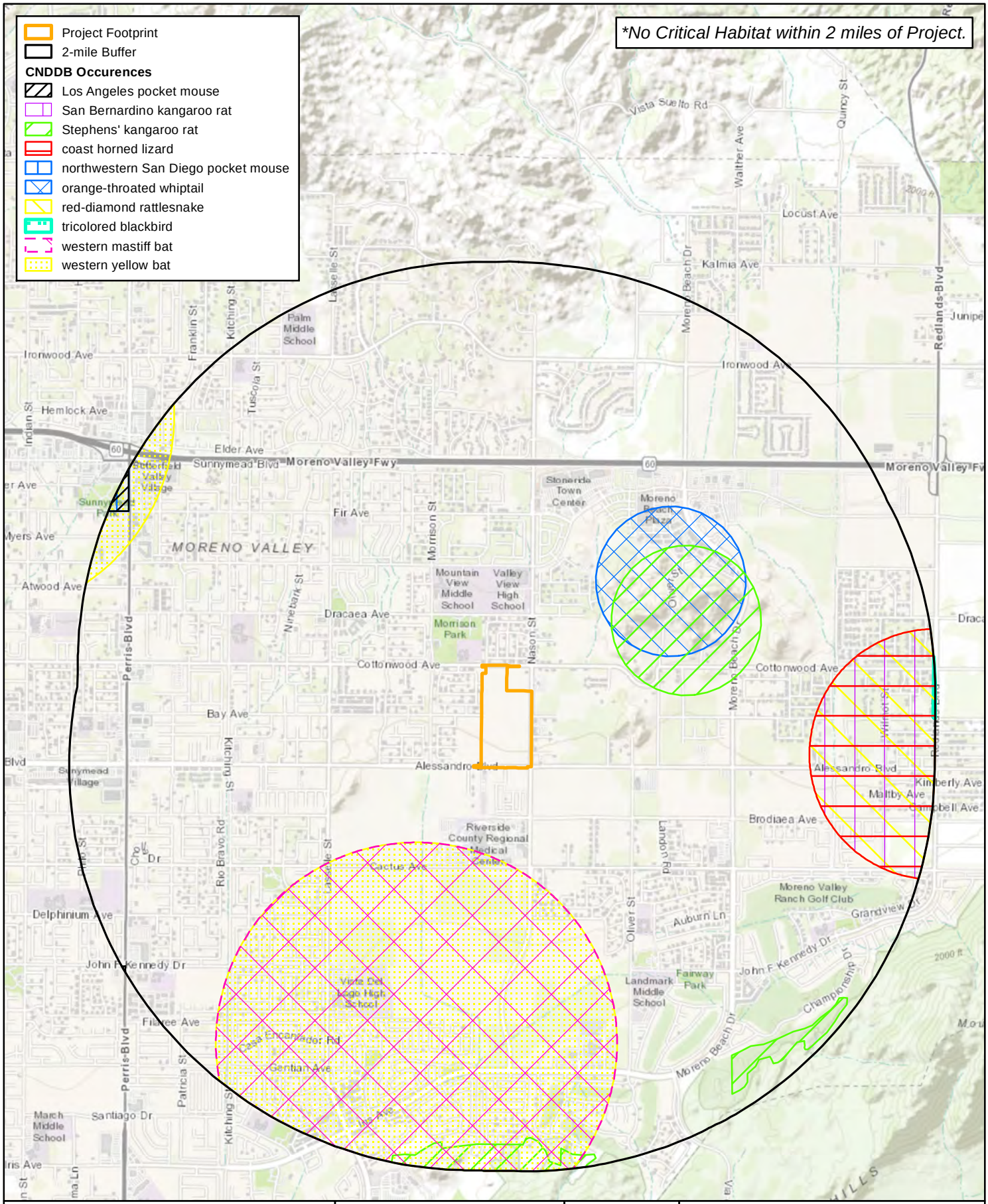
Figure 4

Vegetation / Land Cover Map


Project Footprint
2-mile Buffer
CNDDB Occurences
Los Angeles pocket mouse
San Bernardino kangaroo rat
Stephens' kangaroo rat
coast horned lizard
northwestern San Diego pocket mouse
orange-throated whiptail
red-diamond rattlesnake
tricolored blackbird
western mastiff bat
western yellow bat
*No Critical Habitat within 2 miles of Project.
MORENO VALLEY
Moreno Valley Fwy
Sunnymead Blvd
Elder Ave
Fir Ave
Dracaea Ave
Cottonwood Ave
Bay Ave
Alessandro Blvd
Perris Blvd
Nason St
Morrison St
Kitching St
Ironwood Ave
Hemlock Ave
Atwood Ave
Delphinium Ave
John F Kennedy Dr
Fir Ave
Gentian Ave
Santiago Dr
Locust Ave
Kalmia Ave
Vista Suelto Rd
Walther Ave
Quincy St
Redlands Blvd
Moreno Beach Dr
Oliver St
Auburn Ln
Grandview Dr
Brodiaea Ave
Kimberly Ave
Maltby Ave
Campbell Ave
Landon Rd
Cactus Ave
Riverside County Regional Medical Center
Moreno Valley Ranch Golf Club
Fairway Park
Landmark Middle School
Championship Dr
Palm Middle School
Mountain View Middle School
Valley View High School
Morrison Park
Stoneridge Town Center
Moreno Beach Plaza
Sunnymead Village
March Middle School
Vista Del Lago High School
Rio Bravo Rd
Patricia St
Franklin St
Lasselle St
Tuscola St
Indian St
Ninebark St
Cholla Dr
Paseo Encantador Rd
Prepared By:
VCS Environmental
Map Created: March 2024
Data Sources: ESRI, Cannon, CDFW, USFWS, NOAA
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
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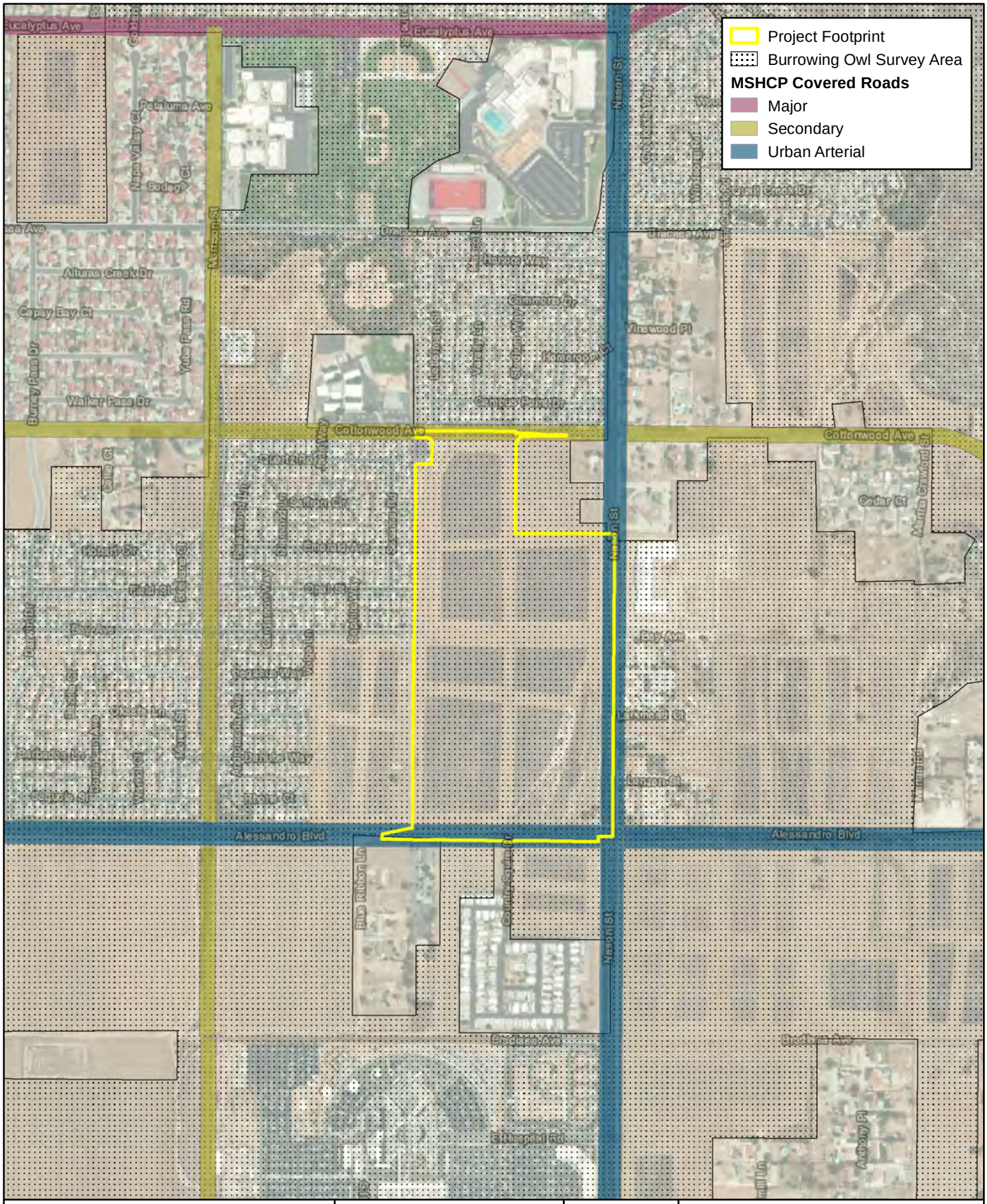
Moreno Valley Town Center
Figure 5
CNDDB Occurences & Critical Habitat



Prepared By:

VCS Environmental

Map Created: March 2024
Data Sources: ESRI, Cannon

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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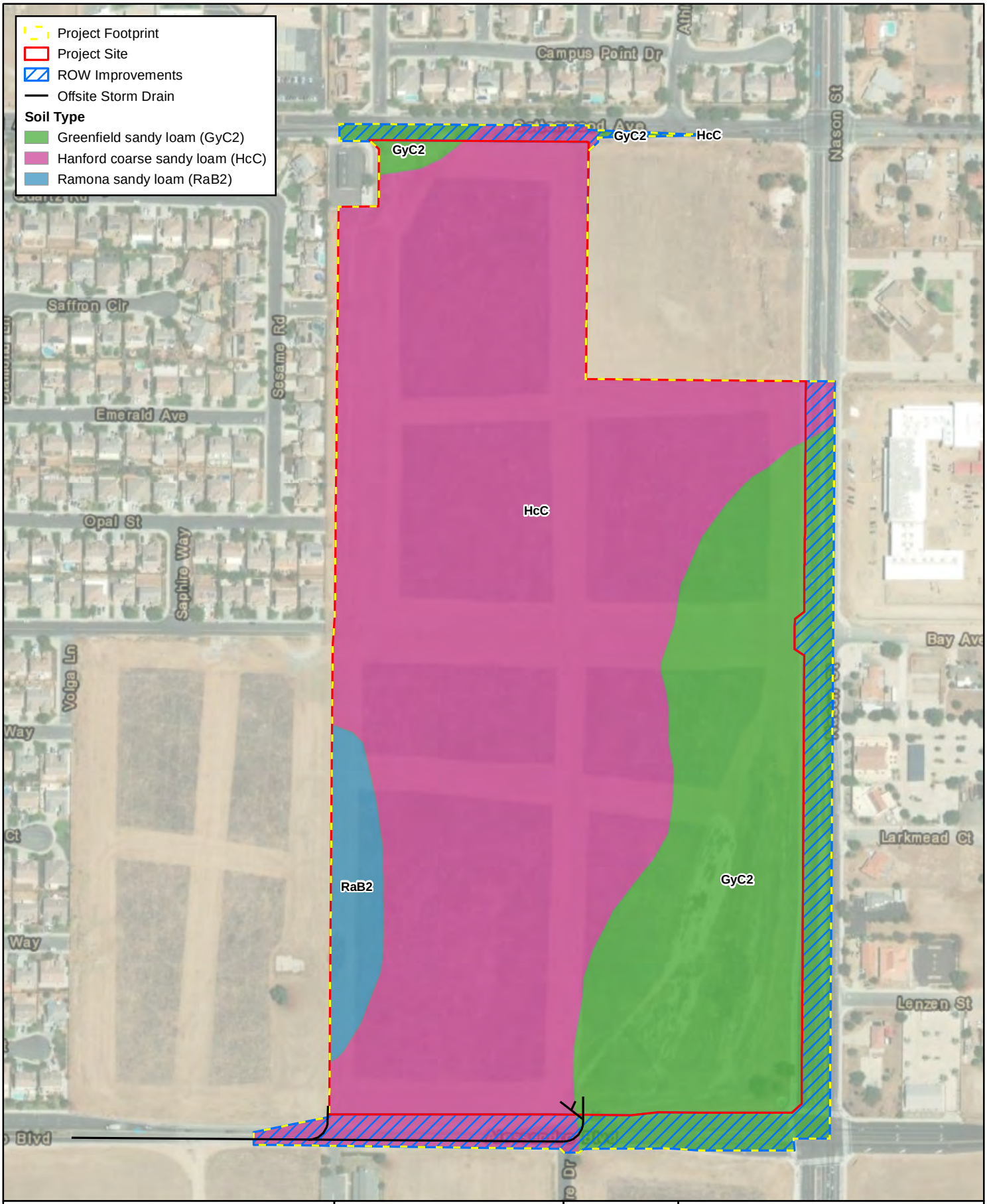
Moreno Valley Town Center

Figure 6

MSHCP
Designation Map



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VCS Environmental

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Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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Moreno Valley Town Center

Figure 7 Soil Map

APPENDIX A

Site Photographs

Photo 1: View of northern boundary of the Project site with Cottonwood Ave to the left, viewing east.

Photo 2: View of the northwestern portion of the Project site, viewing west.

Photo 3: View of the northeastern boundary of the Project site, viewing west.

Photo 4: View of the southern portion of the Project site, viewing west.

Photo 5: View of the eastern portion of the Project site, viewing east.

Photo 6: View of southern portion of Project site, viewing east.

APPENDIX B

Plant and Wildlife Species Observed within the Project Site

Plant Species Observed within the Project Site

Scientific Name	Common Name
Anacardiaceae	Amaranth Family
*Schinus molle**	Peruvian pepper tree
Arecaceae	Palm Family
*Washingtonia robusta**	Mexican fan palm
Asteraceae	Sunflower Family
Erigeron canadensis	Horseweed
Helianthus annuus	Sunflower
Heterotheca grandiflora	Telegraph Weed
*Lactuca serriola**	Prickly lettuce
*Oncosiphon piluliferum**	Stinknet
Boraginaceae	Borage Family
Amsinckia menziesii	fiddleneck
Brassicaseae	Mustad Family
*Hirschfeldia incana**	short-pod mustard
*Sisymbrium irio**	London rocket
Chenopodiaceae	Goosefoot Family
*Salsola australis**	Russian thistle
Convolvulaceae	Morning Glory Family
*Convolvulus arvensis**	field bindweed
Geraniaceae	Storksbill or Cranesbill Family
*Erodium cicutarium**	Common Stork's Bill
Oleaceae	Olive Family
*Olea europaea**	Olive
Poaceae	Grasses
*Avena fatua**	Wild oat
*Bromus diandrus**	Ripgut Brome
*Bromus hordeaceus**	Soft brome
*Hordeum jubatum**	Foxtail Barley

Scientific Name	Common Name
Solanaceae	Nightshade Family
Datura wrightii	Sacred Datura
*Solanum elaeagnifolium**	Silver leaf nightshade

* non-native species.

Wildlife Species Observed/Detected within the Project Site

Scientific Name	Common Name
Aves - Birds	
Accipitridae	Kites, Eagles and Hawks
Accipiter cooperii	Cooper's Hawk
Buteo jamaicensis	Red-tailed hawk
Columbidae	Pigeons and Doves
Zenaida macroura	Mourning Dove
Corvidae	Jays, Magpies and Crows
Corvus corax	Common Raven
Falconidae	Caracaras and Falcons
Falco sparverius	American Kestrel
Fringillidae	Finches
Haemorhous mexicanus	House Finch
Mimidae	Mockingbirds and Thrashers
Mimus polyglottos	Northern Mockingbird
Sturnidae	Starlings and Allies
*Sturnus vulgaris**	European Starling
Tyrannidae	Tyrant Flycatchers
Sayornis saya	Say's Phoebe
Tyrannus vociferans	Cassin's Kingbird
Mammalia - Mammals	
Canidae	Foxes, Wolves and Relatives
Canis latrans	Coyote
Felidae	Cats
Felix catus	Domestic cat

Scientific Name	Common Name
Geomyidae	Pocket Gophers
Thomomys bottae	Botta's Pocket Gopher
Leporidae	Rabbits and Hares
Sylvilagus audubonii	Audubon's Cottontail
Sciuridae	Squirrels, Chipmunks and Marmots
Ostospermophilus beecheyi	California Ground Squirrel
Reptilia - Reptiles	
Phrynosomatidae	Spiny Lizards
Uta stansburiana	Common Side-blotched Lizard

*Non-native species

APPENDIX C

Special Status Species
Potential Occurrence Determination

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APPENDIX C

Special Status Species Potential Occurrence Determination

This table summarizes conclusions from analysis and field surveys regarding the potential occurrence of special status species within the Project site. During the field surveys, the potential for special status species to occur within the Project site was assessed based on the following criteria:

- Present: observed on the site during the field surveys, or recorded on-site by other qualified biologists.

- High potential to occur: observed in similar habitat in the region by a qualified biologist, or habitat on the site is a type often utilized by the species and the site is within the known distribution and elevation range of the species.

- Moderate potential to occur: reported sightings in surrounding region, or the site is within the known distribution and elevation range of the species and habitat on the site is a type occasionally used by or typical of the species.

- Low potential to occur: the site is within the known distribution and elevation range of the species but habitat on the site is rarely used by the species or no suitable habitat is present, or there are no known recorded occurrences of the species within or adjacent to the site.

- Absent: a focused study failed to detect the species or the site is outside the known distribution and elevation range of the species.

- Unknown: the species' distributional/elevation range and habitat are poorly known.

Even with field surveys, biologists assess the *probability* of occurrence rather than make a definitive conclusion about species' presence or absence. Failure to detect the presence of the species is not definitive and may be due to variable effects associated with fire, rainfall patterns, and/or season.

Special Status Species: Potential to Occur within the Project Site

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence within the Project Site
PLANTS				
Abronia villosa var. aurita	Chaparral sand-verbena (also foothill sand-verbena)	CRPR: 1B.1, BLMS, FSS	Exposed sites with sandy soils, especially washes and dunes, in chaparral, sage scrub, and alluvial scrub. Elevation: < 1600 meters Blooming period: (Jan)March – September, annual herb	Low – Project site lacks suitable sage scrub, chaparral, and alluvial scrub habitats.
Artemisia palmeri	San Diego sagewort (Palmer's sage)	CRPR: 4.2,	Prefers coastal scrub, chaparral, riparian forest, and riparian woodland. Elevation: < 600 meters Blooming period: (Feb)May - September	Low – Project site lacks suitable coastal scrub, chaparral, and riparian habitat.
Calochortus plummerae	Plummer's mariposa-lily	CRPR: 4.2 MSHCP: Group 2	Perennial bulbiferous herb endemic to California. Habitat includes granitic, rocky soils, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland. Threatened by development, fire suppression, foot traffic, mining, powerline construction, and recreational activities. Possibly threatened by vegetation clearing, collecting, road maintenance, and non-native plants. Less common at higher elevations. Elevation: < 1700 meters Blooming period: May - July	Absent. No habitat on site and no nearby occurrences.
Caulanthus simulans	Payson's jewelflower	CRPR: 4.2, FSS MSHCP: Group 1	Sandy, granitic habitats in chaparral and coastal scrub. Elevation: 400 - 2200 meters Blooming period: (February)March - May (June)	Absent. No habitat on site and no nearby occurrences.
Centromadia pungens ssp. *laevis*	smooth tarplant	CRPR: 1B.1 MSHCP: Group 3	Suitable habitat for the smooth tarplant includes alkali scrub, alkali playas, and grasslands with alkaline affinities. Elevation: 90 - 500 meters Blooming period: April - September	Low – Project site lacks the alkali conditions suitable for smooth tarplant.
Chorizanthe leptotheca	peninsular spineflower	CRPR: 4.2 MSHCP: Group 2	Annual herb native to California and Baja California. Habitat includes alluvial fan and granitic soils, chaparral, coastal scrub, and lower montane coniferous forest. Much habitat already lost to development; also threatened by non-native grasses.	Low – Project site lacks suitable chaparral habitat and currently has high densities of

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence within the Project Site
			Elevation: 300 - 1600 meters Blooming period: May - August	non-native grasses.
Chorizanthe parryi var. *parryi*	Parry's spineflower	CRPR: 1B.1, BLMS, FSS MSHCP: Group 2	Parry's spineflower occurs within the alluvial chaparral and scrub of the San Gabriel, San Bernardino and San Jacinto Mountains. Elevation: 90 - 800 meters Blooming period: April - June	Absent. No suitable habitat on site.
Deinandra paniculata	San Diego tarplant (paniculate tarplant)	CRPR: 4.2	Occurs as a dominant or co-dominant plant in the herbaceous layer of grasslands, forblands, openings of coastal sage scrub and oak woodland. Elevation: <1300 meters Blooming period: (March)April - November (December)	Moderate – Project site supports grassland habitats that could support San Diego tarplant. San Diego tarplant is known to occur throughout Moreno Valley. However, the species was not observed during biological assessment.
Juglans californica var *californica*	California black walnut / Southern California black walnut	CRPR: 4.2 MSHCP: Group 2	Perennial deciduous tree endemic to California. Habitat includes alluvial substrates, chaparral, cismontane woodland, coastal scrub, and riparian woodland. Threatened by urbanization, grazing, non-native plants, and possibly by lack of natural reproduction. Elevation: 30 - 900 meters Blooming period: Mar – May	Absent. The species was not observed during the biological assessment.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	CRPR: 1B.1, BLMS MSHCP: Group 3	Coulter's goldfields are associated with low-lying alkali habitats along the coast and in inland valleys. Most of the populations are associated with coastal salt marsh. In Riverside County, Coulter's goldfields occur primarily in highly alkaline, silty-clay soils in association with Traver, Domino and Willows soils. Most Riverside County populations are associated with the Willows soil series. Coulter's goldfields occur primarily in the alkali vernal plains community. Elevation: 1 - 1200 meters Blooming period: February - June	Low – Project site lacks suitable silty clay soils. Additionally, the alkaline conditions preferred by Coulter's goldfields are not present on the Project site.

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence within the Project Site
Lepidium virginicum var. robinsonii	Robinson's peppergrass	CRPR: 4.3 SD County List A	Annual herb occurring in dry sandy or thin soils in coastal sage scrub and chaparral. Elevation: < 2800 m Blooming period: Mar – Jun	Low – Project site lacks suitable habitat.
REPTILES				
Aspidoscelis hyperythra	orange-throated whiptail	WL, FSS, MSHCP: Group 1	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes & other sandy areas with patches of brush & rocks. Perennial plants necessary for its major food-termites.	Low. Project site lacks suitable habitat. Only one recorded occurrence (from 1989) of the species within 2 miles of the Project site.
Crotalus ruber	red-diamond rattlesnake	FSS, SSC MSHCP: Group 2	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Low. Project site lacks suitable habitat.
Phrynosoma blainvillii	coast horned lizard	SSC, BLMS	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants. The species is common in most areas of the MSHCP Plan Area except where adjacent to urban situations.	Low. Adjacency to urban development and decades of disturbance onsite likely preclude this species. Only one recorded occurrence (from 1929) of the species within 2 miles of the Project site.
BIRDS				
Athene cunicularia	burrowing owl	SSC, BCC, BLMS, MSHCP: Group 3	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Moderate. Project site includes suitable burrows but lacks perches.
Accipiter cooperii	Cooper's hawk	WL, IUCN:LC	Forest and woodland birds. These lanky hawks are a regular sight in parks, quiet neighborhoods, over fields, at backyard feeders, and even along busy streets if there are trees around.	This species was observed during the biological survey; Cooper's hawk occasionally

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence within the Project Site
				nest in large pines and Eucalyptus trees. No Eucalyptus or pine trees are present onsite. Low potential for nesting habitat.
MAMMALS				
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	SSC, MSHCP: Group 1	This species inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. Habitats tend to be stony soils above sandy desert fans and rocky areas within shrub communities such as coastal sage scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	Low. Project site lacks stony soils or rocky areas as well as suitable shrub habitat. Nearest species occurrence is from 1999 located approximately 2 miles to the northwest.
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE, SSC MSHCP: Group 3	This species is typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub, chaparral and even disturbed areas that are associated with alluvial processes. Soil texture is a primary factor in this subspecies' occurrence. Sandy loam substrates allow for the digging of simple, shallow burrows. The species is found in open grassland habitats where the sparse vegetation is mainly composed of shrubs, sagebrush, grasses and forbs.	Low. Project site lacks suitable habitat and it is not located near a wash nor is the site associated with alluvial processes. Nearest historic species occurrence is from 1913 located approximately 1.5 miles to the east.
Dipodomys stephensi	Stephens' kangaroo rat	FE, ST, MSHCP: Group 2	The species is found in open grassland habitats where the sparse vegetation is mainly composed of shrubs, sagebrush, grasses and forbs. Species avoids dense grasses (for example, non-native bromes) and are more likely to inhabit areas where the annual forbs disarticulate in the summer and leave more open areas. As a fossorial (burrowing) animal, the Stephens' kangaroo rat typically is found in sandy and sandy loam soils with a low clay to gravel content, although there are exceptions where they can utilize the burrows of Botta's pocket gopher (*Thomomys bottae*)	Low. Project site has been disturbed for decades and is adjacent to development. The closest recorded occurrence from 1988 is located approximately 0.5 miles

Scientific Name	Common Name	Status	General Habitat Description	Potential for Occurrence within the Project Site
			and California ground squirrel (*Spermophilus beecheyi*).	northeast of the site.
Lasiurus xanthinus	western yellow bat	SSC, WBWG (H)	Year-round resident of southern CA, found below 2000 ft in or near foothill or desert riparian habitats. Roosts in trees, including palm trees, in and near palm oases and riparian habitats.	Low. Project impact footprint lacks suitable roosting habitat, but the willow canopy overhanging onto the Project site could support roosting for this species. The species could forage onsite. The nearest recorded occurrence from 1992 is located approximately 0.3 miles south of the site.
Eumops perotis californicus	western mastiff bat	SSC, BLMS, WBWG (H)	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.	Low (Moderate foraging) – The project site supports grassland habitats that could be used as foraging habitat by the western mastiff bat. However, the site does not provide suitable night roosting habitat. The nearest recorded occurrence from 1992 is located approximately 0.3 miles south of the site.

Legend
Federal Endangered Species Act (ESA) Listing Codes: federal listing is pursuant to the Federal Endangered Species Act of 1973, as amended (ESA). FE = federally listed as endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range. FT = federally listed as threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future. FCE = federal candidate endangered. FD = federally delisted species. *California Endangered Species Act (CESA) Listing Codes:* state listing is pursuant to § 1904 (Native Plant Protection Act of 1977) and §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals. SE = state listed as endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range. ST = state listed as threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future. SCE = state listed as candidate endangered. SD = state delisted species *California Department of Fish and Wildlife (CDFW):* SSC = species of special concern: status applies to animals which 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist. The CDFW has designated certain vertebrate species as "species of special concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. FP = Fully protected: animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. WL = watch list: these birds have been designated as "Taxa to Watch" in the *California Bird Species of Special Concern report* (Shuford and Gardali 2008). The report defines "Taxa to Watch" as those that are not on the current special concern list that (1) formerly were on the 1978 (Remsen 1978) or 1992 (CDFG 1992) special concern lists and are not currently listed as state threatened and endangered; (2) have been removed (delisted) from either the state or federal threatened and endangered lists (and remain on neither), or (3) are currently designated as "fully protected" in California. *United States Fish and Wildlife Service (USFWS):* BCC = USFWS bird of conservation concern: listed in the USFWS'S 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report are priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing. *United States Forest Service (USFS):* FSS = Forest Service sensitive: those plant and animal species identified by a Regional Forester that are not listed or proposed for listing under the ESA and for which population viability is a concern, as evidenced by: (a) significant current or predicted downward trends in population numbers or density or (b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution."

United States Bureau of Land Management (BLM):
BLMS = BLM sensitive: those plant and animal species on BLM administered lands and that are (1) under status review by the USFWS/NMFS; or (2) whose numbers are declining so rapidly that federal listing may become necessary, or (3) with typically small and widely dispersed populations; or (4) those inhabiting ecological refugia or other specialized or unique habitats. BLM policy is to provide the same level of protection as USFWS candidate species.

California Rare Plant Ranks (Formerly known as CNPS Lists): the CNPS is a statewide, non-profit organization that maintains, with CDFG, an Inventory of Rare and Endangered Plants of California. In the spring of 2011, CNPS and CDFG officially changed the name "CNPS List" or "CNPS Ranks" to "California Rare Plant Rank" (or CPRP). This was done to reduce confusion over the fact that CNPS and CDFG jointly manage the Rare Plant Status Review Groups and the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.

CRPR: 1B - California Rare Plant Rank 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere. All of the plants constituting California Rare Plant Rank 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

CRPR: 2 - California Rare Plant Rank 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere. All of the plants constituting California Rare Plant Rank 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

CRPR: 4 - California Rare Plant Rank 4 (formerly List 4): Plants of Limited Distribution - A Watch List. Very few of the plants constituting California Rare Plant Rank 4 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS and CDFG strongly recommend that California Rare Plant Rank 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

California Native Plant Society (CNPS) Threat Ranks: The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

0.1 = seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = fairly endangered in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3 = not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Western Riverside Multiple Species Habitat Conservation Plan (MSHCP): Planning species covered by the MSHCP. Additional surveys for Narrow Endemic Plant Species and Criteria Area Species to determine presence/absence may be required.
PS = planning species
NEPSSA # = Narrow Endemic Plant Species Survey Area (with survey area number noted).
CASSA # = Criteria Area Species Survey Area (with survey area number noted).

Group 1 = Species that have wide distribution throughout the Plan Area within suitable habitat. Take coverage is warranted based upon regional or landscape level considerations, such as healthy population levels, widespread distribution throughout the MSHCP Plan Area, and life history characteristics that respond to habitat-scale conservation and management actions.
Group 2 = Species that are relatively well-distributed throughout the MSCHP Plan Area. Take coverage is warranted based on regional or landscape level considerations with the addition of site-specific conservation and management requirements that are clearly identified in the MSHCP for species that are generally well-distributed, but that have Core Areas that require Conservation.
Group 3 = Species that have narrow habitat requirements and limited distribution within the Plan Area. Take coverage is warranted based upon site specific considerations and the identification of specific conservation and management conditions for species within a narrowly defined Habitat or limited geographic area within the MSHCP Plan Area.

Western Bat Working Group (WBWG): The WBWG is composed of agencies, organizations, and individuals interested in bat research, management, and conservation from the 13 western states and provinces. The goals are (1) to facilitate communication among interested parties and reduce risks of species decline or extinction; (2) to provide a mechanism by which current information on bat ecology, distribution, and research techniques can be readily accessed; and (3) to develop a forum to discuss conservation strategies, provide technical assistance, and encourage education programs. Species are ranked as High, Medium, or Low Priority in each of 10 regions in western North America. Because California includes multiple regions where a species may have different WBWG Priority ranks, the CNNDB includes categories for Medium-High, and Low-Medium Priority.
WBWG-H= High Priority
WBWG-M= Medium Priority
WBWG-L= Low Priority

American Fisheries Society: Listing of imperiled freshwater and diadromous fishes of North America prepared by the American Fisheries Society's Endangered Species Committee.
AFS-E= Endangered
AFS-TH= Threatened
AFS-V= Vulnerable

The International Union for Conservation of Nature (IUCN): The IUCN assesses, on a global scale, the conservation status of species, subspecies, varieties and even selected subpopulations in order to highlight taxa threatened with extinction, and therefore promote their conservation. Detailed information on the IUCN and the Red List is available at: http://www.iucnredlist.org
IUCN-CR = Critically endangered
IUCN-EN = Endangered

IUCN-NT = Near threatened
IUCN-VU = Vulnerable
IUCN-LC = Least concern
IUCN-DD = Data deficient
IUCN-CD = Conservation dependent

NatureServe Element Ranking: This ranking system's units of conservation may include non-taxonomic biological entities such as populations or ecological communities, thus, NatureServe refers to the targets of biological conservation as "elements" rather than taxa. The three main categories that are taken into consideration when assigning an element rank are rarity, threats, and trends.

The global rank (G-rank) is a reflection of the overall status of an element throughout its global range:

GX: Presumed Extinct – Not located despite intensive searches and virtually no likelihood of rediscovery.
GH: Possibly Extinct – Known from only historical occurrences but still some hope of rediscovery. Examples of evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species has been searched for unsuccessfully, but not thoroughly enough to presume that it is extinct throughout its range.
G1: Critically Imperiled – At very high risk of extinction due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
G2: Imperiled – At high risk of extinction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
G3: Vulnerable – At moderate risk of extinction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
G4: Apparently Secure – At fairly low risk of extinction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
G5: Secure – At very low risk of extinction due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
GNR: Unranked – Global rank not yet assessed.

The state rank (S-rank) refers to the imperilment status only within California's state boundaries:

SX: Presumed Extirpated – Species is believed to be extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered
SH: Possibly Extirpated – Known from only historical records but still some hope of rediscovery. There is evidence that the species may no longer be present in the state, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.
S1: Critically Imperiled – At very high risk of extirpation in the state due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
S2: Imperiled – At high risk of extirpation in the state due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
S3: Vulnerable – At moderate risk of extirpation in the state due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

S4: Apparently Secure – At a fairly low risk of extirpation in the state due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

Sources:

- CNPS Inventory of Rare and Endangered Plants (CNPS 2021)
- The Jepson Manual: *Vascular Plants of California,* second edition (Baldwin *et al.* 2012).
- RareFind, CDFW, California Natural Diversity Database (CNDDB) (CDFW 2021).
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW, October 2021).
- State and Federally Listed Endangered and Threatened Animals of California (CDFW, October 2021).
- Special Animals List (CDFW, October 2021).
- Life History Accounts (CDFW).
- Sensitive List (BLM)

APPENDIX D

Burrowing Owl
Focused Survey Report

MORENO VALLEY TOWN CENTER PROJECT

MORENO VALLEY, RIVERSIDE COUNTY, CALIFORNIA
Assessor Parcel Numbers 487-470-030 and -031

Burrowing Owl Focused Survey Report

Prepared For:

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714.716.5050

September 2021

MORENO VALLEY TOWN CENTER PROJECT

MORENO VALLEY, RIVERSIDE COUNTY, CALIFORNIA

Burrowing Owl Focused Survey Report

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Director

Thomas J. McGill, Ph.D.
Managing Director

September 2021

Table of Contents

EXHIBITS

APPENDIX

Section 1 Introduction

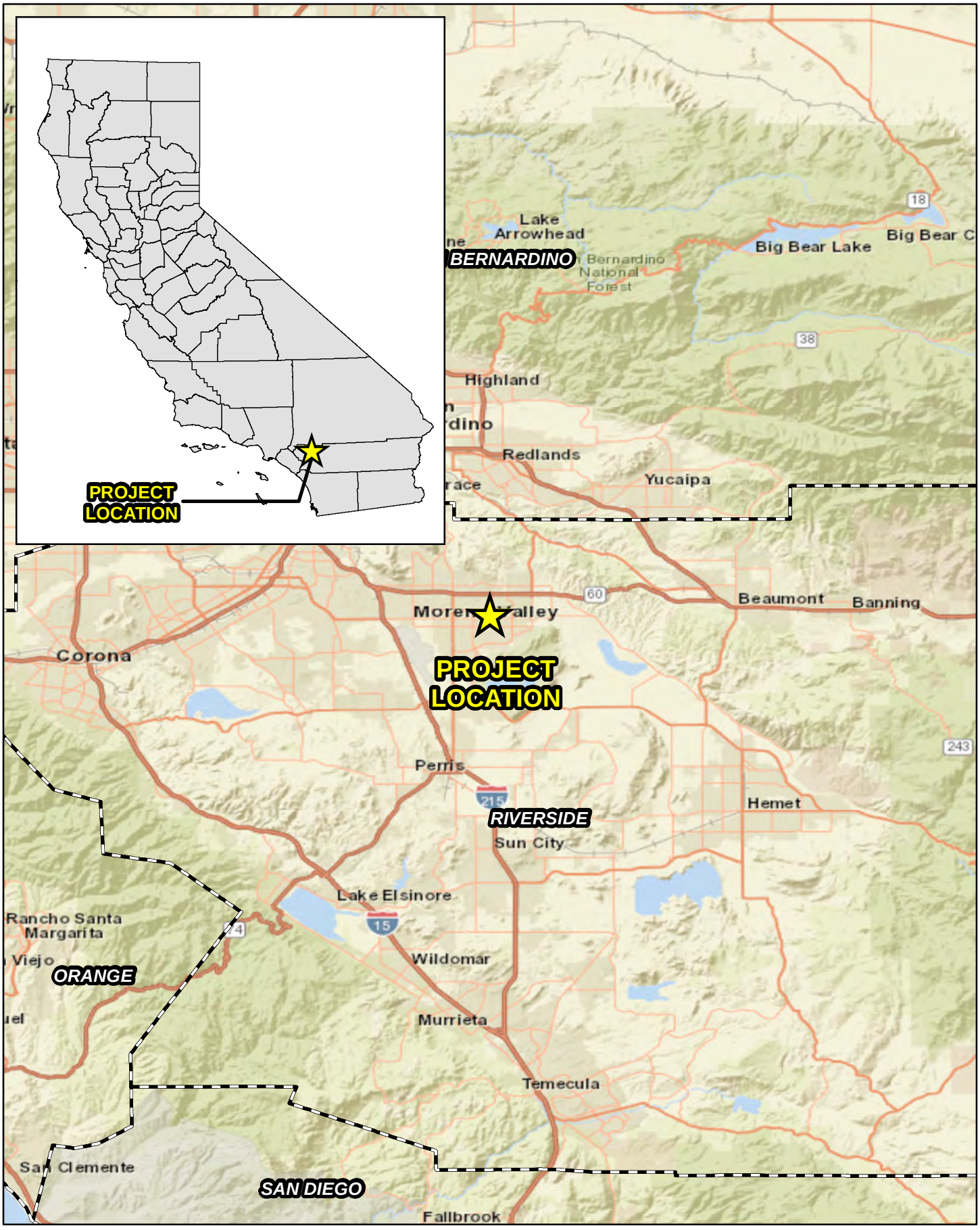
ELMT Consulting (ELMT) conducted a focused burrowing owl (*Athene cunicularia*) survey for the Moreno Valley Town Center Project (project or project site) located in the City of Moreno Valley, Riverside County, California. Biologists Travis J. McGill and Jacob H. Lloyd Davies surveys the project site in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (Environmental Programs Department, 2006). Four (4) separate focused burrowing owl surveys were conducted on August 5, 12, 18, and 24, 2021. All surveys were completed between 0600 and 1000 hours. The surveys were conducted to document the presence/absence of burrowing owl on the project site.

1.1 PROJECT LOCATION

The project site is generally located south of State Route 60, west of State Route 79, north of Lake Perris, and east of Interstate 215 in the City of Moreno Valley, Riverside County, California (Exhibit 1, *Regional Vicinity*). The site is depicted on the Sunnymead quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 9 of Township 3 South, Range 3 West (Exhibit 2, *Site Vicinity*). Specifically, the project site is bounded to the north by Cottonwood Avenue to the south by Alessandro Boulevard, and to the east by Nason Street within Assessor's Parcel Numbers 487-470-030 and -031. Refer to Exhibits 1- 3.

1.2 PROJECT DESCRIPTION

The project proposes the grading for, and construction of, a multi-use development in the City of Moreno Valley.

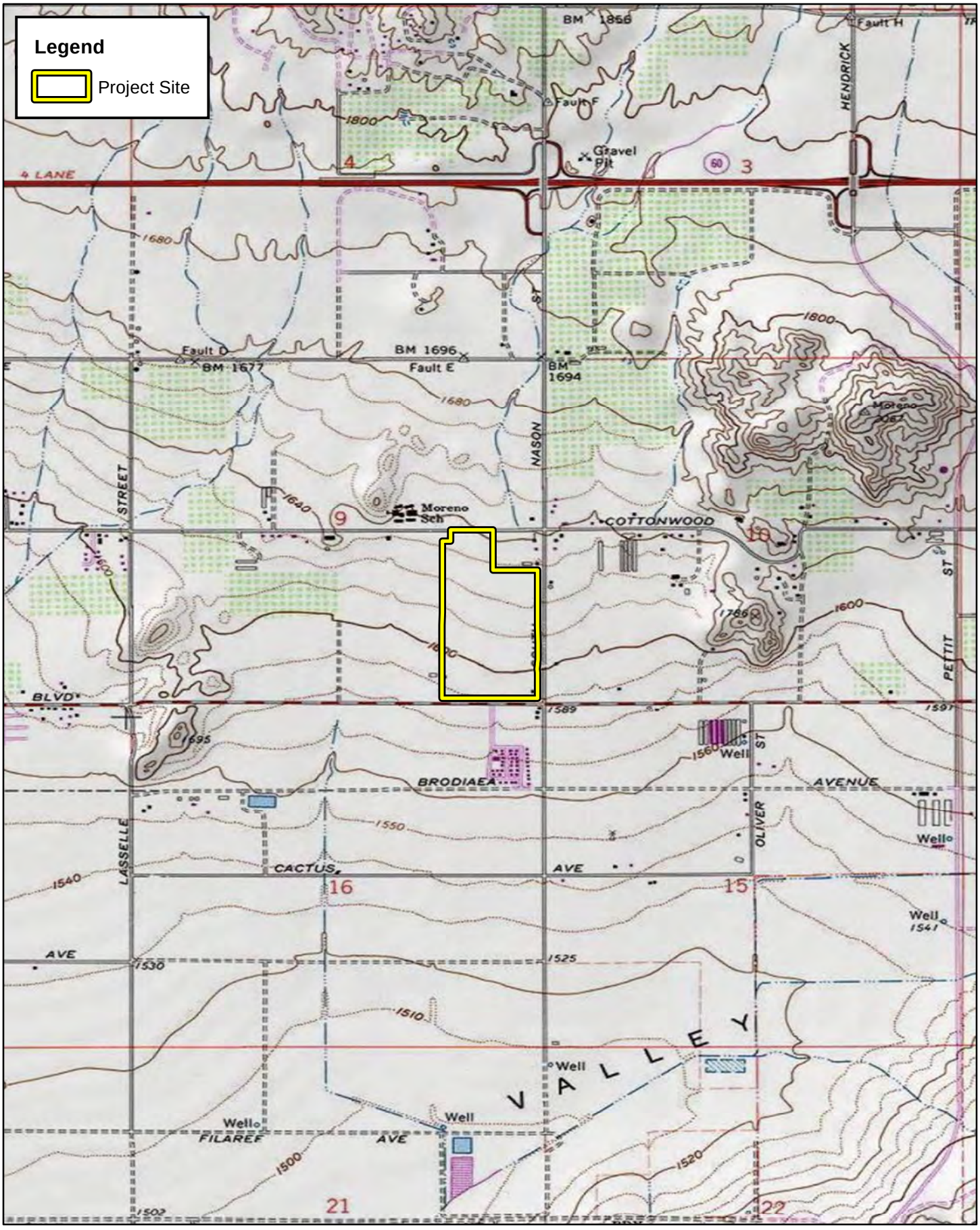


Source: World Street Map, Riverside County

MORENO VALLEY TOWN CENTER PROJECT
BURROWING OWL FOCUSED SURVEY

Regional Vicinity

Exhibit 1



MORENO VALLEY TOWN CENTER PROJECT
BURROWING OWL FOCUSED SURVEY

Site Vicinity

ELMT CONSULTING

0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, Riverside County

Exhibit 2

MORENO VALLEY TOWN CENTER PROJECT
BURROWING OWL FOCUSED SURVEY

Project Site

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, Riverside County

Exhibit 3

Section 2 Species Background

2.1 SPECIES BACKGROUND

The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 1999). Burrowing owls are dependent upon the presence of fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*), whose burrows are used for roosting and nesting (Haug and Didiuk 1993). The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Burrowing owls have crepuscular (dawn and dusk) hunting habits but are often observed perched in or near the burrow entrance during the day. They prey upon invertebrates and small vertebrates (Thomsen 1971) through low vegetation which allows for foraging visibility. The nesting season occurs between February 1 and August 31. Burrowing owl in California may migrate southerly, but often remain in the breeding area during the non-breeding period.

The burrowing owl was once abundant and widely distributed within coastal southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino. A petition was filed to list the California population of the western burrowing owl as an Endangered or Threatened species (Center for Biological Diversity 2003); however, the California Department of Fish and Wildlife (CDFW) declined to list the burrowing owl as either endangered or threatened. The CDFW currently lists the burrowing owl as a California Species of Special Concern.

2.2 REGULATORY FRAMEWORK

The burrowing owl is a resident and migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA reflects agreements made between the U.S., England, Mexico, the former Soviet Union, and Japan to protect all of North America's migratory bird populations. The MBTA protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and collection. The other prohibitions of the MBTA - capture, pursue, hunt, and kill - are inapplicable to nests. The regulatory definition of take, as defined in Title 50 C.F.R. part 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect. Only the verb "collect" applies to nests. It is illegal to collect, possess, and by any means transfer possession of any migratory bird nest. The MBTA prohibits the destruction of a

nest when it contains birds or eggs, and no possession shall occur during the destruction (United States Fish and Wildlife Service, Migratory Bird Permit Memorandum, April 15, 2003). Certain exceptions to this prohibition are included in 50 C.F.R. section 21. Pursuant to CDFW Code section 3513, the Department enforces the MBTA consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

Additionally, burrowing owl is protected under Sections 3503, 3503.3, 3511, and 3513 of the CDFW Code which prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that project-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (March 1 - August 15, annually). CDFW Code Section 3503.5 protects birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks and owls, including burrowing owls) which makes it unlawful to take, posses, or destroy their nest or eggs.

CDFW's 2012 Staff Report on Burrowing Owl Mitigation offers long-term assurances for conservation of this species in exchange for biologically appropriate levels of incidental take and/or habitat loss as defined in the approved plan. California's NCCP Act (FGC §2800 et seq.) governs such plans at the state level, and was designed to conserve species, natural communities, ecosystems, and ecological processes across a jurisdiction or a collection of jurisdictions. Complementary federal HCPs are governed by the Endangered Species Act (7 U.S.C. § 136, 16 U.S.C.§ 1531 et seq.) (ESA). Regional conservation plans (and certain other landscape-level conservation and management plans), may provide conservation for unlisted as well as listed species. Because the geographic scope of NCCPs and HCPs may span many hundreds of thousands of acres, these planning tools have the potential to play a significant role in conservation of burrowing owls, and grasslands and other habitats.

Guidelines for the Implementation of the California Environmental Quality Act (CEQA) provide that a species be considered as endangered or "rare" regardless of appearance on a formal list for the purposes of the CEQA (Guidelines, Section 15380, subsections b and d). CEQA requires a mandatory finding of significance if impacts to threatened or endangered species are likely to occur (Sections 21001(c), 21083. Guidelines 15380, 15064, 15065). Avoidance or mitigation must be presented to reduce impacts to less than significant levels.

2.2.1 MSHCP Section 6.3.2 Additional Survey Needs and Procedures – Burrowing Owl

Under Section 6.3.2 the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) the burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The purpose of Section 6.3.2 of the MSHCP is to provide coverage under the MSHCP for those species for which existing available information was not sufficient, and therefore, survey requirements are incorporated in the MSHCP to provide the level of information necessary for these species to receive coverage (Dudek & Associates, Inc., 2003).

Section 3 Methodology

General weather conditions during each of the surveys were suitable for detections of burrowing owls. The weather during the surveys consisted of cloudy to clear skies with minimal wind, and temperatures ranging from 65 to 80 degrees Fahrenheit (^{o}F). Surveys are not accepted if they are conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90^{o}F. The protocol survey for burrowing owl requires a systematic survey of all areas that provide suitable habitat plus a 150-meter (approximately 500 feet) zone of influence (survey area) on all sides of suitable habitat, where applicable (Exhibit 4, *Survey Area and Suitable Habitat*).

Due to surrounding development and fenced-off private property, a zone of influence was not able to be surveyed by foot to the northeast, north, west, or southwest of the project site. Residential and industrial developments occur north and south of the site, respectively, and do not provide suitable habitat for burrowing owls; therefore, these areas were not surveyed for burrowing owls. The area east of the site is largely undeveloped and surveyed for burrowing owls. The areas northwest, west and southwest of the site were surveyed on foot. Refer to Exhibit 4, *Survey Areas and Suitable Habitat.*

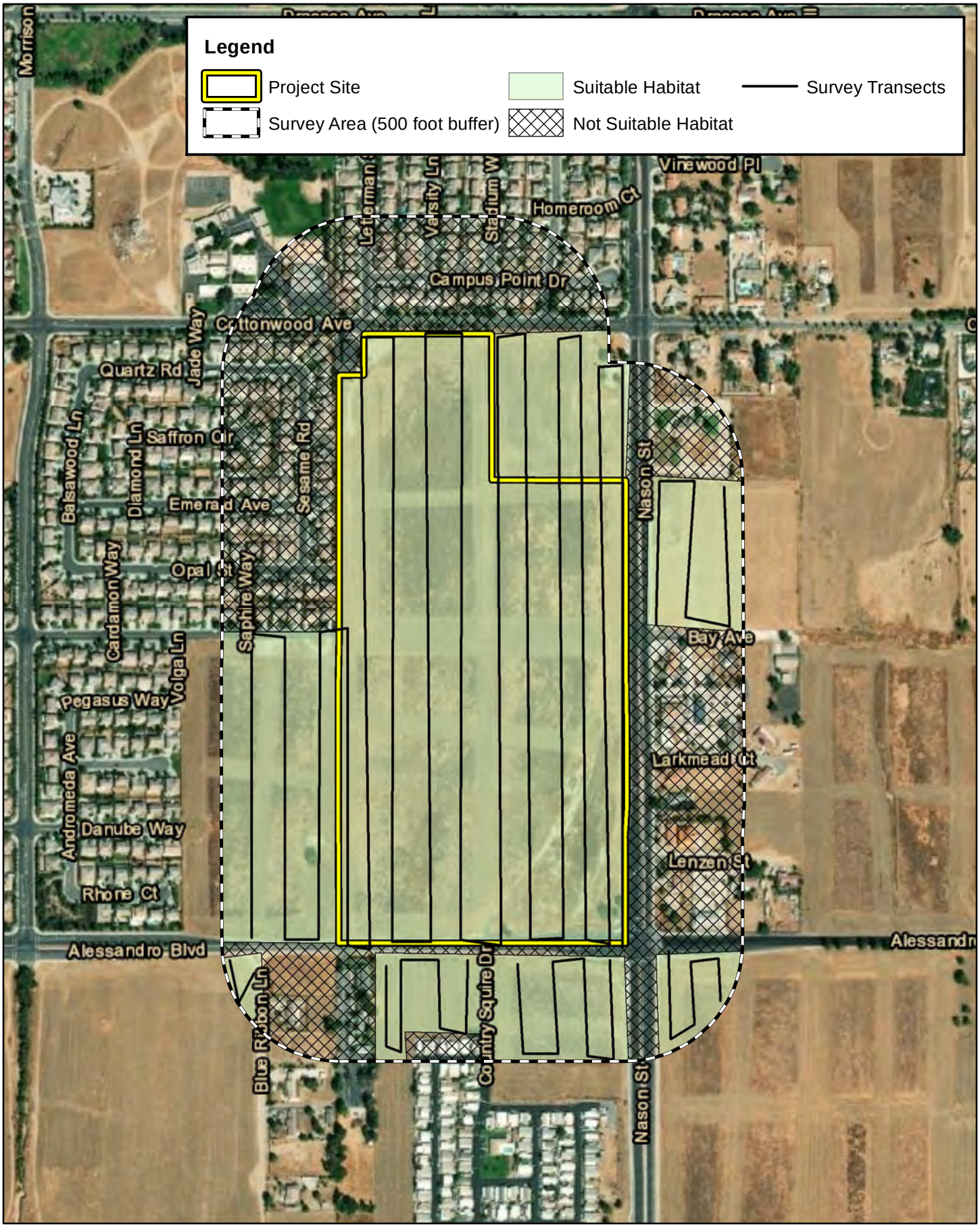
Survey transects on the project site were oriented north to south and were conducted at a maximum of 30-meter (approximately 100 feet) intervals to ensure 100% visual coverage of all areas in suitable habitat on the project site and within the survey area. The focused burrowing owl surveys were conducted during the recognized timeframe (the breeding season is typically March through August) in the morning one hour before sunrise to two hours after sunrise.

Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence. All burrows encountered were examined for shape, scat, pellets, white-wash, feathers, tracks, and prey remains. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed were recorded and mapped, with a hand-held GPS unit, if observed. Methods to detect presence of burrowing owls included direct observation, aural detection, and signs of presence. Binoculars were used to observe distant birds and their activity around potential nesting habitat. During the focused surveys, the survey area was assessed on foot by qualified biologists Travis J. McGill and Jacob H. Lloyd Davies, who area knowledgeable in the habitats and behavior of burrowing owls.

Four focused burrowing owl surveys were conducted on August 5, 12, 18, and 24, 2021. All surveys were completed between 0600 to 1000 hours. The surveys were conducted to document the presence/absence of burrowing owl on the project site.

Table 1: Survey Data

Survey No.	Survey Date	Surveyor	Time	Temperature (˚F)	Cloud Cover	Wind Speed (mph)	Burrowing Owl Detected
1	8/5/21	Jacob Lloyd Davies	0600-0900	71-75	0%	1-3	No
2	8/12/21	Travis McGill	0600-0900	68-72	30%	1-5	No
3	8/18/21	Jacob Lloyd Davies	0630-0930	62-65	100%	1-5	No
4	8/24/21	Jacob Lloyd Davies	0630-0930	73-80	0%	1-5	No



MORENO VALLEY TOWN CENTER PROJECT
BURROWING OWL FOCUSED SURVEY

Survey Area and Suitable Habitat

Exhibit 4

Section 4 Results

4.1 EXISTING CONDITIONS

The project site is generally flat with the exception of the southeast corner, which supports a narrow hill that stretches north from the southern boundary. Elevation on the project site ranges from approximately 1,590 to 1,645 feet above mean sea level. The highest elevation occurs along the northern boundary and the site slopes gently from north to south.

Based on the NRCS USDA Web Soil Survey, the project site is underlain by the following soil units: Greenfield sandy loam (2 to 8 percent slopes, eroded), Hanford coarse sandy loam (2 to 8 percent slopes), and Ramona sandy loam (2 to 5 percent slopes, eroded). Soils on-site have been mechanically disturbed and compacted from historic land uses (i.e. agricultural activities, routine weed abatement, illegal dumping, and staging activities to support surrounding development). Historic aerials show these activities have been ongoing since at least 1966. The hill in the southeast corner of the site was not visually present until 1997, in conjunction with grading and stockpiling activities for surrounding development.

The site is bordered by residential development to the north; residential and commercial development and undeveloped, vacant land to the east; residential development and undeveloped, vacant land to the south; and residential development and undeveloped, vacant land to the west. A remnant foundation and rubble pile occurs adjacent to the northeast corners of the site, where a farmhouse associated with historic agricultural activities once stood.

The project site supports one (1) plant community: non-native grassland. Refer to Exhibit 5, *Vegetation*. In addition, the site also supports one (1) land type that would be classified as disturbed. Refer to Appendix B, *Site Photographs*, for representative site photographs. No native plant communities are expected to be impacted from implementation of the proposed project.

The non-native grassland plant community occurs throughout the project site and is impacted by routine weed abatement. This plant community is dominated by non-native grasses such as ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and foxtail barley (*Hordeum murinum*). Common plant species observed in this community include Mediterranean mustard (*Hirschfeldia incana*), sunflower (*Helianthus annuus*), and jimsonweed (*Datura wrightii*).

Disturbed areas on-site occur along site boundaries, atop and adjacent to the hill in the southeast corner of the site, and along an access road that traverses the site from the southern boundary to the northeast corner. These areas are impacted by routine weed abatement and illegal dumping and primarily support weedy-early successional species such as Mediterranean mustard, horseweed (*Erigeron* sp.), Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), olive (*Olea* sp.), fan palm (*Washintonia robusta*), and Peruvian pepper (*Schinus molle*).

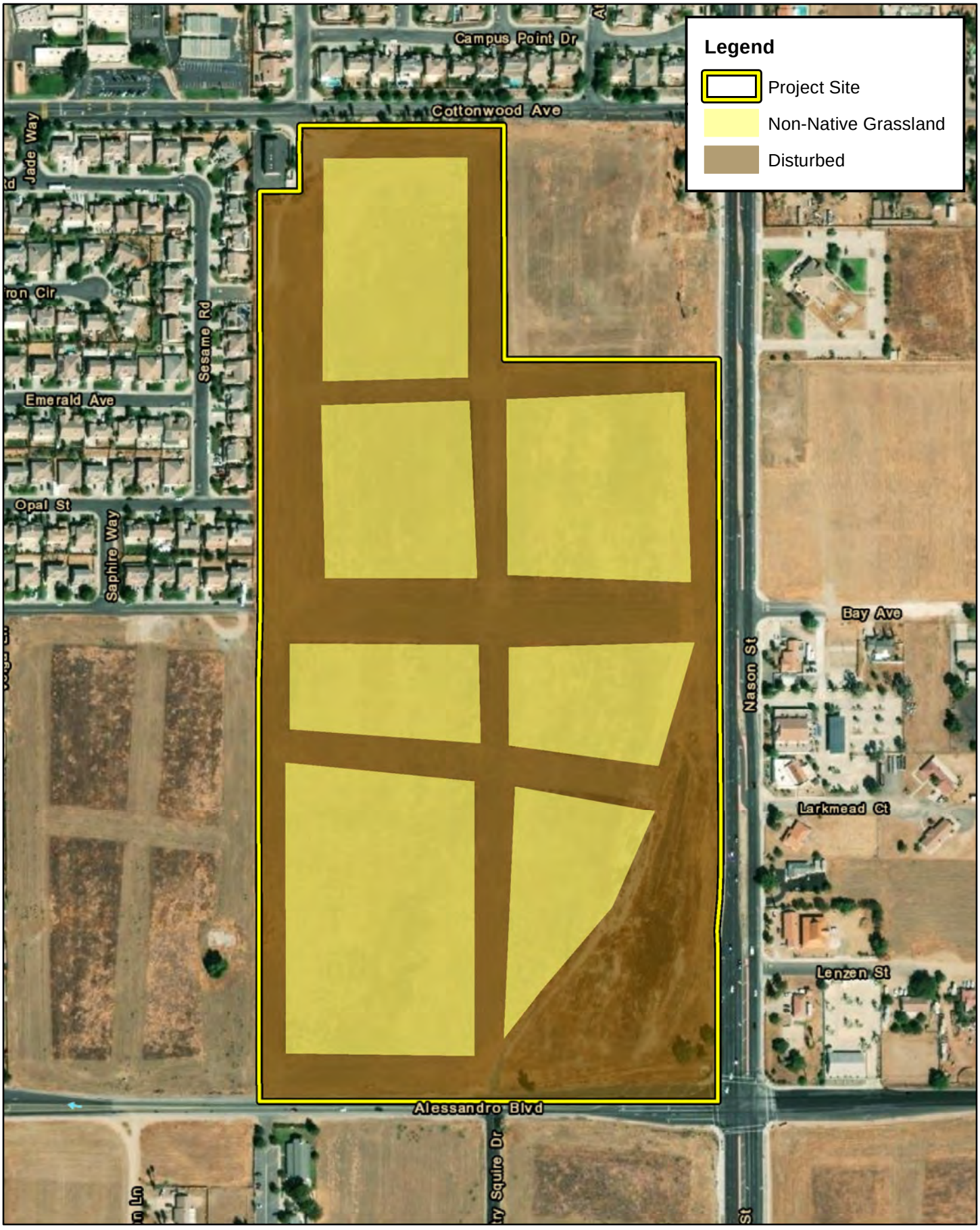
Based on a review of CDFW's California Natural Diversity Database (CNDDB) approximately 4 burrowing owl observations have been recorded within 5 miles of the project site. The nearest

occurrence was approximately 3 miles southwest of the project site. Refer to Exhibit 6, *CNDDB BUOW Observations.*

4.2 BURROWING OWL FOCUSED SURVEY

The project site is unvegetated and/or vegetated with a variety of low-growing plant species that allow for line-of-sight observation favored by burrowing owls. The site also supports California ground squirrel and desert cottontail (*Sylvilagus audubonii*) burrows that provide suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities. However, the southern portion of the site and surrounding area support tall trees that provide perching opportunities for large raptors (i.e., red-tailed hawk) that can prey on burrowing owls. Despite a systematic search of the project site, no burrowing owls or sign (pellets, feathers, castings, or whitewash) were observed on or within 500 feet, where accessible, of the project site during the focused surveys.

Avian species identified during the surveys include Say's phoebe (*Sayornis saya*), common raven (*Corvus corax*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Haemorhous mexicanus*), and European starling (*Sturnus vulgaris*). Refer to Appendix B for a complete list of wildlife species observed during the focused surveys.



MORENO VALLEY TOWN CENTER PROJECT
BURROWING OWL FOCUSED SURVEY

Vegetation

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, Riverside County

Exhibit 5

MORENO VALLEY TOWN CENTER PROJECT
BURROWING OWL FOCUSED SURVEY

CNDDB BUOW Observations

ELMT CONSULTING

0 1 2 4 Miles

Source: ESRI Aerial Imagery, CDFW CNDDB, Riverside County

Exhibit 6

Section 5 Conclusion and Recommendations

Based on the results of the 2021 burrowing owl focused surveys, no burrowing owls or evidence of recent or historic use by burrowing owls were observed on the project site. As a result, burrowing owls are presumed to be absent from the project site. Out of an abundance of caution, and to ensure burrowing owl remain absent from the project site, it is recommended that a 30-day burrowing owl pre-construction clearance survey be conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* prior to any ground disturbing activities. If burrowing owls and/or birds displaying nesting behaviors are observed within the project site during future construction, further review may be needed to ensure compliance with the MSHCP, MBTA and Fish and Game Code.

Section 6 References

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Coulombe, H.N. 1971. *Behavior and population ecology of the burrowing owl* (*Speotyto cunicularia) in the Imperial Valley of California.* Condor 73: 162-176.

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Appendix A Site Photographs

Photograph 1: From the northwest corner of the project site looking south along the western boundary.

Photograph 2: From the northwest corner of the project site looking east along the northern boundary.

Photograph 3: From the northeast corner of the project site at Cottonwood Avenue looking west along the northern boundary.

Photograph 4: From the northeast corner of the project site at Cottonwood Avenue looking west along the northern boundary.

Photograph 5: From the northeast corner of the project site at Nason Street looking west along the northern boundary. The adjacent foundation on the right is associated with the farmhouse that historically occurred off-site to the northeast.

Photograph 6: From the northeast corner of the project site at Nason Street looking south along the eastern boundary.

Photograph 7: From atop the hill near the southeast corner of the project site looking north along the eastern boundary.

Photograph 8: From atop the hill near the southeast corner of the project site looking west along the southern boundary.

Photograph 9: From the southwest corner of the project site looking east along the southern boundary.

Photograph 10: From the southwest corner of the project site looking north along the western boundary.

Photograph 11: Looking south towards the southeast corner of the project site.

Photograph 12: A suitable burrow (>4 inches) within a rubble pile near the southwest corner of the project site.

Appendix B Fauna Compendium

Table B-1: Wildlife Species

Scientific Name	Common Name
Aves	**Birds**
Buteo jamaicensis	red-tailed hawk
Corvus corax	common raven
Falco sparverius	American kestrel
Haemorhous mexicanus	house finch
Sayornis saya	Say's phoebe
Sturnus vulgaris	European starling
Mammalia	**Mammals**
Canis latrans	coyote
Felix catus	domestic cat
Otospermophilus beecheyi	California ground squirrel
Sylvilagus audubonii	Audubon's cottontail
Thomomys bottae	Botta's pocket gopher
Reptilia	**Reptiles**
Uta stansburiana elegans	western side-blotched lizard