HABITAT ASSESSMENT INCLUDING THE RESULTS OF A FOCUSED BURROWING OWL SURVEY AND OVERVIEW MSHCP CONSISTENCY

Tentative Tract Map 37858
(APN 478-090-018, 478-090-024, and 478-090-025)
In the
City of Moreno Valley, County of Riverside
USGS 7.5-minute Sunnymead topographic quadrangle map in Section 14 of Township 3 South, Range 3 West

Prepared By:

GONZALES
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Report Date: March 1, 2020
Updated per comments January 22, 2021

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CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: January 22, 2021 Signed: 

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

Permit #: TE060175-5 Signed: 

TITLE PAGE

A. Date report prepared: March 1, 2020

B. Report Title: HABITAT ASSESSMENT INCLUDING THE RESULTS OF FOCUSED BURROWING OWL AND OVERVIEW MSHCP CONSISTENCY for Tentative Tract Map 37858 (APN 478-090-018, 478-090-024, and 478-090-025) In the City of Moreno Valley, County of Riverside

C. Project site location: USGS 7.5-minute topographic Sunnymead Quadrangle Township 3 South, Range 3 West, portions of Section 14

D. Owner/Applicant:
Roger Hobbs, President
RC Hobbs Companies
1428 E. Chapman Avenue
Orange, CA 92866

E. Principal Investigator(s): Teresa Gonzales and Paul Gonzales
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San Jacinto, CA 92583
Phone: 760.777-1621

G. Name and phone number of person preparing report and of all persons who performed fieldwork on the site

Name of Person	Role on project
Teresa Gonzales	Prepared report and performed fieldwork
Paul Gonzales	Performed fieldwork

This document should be cited as:
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ACRONYMS AND ABBREVIATIONS

BMPs	best management practices
BUOW	burrowing owl
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
DEIR	Draft Environmental Impact Report
ESA	Endangered Species Act
° F	degrees Fahrenheit
FEIR	Final Environmental Impact Report
Ft^2	square feet
GEC	Gonzales Environmental Consulting, LLC
GIS	Geographic Information System
GPS	Global Positioning System
HCP	Habitat Conservation Plan
HMMP	Habitat Mitigation and Monitoring Plan
JD	Jurisdictional Determination
MBTA	Migratory Bird Treaty Act
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
Plan	Western Riverside County Multiple Species Habitat Conservation Plan
PQP	Public/Quasi-Public
RCA	Regional Conservation Authority
RCFCD	Riverside County Flood Control District
RWQCB	Regional Water Quality Control Board
SKR	Stephens' kangaroo rat
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

UWIG	Urban/Wildlands Interface Guidelines
WOS	Waters of the State
WQMP	Water Quality Management Plan
WUS	Waters of the U.S.

SUMMARY

In January and February 2020, Teresa Gonzales and Paul Gonzales of Gonzales Environmental Consulting, LLC (GEC) conducted biological resources assessment of the project site Tentative Tract Map 37858 [APN 478-090-018 (3.16 acres), 478-090-024 (0.90 acres), and 478-090-025 (0.76 acres)] (site). The purpose of our assessment was to characterize biological resources on the site, and to identify any biological constraints to land-use changes.

Western Riverside Multiple Species Habitat Conservation Plan

The site is in within Reche Canyon/Badlands Area Plan of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). **No Criteria cell, Core and Linkage are located in or around the project area**. Habitat assessments are required for burrowing owl as it is MSHCP Burrowing Owl Survey Area.

Based on biological resource assessments, the Riverside County Integrated Project Conservation Report Generator, and maps of MSHCP survey areas, it was determined that the following studies would be required for the proposed Project's consistency with the MSHCP:

- Focused surveys for the burrowing owl (*Athene cunicularia*).

Vegetation

The vegetation communities within the project area are California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*). Previous and current anthropogenic activities and invasion of nonnative plant species have contributed to the disturbed condition of many vegetation communities within the project vicinity.

Endangered, Threatened and Sensitive Species

A few special-status plant and animal species have the potential to occur on site. None were found on the site.

Summary of Project Effects

Participation in the MSHCP, seasonal restrictions, compliance with local tree ordinances, implementation of mitigation measures, and compliance with local, state, and federal laws will allow the proposed project to proceed as proposed without significant impacts to biological resources.

The project area supports a low-moderate diversity of wildlife species due to the high level of disturbance and development in the vicinity. Many of the wildlife species observed or detected in the project area are commonly found in the urban interface or in disturbed habitat.

There is suitable habitat for occupation by burrowing owl (BUOW) present in the project area. A general habitat assessment and focused surveys were conducted in 2020. No

BUOWs, sign or burrows were observed. A pre-construction survey of all suitable habitats will be conducted 30 days or less prior to the initiation of construction to ensure that no BUOW have occupied the project area. If active burrows are detected, avoidance and minimization measures will be implemented including, but not limited to, establishing avoidance buffers and use of biological monitors during construction activities.

Increases in noise, construction traffic, and human activities during construction activities may temporarily deter movement of wildlife within the project vicinity. However, significant impacts to wildlife corridors or nursery sites are not expected from construction or operational activities of the proposed project.

During construction, as with any project, there is the possibility that sensitive species, including those Adequately Conserved or those with additional mitigation requirements, could be encountered. In this event, the project proponent will coordinate directly with RCA and resource agencies (if appropriate) to determine any additional processing and mitigation as needed.

The proposed project is consistent with the MSHCP Reserve Assembly goals and project relationship for Criteria Areas/Cells in the Reche Canyon/Badlands Area Plan. **No Criteria cell, Core and Linkage are located in or around the project area.** The proposed project would not impede the functions and values nor the goals and objectives of the MSHCP.

I. INTRODUCTION

This report was prepared by Gonzales Environmental Consulting, LLC (GEC) for RC Hobbs Companies. The project is located in the City of Moreno Valley of Riverside County, California.

The report summarizes results of literature review to determine the potential presence or absence of species of concern within the project vicinity and the results of the 2020 general biological survey as well as the 2020 field investigations conducted by GEC. In addition, the report provides an assessment of the potential impacts of the project on the biological resources on the project site.

GEC conducted biological surveys of the project site in 2020. This report documents the results of the surveys, provides a summary of the technical studies (attached as Technical Appendices), analyzes the effects of the proposed project on the identified biological resources and recommends mitigation measures for identified impacts.

Project Location

The project site (site) discussed in this report is located north of Cactus Avenue, west of Bradshaw Circle in the City of Moreno Valley, Riverside County, California. See Figures 1.1 and 1.2.

The site is located within San Bernardino Meridian in a portion of Section 14, Township 3 South, Range 3 West, City of Moreno Valley, Riverside County, California (Figures 1.1, 1.2 and 1.3). This location is shown on the Sunnymead, California 7.5-minute U.S. Geological Survey (USGS) quadrangle (Sunnymead Photorevised 1980); page 718 Grid D6 of the Riverside County Street Guide and Directory (Thomas Brothers Maps Design 2013). The approximate center of the site is located at 33.911044°, -117.170339°.

Elevation of the assessment area ranges from a from a low of 1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land. The project site has been impacted by anthropogenic activities. Land use in the surrounding area varies between disturbed undeveloped areas, semi-rural and single family residential.

The primary vegetation communities in the project area are California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*) Previous and current anthropogenic activities and invasion of nonnative plant species have contributed to the disturbed condition of many vegetation communities within the project vicinity.

PROJECT DESCRIPTION

The site is comprised of approximately 4.82 acres of disturbed property situated in the City of Moreno Valley in Riverside County, California.

1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land.

TR 37858 proposes the subdivision of approximately 4.81 acres of undeveloped land into 38 residential numbered lots, lettered lots (WQMP basin, wall drainage, landscape area and recreation-open space), and streets. Access to the tract can be taken from Bradshaw Circle.

Estimated Duration of Construction:
Estimated duration of construction is 18 months.

Full Avoidance Infeasibility:
The project, as designed proposes to disturb only where required in order to allow for subdivision of the surrounding property. Where avoidance was not possible, mitigation of these impacts is being provided offsite as a part of this project.

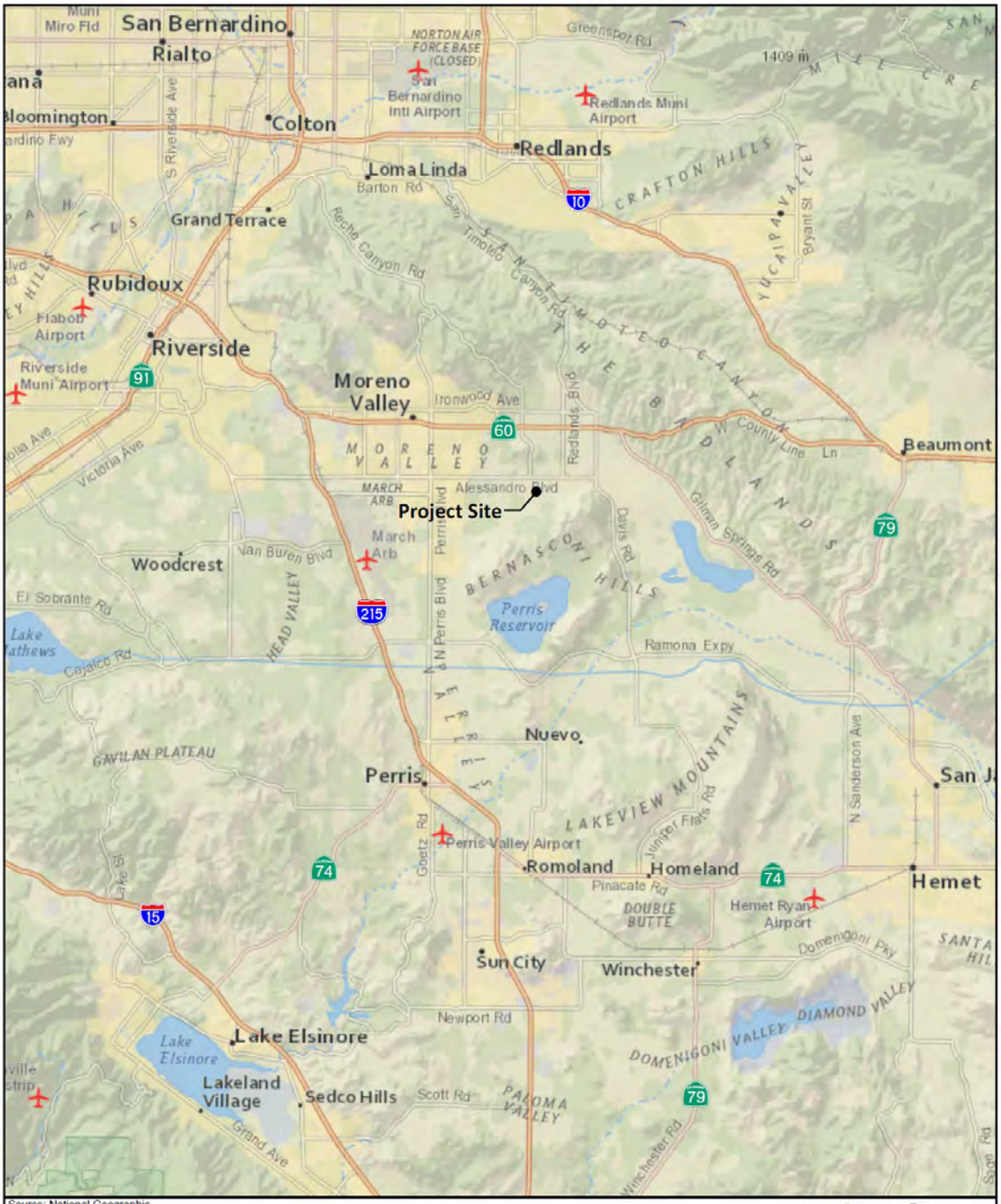
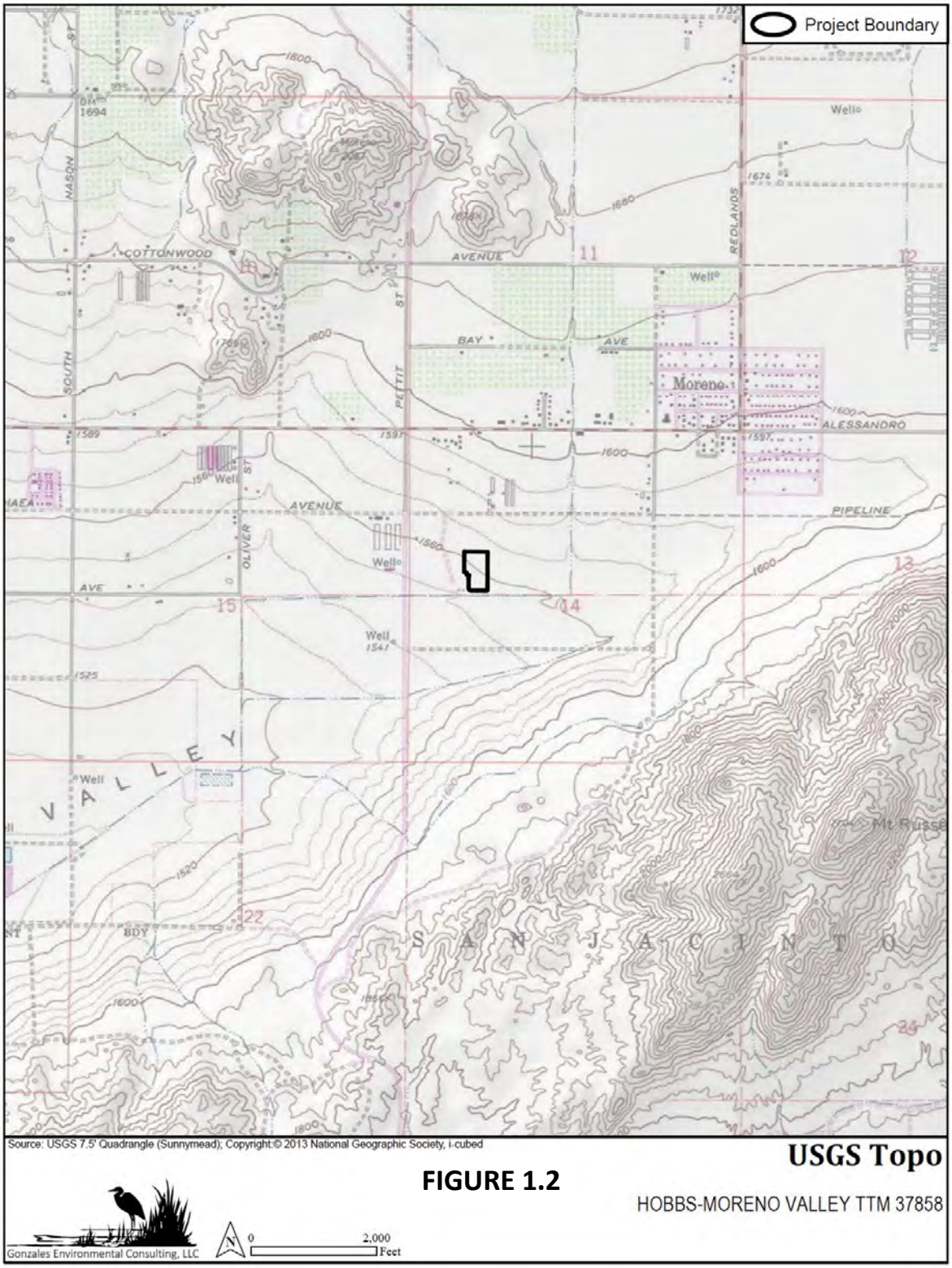


FIGURE 1.1

Regional Map

HOBBS-MORENO VALLEY TTM 37858


Project Boundary
COTTONWOOD AVENUE
BAY AVE
Moreno
ALESSANDRO
PIPELINE
AVENUE
AVE
NASON
SOUTH
PETTIT ST
OLIVER ST
REDLANDS
Well
VALLEY
SAN JACINTO
Mt Russe
Source: USGS 7.5' Quadrangle (Sunnymead); Copyright:© 2013 National Geographic Society, i-cubed
USGS Topo
HOBBS-MORENO VALLEY TTM 37858
Gonzales Environmental Consulting, LLC
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2,000
Feet

FIGURE 1.2

FIGURE 1.3

Aerial Photograph

HOBBS-MORENO VALLEY TTM 37858

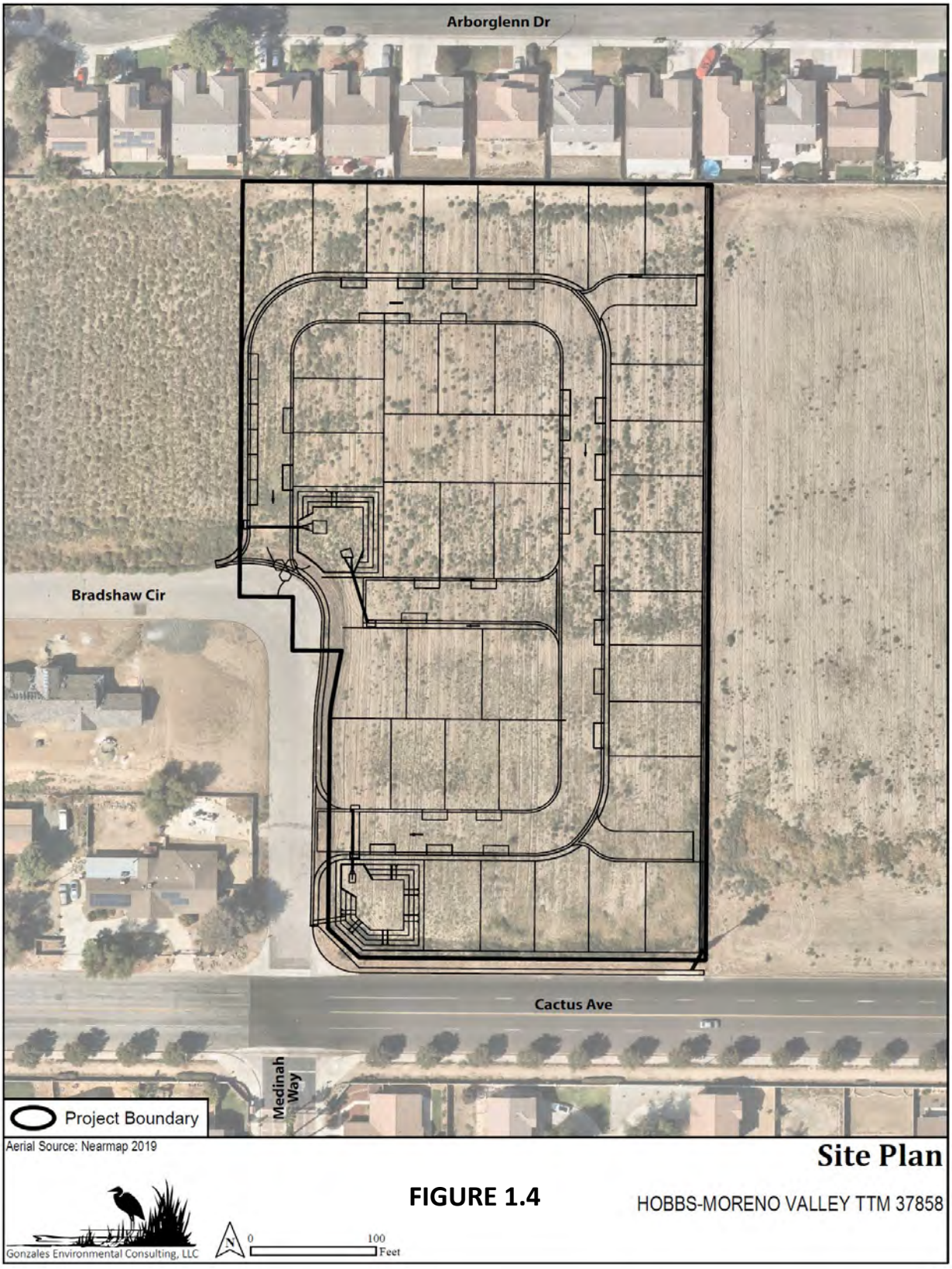

Arborglenn Dr
Bradshaw Cir
Cactus Ave
Medinah Way
Project Boundary
Aerial Source: Nearmap 2019
Gonzales Environmental Consulting, LLC
N
0
100
Feet
Site Plan
HOBBS-MORENO VALLEY TTM 37858

FIGURE 1.4

The project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

REGIONAL LAND USE AND CONSERVATION PLANS

Riverside County Multi-Species Habitat Conservation Plan (MSHCP)

The proposed project area occurs in undeveloped lands within the City of Moreno Valley. It contains a combination of native and disturbed lands.

The proposed project is located within the boundaries of the MSHCP. The MSHCP allows for the Permittees within the Plan area to manage local land-use decisions and maintain a strong economic climate while addressing the requirements of the state and federal Endangered Species Acts (ESAs). Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 5,000 acres and a mechanism to fund and implement the reserve system (County of Riverside 2003). Take of Stephen's kangaroo rat (*Dipodomys stephensi*; SKR) will be processed directly through the SKR Habitat Conservation Plan (HCP) leaving the MSHCP to cover incidental take, as needed, for 145 species potentially impacted by the proposed project.

The importance of the Plan to the proposed Project and other projects within its boundaries is that it streamlines the environmental review and permitting processes for projects that affect biological resources. This is accomplished by having established survey and analysis requirements that directly support the identified conservation goals and objectives of the Plan. The goals and objectives of the Plan ultimately result in the development of a comprehensive biological resources reserve system providing long-term conservation of biological resources. The overall benefit to a project proponent is the use of existing state and federal take permits for listed species, with built-in mitigation measures, so that individual applicants need not seek their own permits from the USFWS and CDFW in accordance with the Federal ESA and California ESA take authorizations.

MSHCP RESERVE ASSEMBLY ANALYSIS

Area Plans, Subunits and Criteria Cells

The project area is located in MSHCP Reche Canyon/Badlands Area Plan. The Area Plan is further divided into Subunits that contain Criteria Cells that are targeted for conservation. Target conservation acreages have been established along with a description of the planning species, biological issues and considerations, and criteria for each Subunit within the MSHCP. In some areas, Cells that have a common habitat goal are combined forming a Cell Group. The design for conservation involves core areas of habitat, blocks of habitat,

and linkages between the core and block areas. The project area is not in a Subunit or Criteria Cell. The following specific target planning species and conservation goals are included within the biological considerations for Reche Canyon/Badlands Area Plan:

Planning Species

- Bell's sage sparrow
- Cactus wren
- Loggerhead Shrike
- Southern California rufous-crowned sparrow
- Bobcat
- Stephens' kangaroo rat
- Nevin's barberry
- Los Angeles pocket mouse
- mountain lion
- San Bernardino kangaroo rat
- American bittern
- black-crowned night heron
- burrowing owl
- California horned lark
- double-crested cormorant
- mountain plover
- northern harrier
- osprey
- peregrine falcon
- prairie falcon
- tricolored blackbird
- white-faced ibis
- white-tailed kite
- California orcutt grass
- Coulter's goldfields
- Davidson's saltscale
- San Jacinto Valley crownscale
- smooth tarplant
- spreading navarretia
- thread-leaved brodiaea
- vernal barley
- Wright's trichocoronis

Biological Issues and Considerations:

- Conserve existing, intact upland Habitat augmenting existing Box Springs Mountain Reserve.
- Conserve existing populations of Bell's sage sparrow and cactus wren.
- Maintain linkage area to Box Springs Mountain for bobcat.
- Conserve upland Habitat in the Badlands.
- Maintain a connection between Blue Mountain to the west and Reche Canyon to the east.

- Conserve existing populations of Bell's sage sparrow.
- Maintain Core Area for bobcat.
- Maintain Core and Linkage Habitat for mountain lion.
- Determine presence of potential small population of San Bernardino kangaroo rat.
- Determine presence of potential Core Area for Los Angeles pocket mouse.
- Maintain Core Area for Nevin's barberry.
- Conserve large habitat blocks in the Badlands.
- Maintain Core Area for bobcat.
- Maintain Core and Linkage Habitat for mountain lion.
- Maintain linkage area to San Jacinto Wildlife Area for Stephens' kangaroo rat.
- Determine potential for scattered populations of San Bernardino kangaroo rat along San Timoteo Creek.
- Determine presence of potential Core Area for Los Angeles pocket mouse in San Timoteo Creek and tributaries and Badlands.
- Conserve alkali playa and other Habitat to augment existing Conservation in the San Jacinto Wildlife Area and Mystic Lake.
- Conserve existing vernal pool complexes associated with the San Jacinto River floodplain, in the Mystic Lake/San Jacinto Wildlife Area. Conservation should focus on vernal pool surface area and supporting watersheds.
- Provide for a connection of intact Habitat between San Jacinto Wildlife Area/Mystic Lake to adjacent Badlands area to the north.
- Conserve Willow-Domino-Travers soils supporting sensitive plants such as San Jacinto Valley crownscale, Davidson's saltscale, Coulter's goldfields, spreading navarretia, vernal barley and Wright's trichocoronis.
- Provide for and maintain a continuous Linkage along the San Jacinto River from the southern boundary of the Reche Canyon/Badlands Area Plan to the southeastern Area Plan boundary.
- Maintain linkage area for bobcat.
- Maintain linkage area for Stephens' kangaroo rat to San Jacinto Wildlife Area.
- Determine presence of potential Core Area for Los Angeles pocket mouse in connection between Badlands and San Jacinto Wildlife area.

Cores and Linkages within Conservation Area

MSHCP Conservation Area is comprised of a variety of existing and proposed cores, extensions of existing cores, linkages, constrained linkages and non-contiguous habitat blocks. These features are generally referenced as cores and linkages. A Core is a block of habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species. Although a more typical definition is population-related and refers to a single species, in the MSHCP this term is habitat-related because of the multi-species nature of the MSHCP Plan. An MSHCP linkage is defined as a connection between Core Areas with adequate size, configuration and vegetation characteristics to generally provide for "live-in" habitat and/or provide for genetic flow for identified planning species. A constrained linkage is a constricted connection expected to provide for movement of identified planning species between Core Areas, where options for assembly of the connection are limited due to existing

patterns of use. Areas identified as linkages in MSHCP may provide movement habitat but not live-in habitat for some species, thereby functioning more as movement corridors.

Project site is not in a Criteria Cell. There are no proposed cores or linkages within the project area.

PUBLIC/QUASI PUBLIC CONSERVED LANDS

The project site is outside of PQP lands. There are no Public/Quasi Public (PQP) land(s) within the immediate area.

MSHCP SURVEY REQUIREMENTS

MSHCP survey areas for the proposed project were identified by conducting an initial search of the RCA MSHCP Information Map (RCA 2020). As a result, the study area was identified to be located within the burrowing owl survey area.

TABLE 2.1

MSHCP PROJECT REVIEW CHECKLIST

Checklist	Yes	No
Is the project located in a Criteria Area or Public/Quasi-Public Land?		✓
Is the project located in Criteria Area Plant Survey Area?		✓
Is the project located in Criteria Area Amphibian Survey Area?		✓
Is the project located in Criteria Area Mammal Survey Area?		✓
Is the project located in Narrow Endemic Plant Species Survey Area?		✓
Are riverine/riparian/wetland habitats or vernal pools present?		✓
Is the project located in Burrowing Owl Survey Area?	✓	
Is the project located in a Special Linkage Area?		✓

MSHCP SECTION 6

Section 6 of the MSHCP provides provision for MSHCP implementation. Two particular subsections of this section are relevant to the proposed project:

- *6.1.2 Protection of Species Associated with Riparian/Riverine areas and Vernal Pools*
- *6.1.3 Protection of Narrow Endemic Plant Species*
- *6.1.4 Guidelines Pertaining to the Urban/Wildlands Interface (relevant)*
- *6.3.2 Additional Survey Needs (relevant)*

The MSHCP covers 146 species, 38 of which require additional surveys if the proposed project occurs in the specific survey area for a species. As noted in Table 4 the proposed project occurs within the burrowing owl survey areas. The project area does not traverse *Riparian/Riverine* and *Vernal Pool* habitats as defined by the MSHCP. Based on biological resource assessments, the RCIP Conservation Report Generator, and maps of MSHCP survey areas, it was determined that surveys for *Riparian/Riverine* habitats, *Vernal Pools*,

and associated species are not required pursuant to *Sections 6.1.2, 6.1.3, and 6.3.2* of the MSHCP.

Section 6.1.3 of the MSHCP describes the 14 Narrow Endemic Plant Species and the procedures necessary for surveying, mapping and documenting these species. In addition to the Narrow Endemic Plant Species listed in *Section 6.1.3*, additional surveys may be needed for certain species listed in *Section 6.3.2* in conjunction with Plan implementation in order to achieve coverage for these species. These species are referred to as "Criteria Area Species". Furthermore, per *Section 6.1.2* of the MSHCP, if potential *Riparian/Riverine*, and/or *Vernal Pool* habitat (as defined by the MSHCP) occurs within the project area, additional surveys are necessary for specific species that have potential to occur within these habitats.

The MSHCP does not supersede existing federal and state regulations covering lakes, streams, vernal pools, and other wetland areas. Thus, projects must comply with existing regulations for these aquatic resources pursuant to Clean Water Act (CWA) and California Fish and Game Code (CFGC). However, pursuant to the MSHCP, an assessment of the potentially significant effects of projects on Riparian/Riverine areas, and Vernal Pools as it relates to habitat functions and values for MSHCP-covered species is required. If an avoidance alternative is not feasible and a more practicable alternative is selected instead, a DBESP would be provided to ensure replacement of any lost functions and values of habitat as it relates to the needs of Covered Species that rely on that habitat.
Section 6.1.2 of the MSHCP defines *Riparian/Riverine* and *Vernal Pool* habitats as follows:

Riparian/Riverine Areas: are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or unvegetated, ephemerals that transport water supporting downstream resources in the MSHCP Conservation Area.

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. Obligate and facultative wetland plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

In addition to mapping *Vernal Pools*, the MSHCP requires mapping of stock ponds, ephemeral pools, and other features which may be suitable habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Brachinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae).*

The MSHCP describes a strategy of impact avoidance, minimization, and mitigation for these resources and further requires that long-term conservation of these areas is

assured, and recommends that indirect impacts be reviewed to provide protection for these areas.

Section 6.1.4 of the MSHCP describes a process to ensure that projects located outside of, but adjacent to, the Conservation Area do not undermine conservation planning objectives of the MSHCP. This process is called the Urban/Wildlands Interface Guidelines (UWIG).

"Future Development in proximity to the MSHCP Conservation Area may result in Edge Effects that will adversely affect biological resources within the MSHCP Conservation Area. To minimize such Edge Effects, the following guidelines shall be implemented in conjunction with review of individual public and private Development projects in proximity to the MSHCP Conservation Area."

Specific elements to be considered in UWIG compliance include:

- Drainage
- Toxics
- Lighting
- Noise
- Invasives
- Barriers
- Grading and land development

As stated in the MSHCP:*"Existing local regulations are generally in place that address the issues presented in this section. Specifically, the County of Riverside and the 18 Cities within the MSHCP Plan Area have approved general plans, zoning ordinances and policies that include mechanisms to regulate the development of land. In addition, project review and impact mitigation that are currently provided through the CEQA process address these issues."* UWIG compliance, therefore, relies heavily on the application of Standard Best Management Practices (BMPs) during site development and project operation. These BMPs can be found in *Appendix C* of the MSHCP. Projects must accordingly demonstrate that they will not adversely affect any Conservation Area and must adequately consider the elements listed above per the UWIG.

MSHCP TABLE 9-3 REQUIREMENTS TO BE MET FOR 28 SPECIES PRIOR TO INCLUDING THOSE SPECIES ON THE LIST OF COVERED SPECIES ADEQUATELY CONSERVED

Of the 146 Covered Species addressed in the MSHCP, 118 species are considered to be Adequately Conserved. The remaining 28 Covered Species will be considered to be adequately conserved when certain conservation requirements are met (by RCA) as identified in the species-specific conservation objectives for those species. For 16 of the 28 species, particular species-specific conservation objectives, which are identified in *Table 9-3* of the MSHCP, must be satisfied to shift those particular species to the list of Covered Species Adequately Conserved.

TABLE 2.2

MSHCP SECTION 6 SPECIES LIST

MSHCP Section	Species
Section 6.1.2 Riparian/ Riverine and Vernal Pools	***Plants:*** Brand's phacelia, California orcutt grass, California black walnut, coulter's Matilija poppy, Engelmann oak, fish's milkwort, graceful tarplant, lemon lily, Mojave tarplant, mud nama, ocellated Humboldt lily, orcutt's brodiaea, parish's meadowfoam, prostrate navarretia, San Diego button-celery, San Jacinto Valley crownscale, San Miguel savory, Santa Ana river woolly-star, slender-horned spine flower, smooth tarplant, spreading navarretia, thread-leaved brodiaea, and vernal barley. ***Invertebrates:*** Riverside fairy shrimp and vernal pool fairy shrimp ***Fish:*** Santa Ana sucker
Section 6.1.3 Narrow Endemic Plant Species	Brand's phacelia, California Orcutt grass, Hammitt's clay-cress, Johnston's rockcress, many-stemmed dudleya, Munz's mariposa lily, Munz's onion, San Diego ambrosia, San Jacinto Mountains bedstraw, San Miguel savory (Santa Rosa Plateau, Steele Rock), slender-horned spine flower, spreading navarretia, Wright's trichocoronis, and Yucaipa onion.
Section 6.3.2 Additional Survey Needs and Procedures	***Plants*:*** Coulter's goldfields, Davidson's saltscale, heart-leaved pitcher sage, little mud nama, Nevin's barberry, Parish's brittlescale, prostrate navarretia, round-leaved filaree, San Jacinto Valley crownscale, smooth tarplant, thread-leaved, and Vail Lakeceanothus. ***Amphibians*:***arroyo toad, mountain yellow-legged frog, and California red-legged frog ***Birds:*** burrowing owl ***Mammals*:*** Aguanga kangaroo rat, San Bernardino kangaroo rat, Los Angeles pocket mouse

*Note: Project does not occur within the plants, amphibian, fish and mammal species survey areas.

MSHCP Consistency Analysis has been added as an appendix to this report.

III. SURVEY METHODS

For the development of this document, a systematic approach was taken to identify and characterize biological resources, including vegetation community types, and special status plant and animal species in the project area. The biological resource study area is defined as the area either directly or indirectly impacted by the project. Records of known occurrences were reviewed to identify those plant and wildlife species that may occur in the project area. Those records were then compared with federal or state listed threatened, endangered, or special status species. General biological surveys; vegetation mapping; and surveys for special status wildlife and plant species for the project were conducted. Methods that were used during these surveys are summarized by resource type in the following sections.

Records Search

Preliminary investigations included review of information obtained from the USFWS, and CDFW; literature searches; examination of aerial photographs; and database searches including California Native Plant Society (CNPS), the California Natural Diversity Data Base (CNDDB) records, and sensitive species accounts for Riverside County. Reviewed environmental documents included Environmental Impact Reports prepared for other projects in the vicinity. The following resources were used in background research and during field surveys:

- Topographic maps (USGS 7.5 minute quadrangle)
- Aerial photos
- California Natural Diversity Database (CDFW 2020)
- USFWS sensitive species occurrence database (USFWS 2020)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2020)
- Western Riverside Area, California Soil Survey (U.S. Department of Agriculture [USDA] 1971)
- Volume 1, Parts I and II of the MSHCP (County of Riverside 2003)
- County of Riverside Conservation Summary Report Generator (County of Riverside 2017)

A list of special status species was compiled, including all species in the project area that were:

Listed as endangered or threatened, proposed for listing, or candidates for listing under the Federal Endangered Species Act (FESA);

Listed as endangered or threatened, or candidates for listing under the California Endangered Species Act (CESA);

Included in one of the CDFW publications on species of special concern;

“Fully protected” by the State of California;

Included in the CNPS compilation; or

Identified as plants meeting the definition of rare or endangered under CEQA.

The information provided by these agencies included both regional and site-specific data on sensitive species. These species are listed in Table 3.4.
Appendix F presents a list of special-status species that were determined to have potential to occur within the project area based on literature and database review, as well as initial habitat assessments.

FIELD SURVEY OVERVIEW

The general biological study area consisted of the proposed project area with some focused surveys out to 500 feet on either side of the proposed project area. A number of biological resources assessments and focused surveys have been performed within the project area to date. General and focused biological surveys and habitat assessments were conducted in order to assess the following:

- General biological characteristics of the project area;
- Presence or potential presence of any listed, special-status, or MSHCP species;
- Vegetation communities;
- Flora and fauna species inventories;
- Habitat suitability for burrowing owls (*Athene cunicularia*) within MSHCP survey area;
- Presence or potential presence of species not covered by the MSHCP;
- Presence or potential presence of MSHCP defined fairy shrimp, *Vernal Pool*, and *Riparian/Riverine* habitats; and
- Presence or potential presence of waters and wetlands under U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) jurisdiction.

Data was collected in the field by numerous techniques including the use of field notes, hand-held Global Positioning System (GPS) devices, standardized data forms, photographs, and field maps. Field maps with an aerial view of the project area included CNDDB, USFWS, and MSHCP sensitive species data points. Potentially occurring habitats for special-status species were identified prior to field investigations through aerial photo-interpretation. Initial reconnaissance level wildlife and botanical surveys were conducted in conjunction with vegetation mapping. The project area was traversed on foot and by vehicles as needed to gain 100 percent access of the survey area.

Focused surveys were scheduled based on the results of the initial assessments. Lists of all vertebrate wildlife species and all plant species encountered within the entire project area are included in Appendix D. Table 4 identifies all field work conducted within the project area in 2020.

Vegetation Methods

Aerial photography and digital vegetation maps were reviewed to determine potential community types within the project area. Preliminary ground-truthing surveys concurred with digital vegetation maps, and additional surveys were performed to accurately define the community types and boundaries.

Wetlands and Aquatic Resources Methods

General wetland and streambed assessments of the proposed project site were conducted in January and February 2020 by GEC, which included general mapping of habitat(s) that may be subject to jurisdiction of CDFW pursuant to sections 1600-12 of the California Fish and Game Code, ACOE and MSHCP Section 6.1.2 if present. Potential MSHCP Section 6.1.2 seasonal watercourses were not found on the project site.

A brief assessment of the wetland/riparian jurisdictional communities encountered (if they were encountered) was also conducted which described the dominant and associate plant species of each community and the presence and/or absence of visual field indicators (e.g., dominance of hydrophytic species, presence of drift lines).

Wildlife Survey and Habitat Assessment Methods

General reconnaissance and habitat assessment surveys were completed to determine habitat suitability for listed species and special status plant, wildlife, and aquatic species. Suitable habitat for listed species and special status species was determined by the presence of specific habitat elements. The surveys coincided with the period during which many wildlife species, including migratory species, would have been most detectable. A faunal inventory of all species observed during the course of the surveys was also prepared.

SPECIAL STATUS SPECIES METHODS

Special Status Rare Plant Species Survey Methods

Information on special status rare plant species within the project area was gathered from several sources including California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2020), CNDDB (CNDDB 2020), and CalFlora (CalFlora 2020). Maps depicting all known sensitive plant species locations within the project area were produced to aid in determining the target species for survey. General reconnaissance and habitat assessment surveys were completed to determine habitat suitability for listed species and special status plants. Suitable habitat for listed species and special status species was determined by the presence of specific habitat elements.

Plant surveys of the project area were conducted in January and February 2020. This time period corresponds to the time during which early ephemeral spring annuals and herbaceous perennials in Riverside County would be detectable. No sensitive plant species were located. The likelihood of these species occurrence (expected, high, moderate, low, or not expected) was also assessed. A floral inventory of all species observed during the course of the surveys was also documented.

Special Status Wildlife Species Survey Methods

Prior to conducting habitat assessment surveys, CNDDB and other sources were reviewed for the records of special status wildlife species potentially occurring in the project area. General reconnaissance and habitat assessment surveys were conducted to assess the presence of special status wildlife species habitats within the project area. Maps depicting all known sensitive wildlife species locations within the regional vicinity of the project were produced to aid in determining the target species to survey. All wildlife species encountered during surveys were documented. Any specific areas (e.g., potential nesting, breeding, and foraging habitat) encountered during the surveys that have a high probability for supporting sensitive wildlife were documented. The likelihood of these species occurrence (not expected, low, moderate, high, expected) was also assessed. General habitat assessments and focused protocol-level surveys for other species including, but not limited to, burrowing owl (*Athene cunicularia*), were also conducted. General habitat assessments involved evaluating the specific vegetation communities encountered and their potential to support these sensitive species (expected, high, moderate, low, not expected).

Surveys

Based on the findings of the biological surveys, focused habitat assessment and species-specific surveys were scheduled for burrowing owl (*Athene cunicularia*) to determine presence of sensitive, listed, and covered species within the project area. Please see Table 3.3 for survey dates. A complete floristic survey of the project area, as required in a complete CEQA analysis, was conducted in 2020 to determine whether listed or special status plant species or sensitive plant communities occur. Burrowing owl surveys were also conducted in the spring of 2020. All plants encountered were identified to a level necessary to ensure detection of covered or special status species.

The following table identifies the sensitive species for which protocol-level surveys were required for the project.

TABLE 3.1
PROTOCOL SURVEYS

Protocol Surveys			
Species		**Survey Protocol**	**Location**
Scientific Name	**Common Name**		
Athene cunicularia	burrowing owl	A minimum of four surveys are required between March 1 and August 31 (County of Riverside).	Grasslands, debris piles, disturbed areas

Transects for general reconnaissance and habitat assessment surveys were conducted to assess the presence of special status wildlife and plant species habitats within the project area. Please see Figure 3.1. Surveys were conducted in January-February 2020.

TABLE 3.2
SURVEY LOCATIONS, PERSONNEL, DATES, AND PURPOSE

Surveyor(s)	Date(s)	Purpose
	2020	
TG, PG	February 7, 18, 26, March 1	General Biological Survey (Plant and Wildlife Habitat Assessments)
TG, PG	February 7, 18, 26, March 1*	Focused Burrowing Owl Surveys
TG, PG	February 7, 18, 26, March 1	MSHCP Habitat Assessment
TG, JP	February 7, 18, 26, March 1	Vegetation Mapping
TG, JP	February 7, 18, 26, March 1	Various Assessments, Vegetation Mapping

LEGEND:
TG=Teresa Gonzales, GEC Biologist
PG=Paul Gonzales, GEC Biologist
JP= Justin Palmer, AJP GIS
*Burrowing owl surveys will continue until June, 2020

TABLE 3.3

BURROWING OWL SURVEY SUMMARY 2020**

Date	Air Temperature (F)	Wind Speed (mph)	Cloud Cover	Precipitation	Sunrise/Sunset Times	Time-Duration*
February 7	43-55	3-9	Clear-30% cloud cover	No	0641/1725	0541/0841 3 hrs
February 18	48-58	0-10	10% cloud cover	No	0630/1735	0530/0830 3 hrs
February 26	43-56	0-7	Clear	No	0621/1742	0521/0821 3 hrs
March 1	37-54	0-10	40% cloud cover	No	0616/1745	0516-0816 3 hrs

*Approved hours for burrowing owl surveys are one hour prior to sunrise until two hours after and two hours prior to sunset and one hour after sunset.

** Surveys will continue until June, 2020

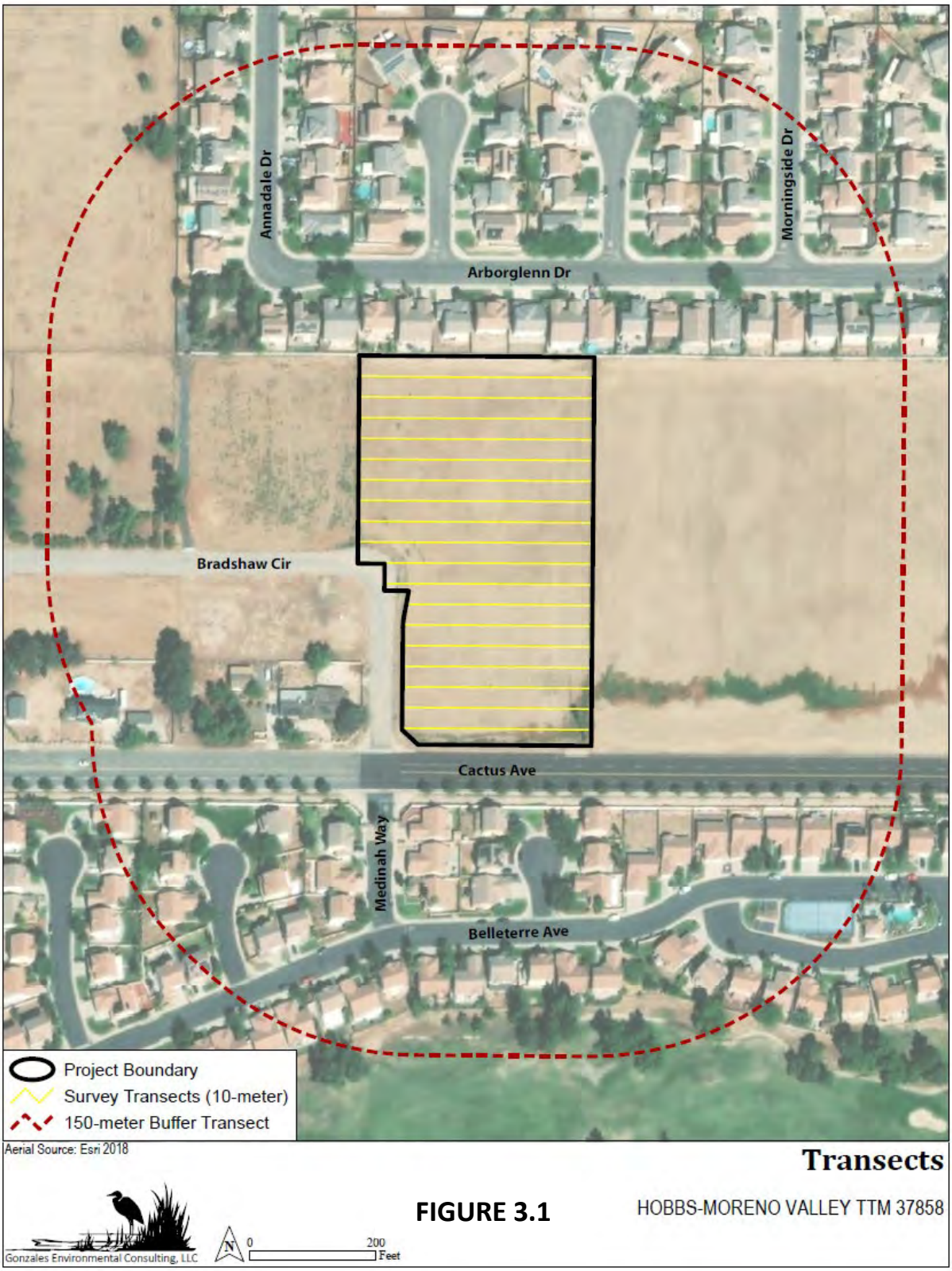


FIGURE 3.1

HOBBS-MORENO VALLEY TTM 37858

BURROWING OWL

Burrowing owl habitat assessment surveys and focused surveys were conducted in 2020 (refer to Table 3.2 for dates and Table 3.3 for 2020 survey information) according to the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006).

GEC biologists knowledgeable in BUOW habitat, ecology, and field identification of the species conducted surveys on the dates shown in Table 3.2 and 3.3. The weather conditions during these surveys were conducive to observing BUOW outside their burrows and detecting BUOW sign. Data was collected by numerous techniques including the use of a hand-held GPS device, standardized data forms, photographs, and aerial field maps. Details regarding each survey method are provided below:

Habitat Assessment (Step 1)

Habitat within the project area was assessed for BUOW presence, use, and potential use. Areas with potential BUOW habitat, including pasture and debris piles were surveyed by GEC for potential burrows and BUOW. Biologists walked areas of potential habitat while searching for BUOW, potential and active burrows, and owl sign, such as feathers, pellets, and prey items. The survey area included a 150-meter (500-foot) buffer zone outside the project site. Transect surveys for burrows, including owl sign, was conducted by walking or being escorted through suitable habitat over the entire survey area (the proposed route and the 150-meter [500-foot] buffer zone). Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 10 meters (30 feet) and was reduced when necessary to account for differences in terrain, vegetation density, and ground surface visibility.

Focused Burrow Surveys (Step 2 A)

GEC conducted focused burrow surveys including natural burrows or suitable debris piles. Transect surveys for burrows, including owl sign, was conducted by walking or being escorted through suitable habitat over the entire survey area (the proposed route and the 150-meter [500-foot] buffer zone). Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 10 meters (30 feet) and was reduced when necessary to account for differences in terrain, vegetation density, and ground surface visibility. The locations of all potential owl burrows, observed owl sign, and observed BUOW were recorded and mapped with a GPS device.

Focused Owl Surveys (Step 2B)

Focused BUOW surveys consisted of eleven site visits covering all project areas and adjacent areas. Surveys were conducted in the morning 1 hour before sunrise to 2 hours after sunrise and 1 hour before sunset to 2 hours after sunset. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors used

binoculars and/or spotting scopes to scan all suitable habitats, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. A survey for owls and owl sign was then conducted by walking through suitable habitat over the entire project site and within the adjacent 150-meter (500-foot) buffer zone. These pedestrian surveys followed transects spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines were no more than 10 meters (30 feet) and were reduced to account for differences in terrain, vegetation density, and ground surface visibility. In areas where access was not obtained, the area adjacent to the project site was surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to the project site.

JURISDICTIONAL WATERS AND WETLANDS

USACE regulates deposition of fill material into waters of the U.S. (WUS) under Section 404 of the CWA. RWQCB regulates impacts to WUS under Section 401 of the CWA and to waters of the State (WOS) under the Porter Cologne Water Quality Control Act. CDFW regulates impacts to their jurisdiction, which includes lakes and streambeds to the outer extent of the riparian canopy, under Section 1600 of the CFGC.

No federal or state streambed areas were found on the project site.

MSHCP 6.1.2 RIPARIAN/RIVERINE/VERNAL POOLS

An assessment of the potentially significant effects of the proposed project on riparian, riverine and vernal pool areas was conducted. Seasonal watercourses are not present and no evidence of recent surface water was observed on site. No potential MSHCP 6.1.2 areas were found on the project site. There are no Riparian/Riverine associated species on the project site (i.e. least Bell's vireo, southwestern willow flycatcher, blue grosbeak, etc.) as there is no appropriate habitat.

FAIRY SHRIMP

An assessment of the potentially significant effects of the proposed project on fairy shrimp was conducted. Fairy shrimp can occasionally be found in habitats other than vernal pools, such as artificial pools created by roadside ditches, shallow depressions and road ruts. Suitable habitat for fairy shrimp would require features that would be able to hold water long enough to support fairy shrimp. We found no appropriate habitat on the project site for fairy shrimp.

SECTION 6.1.2 RIPARIAN, RIVERINE, AND VERNAL POOL RESOURCES

The lack of appropriate vegetation means that the site is not suitable for riparian bird species including least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax trailii extimus*), and yellow-billed cuckoo (*Coccyzus americanus*). No vernal pool plants or appropriate soils were observed on the project site.

TABLE 3.4

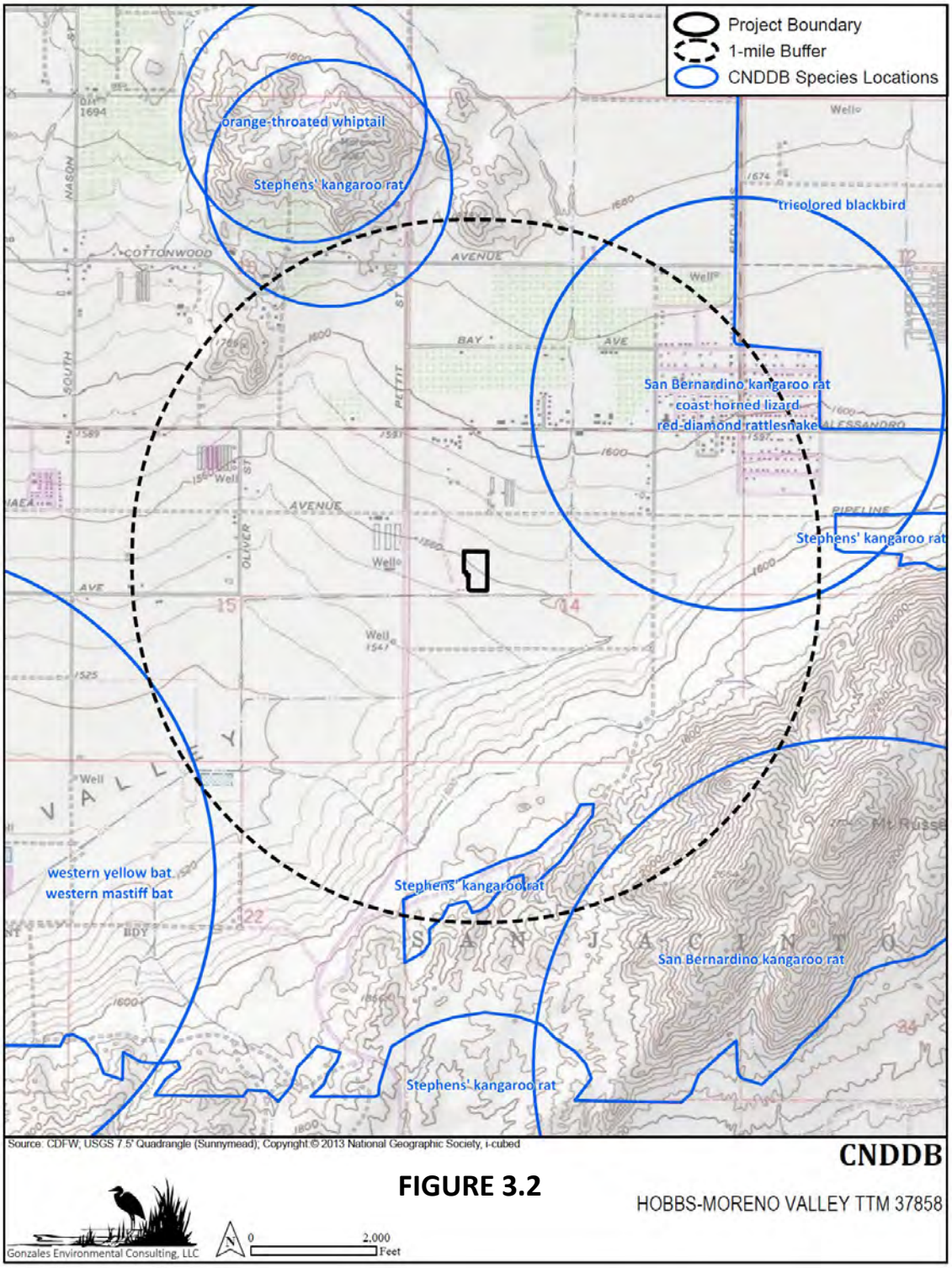
CNDDB RARE, THREATENED OR ENDANGERED SPECIES AND HABITATS IN SUNNYMEAD QUADRANGLE[1]

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CALIF STATUS	CDFW	CNPS LIST
Spea hammondii	western spadefoot	None	None	SSC	-
Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP	-
Pelecanus erythrorhynchos	American white pelican	None	None	SSC	-
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP	-
Artemisiospiza belli belli	Bell's sage sparrow	None	None	WL	-
Nycticorax nycticorax	black-crowned night heron	None	None	-	-
Athene cunicularia	burrowing owl	None	None	SSC	-
Larus californicus	California gull	None	None	WL	-
Eremophila alpestris actia	California horned lark	None	None	WL	-
Aythya valisineria	canvasback	None	None	-	-
Hydroprogne caspia	Caspian tern	None	None	-	-
Polioptila californica californica	coastal California gnatcatcher	Threatened	None	SSC	-
Accipiter cooperii	Cooper's hawk	None	None	WL	-
Calypte costae	Costa's hummingbird	None	None	-	-
Phalacrocorax auritus	double-crested cormorant	None	None	WL	-
Buteo regalis	ferruginous hawk	None	None	WL	-
Aquila chrysaetos	golden eagle	None	None	FP ; WL	-
Ammodramus savannarum	grasshopper sparrow	None	None	SSC	-
Ardea herodias	great blue heron	None	None	-	-
Ardea alba	great egret	None	None	-	-
Spinus lawrencei	Lawrence's goldfinch	None	None	-	-
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	-	-
Lanius ludovicianus	loggerhead shrike	None	None	SSC	-
Numenius americanus	long-billed curlew	None	None	WL	-
Asio otus	long-eared owl	None	None	SSC	-
Falco columbarius	merlin	None	None	WL	-
Circus hudsonius	northern harrier	None	None	SSC	-
Pandion haliaetus	osprey	None	None	WL	-
Falco mexicanus	prairie falcon	None	None	WL	-
Sphyrapicus ruber	red-breasted sapsucker	None	None	-	-
Accipiter striatus	sharp-shinned hawk	None	None	WL	-
Asio flammeus	short-eared owl	None	None	SSC	-
Egretta thula	snowy egret	None	None	-	-
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None	None	WL	-
Empidonax traillii extimus	southwestern willow flycatcher	Endangered	Endangered	-	-
Buteo swainsoni	Swainson's hawk	None	Threatened	-	-
Agelaius tricolor	tricolored blackbird	None	Threatened	SSC	-
Chaetura vauxi	Vaux's swift	None	None	SSC	-
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Threatened	Endangered	-	-
Plegadis chihi	white-faced ibis	None	None	WL	-
Elanus leucurus	white-tailed kite	None	None	FP	-
Empidonax traillii	willow flycatcher	None	Endangered	-	-
Setophaga petechia	yellow warbler	None	None	SSC	-
Icteria virens	yellow-breasted chat	None	None	SSC	-
Xanthocephalus xanthocephalus	yellow-headed blackbird	None	None	SSC	-
Taxidea taxus	American badger	None	None	SSC	-
Dipodomys simulans	Dulzura kangaroo rat	None	None	-	-
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	None	SSC	-
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None	None	SSC	-
Lynx rufus pallescens	pallid bobcat	None	None	-	-
Nyctinomops femorosaccus	pocketed free-tailed bat	None	None	SSC	-

[1] NDDB 2016

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CALIF STATUS	CDFW	CNPS LIST
Dipodomys merriami parvus	San Bernardino kangaroo rat	Endangered	Candidate Endangered	SSC	-
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None	None	SSC	-
Neotoma lepida intermedia	San Diego desert woodrat	None	None	SSC	-
Dipodomys stephensi	Stephens' kangaroo rat	Endangered	Threatened	-	-
Eumops perotis californicus	western mastiff bat	None	None	SSC	-
Myotis ciliolabrum	western small-footed myotis	None	None	-	-
Lasiurus xanthinus	western yellow bat	None	None	SSC	-
Myotis yumanensis	Yuma myotis	None	None	-	-
Phrynosoma blainvillii	coast horned lizard	None	None	SSC	-
Salvadora hexalepis virgultea	coast patch-nosed snake	None	None	SSC	-
Aspidoscelis tigris stejnegeri	coastal whiptail	None	None	SSC	-
Aspidoscelis hyperythra	orange-throated whiptail	None	None	WL	-
Crotalus ruber	red-diamond rattlesnake	None	None	SSC	-
Diadophis punctatus modestus	San Bernardino ringneck snake	None	None	-	-
Coleonyx variegatus abbotti	San Diego banded gecko	None	None	SSC	-
Anniella stebbinsi	southern California legless lizard	None	None	SSC	-
Emys marmorata	western pond turtle	None	None	SSC	-
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	None	None	-	-
Artemisia palmeri	San Diego sagewort	None	None	-	4.2
Abronia villosa var. *aurita*	chaparral sand-verbena	None	None	-	1B.1
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None	None	-	1B.1
Deinandra paniculata	paniculate tarplant	None	None	-	4.2
Chorizanthe parryi var. *parryi*	Parry's spineflower	None	None	-	1B.1
Caulanthus simulans	Payson's jewelflower	None	None	-	4.2
Chorizanthe leptotheca	Peninsular spineflower	None	None	-	4.2
Calochortus plummerae	Plummer's mariposa-lily	None	None	-	4.2
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None	None	-	4.3
Symphyotrichum defoliatum	San Bernardino aster	None	None	-	1B.2
Centromadia pungens ssp. *laevis*	smooth tarplant	None	None	-	1B.1
Juglans californica	southern California black walnut	None	None	-	4.2
Chorizanthe xanti var. *leucotheca*	white-bracted spineflower	None	None	-	1B.2

Legend:
Candidate= Candidate for listing
CNDDB=California Natural Diversity Database
CDFW=California Department of Fish and Wildlife
FP=Fully Protected
SSC=Species of Concern
CNPS List= California Native Plant Society
CNPS 1B= Rare or Endangered In California and Elsewhere
CNPS 2= Rare or Endangered in California, More Common Elsewhere
CNPS 3= Need More Information
CNPS 4= Plants of Limited Distribution
CNPS New Threat Code extensions and their meanings:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)


Project Boundary
1-mile Buffer
CNDDB Species Locations
orange-throated whiptail
Stephens' kangaroo rat
tricolored blackbird
San Bernardino kangaroo rat
coast horned lizard
red-diamond rattlesnake
Stephens' kangaroo rat
western yellow bat
western mastiff bat
Stephens' kangaroo rat
San Bernardino kangaroo rat
Stephens' kangaroo rat
Source: CDFW, USGS 7.5' Quadrangle (Sunnymead); Copyright © 2013 National Geographic Society, i-cubed
CNDDB
HOBBS-MORENO VALLEY TTM 37858
Gonzales Environmental Consulting, LLC
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2,000
Feet

FIGURE 3.2

TABLE 3.5
CNDDB RARE, THREATENED OR ENDANGERED SPECIES AND HABITATS IN SUNNYMEAD QUADRANGLE AND SURROUNDING NINE QUADRANGLES

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CA STATUS	CDFW	CNPS LIST
Rana draytonii	California red-legged frog	T	None	SSC	-
Rana muscosa	southern mountain yellow-legged frog	E	E	WL	-
Spea hammondii	western spadefoot	None	None	SSC	-
Botaurus lentiginosus	American bittern	None	None	-	-
Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP	-
Pelecanus erythrorhynchos	American white pelican	None	None	SSC	-
Haliaeetus leucocephalus	bald eagle	Delisted	E	FP	-
Artemisiospiza belli belli	Bell's sage sparrow	None	None	WL	-
Cypseloides niger	black swift	None	None	SSC	-
Nycticorax nycticorax	black-crowned night heron	None	None	-	-
Polioptila melanura	black-tailed gnatcatcher	None	None	WL	-
Branta bernicla	brant	None	None	SSC	-
Spizella breweri	Brewer's sparrow	None	None	-	-
Athene cunicularia	burrowing owl	None	None	SSC	-
Laterallus jamaicensis coturniculus	California black rail	None	T	FP	-
Pelecanus occidentalis californicus	California brown pelican	Delisted	Delisted	FP	-
Gymnogyps californianus	California condor	E	E	FP	-
Larus californicus	California gull	None	None	WL	-
Eremophila alpestris actia	California horned lark	None	None	WL	-
Strix occidentalis occidentalis	California Spotted Owl	None	None	SSC	-
Aythya valisineria	canvasback	None	None	-	-
Hydroprogne caspia	Caspian tern	None	None	-	-
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	None	None	SSC	-
Polioptila californica californica	coastal California gnatcatcher	T	None	SSC	-
Gavia immer	common loon	None	None	SSC	-
Accipiter cooperii	Cooper's hawk	None	None	WL	-
Calypte costae	Costa's hummingbird	None	None	-	-
Phalacrocorax auritus	double-crested cormorant	None	None	WL	-

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CA STATUS	CDFW	CNPS LIST
Buteo regalis	ferruginous hawk	None	None	WL	-
Aquila chrysaetos	golden eagle	None	None	FP ; WL	-
Ammodramus savannarum	grasshopper sparrow	None	None	SSC	-
Ardea herodias	great blue heron	None	None	-	-
Ardea alba	great egret	None	None	-	-
Passerculus sandwichensis rostratus	large-billed savannah sparrow	None	None	SSC	-
Spinus lawrencei	Lawrence's goldfinch	None	None	-	-
Vireo bellii pusillus	least Bell's vireo	E	E	-	-
Ixobrychus exilis	least bittern	None	None	SSC	-
Melanerpes lewis	Lewis' woodpecker	None	None	-	-
Lanius ludovicianus	loggerhead shrike	None	None	SSC	-
Numenius americanus	long-billed curlew	None	None	WL	-
Asio otus	long-eared owl	None	None	SSC	-
Falco columbarius	merlin	None	None	WL	-
Charadrius montanus	mountain plover	None	None	SSC	-
Accipiter gentilis	northern goshawk	None	None	SSC	-
Circus hudsonius	northern harrier	None	None	SSC	-
Baeolophus inornatus	oak titmouse	None	None	-	-
Contopus cooperi	olive-sided flycatcher	None	None	SSC	-
Pandion haliaetus	osprey	None	None	WL	-
Falco mexicanus	prairie falcon	None	None	WL	-
Progne subis	purple martin	None	None	SSC	-
Sphyrapicus ruber	red-breasted sapsucker	None	None	-	-
Sphyrapicus ruber	red-breasted sapsucker	None	None	-	-
Aythya americana	redhead	None	None	SSC	-
Selasphorus rufus	rufous hummingbird	None	None	-	-
Accipiter striatus	sharp-shinned hawk	None	None	WL	-
Asio flammeus	short-eared owl	None	None	SSC	-
Egretta thula	snowy egret	None	None	-	-
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None	None	WL	-
Empidonax traillii extimus	southwestern willow flycatcher	E	E	-	-
Buteo swainsoni	Swainson's hawk	None	T	-	-

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CA STATUS	CDFW	CNPS LIST
Agelaius tricolor	tricolored blackbird	None	T	SSC	-
Anser albifrons elgasi	tule greater white-fronted goose	None	None	SSC	-
Chaetura vauxi	Vaux's swift	None	None	SSC	-
Pyrocephalus rubinus	vermilion flycatcher	None	None	SSC	-
Coccyzus americanus occidentalis	western yellow-billed cuckoo	T	E	-	-
Plegadis chihi	white-faced ibis	None	None	WL	-
Elanus leucurus	white-tailed kite	None	None	FP	-
Empidonax traillii	willow flycatcher	None	E	-	-
Setophaga petechia	yellow warbler	None	None	SSC	-
Icteria virens	yellow-breasted chat	None	None	SSC	-
Xanthocephalus xanthocephalus	yellow-headed blackbird	None	None	SSC	-
Streptocephalus woottoni	Riverside fairy shrimp	E	None	-	-
Gila orcuttii	arroyo chub	None	None	SSC	-
Rhinichthys osculus ssp. 3	Santa Ana speckled dace	None	None	SSC	-
Catostomus santaanae	Santa Ana sucker	Threatened	None	-	-
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	E	None	-	-
Carolella busckana	Busck's gallmoth	None	None	-	-
Bombus crotchii	Crotch bumble bee	None	None	-	-
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Endangered	None	-	-
Ceratochrysis longimala	Desert cuckoo wasp	None	None	-	-
Halictus harmonius	haromonius halictid bee	None	None	-	-
Euphydryas editha quino	quino checkerspot butterfly	E	None	-	-
Taxidea taxus	American badger	None	None	SSC	-
Dipodomys simulans	Dulzura kangaroo rat	None	None	-	-
Chaetodipus californicus femoralis	Dulzura pocket mouse	None	None	SSC	-
Leptonycteris yerbabuenae	lesser long-nosed bat	Delisted	None	SSC	-
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	None	SSC	-
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None	None	SSC	-
Perognathus longimembris pacificus	Pacific pocket mouse	E	None	SSC	-
Antrozous pallidus	pallid bat	None	None	SSC	-
Lynx rufus pallescens	pallid bobcat	None	None	-	-
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	None	None	SSC	-

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CA STATUS	CDFW	CNPS LIST
Ovis canadensis nelsoni pop. 2	Peninsular bighorn sheep DPS	E	T	FP	-
Nyctinomops femorosaccus	pocketed free-tailed bat	None	None	SSC	-
Glaucomys oregonensis californicus	San Bernardino flying squirrel	None	None	SSC	-
Dipodomys merriami parvus	San Bernardino kangaroo rat	E	C E	SSC	-
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None	None	SSC	-
Neotoma lepida intermedia	San Diego desert woodrat	None	None	SSC	-
Onychomys torridus ramona	southern grasshopper mouse	None	None	SSC	-
Dipodomys stephensi	Stephens' kangaroo rat	E	T	-	-
Eumops perotis californicus	western mastiff bat	None	None	SSC	-
Lasiurus blossevillii	western red bat	None	None	SSC	-
Myotis ciliolabrum	western small-footed myotis	None	None	-	-
Lasiurus xanthinus	western yellow bat	None	None	SSC	-
Myotis yumanensis	Yuma myotis	None	None	-	-
Taxidea taxus	American badger	None	None	SSC	-
Arizona elegans occidentalis	California glossy snake	None	None	SSC	-
Phrynosoma blainvillii	coast horned lizard	None	None	SSC	-
Salvadora hexalepis virgultea	coast patch-nosed snake	None	None	SSC	-
Aspidoscelis tigris stejnegeri	coastal whiptail	None	None	SSC	-
Anniella pulchra	northern California legless lizard	None	None	SSC	-
Aspidoscelis hyperythra	orange-throated whiptail	None	None	WL	-
Crotalus ruber	red-diamond rattlesnake	None	None	SSC	-
Diadophis punctatus modestus	San Bernardino ringneck snake	None	None	-	-
Coleonyx variegatus abbotti	San Diego banded gecko	None	None	SSC	-
Diadophis punctatus similis	San Diego ringneck snake	None	None	-	-
Thamnophis sirtalis pop. 1	south coast gartersnake	None	None	SSC	-
Anniella stebbinsi	southern California legless lizard	None	None	SSC	-
Thamnophis hammondii	two-striped gartersnake	None	None	SSC	-
Emys marmorata	western pond turtle	None	None	SSC	-
Galium californicum ssp. *primum*	Alvin Meadow bedstraw	None	None	-	1B.2
Phacelia stellaris	Brand's star phacelia	None	None	-	1B.1
Carex comosa	bristly sedge	None	None	-	2B.1
Imperata brevifolia	California satintail	None	None	-	2B.1

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CA STATUS	CDFW	CNPS LIST
Tortula californica	California screw moss	None	None	-	1B.2
Senecio aphanactis	chaparral ragwort	None	None	-	2B.2
Abronia villosa var. *aurita*	chaparral sand-verbena	None	None	-	1B.1
Diplacus clevelandii	Cleveland's bush monkeyflower	None	None	-	4.2
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None	None	-	1B.1
Romneya coulteri	Coulter's matilija poppy	None	None	-	4.2
Muilla coronata	crowned muilla	None	None	-	4.2
Atriplex serenana var. *davidsonii*	Davidson's saltscale	None	None	-	1B.2
Pseudorontium cyathiferum	Deep Canyon snapdragon	None	None	-	2B.3
Juncus duranii	Duran's rush	None	None	-	4.3
Quercus engelmannii	Engelmann oak	None	None	-	4.2
Nasturtium gambelii	Gambel's water cress	E	T	-	1B.1
Monardella macrantha ssp. *hallii*	Hall's monardella	None	None	-	1B.3
Astragalus hornii var. *hornii*	Horn's milk-vetch	None	None	-	1B.1
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	None	None	-	1B.1
Myosurus minimus ssp. *apus*	little mousetail	None	None	-	3.1
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None	None	-	1B.2
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	None	None	-	1A
Arenaria paludicola	marsh sandwort	E	E	-	1B.1
Horkelia cuneata var. *puberula*	mesa horkelia	None	None	-	1B.1
Nama stenocarpa	mud nama	None	None	-	2B.2
Allium munzii	Munz's onion	E	T	-	1B.1
Piperia leptopetala	narrow-petaled rein orchid	None	None	-	4.3
Berberis nevinii	Nevin's barberry	E	E	-	1B.1
Lilium humboldtii ssp. *ocellatum*	ocellated humboldt lily	None	None	-	4.2
Harpagonella palmeri	Palmer's grapplinghook	None	None	-	4.2
Deinandra paniculata	paniculate tarplant	None	None	-	4.2
Atriplex parishii	Parish's brittlescale	None	None	-	1B.1
Malacothamnus parishii	Parish's bush-mallow	None	None	-	1A
Sidalcea hickmanii ssp. *parishii*	Parish's checkerbloom	None	Rare	-	1B.2
Lycium parishii	Parish's desert-thorn	None	None	-	2B.3
Ribes divaricatum var. *parishii*	Parish's gooseberry	None	None	-	1A
Rupertia rigida	Parish's rupertia	None	None	-	4.3

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	CA STATUS	CDFW	CNPS LIST
Chorizanthe parryi var. *parryi*	Parry's spineflower	None	None	-	1B.1
Caulanthus simulans	Payson's jewelflower	None	None	-	4.2
Chorizanthe leptotheca	Peninsular spineflower	None	None	-	4.2
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	None	None	-	2B.2
Calochortus plummerae	Plummer's mariposa-lily	None	None	-	4.2
Sphenopholis obtusata	prairie wedge grass	None	None	-	2B.2
Monardella pringlei	Pringle's monardella	None	None	-	1A
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None	None	-	4.3
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	E	E	-	1B.2
Sidalcea neomexicana	salt spring checkerbloom	None	None	-	2B.2
Symphyotrichum defoliatum	San Bernardino aster	None	None	-	1B.2
Artemisia palmeri	San Diego sagewort	None	None	-	4.2
Senecio astephanus	San Gabriel ragwort	None	None	-	4.3
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	E	None	-	1B.1
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	E	E	-	1B.1
Dodecahema leptoceras	slender-horned spineflower	E	E	-	1B.1
Convolvulus simulans	small-flowered morning-glory	None	None	-	4.2
Centromadia pungens ssp. *laevis*	smooth tarplant	None	None	-	1B.1
Juglans californica	southern California black walnut	None	None	-	4.2
Streptanthus campestris	southern jewelflower	None	None	-	1B.3
Navarretia fossalis	spreading navarretia	T	None	-	1B.1
Brodiaea filifolia	thread-leaved brodiaea	T	E	-	1B.1
Bouteloua trifida	three-awned grama	None	None	-	2B.3
Hordeum intercedens	vernal barley	None	None	-	3.2
Asplenium vespertinum	western spleenwort	None	None	-	4.2
Chorizanthe xanti var. *leucotheca*	white-bracted spineflower	None	None	-	1B.2
Texosporium sancti-jacobi	woven-spored lichen	None	None	-	3
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	None	None	-	2B.1
Allium marvinii	Yucaipa onion	None	None	-	1B.2

Legend:

Candidate= Candidate for listing
CNDDB=California Natural Diversity Database
CDFW=California Department of Fish and Wildlife
FP=Fully Protected
SSC=Species of Concern
CNPS List= California Native Plant Society
CNPS 1B= Rare or Endangered In California and Elsewhere
CNPS 2= Rare or Endangered in California, More Common Elsewhere
CNPS 3= Need More Information
CNPS 4= Plants of Limited Distribution

CNPS New Threat Code extensions and their meanings:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

IV. EXISTING CONDITIONS

This section provides the existing conditions of the study area, including the general description of the site, hydrological resources, soil types, and vegetation communities.

GENERAL DESCRIPTION OF THE SITE

Elevation of the assessment area ranges from a from a low of 1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land. The project site has been impacted by anthropogenic activities. Land use in the surrounding area varies between disturbed undeveloped areas, semi-rural and single family residential.

HYDROLOGICAL RESOURCES

There are no hydrological resources on the project site.

SOILS OF THE SITE

The soil associations mapped for the area are San Emigdio-Grangeville-Metz association. San Emigdio-Grangeville-Metz association: Very deep, poorly drained to somewhat excessively drained, nearly level to strongly sloping soils that have a surface layer of calcareous loamy sand to loam; on alluvial fans and flood plains. The soil series mapped for the area are described in Table 4.1. The soils found are similar in texture and color to those mapped, but were highly disturbed from anthropogenic activities. The soils were compacted and unstratified over the majority of the project site. The soils at soil pit locations did not meet the criteria for hydric soils within project boundaries.

TABLE 4.1

SOIL SERIES MAPPED FOR THE AREA

Name	Description
San Emigdio fine sandy loam 2-8% slopes, eroded	Soils on broad smooth fans and flood plains along the rivers and creeks of the survey area. The soils formed in alluvium washed from weakly consolidated sediment and sandstone of the San Timoteo Badlands. Slopes range from 2-8%. Elevations range from 600-2,500 feet. The average annual rainfall ranges from 10-18 inches, the average annual temperature from 61-64 degrees F, and the average frost-free season from 200-280 days.
San Emigdio loam 2-8% slopes	Soils on broad smooth fans and flood plains along the rivers and creeks of the survey area. The soils formed in alluvium washed from weakly consolidated sediment and sandstone of the San Timoteo Badlands. Slopes range from 2-8%. Elevations range from 600-2,500 feet. The average annual rainfall ranges from 10-18 inches, the average annual temperature from 61-64 degrees F, and the average frost-free season from 200-280 days.

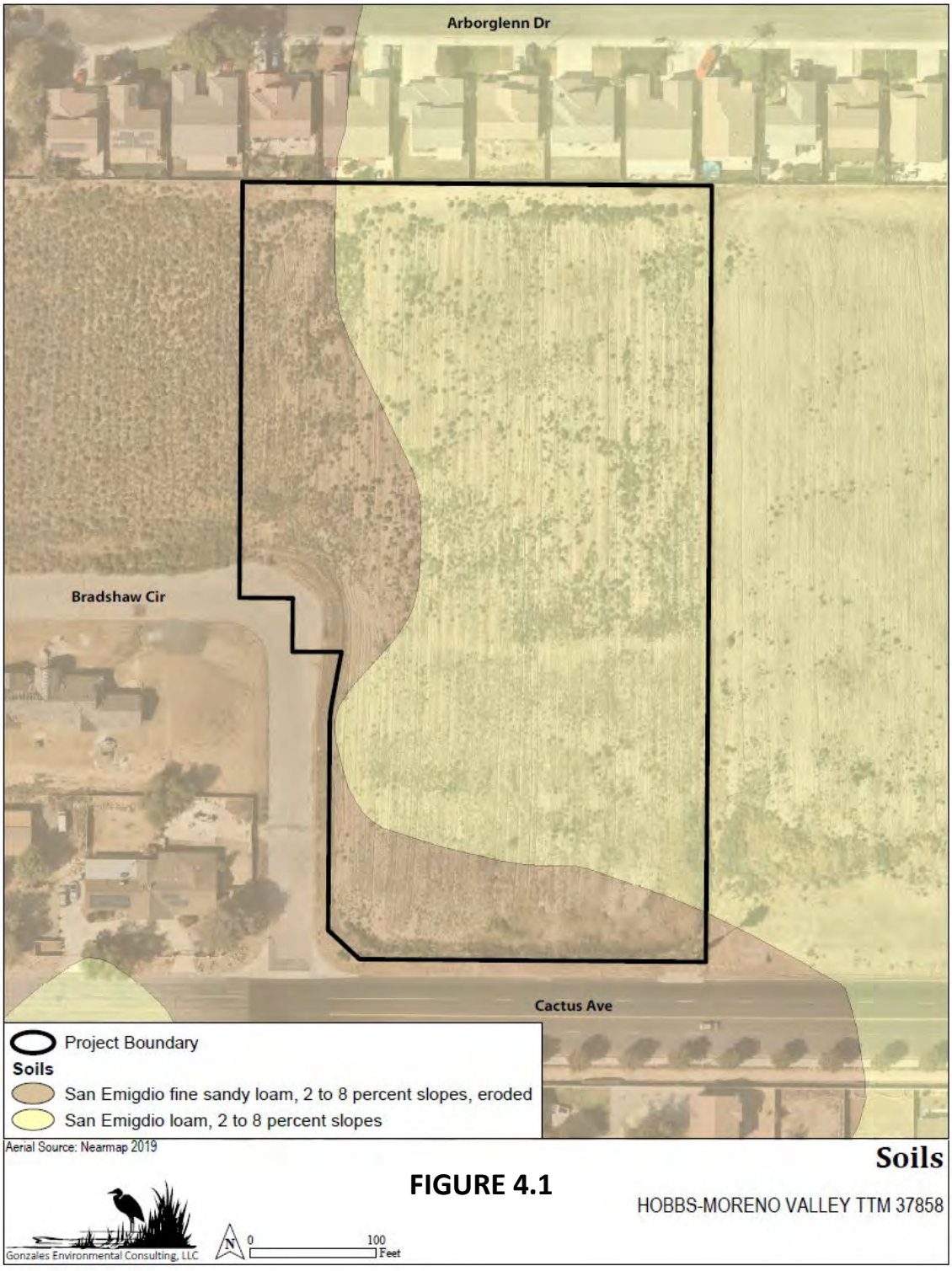


FIGURE 4.1

Soils

HOBBS-MORENO VALLEY TTM 37858

PLANT COMMUNITIES

Sensitive Vegetation Communities

Sensitive vegetation communities are those that are: considered sensitive pursuant to the State of California NCCP program; are under the jurisdiction of the ACOE pursuant to Section 404 of the CWA; are under the jurisdiction of the CDFW pursuant to Sections 1600 through 1612 of the California Fish and Game Code; are known or believed to be of high priority for inventory in the California Natural Diversity Data Base (CNDDB 2020); are considered regionally rare in southern California; have undergone a large- scale reduction from their Pre-European coverage in southern California due to increased urban and agricultural encroachment; and/or support sensitive plant and animal species.

Sensitive vegetation communities listed for the surrounding project area (9 surrounding quadrangles) are:
Canyon Live Oak Ravine Forest, Riversidian Alluvial Fan Sage Scrub, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder, Riparian Woodland, and Southern Willow Scrub.

Vegetation Communities on the Project Site

The project encompasses seven vegetation community types. Vegetation communities currently present are California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*) are located on the southern boundary of the project site. The existing plant communities are described in more detail below.

California Annual Grassland Alliance

This alliance of non-native annual grasslands and forb lands is composed of cool-season, annual grasses mostly introduced from Europe. They are invasive in disturbed areas throughout much of California. The composition varies widely. Many alien annual species may be present, including *Avena fatua, Brassica* spp., *Bromus diandrus, Bromus hordeaceus* and *Bromus madritensis*. The composition of this alliance is largely determined by amount of disturbance coupled with fall temperatures and precipitation, light intensity, litter thickness and micro topography. The percentage of exotic alien species is often directly related to disturbance history with heavy disturbance correlating with heavy exotic invasion. Annual grasses are supremely adapted to the Mediterranean climate of California; many species evolved under similar conditions in southern Europe and northern Africa. Plants germinate during winter rains, and complete their life cycles by the beginning of the summer drought. Seeds often remain viable for many years.

PICTURE 4.1

***Amaranthus albus* (Tumbleweed) herb alliance**

This alliance of non-native *Amaranthus albus* (Tumbleweed) is actually a sub alliance of California annual grasslands is composed of Amaranthus albus (Tumbleweed). Tumbleweed is invasive in disturbed areas throughout much of California. We subcategorized this alliance as there are such large areas with this species.

PICTURE 4.2

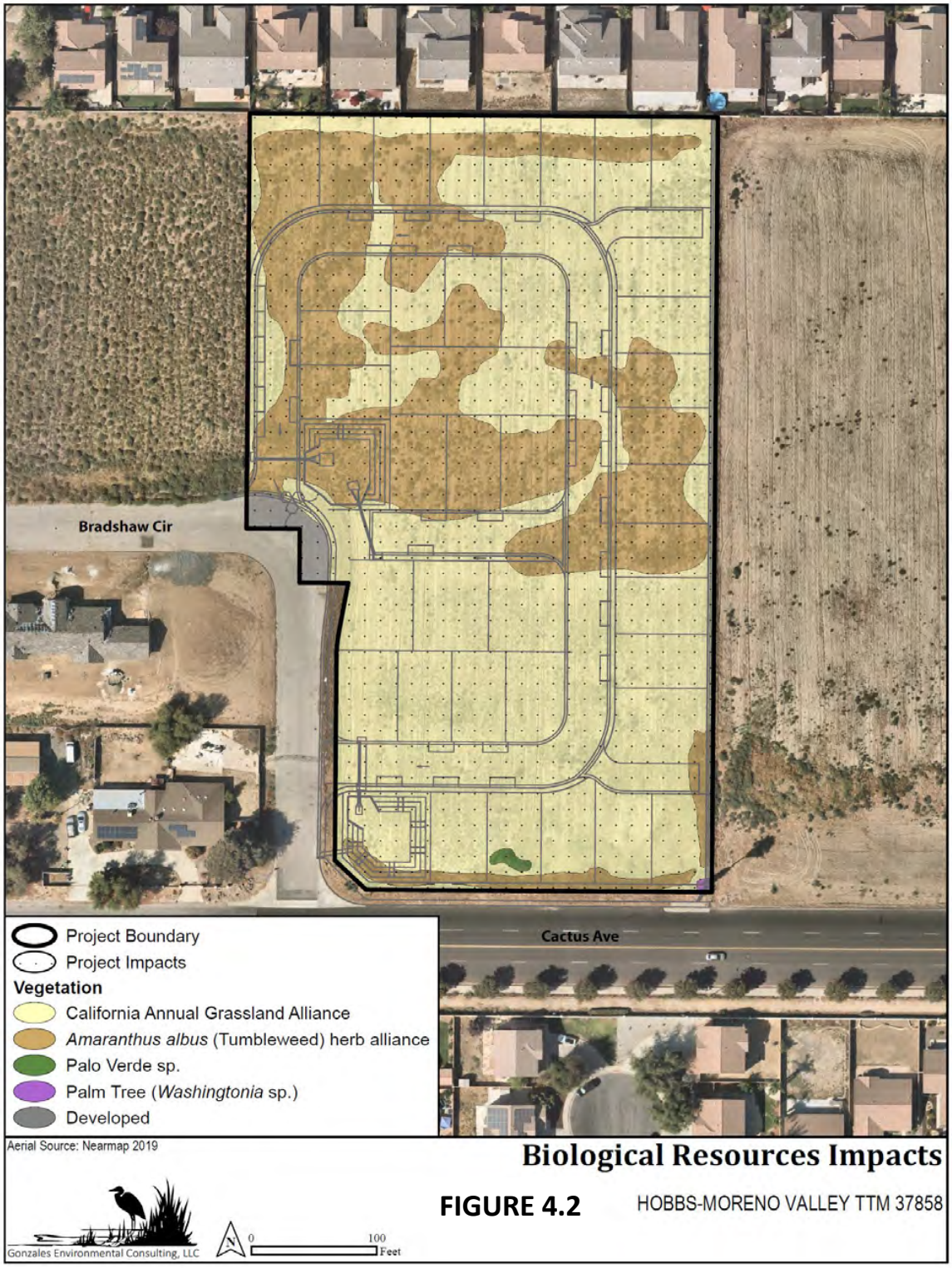
Disturbed/Developed

Disturbed areas are characterized by predominantly non-native species introduced and established through human action. Disturbed or barren areas are areas that either completely lack vegetation or have a predominance of non-native species.

PICTURE 4.3

TABLE 4.2
ACREAGE OF HABITAT TYPES

Vegetation	Existing (Acres) On-Site
Amaranthus albus (Tumbleweed) herb alliance	1.630
California Annual Grassland Alliance	3.120
Developed	0.050
Palm Tree (1)	0.003
Palo Verde (1)	0.007
TOTAL (acres)	**4.811**


Bradshaw Cir
Cactus Ave
Project Boundary
Project Impacts
Vegetation
California Annual Grassland Alliance
Amaranthus albus (Tumbleweed) herb alliance
Palo Verde sp.
Palm Tree (Washingtonia sp.)
Developed
Aerial Source: Nearmap 2019
Gonzales Environmental Consulting, LLC
0
100
Feet
Biological Resources Impacts
FIGURE 4.2
HOBBS-MORENO VALLEY TTM 37858

V. RESULTS

This section presents the result of habitat assessments and focused surveys that were conducted within the study area. Regarding how the survey results relate to potential impacts to sensitive biological resources and MSHCP consistency, refer to Section 6 and Section 7, respectively, of this report.

SENSITIVE HABITATS

A list of special status habitats was created based on published literature and literature readily available on the internet and CNDDB records searches. Canyon Live Oak Ravine Forest, Riversidian Alluvial Fan Sage Scrub, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder, Riparian Woodland, and Southern Willow Scrub are sensitive habitats listed for the surrounding area.

MSHCP RIPARIAN/RIVERINE AND VERNAL POOL HABITATS

RIPARIAN/RIVERINE

We found no seasonal watercourses or potential 6.1.2 riverine vegetation and no evidence of recent surface water on the project site.

VERNAL POOLS

An assessment of the potentially significant effects of the proposed project on vernal pools was conducted. Vernal pools, also called vernal ponds or ephemeral pools, are temporary pools of water that provide habitat for distinctive plants and animals. We found none of those features on the project site. There are no clay soils or areas which has compacted soils that would allow water to stand for any length of time No vernal pools are present on the project site.

FAIRY SHRIMP

An assessment of the potentially significant effects of the proposed project on fairy shrimp was conducted. Fairy shrimp can occasionally be found in habitats other than vernal pools, such as artificial pools created by roadside ditches, shallow depressions and road ruts. Suitable habitat for fairy shrimp would require features that would be able to hold water long enough to support fairy shrimp. We found none of those features on the project site. There are no clay soils or areas which has compacted soils that would allow water to stand for any length of time. The site has been anthropogenically impacted and does not have any features necessary to support fairy shrimp in its current condition.

SENSITIVE PLANTS

Several special-status plant and animal species have the potential to occur on site. Table 5.1 documents the special-status plant species that may occur in the SUNNYMEAD quadrangle and surrounding nine quadrangles (Rarefind 5-2020).

TABLE 5.1
SPECIAL-STATUS PLANT SPECIES LISTED FOR SUNNYMEAD & SURROUNDING NINE QUADRANGLES

Scientific Name	Common Name	Status Federal/ State	CNPS List	Primary Habitat Associations	Status Onsite or Potential to Occur
Galium californicum ssp. *primum*	Alvin Meadow bedstraw	None/None	1B.2	Chaparral and yellow pine forests at an elevation 5000 feet	No habitat; No potential
Phacelia stellaris	Brand's star phacelia	None/None	1B.1	Open areas, coastal-sage scrub coastal sage scrub below 400 meters	No habitat; No potential
Carex comosa	bristly sedge	None/None	2B.1	Lake-margins and edges between 0 and 1400 feet	No habitat; No potential
Imperata brevifolia	California satintail	None/None	2B.1	Wet springs, meadows, streambanks, floodplains in wet or dry soil of Chaparral, Coastal Sage Scrub, and Creosote Bush Scrub habitats; Elevation: < 500 m	No habitat; No potential
Tortula californica	California screw moss	None/None	1B.2	Sage scrub and grassland at an elevation between 33 and 328 feet	Habitat present; No potential above elevational range
Senecio aphanactis	chaparral ragwort	None/None	2B.2	Alkaline flats, dry open rocky areas at an elevation between 10--550 meters	No habitat; No potential
Abronia villosa var. *aurita*	chaparral sand-verbena	None/None	1B.1	Sandy places in coastal-sage scrub, chaparral at less than 1600 meters	No habitat; No potential
Diplacus clevelandii	Cleveland's bush monkeyflower	None/None	4.2	Disturbed areas, open borders of woodland, and chaparral habitats at an elevation between 1300–2600 meters	No habitat; No potential
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/None	1B.1	Alkaline coastal salt marshes, alkali playas, valley and foothill grasslands, and vernal pools	Habitat present; No potential not observed during surveys
Romneya coulteri	Coulter's matilija poppy	None/None	4.2	Sage scrub and chaparral	No habitat; No potential
Muilla coronata	crowned muilla	None/None	4.2	Creosote Bush Scrub, Joshua Tree Woodland, Pinyon-Juniper Woodland at an elevation between 1000-1600 meters	No habitat; No potential
Atriplex serenana var. *davidsonii*	Davidson's saltscale	None/None	1B.2	Domino-Willows-Traver Soils series in association with the alkali vernal pools, alkali annual grassland, alkali playa, and alkali scrub components of alkali vernal plains	No alkali habitat; No potential
Pseudorontium cyathiferum	Deep Canyon snapdragon	None/None	2B.3	Washes, rocky slopes in creosote bush scrub; Elevation: < 800 m	No habitat; No potential
Juncus duranii	Duran's rush	None/None	4.3	Creek banks, wet places, in montane conifer forest at an elevation from 1800--2750 meters	No habitat; No potential
Quercus engelmannii	Engelmann oak	None/None	4.2	Slopes, foothills, woodland at an elevation less than 1300 meters	No suitable habitat; No potential
Nasturtium gambelii	Gambel's water cress	E/T	1B.1	Freshwater marsh, coastal sage scrub and chaparral communities. Habitat includes freshwater-march and brackish marsh	No suitable habitat; No potential
Monardella macrantha ssp. *hallii*	Hall's monardella	None/None	1B.3	Chaparral, foothill woodlands, yellow pine forests, mixed evergreen forests, and valley grasslands.	Habitat present; No potential not observed during surveys
Astragalus hornii var. *hornii*	Horn's milk-vetch	None/None	1B.1	Salty flats and lakeshores	No suitable habitat; No potential
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	None/None	1B.1	Rocky or sandy areas; Elevation: 450-1200 m.	No suitable habitat; No potential
Myosurus minimus ssp. *apus*	little mousetail	None/None	3.1	Vernal Pools	No habitat; No potential
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	None/None	1B.2	Southern needle grass grassland, and openings in coastal sage scrub and chaparral	No suitable habitat; No potential
Helianthus nuttallii ssp. *parishii*	Los Angeles sunflower	None/None	1A	Coastal salt marsh	No suitable habitat; No potential
Arenaria paludicola	marsh sandwort	E/E	1B.1	Freshwater-marsh, Wet meadows, marshes at an elevation less than 300 meters	No suitable habitat; No potential
Horkelia cuneata var. *puberula*	mesa horkelia	None/None	1B.1	Vernal pools, depressions and ditches in areas that once supported vernal pools below 2000 feet.	No suitable habitat; No potential

Scientific Name	Common Name	Status Federal/ State	CNPS List	Primary Habitat Associations	Status Onsite or Potential to Occur
Nama stenocarpa	mud nama	None/None	2B.2	Intermittently wet areas; <810 m	No suitable habitat; No potential
Allium munzii	Munz's onion	E/T	1B.1	Grassy openings in coastal sage scrub, chaparral, juniper woodland, valley and foothill grasslands in clay soils. Found on mesic exposures or seasonally moist microsites	No suitable habitat; No potential
Piperia leptopetala	narrow-petaled rein orchid	None/None	4.3	Dry sites, scrub, and woodland at an elevation less than 2200 meters	No suitable habitat; No potential
Berberis nevinii	Nevin's barberry	E/E	1B.1	Chaparral, Foothill Woodland, Coastal Sage Scrub habitats, Sandy to gravelly soils, washes, chaparral at an elevation less than 650 meters	No suitable habitat; No potential
Lilium humboldtii ssp. *ocellatum*	ocellated humboldt lily	None/None	4.2	Oak canyons, chaparral and yellow-pine forest at an elevation below 1800 meters	No suitable habitat; No potential
Harpagonella palmeri	Palmer's grapplinghook	None/None	4.2	Clay slopes and in burned areas at lower elevations	No habitat; No potential
Mimulus diffusus	Palomar monkeyflower	None/None	4.3	Sandy washes, disturbed areas at an elevation less than 2100 meters	No habitat; No potential
Deinandra paniculata	paniculate tarplant	None/None	4.2	Grassland, open chaparral and woodland, disturbed areas, often in sandy soils up to 1320 meter	Habitat present; No potential not observed during surveys
Atriplex parishii	Parish's brittlescale	None/None	1B.1	Alkaline or clay soils at an elevation less than 470 meters	No habitat; No potential
Malacothamnus parishii	Parish's bush-mallow	None/None	1A	Chaparral and coastal sage scrub	No habitat; No potential
Sidalcea hickmanii ssp. *parishii*	Parish's checkerbloom	None/Rare	1B.2	Chaparral and Yellow Pine forests	No habitat; No potential
Lycium parishii	Parish's desert-thorn	None/None	2B.3	Creosote Brush Scrub and Coastal Sage Scrub habitats; Sandy to rocky slopes, canyons at an elevation less than 1000 meters	No habitat; No potential
Ribes divaricatum var. *parishii*	Parish's gooseberry	None/None	1A	Moist woodland between 60–310 meters	No habitat; No potential
Rupertia rigida	Parish's rupertia	None/None	4.3	Woodland, chaparral, lower montane conifer forest at an elevation less than 2500 m	No habitat; No potential
Chorizanthe parryi var. *parryi*	Parry's spineflower	None/None	1B.1	Openings of chaparral, sage scrub, alluvial fan sage scrub and Juniper woodland	No habitat; No potential
Caulanthus simulans	Payson's jewelflower	None/None	4.2	Chaparral, Coastal Sage Scrub	No habitat; No potential
Chorizanthe leptotheca	Peninsular spineflower	None/None	4.2	Sand or gravel, between (300)600–1600 meters	No habitat; No potential
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	None/None	2B.2	Found on herbs including Alternanthera, Dalea, Lythrum, Polygonum and Xanthium at an elevation of less than 500 meters	No habitat; No potential
Calochortus plummerae	Plummer's mariposa-lily	None/None	4.2	Dry, rocky slopes, brushy areas and openings in chaparral below 5000 feet	No habitat; No potential
Sphenopholis obtusata	prairie wedge grass	None/None	2B.2	Wet meadows, streambanks, ponds at an elevation between 240–2870 meters	No habitat; No potential
Monardella pringlei	Pringle's monardella	None/None	1A	Interior sand dunes in sandy soils at an elevation between 300–400 meters	No habitat; No potential
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None/None	4.3	Coastal sage scrub, chaparral, dry soils up to 1,500 foot elevation	No habitat; No potential
Chloropyron maritimum ssp. *maritimum*	salt marsh bird's-beak	E/E	1B.2	Coastal Strand and Coastal Salt Marsh and under natural conditions in wetlands at an elevation less than 10 meters	No habitat; No potential
Sidalcea neomexicana	Salt Spring checkerbloom	None/None	2B.2	Creosote Bush Scrub, Chaparral, Yellow Pine Forest, Coastal Sage Scrub and Alkali Sink	No habitat; No potential
Symphyotrichum defoliatum	San Bernardino aster	None/None	1B.2	Cismontane woodlands, coastal sage scrub, lower montane coniferous forests, meadows, seeps, marshes, swamps, valleys and foothill grasslands	Habitat present; No potential not observed during surveys
Artemisia palmeri	San Diego sagewort	None/None	4.2	Moist drainages, sandy soil at an elevation greater than 600 meters	No habitat; No potential

Scientific Name	Common Name	Status Federal/ State	CNPS List	Primary Habitat Associations	Status Onsite or Potential to Occur
Senecio astephanus	San Gabriel ragwort	None/None	4.3	Steep rocky slopes in chaparral/coastal-sage scrub and oak woodland; Elevation: 400--1500 m	No habitat; No potential
Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	E/None	1B.1	Alkali flats	No habitat; No potential
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	E/E	1B.1	Washes, floodplains, dry riverbeds at an elevation less than 500 m.	No habitat; No potential
Dodecahema leptoceras	slender-horned spineflower	Endangered/Endangered	1B.1	Alluvial washes. It is usually restricted to old bench habitats in Riversidian alluvial fan sage scrub	No habitat; No potential
Convolvulus simulans	small-flowered morning-glory	None/None	4.2	Coastal sage scrub, valley grassland	Habitat present; No potential not observed during surveys
Centromadia pungens ssp. *laevis*	smooth tarplant	None/None	1B.1	Alkaline soils at the edges of marshes and swamps	No habitat; No potential
Juglans californica	southern California black walnut	None/None	4.2	Hillsides and canyons at 30–900 meters	No habitat; No potential
Streptanthus campestris	southern jewelflower	None/None	1B.3	Juniper woodland or high desert transitional chaparral. Open, rocky conifer forest, chaparral, woodland; Elevation: 900--2300 m	No habitat; No potential
Navarretia fossalis	spreading navarretia	Threatened/None	1B.1	Vernal pools and depressions and ditches	No habitat; No potential
Brodiaea filifolia	thread-leaved brodiaea	Threatened/Endangered	1B.1	Valley Grassland, Foothill Woodland, Coastal Sage Scrub, and Freshwater Wetland	Habitat present; No potential not observed during surveys
Bouteloua trifida	three-awned grama	None/None	2B.3	Dry, rocky, generally calcareous slopes, crevices, washes, scrub in creosote bush scrub; at an elevation: 200--1600 m	No habitat; No potential
Hordeum intercedens	vernal barley	None/None	3.2	Vernal pools, dry, saline streambeds and alkaline flats at an elevation below 500 meters	No habitat; No potential
Asplenium vespertinum	western spleenwort	None/None	4.2	Moist, shady, rocky places, such as the shadows beneath cliff overhangs	No habitat; No potential
Chorizanthe xanti var. *leucotheca*	white-bracted spineflower	None/None	1B.2	Saltbush, pinyon-juniper, and pine-oak woodlands communities, at an elevation between 400-1,250 meters	No habitat; No potential
Texosporium sancti-jacobi	woven-spored lichen	None/None	3	Arid to semi-arid shrub-steppe, grassland or savannah communities up to 1,000 meters in elevation	Habitat present; Low potential- was not observed during surveys
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	None/None	2B.1	Moist places, drying riverbeds	No habitat; No potential
Allium marvinii	Yucaipa onion	None/None	1B.2	Dry slopes, ridges; Elevation: 300--1250 m	No habitat; No potential

Legend

FE: Federally-listed as endangered
FT: Federally-listed as threatened
SCE: State candidate for listing as endangered
FC: Federal Candidate
SE: State-listed as endangered
ST: State-listed as threatened
SR: State rare

CNPS List= California Native Plant Society
CNPS 1B= Rare or Endangered In California and Elsewhere
CNPS 2= Rare or Endangered in California, More Common Elsewhere
CNPS 3= Need More Information
CNPS 4= Plants of Limited Distribution
CNPS New Threat Code extensions and their meanings:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

OAK TREES

There are no oak trees on or adjacent to the project site.

FAUNA

The project study area supports a low-moderate diversity of wildlife species due to the level of disturbance and development in the vicinity. Many of the wildlife species observed or detected in the project study area are commonly found in the urban interface or on disturbed habitat Wildlife is generally specific to disturbed sage scrub habitat. While a few wildlife species are entirely dependent on a single vegetative community, the entire mosaic of the site and adjoining areas constitutes a functional ecosystem for a variety of wildlife species. The habitat on the site provides foraging habitat for year-round residents, seasonal residents, and migrating song birds. In addition, the site encompasses raptor foraging and perching habitat. A list of observed wildlife is attached as Appendix D. Wildlife usage of the project site tends to be focused around the margins of the project site, away from the eastern development. Characteristic avian species detected include mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), European starling (*Sturnus vulgaris*), Savannah sparrow (*Passerculus sandwichensis*), house finch (*Haemorhous mexicanus*) and lesser goldfinch (*Spinus psaltria*).

SENSITIVE WILDLIFE

No sensitive wildlife was detected within the project study area during wildlife field studies. Additional species are discussed in Appendix F. One (1) species is assumed to be present Table 5.2 provides the listing status of the species.

TABLE 5.2

MSHCP ADEQUATELY CONSERVED WILDLIFE SPECIES

Species	Listing Status
Stephens' kangaroo rat (*Dipodomys stephensi*)	Federal: Endangered State: Threatened MSHCP: Covered Species

MSHCP ADEQUATELY CONSERVED SPECIES

Wildlife species that are covered and Adequately Conserved by the MSHCP does not include Stephens Kangaroo rat. Stephens Kangaroo rat (SKR) is covered under a separate Habitat Conservation Plan. As a Covered species, participation in the HCP would provide "take" for SKR species and no additional mitigation except a fee, would be required. Although SKR is Adequately Conserved, the intent of the proposed project is to avoid and/or minimize impacts to all biological resources that occur within its boundaries.

MSHCP SECTION 6.1.2 SPECIES

No MSHCP Section 6.1.2 species (LBV, southwestern Willow flycatcher and other riparian species) were observed on the project site or within the 500 foot buffer.

FAIRY SHRIMP

We found no ponded water areas on the project site.

MSHCP SECTION 6.3.2 CRITERIA AREA SPECIES

Burrowing owl (*Athene cunicularia*) is a state species of special concern and MSHCP Group 3 species that is found in open, dry grasslands, agricultural and range lands, as well as desert habitats with low-growing vegetation. The BUOW resides in burrows primarily created, then abandoned, by species such as California ground squirrels (*Spermophilus beecheyi*) and coyotes (*Canis latrans*). Although several potential debris piles were mapped within the project area during habitat assessments for this species, focused surveys did not identify BUOW or active burrows during surveys on the property or in adjacent areas.

VI. IMPACT ANALYSIS AND MITIGATION MEASURES

This section provides an analysis of impacts to biological resources expected to occur from the construction of the proposed p roject. Both direct and indirect impacts are anticipated as a result of construction activities. Impacts are defined as activities that destroy, damage, alter, or otherwise affect biological resources in a project area. Impacts are described below.

PROJECT EFFECTS

The number of individuals of each sensitive species inhabiting the habitat areas was not determined, for the following reasons: (a) many species are amphibians or reptiles, which are difficult to detect during routine field surveys, (b) intensive population studies of small mammals inhabiting the various habitats were not conducted due to the excessive time required to complete such investigations, and (c) some of the bird species known from habitats immediately adjacent to the project area were not observed during field surveys but, due to their capacity of flight, could inhabit the area any time in the future.

Direct and Indirect Impacts to Wildlife

This section addresses direct, indirect, and cumulative impacts to biological resources that may result from implementation of the proposed project.

Direct impacts generally consist of the loss of habitat and the plant and wildlife species that it contains within the area impacted by the proposed project. For the purposes of this assessment, all biological resources within the grading impact area are considered 100 percent lost.

Indirect Impacts are difficult to quantify but, in some cases, they may be as significant as direct impacts. In general, indirect impacts primarily result from adverse "edge effects," either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with the location of development in proximity to biological resources within natural open space.

Short-term indirect impacts that may potentially result from any project construction include dust production, which could affect plant growth and insect activity; noise, which could disrupt wildlife communication, including bird breeding behavior; lighting, which could disrupt behavior of nocturnal reptiles, mammals, and raptors; sedimentation, siltation, and erosion, which could affect water quality of onsite streams; and pollutant runoff, including chemicals used during construction and machinery maintenance, which could contaminate soil and water.

Cumulative Impacts refer to incremental individual environmental effects of the proposed project and other past, present, and reasonably foreseeable future projects when combined together. These impacts taken individually may be minor, but collectively may be significant as they occur over a period of time.

THRESHOLDS FOR DETERMINING POTENTIAL SIGNIFICANCE

Guidelines under California Environmental Quality Act (CEQA) provide guidance and interpretation for implementing CEQA statutes. CEQA significance entails any impact to plant and wildlife species listed by federal or state agencies as threatened or endangered, or of regional or local significance. A significant impact to listed or sensitive species could be direct or indirect, with impacts to rare or sensitive habitats also considered significant.

In general, the proposed project could result in a potentially significant impact to the environment if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW, USACE, RWQCB, or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.
- Introduce land use within an area immediately adjacent to the MSHCP Conservation Area that would result in substantial edge effects; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Mitigation and conservation recommendations to address each impact to biological resources are identified below.

Participation in the MSHCP and implementation of conservation and additional mitigation measures would compensate for impacts that would occur as a result of project implementation.

DIRECT IMPACTS

Direct impacts consist of any ground-disturbing activities (i.e., vegetation removal, grading, paving, building of structures, installing landscaping, etc.). Impacts will occur to all of the habitat on the site. These impacts will occur in the grading for the buildings and roadways by removal of habitat. No state or federal listed plant species will be impacted by the proposed project. The habitat on the project site supports common native wildlife species that would be directly affected by the removal of the habitat.

The more mobile wildlife species, such as birds that utilize the affected area will be displaced during clearing activities to adjacent areas. These animals may move to open adjacent properties. The less mobile species will probably be lost during the habitat

clearing and grading. Construction of the project will probably limit the future use of the area except for common reptile, bird and small mammal species that can be found in urban neighborhoods.

Anticipated impacts to most sensitive wildlife species would be relatively minor, for the following reasons: (a) most of the potentially impacted species are common, and (b) the project area is already disturbed by anthropogenic activities.

Construction Related Land Disturbance

Land disturbance calculations that would result from construction activities (i.e. grading, staging areas etc.) are provided in Table 6.1 below. Implementation of the proposed project would result in the estimated direct permanent loss of approximately 4.8 acres of habitat.

TABLE 6.1

ACREAGE OF HABITAT TYPES RELATED TO LAND DISTURBANCE

Vegetation	Existing/Impacts
Amaranthus albus (Tumbleweed) herb alliance	1.630
California Annual Grassland Alliance	3.120
Developed	0.050
Palm Tree (*Washingtonia* sp.)	0.003
Palo Verde sp.	0.007
TOTAL (acres)	**4.811**

Vegetation Communities

Permanent impacts to vegetation communities that occur within the project footprint would result from disturbance associated with permanent roads and structures.

Clearing and grading associated with construction of the project may result in the alteration of soil conditions, including the loss of native seed bank and changes to the topography and drainage of a site such that the capability of the habitat to support current vegetation is impaired. Table 6.1 describes impacts to habitat types.

RIPARIAN, STREAMBED, MSHCP SECTION 6.12 AND WATERS OF THE U.S.

There are no state or federal streambed resources on the project site. MSHCP Section 6.12 riverine resources are not located on the project site.

FAIRY SHRIMP

There are no fairy shrimp on the project site. Fairy shrimp are not located on the project site.

SENSITIVE PLANT SPECIES

There are no sensitive plant species in the project area, and none were observed on the project site.

OAK TREES

There are no oak trees on the project site.

COMMON AND SENSITIVE WILDLIFE SPECIES

Although the intent of the proposed project is to protect biological resources to the maximum extent possible, construction and implementation of the proposed project could potentially impact common wildlife species, species Covered by the MSHCP and associated habitats for these species as identified within the study area. The following avoidance and minimization measures will be incorporated during project implementation for the protection of these species.

COMMON AND MSHCP ADEQUATELY CONSERVED SPECIES

No wildlife species, that are Covered Species and Adequately Conserved by the MSHCP, were detected within the study area during habitat assessment and focused surveys. The following measures will be implemented in order to avoid and/or minimize potential impacts to common and Adequately Conserved MSHCP wildlife species resources.

Construction Minimization Measures (Section 7.5.3 of the MSHCP)

The following construction minimization measures shall be implemented during project construction to minimize impacts on biological resources during construction:

- Timing of construction activities shall consider seasonal requirements for breeding birds and migratory non-resident species covered under the Migratory Bird Treaty Act. Habitat clearing shall be avoided during species active breeding season, defined as February 1 to September 15. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to the project site shall occur on pre-existing access routes to the greatest extent possible.
- Equipment storage, fueling and staging areas shall be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types. The limits of disturbance, including the upstream, downstream and lateral extents, shall be clearly defined and marked in the field. Mitigation Monitoring Program personnel shall review the limits of disturbance prior to initiation of construction activities.

- Exotic species removed during construction shall be properly handled to prevent sprouting or regrowth.
- Training of construction personnel shall be provided.
- Ongoing monitoring and reporting shall occur for the duration of the construction activity to ensure implementation of best management practices (BMPs).
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
- Waste, dirt, rubble, or trash shall not be deposited in a Conservation Area or on native habitat.

SENSITIVE SPECIES RELATED TO SECTION 6.1.2 OF THE MSHCP

There are no sensitive species related to Section 6.1.2 of the MSHCP on the project site.

FAIRY SHRIMP

There are no fairy shrimp on the project site.

MSHCP SECTION 6.3.2 CRITERIA AREA SPECIES

Burrowing Owl-Focused surveys for BUOW were completed in accordance with the applicable survey protocol as discussed above in Section 3.0 Survey Methods. This species has been determined absent from the project study area at this time. Although no impacts to this species are anticipated as a result of construction activities, implementation of avoidance and minimization measures described below would be implemented to minimize potential for impact to the species should BUOW come into the project area.

Pursuant to the MSHCP Mitigation Measure Objective 6, for burrowing owl, a preconstruction burrowing owl survey shall be conducted prior to issuance of a grading permit to verify the presence/absence of the owl on the Project site. Within thirty days of the onset of construction activities, a qualified biologist shall survey within 500 feet of the Project site for the presence of any active owl burrows. Any active burrow found during survey efforts shall be mapped on the construction plans. If no active burrows are found, no further mitigation would be required. Results of the surveys shall be provided to the City of Moreno Valley. If nesting activity is present at an active burrow, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owl in the region normally occurs between March and August. To protect the active burrow, the following restrictions to construction activities shall be required until the burrow is no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any active burrow, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any active burrow, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the active burrow shall only be allowed if the biologist

determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active burrow is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will either actively or passively relocate the burrowing owl based on direction from the WRC RCA. The biologist shall then remove the burrow so the burrowing owl cannot return to the burrow. Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to BUOW would not be significant.

Stephens' Kangaroo rat (SKR) - This species has been determined absent from the project study area at this time. No impacts to this species are expected. Although no impacts to this species are anticipated as a result of construction activities it is in the SKR habitat area. It is a HCP covered species and a fee is required as part of the mitigation for the project.

Raptors (Including MSHCP covered and non-covered species) Mitigation Measure-Seven days prior to the onset of construction activities during the raptor nesting season (February 1 to June 30), a qualified biologist shall survey within 500 feet of the Project impact area for the presence of any active raptor nests (common or special status). Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW. If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any occupied nest, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any occupied nest, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active nest is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will flush any raptor to open space areas. A qualified biologist, or construction personnel under the direction of the qualified biologist, shall then remove the nest site so raptors cannot return to a nest. Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to raptors would not be significant.

NON-MSHCP COVERED WILDLIFE SPECIES

No non-MSHCP covered special status wildlife species were observed on the project site. Impacts to non-MSHCP covered special status wildlife species would not be considered significant with the implementation of minimization and avoidance measures proposed below in conjunction with other nesting and/or migratory bird species.

MIGRATORY BIRD SPECIES

Project construction may temporarily effect the movement of migratory bird species and their breeding success. Their active nests could be directly or indirectly impacted such that nest abandonment resulting in death of eggs or young occurs. Disturbance from construction activities, such as noise, human presence, and habitat alteration due to the trimming of trees and clearing of native vegetation, could affect the nesting habits of the special-status and migratory bird species. However, these impacts would not be considered significant with the implementation of avoidance and minimization measures described above and below:

If construction is to occur during the MBTA nesting cycle (February 1-September 15) than a nesting bird survey should be conducted by a qualified biologist. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take and is potentially punishable by fines or imprisonment. Active bird nests should be mapped utilizing a hand-held global positioning system (GPS) and a 300' buffer will be flagged around the nest (500' buffer for raptor nests). Construction should not be permitted within the buffer areas while the nest continues to be active (eggs, chicks, etc.). Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to migratory birds would not be significant.

WILDLIFE MOVEMENT

Increases in noise, construction traffic, and human activities during construction activities may temporarily deter movement of wildlife within the project vicinity. Impacts to wildlife species are considered significant if they interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Indirect, adverse, substantial effects on movement of wildlife or impediments to the use of wildlife corridors or nursery sites are not expected from construction or operational activities of the proposed project. However, implementation of avoidance and minimization measures described above would ensure that wildlife movement would not be significantly impacted by the proposed project.

INDIRECT IMPACTS

It is anticipated that there will be some indirect impacts resulting from the proposed project. Potential indirect impacts include increased noise, human activity, and light levels as described below. For each of the indirect impacts (MSHCP Section 6.1.4 Urban/Wildlands Interface) described below, an action(s) or measure(s) is described to ensure that these potential indirect impacts can be maintained at less than significant levels.

Runoff, Erosion and Siltation

Siltation and erosion resulting from the proposed activities are potentially significant indirect impacts associated with this proposed project because of the proximity of the proposed work area to natural areas. Surface water quality could be diminished as a result of scraping and grading, and material laydown. As such, erosion from these activities can remove topsoil necessary for plant growth both in the graded areas and

in lower areas affected by increased runoff. The eroded soil can be deposited as silt and alluvium off of the project site. Siltation from these activities can damage wetlands and aquatic habitats and bury vegetation or topsoil. Implementation of avoidance and minimization measures described above under direct impacts is proposed. These measures include implementation of an effective SWPPP or WQMP that employs appropriate BMPs to avoid or limit runoff, erosion, and siltation. With these measures, project related runoff, erosion, and siltation would not result in significant impacts to any offsite water features or sensitive habitats.

Nonnative Weed Establishment

The loss of topsoil from grading or as a result of overland flow may increase the likelihood of exotic plant establishment in offsite native communities. Nonnatives may out-compete native species, suppress native recruitment, alter community structure, degrade or eliminate habitat for native wildlife, and provide food and cover for undesirable nonnative wildlife. The introduction of nonnative plant species into a community as a result of soil disturbance and erosion can increase the competition for resources such as water, minerals, and nutrients between native and nonnative species as well as alter the hydrology and sedimentation rates. In addition, if the nonnative plants form a continuous ground cover, an increase in the natural fire regime may occur, further eliminating any remaining native vegetation, and causing a type conversion to a disturbed/nonnative habitat type. The establishment of nonnative weeds could affect endangered species associated with offsite habitat and could therefore be considered potentially significant if not mitigated. Implementation of avoidance and minimization measures described under direct impacts will reduce potential impacts from project related impacts due to nonnative species.

Toxic Substances

Toxic substances can kill wildlife and plants or prevent new growth where soils or water are contaminated. Toxic substances can be released into the environment through several scenarios including planned or accidental releases, leaching from stored materials, pesticide or herbicide use, or fires, among others. No intentional releases of toxic substances are planned as part of the proposed project. Accidental releases could occur from several sources such as leaking equipment, or fuel spills during the course of the construction. The implementation of BMPs during construction will reduce the risk of leaks and fuel spills below a level of significance.

A spill contingency plan, written by the construction contractor and approved prior to construction will be in effect during all phases of construction activities. The project would result in the additional use of hazardous materials in limited quantities associated with normal residential use such as cleaning products, solvents, herbicides, and insecticides. However, compliance with regulations will reduce the potential risk of hazardous material exposure to a level that is less than significant. An information pamphlet will be prepared for each homeowner regarding the use of toxics.

Fugitive Dust

Trenching, grading, and vehicle operations associated with the construction of the proposed project may produce fugitive dust. Excessive dust can damage or degrade vegetation by blocking leaf exposure to sunlight. Implementation of dust control measures, as part of BMPs during construction, will reduce fugitive dust emissions to below a level of significance. Dust control measures can include spraying work or driving areas with water and careful operation of equipment.

CUMULATIVE IMPACTS

Construction of the proposed project will alter 4.8 acres of habitat. To determine if this impact is significant on a cumulative basis, it needs to be considered in the context of existing and future surrounding developments within this area of the City of Moreno Valley. Cumulative impacts could also result from the marginalization of quality of the habitat in close proximity to the future project by increased human activities associated with the development of the proposed project site.

- Riverside County is expected to experience a dramatic increase in residential and commercial development over the next twenty years. Such development will involve many large scale construction projects which may encroach on biological resources, potentially impacting sensitive communities, special status species, and biological diversity.
- For the purpose of this analysis, the geographic scope will comprise the habitat areas directly and indirectly affected by the construction and operation of the project. Urbanization and development in the area impact the ability of certain plant and animal species to forage, breed, and develop in their natural habitat. A cumulative impact would occur if the proposed project substantially contributed to the cumulative degradation of biological resources caused by recent, current, and planned development.
- The proposed project is located within the coverage area of the MSHCP. This conservation planning effort with the overall goal of maintaining biological diversity in rapidly urbanizing areas provides a Conservation Area for 146 special status species, requiring incidental take permits for projects impacting these species. The proposed project would contribute to significant cumulative impacts to biological resources if it violated a conservation plan such as the MSHCP. The proposed project will comply with all MSHCP regulations, including but not limited to the payment of relevant fees, compliance with acquisition processes, and compliance with policies protecting various plants and animals. In following all the regulations set forth by the MSHCP, the proposed project would not substantially contribute to cumulative impacts to biological resources in violation of conservation plans.
- Construction and operation of the proposed project can potentially result in the permanent loss of or temporary disturbance to habitat through grading, drilling, clearing brush, or other construction activities. To protect sensitive biological resources a biologist will conduct preconstruction surveys and mark sensitive areas so that they might be avoided by construction crews and protected from construction activities. The same measures will be taken to protect special status plant species, special status terrestrial species, and BUOW. Construction activities may also impact avian species by disturbing active nests trimming trees or removing vegetation. Mitigation measures mandates that

either construction activities be limited to non-breeding season or a wildlife biologist conduct a preconstruction focused nesting survey. Additionally, construction noise may impact both migratory and nesting birds; mitigation measures regulates ambient noise levels to minimize the impact to birds nesting within or passing through construction areas. With the implementation of mitigation measures, construction of the proposed project would not substantially contribute, either directly or through habitat modification, to adverse cumulative effects on candidate, sensitive, or special status species.

- Construction of the proposed project will result in permanent and temporary disturbance to natural lands through grading and clearing vegetation, exposing topsoil to weathering, impacting sheetflow, and impeding plant growth. In a rapidly developing area, these impacts would contribute to the cumulative degradation of this habitat. The Applicant will minimize the effects of erosion and the hydrologic impacts through such measures as the installation of sediment control structures and the use of water bars, silt fences, stalked straw bales, and mulching in disturbed areas. By implementing BMP measures, the proposed project will not substantially contribute to the cumulative damage to this habitat.
- The proposed project falls under the jurisdiction of local policies and ordinances regarding trees. In order to construct the proposed project the removal of vegetation at will permanently and directly damage trees. By complying with the City of Moreno Valley requirements, the proposed project will not significantly contribute to the cumulative impact on local tree populations.
- Composite development has the potential to interfere with the movement of migratory animals by physically interfering with the migratory corridor. Construction activities, and introduced structures can act as barriers to migration. Construction activities could potentially impact migration patterns but are considered temporary. Given the distribution of the structures and the volume of traffic associated with the proposed project, the project may significantly contribute to cumulative obstacles to migratory wildlife.

The cumulative effects of the proposed project on biological resources are considered insignificant for the following reasons:

The proposed project site totals approximately 4.8 acres, of which all of it will be disturbed.

1. The proposed best management practices (BMP's) are part of the requirement for the proposed project by the Santa Ana Regional Water Quality Control Board for protection of surface water quality from sediments in the proposed project runoff.

2. The habitat present is contiguous with habitat to the west and east. Preserving the proposed project site would provide biological value because of the nesting target species that already occur on the project site.

3. If the proposed project is not constructed, impacts to the existing area would still occur as a result of populater of invasive species and anthropogenic activities.

Anticipated impacts to sensitive wildlife species would be relatively minor, for the following reasons: (a) most of the potentially impacted species are common species and not threatened/endangered, and (b) the project area is already disturbed by the existing anthropogenic activities and surrounding developments. Appendix C-Riverside County Attachment E-4 of this document includes CEQA checklist (impacts to sensitive habitat/riparian habitat, wetlands/jurisdictional features, wildlife movement, and local ordinances).

VII. MSHCP CONSISTENCY OVERVIEW

This section provides an overview of MSHCP consistency of the proposed Project with the MSHCP. Appendix G, attached, provides a stand alone MSHCP Consistency Determination Report. The proposed Project must comply with the following MSHCP requirements:

- Project Consistency with MSHCP Reserve Assembly (MSHCP *Section 3.2.3* and *Section 3.3*)
- Guidelines for facilities within the PQP Lands (MSHCP *Section 7.5*)
- Species Associated with Riparian/Riverine Areas and Vernal Pool guidelines (MSHCP *Section 6.1.2*)
- Narrow Endemic Plant Species guidelines (MSHCP *Section 6.1.3*)
- Additional Survey Needs and Procedures (MSHCP *Section 6.3.2*)
- Urban Wildlands Interface Guidelines (MSHCP *Section 6.1.4*)
- Requirements To Be Met For 28 Species Prior To Including Those Species On The List Of Covered Species Adequately Conserved (MSHCP *Table 9-3*)

PROJECT CONSISTENCY WITH MSHCP AREA PLANS

The project area is located in Reche Canyon/Badlands. Reserve assembly goals and project relationship for each of these areas are presented in Section 2 of this report.

The project alignment is located within Rough Step 3. Based on the 2017 Annual Report, Rough Step Unit 3 is in "Rough Step." Therefore, the project does not affect the Reserve Assembly goals of the MSHCP.

PROJECT CONSISTENCY WITH CORES AND LINKAGES WITHIN THE CONSERVATION AREA

The MSHCP Conservation Area is comprised of a variety of existing and proposed cores, extensions of existing cores, linkages, constrained linkages and non-contiguous habitat blocks. These features are generally referenced as cores and linkages. There are no proposed cores and linkages located within the project area. There will not be any impacts to key species associated with cores and linkages.

PUBLIC/QUASI-PUBLIC LANDS

There are no public/quasi-public lands adjacent to the project site. There will be no anticipated direct impacts to public/quasi-public lands.

MSHCP SECTION 6.1.2 – PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AND VERNAL POOL RESOURCES

An assessment of the potentially significant effects of the proposed project on riparian, riverine and vernal pool areas was conducted. Seasonal watercourses are present and evidence of recent surface water was observed on site. Potential MSHCP 6.1.2 areas were found on the project site. A Determination of Biologically Equivalent or Superior Preservation (DBESP) Report as required by the MSHCP (Section 6.1.2, pages 6-21 and 6-

22) for impacts to Riparian/Riverine Areas/Vernal Pools may be required to be completed. The proposed project is consistent with MSHCP Section 6.1.2, depending on the seasonal watercourses determination.

MSHCP SECTION 6.1.2 – PROTECTION OF NARROW ENDEMIC PLANT SPECIES

There are no narrow endemic plant species on the project site. The proposed project will have no impact on these resources. As such, the proposed project is consistent with MSHCP *Section 6.1.3*.

MSHCP SECTION 6.3.2 - ADDITIONAL SURVEY NEEDS AND PROCEDURES

Criteria Area Plant Surveys

No Criteria Area Plant Surveys have been identified within the project area to date. As such, the proposed project will have no impact on the Criteria Area Plant Surveys and is consistent with MSHCP *Section 6.3.2*.

Burrowing Owl

The proposed project is located within the BUOW survey area of the MSHCP. Focused surveys for BUOWs were completed in accordance with the applicable survey protocol (refer to Table 6 for list of survey dates). Although no BUOW sign and no live individuals were detected in the project study area, BUOW was detected adjacent to the project area. As BUOW is a species that is known for its ability to move into and out of areas across seasons and years, avoidance and minimization measures presented in Section 6 above will be implemented for the protection of this species if BUOW is encountered. The proposed project will have no impact on the BUOW. As such, the proposed project is consistent with MSHCP *Section 6.3.2*.

MSHCP TABLE 9-3 REQUIREMENTS TO BE MET FOR 28 SPECIES PRIOR TO INCLUDING THOSE SPECIES ON THE LIST OF COVERED SPECIES ADEQUATELY CONSERVED

Table 9-3 of the MSHCP lists goals for 28 species that must be met before they are considered to be Adequately Conserved. GEC found none of the species listed in Table 9-3 on the proposed project site. As such, the proposed project is consistent with MSHCP *Table 9-3.*

MSHCP SECTION 6.1.4 - URBAN WILDLANDS INTERFACE GUIDELINES

The guidelines presented in *Section 6.1.4* of the MSHCP are intended to address indirect effects associated with development in proximity to the MSHCP Conservation Area (i.e., the portions of the Criteria Cells which will be, or have been, conserved). Below is a summary of the Urban Wildlands Interface Guidelines and their relationship to the proposed project:

Drainage- The proposed project will impact existing runoff conditions. BMPs established in Section 8.0 will be taken to ensure that the quantity and quality of runoff will be comparable to existing conditions.

Toxics- It is not anticipated that this proposed project will use chemicals or generate bi-products that are potentially toxic or may adversely affect wildlife species, habitat or water quality. If a toxic substance is identified during construction, measures such as those employed to address drainage issues, as presented in Section 8.0, will be implemented to avoid potential for adverse impacts. An information pamphlet will be prepared for each business owner regarding the use of toxics.

Lighting- Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated into project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.

Noise- Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards.

Invasives- Project related landscaping within or adjacent to the Conservation Area, will comply with not utilizing the invasive nonnative plant species listed in *Table 6-2* of *Section 6.1.4* of the MSHCP. Minimization and avoidance measures as presented in Section 8.0 of this report will be implemented in order to avoid the spread of invasive species within the project area.

Barriers- Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas.

Grading/Land Development- All manufactured slopes associated with site development will be within the project site.

MIGRATORY BIRD TREATY ACT COMPLIANCE

Pursuant to MSHCP *Section 14.13*, the Section 10(a) Permit issued for the MSHCP constitutes a Special Purpose Permit under 50 Code of Federal Regulations Section 21.27, for the Take of Covered Species Adequately Conserved listed under Federal ESA and which are also listed under the MBTA of 1918, as amended (16 U.S.C. §§ 703-712), in the amount and/or number specified in the MSHCP, subject to the terms and conditions specified in the Section 10(a) Permit. Any such Take will not be in violation of the MBTA. The MBTA Special Purpose Permit will extend to Covered Species Adequately Conserved listed under Federal ESA and also under the MBTA, valid for a period of three (3) years from its Effective Date, provided the Section 10(a) Permit remains in effect for such period. The Special Purpose Permit shall be renewed pursuant to the requirements of the MBTA if needed valid for a period of three (3) additional years.

The period from approximately 15 February to 15 September covers the breeding season

for most birds in the project area, but unseasonal active nests must also be avoided if encountered. Although minimal direct impacts are anticipated in habitats for nesting birds, nesting in adjacent areas may suffer indirect impacts from project activity, such as disturbance related nest abandonment. In these areas, work should be conducted in the non-breeding season when possible. If project activity must be conducted during the breeding season, a qualified biologist should check for nesting birds prior to such activity. Implementation of avoidance/minimization measures presented in Section 8.0 would ensure that migratory and/or nesting bird species would not be impacted by the proposed project. As it relates to nesting birds covered under MSHCP *Section 14.13*, the proposed project is consistent with the MSHCP.

VIII. SUMMARY OF MITIGATION MEASURES AND BMPS

This section provided a comprehensive list of avoidance, minimization and compensation measures. Implementation of these measures, as proposed, ensures compliance and consistency with the MSHCP.

MSHCP BMPs AND MITIGATION MEASURES

Table 8.1 presents MSHCP BMPs (Appendix C of the MSHCP), Construction Guidelines (*Section 7.5.*3 of the MSHCP), and species specific mitigation measures that have been incorporated in the MSHCP and will be implemented as part of the project. **Mitigation Measures Detailed in Table 8.1 shall be included in the Mitigation Monitoring and Reporting Program for the project and completed prior to the issuance of a Grading Permit.**

TABLE 8.1

MSHCP BMPS AND SPECIES SPECIFIC MITIGATION MEASURES

MSHCP BMPs (MSHCP Vol. I, Appendix C)	
MSHCP BMP-1	Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
MSHCP BMP-2	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, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
MSHCP BMP-3	Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
MSHCP BMP-4	To avoid attracting predators of the species of concern, the project site 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).
MSHCP BMP-5	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.
MSHCP Construction Guidelines (MSHCP Section 7.5.3)	
MSHCP CONST-1	Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and approved by the City of Lake Elsinore and participating jurisdiction prior to construction.
MSHCP CONST-2	Timing of construction activities will consider seasonal requirements for breeding birds and migratory non- resident species. Habitat clearing will be avoided during species active breeding season defined as February 15-September 15
MSHCP CONST-3	Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
MSHCP CONST-4	Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site.
MSHCP CONST-5	Settling ponds where sediment is collected will be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds will be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care will be exercised during removal of silt fencing to minimize release of debris or sediment into streams.
MSHCP CONST-6	No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
MSHCP CONST-7	The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible.
MSHCP CONST-8	Equipment storage, fueling and staging areas will be sited on non-sensitive upland Habitat types with minimal risk of direct discharge into riparian areas or other sensitive Habitat types.
MSHCP CONST-9	The limits of disturbance, including the upstream, downstream and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.
MSHCP CONST-10	During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland Habitats occupied by Covered Species that are outside of the project footprint will be avoided.

MSHCP CONST-11	Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.
MSHCP CONST-12	Training of construction personnel will beprovided.
MSHCP CONST-13	Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best managementpractices.
MSHCP CONST-14	Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation.
MSHCP CONST-15	All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
MSHCP CONST-16	Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat.
MSHCP CONST-17	Wildlife Biologist required to be present during construction of the project.
MSHCP SPECIES/HABITAT SPECIFIC MEASURES MITIGATION MEASURES	
Stephen's Kangaroo Rat	As part of the mitigation for the project, Stephen's kangaroo rat mitigation fee is required for the project. Fee is required to be paid prior to the issuance of a Grading Permit.
Raptors-Nesting Birds	As part of the mitigation for the project, Seven days prior to the onset of construction activities during the raptor nesting season (February 1 to June 30), a qualified biologist shall survey within 500 feet of the Project impact area for the presence of any active raptor nests (common or special status). Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW. If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any occupied nest, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any occupied nest, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active nest is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the

	raptor is away from the nest, the biologist will flush any raptor to open space areas. A qualified biologist, or construction personnel under the direction of the qualified biologist, shall then remove the nest site so raptors cannot return to a nest.
MSHCP-BUOW	As part of the mitigation for the project, A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (including but not limited to vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies, and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

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X. APPENDICES

Appendix A: Project Site Photos and Photo Location Key

Appendix B: Riverside County Attachment E-3

Appendix C: Riverside County Attachment E-4

Appendix D: Plant and Animal Compendium

Appendix E: Burrowing Owl Report

Appendix F: List of special-status species that were determined to have potential to occur within the project area

Appendix G: Consistency Analysis

Appendix A

Photo key & Photos

Figure 1: Picture Locations

HOBBS-MORENO VALLEY TTM 37858

Figure 2
Picture 1
View North

Figure 3
Picture 2
View North

Figure 4
Picture 3
View South

Figure 5
Picture 4
View South

Figure 6
Picture 5
View West

Figure 7
Picture 6
View East

Figure 8
Picture 7
View West

Appendix B

Riverside County Attachment E-3

BIOLOGICAL REPORT SUMMARY SHEET

(Submit two copies to the County)

Applicant Name: RC Hobbs Companies

Assessor's Parcel Number (APN): 478-090-018, 478-090-024, and 478-090-025

Site Location: Section 14 Township: 3S Range: 3W Sunnymead Quadrangle
Site Address: NA

Related Case Number(s): ---------- **PDB Number:** ----------

CHECK SPECIES SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE OF CONCERN	(Circle Yes, No or N/A regarding species findings on the referenced site)		
		Yes	No	N/A
XXX	MSHCP 6.1.2 riparian/riverine/vernal pools		X	
XXX	Blueline Stream(s)		X	
XXX	California red-legged frog			X
XXX	southern mountain yellow-legged frog			X
XXX	western spadefoot			X
XXX	American bittern			X
XXX	American peregrine falcon		X	
XXX	American white pelican			X
XXX	bald eagle			X
XXX	Bell's sage sparrow		X	
XXX	black swift		X	
XXX	black-crowned night heron			X

XXX	black-tailed gnatcatcher			X
XXX	brant			X
XXX	Brewer's sparrow		X	
XXX	burrowing owl		X	
XXX	California black rail			X
XXX	California brown pelican			X
XXX	California condor			X
XXX	California gull			X
XXX	California horned lark			X
XXX	California Spotted Owl			X
XXX	canvasback			X
XXX	Caspian tern			X
XXX	coastal cactus wren			X
XXX	coastal California gnatcatcher			X
XXX	common loon			X
XXX	Cooper's hawk			X
XXX	Costa's hummingbird			X
XXX	double-crested cormorant			X
XXX	ferruginous hawk		X	
XXX	golden eagle		X	
XXX	grasshopper sparrow		X	
XXX	great blue heron			X
XXX	great egret			X
XXX	large-billed savannah sparrow			X
XXX	Lawrence's goldfinch			X
XXX	least Bell's vireo			X

XXX	least bittern			X
XXX	Lewis' woodpecker			X
XXX	loggerhead shrike		X	
XXX	long-billed curlew			X
XXX	long-eared owl		X	
XXX	merlin		X	
XXX	mountain plover			X
XXX	northern goshawk			X
XXX	northern harrier		X	
XXX	oak titmouse			X
XXX	olive-sided flycatcher			X
XXX	osprey			X
XXX	prairie falcon		X	
XXX	purple martin			X
XXX	red-breasted sapsucker			X
XXX	red-breasted sapsucker			X
XXX	redhead			X
XXX	rufous hummingbird			X
XXX	sharp-shinned hawk			X
XXX	short-eared owl		X	
XXX	snowy egret			X
XXX	southern California rufous-crowned sparrow		X	
XXX	southwestern willow flycatcher			X
XXX	Swainson's hawk		X	
XXX	tricolored blackbird			X
XXX	tule greater white-fronted goose			X

XXX	Vaux's swift		X	
XXX	vermilion flycatcher			X
XXX	western yellow-billed cuckoo			X
XXX	white-faced ibis			X
XXX	white-tailed kite		X	
XXX	willow flycatcher			X
XXX	yellow warbler			X
XXX	yellow-breasted chat			X
XXX	yellow-headed blackbird			X
XXX	Riverside fairy shrimp			X
XXX	arroyo chub			X
XXX	Santa Ana speckled dace			X
XXX	Santa Ana sucker			X
XXX	steelhead - southern California DPS			X
XXX	Busck's gallmoth			X
XXX	Crotch bumble bee		X	
XXX	Delhi Sands flower-loving fly			X
XXX	Desert cuckoo wasp			X
XXX	haromonius halictid bee			X
XXX	quino checkerspot butterfly			X
XXX	American badger		X	
XXX	Dulzura kangaroo rat		X	
XXX	Dulzura pocket mouse		X	
XXX	lesser long-nosed bat		X	
XXX	Los Angeles pocket mouse		X	
XXX	northwestern San Diego pocket mouse		X	

XXX	Pacific pocket mouse		X	
XXX	pallid bat		X	
XXX	pallid bobcat		X	
XXX	pallid San Diego pocket mouse		X	
XXX	Peninsular bighorn sheep DPS		X	
XXX	pocketed free-tailed bat		X	
XXX	San Bernardino flying squirrel			X
XXX	San Bernardino kangaroo rat			X
XXX	San Diego black-tailed jackrabbit		X	
XXX	San Diego desert woodrat		X	
XXX	southern grasshopper mouse		X	
XXX	Stephens' kangaroo rat	X–within fee area		
XXX	western mastiff bat			X
XXX	western red bat			X
XXX	western small-footed myotis			X
XXX	western yellow bat		X	
XXX	Yuma myotis		X	
XXX	California glossy snake		X	
XXX	coast horned lizard		X	
XXX	coast patch-nosed snake		X	
XXX	coastal whiptail		X	
XXX	northern California legless lizard		X	
XXX	orange-throated whiptail		X	
XXX	red-diamond rattlesnake		X	
XXX	San Bernardino ringneck snake		X	
XXX	San Diego banded gecko		X	

XXX	San Diego ringneck snake			X
XXX	south coast gartersnake			X
XXX	southern California legless lizard			X
XXX	two-striped gartersnake			X
XXX	western pond turtle			X
XXX	Alvin Meadow bedstraw			X
XXX	Brand's star phacelia			X
XXX	bristly sedge			X
XXX	California satintail			X
XXX	California screw moss			X
XXX	chaparral ragwort			X
XXX	chaparral sand-verbena			X
XXX	Cleveland's bush monkeyflower			X
XXX	Coulter's goldfields		X	
XXX	Coulter's matilija poppy			X
XXX	crowned muilla			X
XXX	Davidson's saltscale			X
XXX	Deep Canyon snapdragon			X
XXX	Duran's rush			X
XXX	Engelmann oak			X
XXX	Gambel's water cress			X
XXX	Hall's monardella			X
XXX	Horn's milk-vetch			X
XXX	Jaeger's milk-vetch			X
XXX	little mousetail			X
XXX	long-spined spineflower			X

XXX	Los Angeles sunflower			X
XXX	marsh sandwort			X
XXX	mesa horkelia			X
XXX	mud nama			X
XXX	Munz's onion			X
XXX	narrow-petaled rein orchid			X
XXX	Nevin's barberry			X
XXX	ocellated humboldt lily			X
XXX	Palmer's grapplinghook			X
XXX	paniculate tarplant			X
XXX	Parish's brittlescale			X
XXX	Parish's bush-mallow			X
XXX	Parish's checkerbloom			X
XXX	Parish's desert-thorn			X
XXX	Parish's gooseberry			X
XXX	Parish's rupertia			X
XXX	Parry's spineflower			X
XXX	Payson's jewelflower			X
XXX	Peninsular spineflower			X
XXX	Peruvian dodder			X
XXX	Plummer's mariposa-lily			X
XXX	prairie wedge grass			X
XXX	Pringle's monardella			X
XXX	Robinson's pepper-grass			X
XXX	salt marsh bird's-beak			X
XXX	salt spring checkerbloom			X
XXX	San Bernardino aster			X
XXX	San Diego sagewort			X
XXX	San Gabriel ragwort			X
XXX	San Jacinto Valley crownscale			X
XXX	Santa Ana River woollystar			X

XXX	slender-horned spineflower			X
XXX	small-flowered morning-glory			X
XXX	smooth tarplant			X
XXX	southern California black walnut			X
XXX	southern jewelflower			X
XXX	spreading navarretia			X
XXX	thread-leaved brodiaea			X
XXX	three-awned grama			X
XXX	vernal barley			X
XXX	western spleenwort			X
XXX	white-bracted spineflower			X
XXX	woven-spored lichen			X
XXX	Wright's trichocoronis			X
XXX	Yucaipa onion			X

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened or candidate species by either State, or Federal regulations, or for Riverside County as listed by the California Department of Fish and Game Natural Diversity Data Base (NDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report.

Teresa Gonzales-Gonzales Environmental Consulting LLC

Signature and Company Name Report Date March 1, 2020

10(a) Permit Number (if applicable) TE060175-5 Permit Expiration Date

County Use Only

Received by:

Date:

PD-B#

Appendix C

Riverside County Attachment E-4

LEVEL OF SIGNIFICANCECHECKLIST

For Biological Resources

(Submit Two Copies)

Case Number: _____ Lot/Parcel No.: APN 478-090-018, 478-090-024, and 478-090-025

EA Number ----------

Wildlife & Vegetation

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

(Check the level of impact the applies to the following questions)

a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	X		

With urban interface mitigation the project will have a less than significant impact on open space.

b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		X	

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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		X	

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		X	

e) 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 Game or U. S. Fish and Wildlife Service?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
		X	

f) 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?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
			X

No wetlands are present.

g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
			X

Source: CGP Fig. VI.36-VI.40

Findings of Fact: The number of individuals of each sensitive species inhabiting the habitat areas was not determined, for the following reasons: (a) many species are amphibians or reptiles, which are difficult to detect during routine field surveys, (b) intensive population studies of small mammals inhabiting the various habitats were not conducted due to the excessive time required to complete such investigations, and (c) some of the bird species known from habitats immediately adjacent to the project area were not observed during field surveys but, due to their capacity of flight, could inhabit the area any time in the future.

Direct and Indirect Impacts to Wildlife

This section addresses direct, indirect, and cumulative impacts to biological resources that may result from implementation of the proposed project.

Direct impacts generally consist of the loss of habitat and the plant and wildlife species that it contains within the area impacted by the proposed project. For the purposes of this assessment, all biological resources within the grading impact area are considered 100 percent lost.

Indirect Impacts are difficult to quantify but, in some cases, they may be as significant as direct impacts. In general, indirect impacts primarily result from adverse "edge effects," either short-term indirect impacts related to construction or long-term, chronic indirect impacts associated with the location of development in proximity to biological resources within natural open space.

Short-term indirect impacts that may potentially result from any project construction include dust production, which could affect plant growth and insect activity; noise, which could disrupt wildlife communication, including bird breeding behavior; lighting, which could disrupt behavior of nocturnal reptiles, mammals, and raptors; sedimentation, siltation, and erosion, which could affect water quality of onsite streams; and pollutant runoff, including chemicals used during

construction and machinery maintenance, which could contaminate soil and water.

Cumulative Impacts refer to incremental individual environmental effects of the proposed project and other past, present, and reasonably foreseeable future projects when combined together. These impacts taken individually may be minor, but collectively may be significant as they occur over a period of time.

THRESHOLDS FOR DETERMINING POTENTIAL SIGNIFICANCE

Guidelines under California Environmental Quality Act (CEQA) provide guidance and interpretation for implementing CEQA statutes. CEQA significance entails any impact to plant and wildlife species listed by federal or state agencies as threatened or endangered, or of regional or local significance. A significant impact to listed or sensitive species could be direct or indirect, with impacts to rare or sensitive habitats also considered significant.

In general, the proposed project could result in a potentially significant impact to the environment if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFW, USACE, RWQCB, or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.
- Introduce land use within an area immediately adjacent to the MSHCP Conservation Area that would result in substantial edge effects; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Mitigation and conservation recommendations to address each impact to biological resources are identified below.

Participation in the MSHCP and implementation of conservation and additional mitigation measures would compensate for impacts that would occur as a result of project implementation.

DIRECT IMPACTS

Direct impacts consist of any ground-disturbing activities (i.e., vegetation removal, grading, paving, building of structures, installing landscaping, etc.). Impacts will occur to all of the habitat on the site. These impacts will occur in the grading for the buildings and roadways by removal of habitat. No state or federal listed plant species will be impacted by the proposed project. The habitat on the project site supports common native wildlife species that would be directly affected by the removal of the habitat.

The more mobile wildlife species, such as birds that utilize the affected area will be displaced

during clearing activities to adjacent areas. These animals may move to open adjacent properties. The less mobile species will probably be lost during the habitat clearing and grading. Construction of the project will probably limit the future use of the area except for common reptile, bird and small mammal species that can be found in urban neighborhoods.

Anticipated impacts to most sensitive wildlife species would be relatively minor, for the following reasons: (a) most of the potentially impacted species are common, and (b) the project area is already disturbed by anthropogenic activities.

Construction Related Land Disturbance

Land disturbance calculations that would result from construction activities (i.e. grading, staging areas etc.) are provided in Table 1 below. Implementation of the proposed project would result in the estimated direct permanent loss of approximately 4.8 acres of habitat.

TABLE 1

ACREAGE OF HABITAT TYPES RELATED TO LAND DISTURBANCE

Vegetation	Existing/Impacts
Amaranthus albus (Tumbleweed) herb alliance	1.630
California Annual Grassland Alliance	3.120
Developed	0.050
Palm Tree (*Washingtonia* sp.)	0.003
Palo Verde sp.	0.007
TOTAL (acres)	**4.811**

Vegetation Communities

Permanent impacts to vegetation communities that occur within the project footprint would result from disturbance associated with permanent roads and structures.

Clearing and grading associated with construction of the project may result in the alteration of soil conditions, including the loss of native seed bank and changes to the topography and drainage of a site such that the capability of the habitat to support current vegetation is impaired. Table 6.1 describes impacts to habitat types.

RIPARIAN, STREAMBED, MSHCP SECTION 6.12 AND WATERS OF THE U.S.

There are no state or federal streambed resources on the project site. MSHCP Section 6.12 riverine resources are not located on the project site.

FAIRY SHRIMP

There are no fairy shrimp on the project site. Fairy shrimp are not located on the project site.

SENSITIVE PLANT SPECIES

There are no sensitive plant species in the project area, and none were observed on the project site.

OAK TREES

There are no oak trees on the project site.

COMMON AND SENSITIVE WILDLIFE SPECIES

Although the intent of the proposed project is to protect biological resources to the maximum extent possible, construction and implementation of the proposed project could potentially impact common wildlife species, species Covered by the MSHCP and associated habitats for these species as identified within the study area. The following avoidance and minimization measures will be incorporated during project implementation for the protection of these species.

COMMON AND MSHCP ADEQUATELY CONSERVED SPECIES

No wildlife species, that are Covered Species and Adequately Conserved by the MSHCP, were detected within the study area during habitat assessment and focused surveys. The following measures will be implemented in order to avoid and/or minimize potential impacts to common and Adequately Conserved MSHCP wildlife species resources.

Construction Minimization Measures (Section 7.5.3 of the MSHCP)

The following construction minimization measures shall be implemented during project construction to minimize impacts on biological resources during construction:

- Timing of construction activities shall consider seasonal requirements for breeding birds and migratory non-resident species covered under the Migratory Bird Treaty Act. Habitat clearing shall be avoided during species active breeding season, defined as February 1 to September 15. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to the project site shall occur on pre-existing access routes to the greatest extent possible.
- Equipment storage, fueling and staging areas shall be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types. The limits of disturbance, including the upstream, downstream and lateral extents, shall be clearly defined and marked in the field. Mitigation Monitoring Program personnel shall review the limits of disturbance prior to initiation of construction activities.
- Exotic species removed during construction shall be properly handled to prevent sprouting or regrowth.
- Training of construction personnel shall be provided.
- Ongoing monitoring and reporting shall occur for the duration of the construction activity to ensure implementation of best management practices (BMPs).

- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
- Waste, dirt, rubble, or trash shall not be deposited in a Conservation Area or on native habitat.

SENSITIVE SPECIES RELATED TO SECTION 6.1.2 OF THE MSHCP

There are no sensitive species related to Section 6.1.2 of the MSHCP on the project site.

FAIRY SHRIMP

There are no fairy shrimp on the project site.

MSHCP SECTION 6.3.2 CRITERIA AREA SPECIES

Burrowing Owl-Focused surveys for BUOW were completed in accordance with the applicable survey protocol as discussed above in Section 3.0 Survey Methods. This species has been determined absent from the project study area at this time. Although no impacts to this species are anticipated as a result of construction activities, implementation of avoidance and minimization measures described below would be implemented to minimize potential for impact to the species should BUOW come into the project area.

Pursuant to the MSHCP Objective 6, for burrowing owl, a preconstruction burrowing owl survey shall be conducted prior to issuance of a grading permit to verify the presence/absence of the owl on the Project site. Within thirty days of the onset of construction activities, a qualified biologist shall survey within 500 feet of the Project site for the presence of any active owl burrows. Any active burrow found during survey efforts shall be mapped on the construction plans. If no active burrows are found, no further mitigation would be required. Results of the surveys shall be provided to the City of Moreno Valley. If nesting activity is present at an active burrow, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owl in the region normally occurs between March and August. To protect the active burrow, the following restrictions to construction activities shall be required until the burrow is no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any active burrow, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any active burrow, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the active burrow shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active burrow is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will either actively or passively relocate the burrowing owl based on direction from the WRC RCA. The biologist shall then remove the burrow so the burrowing owl cannot return to the burrow. Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to BUOW would not be significant.

Stephens' Kangaroo rat (SKR) - This species has been determined absent from the project study area at this time. No impacts to this species are expected. Although no impacts to this species are anticipated as a result of construction activities it is in the SKR habitat area. It is a HCP covered species and a fee is required.

Raptors (Including MSHCP covered and non-covered species)-Seven days prior to the onset of construction activities during the raptor nesting season (February 1 to June 30), a qualified biologist shall survey within 500 feet of the Project impact area for the presence of any active raptor nests (common or special status). Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW. If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any occupied nest, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any occupied nest, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active nest is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will flush any raptor to open space areas. A qualified biologist, or construction personnel under the direction of the qualified biologist, shall then remove the nest site so raptors cannot return to a nest. Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to raptors would not be significant.

NON-MSHCP COVERED WILDLIFE SPECIES

No non-MSHCP covered special status wildlife species were observed on the project site. Impacts to non-MSHCP covered special status wildlife species would not be considered significant with the implementation of minimization and avoidance measures proposed below in conjunction with other nesting and/or migratory bird species.

MIGRATORY BIRD SPECIES

Project construction may temporarily effect the movement of migratory bird species and their breeding success. Their active nests could be directly or indirectly impacted such that nest abandonment resulting in death of eggs or young occurs. Disturbance from construction activities, such as noise, human presence, and habitat alteration due to the trimming of trees and clearing of native vegetation, could affect the nesting habits of the special-status and migratory bird species. However, these impacts would not be considered significant with the implementation of avoidance and minimization measures described above and below:

If construction is to occur during the MBTA nesting cycle (February 1-September 15) than a nesting bird survey should be conducted by a qualified biologist. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take and is potentially punishable by fines or imprisonment. Active bird nests should be mapped utilizing a hand-held global positioning system (GPS) and a 300’ buffer will be flagged around the nest (500’ buffer for raptor nests). Construction should not be permitted within the buffer areas while the nest continues to be active (eggs, chicks, etc.). Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to migratory birds would not be significant.

WILDLIFE MOVEMENT

Increases in noise, construction traffic, and human activities during construction activities may temporarily deter movement of wildlife within the project vicinity. Impacts to wildlife species are considered significant if they interfere substantially with the movement of any native resident or

migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Indirect, adverse, substantial effects on movement of wildlife or impediments to the use of wildlife corridors or nursery sites are not expected from construction or operational activities of the proposed project. However, implementation of avoidance and minimization measures described above would ensure that wildlife movement would not be significantly impacted by the proposed project.

INDIRECT IMPACTS

It is anticipated that there will be some indirect impacts resulting from the proposed project. Potential indirect impacts include increased noise, human activity, and light levels as described below. For each of the indirect impacts (MSHCP Section 6.1.4 Urban/Wildlands Interface) described below, an action(s) or measure(s) is described to ensure that these potential indirect impacts can be maintained at less than significant levels.

Runoff, Erosion and Siltation

Siltation and erosion resulting from the proposed activities are potentially significant indirect impacts associated with this proposed project because of the proximity of the proposed work area to natural areas. Surface water quality could be diminished as a result of scraping and grading, and material laydown. As such, erosion from these activities can remove topsoil necessary for plant growth both in the graded areas and in lower areas affected by increased runoff. The eroded soil can be deposited as silt and alluvium off of the project site. Siltation from these activities can damage wetlands and aquatic habitats and bury vegetation or topsoil. Implementation of avoidance and minimization measures described above under direct impacts is proposed. These measures include implementation of an effective SWPPP or WQMP that employs appropriate BMPs to avoid or limit runoff, erosion, and siltation. With these measures, project related runoff, erosion, and siltation would not result in significant impacts to any offsite water features or sensitive habitats.

Nonnative Weed Establishment

The loss of topsoil from grading or as a result of overland flow may increase the likelihood of exotic plant establishment in offsite native communities. Nonnatives may out-compete native species, suppress native recruitment, alter community structure, degrade or eliminate habitat for native wildlife, and provide food and cover for undesirable nonnative wildlife. The introduction of nonnative plant species into a community as a result of soil disturbance and erosion can increase the competition for resources such as water, minerals, and nutrients between native and nonnative species as well as alter the hydrology and sedimentation rates. In addition, if the nonnative plants form a continuous ground cover, an increase in the natural fire regime may occur, further eliminating any remaining native vegetation, and causing a type conversion to a disturbed/nonnative habitat type. The establishment of nonnative weeds could affect endangered species associated with offsite habitat and could therefore be considered potentially significant if not mitigated. Implementation of avoidance and minimization measures described under direct impacts will reduce potential impacts from project related impacts due to nonnative species.

Toxic Substances

Toxic substances can kill wildlife and plants or prevent new growth where soils or water are contaminated. Toxic substances can be released into the environment through several scenarios

including planned or accidental releases, leaching from stored materials, pesticide or herbicide use, or fires, among others. No intentional releases of toxic substances are planned as part of the proposed project. Accidental releases could occur from several sources such as leaking equipment, or fuel spills during the course of the construction. The implementation of BMPs during construction will reduce the risk of leaks and fuel spills below a level of significance.

A spill contingency plan, written by the construction contractor and approved prior to construction will be in effect during all phases of construction activities. The project would result in the additional use of hazardous materials in limited quantities associated with normal residential use such as cleaning products, solvents, herbicides, and insecticides. However, compliance with regulations will reduce the potential risk of hazardous material exposure to a level that is less than significant. An information pamphlet will be prepared for each homeowner regarding the use of toxics.

Fugitive Dust

Trenching, grading, and vehicle operations associated with the construction of the proposed project may produce fugitive dust. Excessive dust can damage or degrade vegetation by blocking leaf exposure to sunlight. Implementation of dust control measures, as part of BMPs during construction, will reduce fugitive dust emissions to below a level of significance. Dust control measures can include spraying work or driving areas with water and careful operation of equipment.

CUMULATIVE IMPACTS

Construction of the proposed project will alter 4.8 acres of habitat. To determine if this impact is significant on a cumulative basis, it needs to be considered in the context of existing and future surrounding developments within this area of the City of Moreno Valley. Cumulative impacts could also result from the marginalization of quality of the habitat in close proximity to the future project by increased human activities associated with the development of the proposed project site.

- Riverside County is expected to experience a dramatic increase in residential and commercial development over the next twenty years. Such development will involve many large scale construction projects which may encroach on biological resources, potentially impacting sensitive communities, special status species, and biological diversity.
- For the purpose of this analysis, the geographic scope will comprise the habitat areas directly and indirectly affected by the construction and operation of the project. Urbanization and development in the area impact the ability of certain plant and animal species to forage, breed, and develop in their natural habitat. A cumulative impact would occur if the proposed project substantially contributed to the cumulative degradation of biological resources caused by recent, current, and planned development.
- The proposed project is located within the coverage area of the MSHCP. This conservation planning effort with the overall goal of maintaining biological diversity in rapidly urbanizing areas provides a Conservation Area for 146 special status species, requiring incidental take permits for projects impacting these species. The proposed project would contribute to significant cumulative impacts to biological resources if it violated a conservation plan such as the MSHCP. The proposed project will comply with all MSHCP regulations, including but not limited to the payment of relevant fees, compliance with acquisition processes, and compliance with policies protecting various plants and animals. In following all the regulations set forth by the MSHCP, the

proposed project would not substantially contribute to cumulative impacts to biological resources in violation of conservation plans.

- Construction and operation of the proposed project can potentially result in the permanent loss of or temporary disturbance to habitat through grading, drilling, clearing brush, or other construction activities. To protect sensitive biological resources a biologist will conduct preconstruction surveys and mark sensitive areas so that they might be avoided by construction crews and protected from construction activities. The same measures will be taken to protect special status plant species, special status terrestrial species, and BUOW. Construction activities may also impact avian species by disturbing active nests trimming trees or removing vegetation. Mitigation measures mandates that either construction activities be limited to non-breeding season or a wildlife biologist conduct a preconstruction focused nesting survey. Additionally, construction noise may impact both migratory and nesting birds; mitigation measures regulates ambient noise levels to minimize the impact to birds nesting within or passing through construction areas. With the implementation of mitigation measures, construction of the proposed project would not substantially contribute, either directly or through habitat modification, to adverse cumulative effects on candidate, sensitive, or special status species.
- Construction of the proposed project will result in permanent and temporary disturbance to natural lands through grading and clearing vegetation, exposing topsoil to weathering, impacting sheetflow, and impeding plant growth. In a rapidly developing area, these impacts would contribute to the cumulative degradation of this habitat. The Applicant will minimize the effects of erosion and the hydrologic impacts through such measures as the installation of sediment control structures and the use of water bars, silt fences, stalked straw bales, and mulching in disturbed areas. By implementing BMP measures, the proposed project will not substantially contribute to the cumulative damage to this habitat.
- The proposed project falls under the jurisdiction of local policies and ordinances regarding trees. In order to construct the proposed project the removal of vegetation at will permanently and directly damage trees. By complying with the City of Moreno Valley requirements, the proposed project will not significantly contribute to the cumulative impact on local tree populations.
- Composite development has the potential to interfere with the movement of migratory animals by physically interfering with the migratory corridor. Construction activities, and introduced structures can act as barriers to migration. Construction activities could potentially impact migration patterns but are considered temporary. Given the distribution of the structures and the volume of traffic associated with the proposed project, the project may significantly contribute to cumulative obstacles to migratory wildlife.

The cumulative effects of the proposed project on biological resources are considered insignificant for the following reasons:

The proposed project site totals approximately 4.8 acres, of which all of it will be disturbed.

1. The proposed best management practices (BMP's) are part of the requirement for the proposed project by the Santa Ana Regional Water Quality Control Board for protection of surface water quality from sediments in the proposed project runoff.

2. The habitat present is contiguous with habitat to the west and east. Preserving the proposed project site would provide biological value because of the nesting target species that already occur on the project site.

3. If the proposed project is not constructed, impacts to the existing area would still occur as a result of populater of invasive species and anthropogenic activities.

Anticipated impacts to sensitive wildlife species would be relatively minor, for the following

reasons: (a) most of the potentially impacted species are common species and not threatened/endangered, and (b) the project area is already disturbed by the existing anthropogenic activities and surrounding developments. Appendix C-Riverside County Attachment E-4 of this document includes CEQA checklist (impacts to sensitive habitat/riparian habitat, wetlands/jurisdictional features, wildlife movement, and local ordinances).

MSHCP CONSISTENCY OVERVIEW

This section provides an overview of MSHCP consistency of the proposed Project with the MSHCP. Appendix G, attached, provides a stand alone MSHCP Consistency Determination Report. The proposed Project must comply with the following MSHCP requirements:

- Project Consistency with MSHCP Reserve Assembly (MSHCP *Section 3.2.3* and *Section 3.3*)
- Guidelines for facilities within the PQP Lands (MSHCP *Section 7.5*)
- Species Associated with Riparian/Riverine Areas and Vernal Pool guidelines (MSHCP *Section 6.1.2*)
- Narrow Endemic Plant Species guidelines (MSHCP *Section 6.1.3*)
- Additional Survey Needs and Procedures (MSHCP *Section 6.3.2*)
- Urban Wildlands Interface Guidelines (MSHCP *Section 6.1.4*)
- Requirements To Be Met For 28 Species Prior To Including Those Species On The List Of Covered Species Adequately Conserved (MSHCP *Table 9-3*)

PROJECT CONSISTENCY WITH MSHCP AREA PLANS

The project area is located in Reche Canyon/Badlands. Reserve assembly goals and project relationship for each of these areas are presented in Section 2 of this report.

The project alignment is located within Rough Step 3. Based on the 2017 Annual Report, Rough Step Unit 3 is in "Rough Step." Therefore, the project does not affect the Reserve Assembly goals of the MSHCP.

PROJECT CONSISTENCY WITH CORES AND LINKAGES WITHIN THE CONSERVATION AREA

The MSHCP Conservation Area is comprised of a variety of existing and proposed cores, extensions of existing cores, linkages, constrained linkages and non-contiguous habitat blocks. These features are generally referenced as cores and linkages. There are no proposed cores and linkages located within the project area. There will not be any impacts to key species associated with cores and linkages.

PUBLIC/QUASI-PUBLIC LANDS

There are no public/quasi-public lands adjacent to the project site. There will be no anticipated direct impacts to public/quasi-public lands.

MSHCP SECTION 6.1.2 – PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AND VERNAL POOL RESOURCES

An assessment of the potentially significant effects of the proposed project on riparian, riverine and vernal pool areas was conducted. Seasonal watercourses are present and evidence of recent surface water was observed on site. Potential MSHCP 6.1.2 areas were found on the project site. A Determination of Biologically Equivalent or Superior Preservation (DBESP) Report as required by the MSHCP (Section 6.1.2, pages 6-21 and 6-22) for impacts to Riparian/Riverine Areas/Vernal Pools may be required to be completed. The proposed project is consistent with MSHCP Section 6.1.2, depending on the seasonal watercourses determination.

MSHCP SECTION 6.1.2 – PROTECTION OF NARROW ENDEMIC PLANT SPECIES

There are no narrow endemic plant species on the project site. The proposed project will have no impact on these resources. As such, the proposed project is consistent with MSHCP *Section 6.1.3*.

MSHCP SECTION 6.3.2 - ADDITIONAL SURVEY NEEDS AND PROCEDURES

Criteria Area Plant Surveys

No Criteria Area Plant Surveys have been identified within the project area to date. As such, the proposed project will have no impact on the Criteria Area Plant Surveys and is consistent with MSHCP *Section 6.3.2*.

Burrowing Owl

The proposed project is located within the BUOW survey area of the MSHCP. Focused surveys for BUOWs were completed in accordance with the applicable survey protocol (refer to Table 6 for list of survey dates). Although no BUOW sign and no live individuals were detected in the project study area, BUOW was detected adjacent to the project area. As BUOW is a species that is known for its ability to move into and out of areas across seasons and years, avoidance and minimization measures presented in Section 6 above will be implemented for the protection of this species if BUOW is encountered. The proposed project will have no impact on the BUOW. As such, the proposed project is consistent with MSHCP *Section 6.3.2*.

MSHCP TABLE 9-3 REQUIREMENTS TO BE MET FOR 28 SPECIES PRIOR TO INCLUDING THOSE SPECIES ON THE LIST OF COVERED SPECIES ADEQUATELY CONSERVED

Table 9-3 of the MSHCP lists goals for 28 species that must be met before they are considered to be Adequately Conserved. GEC found none of the species listed in Table 9-3 on the proposed project site. As such, the proposed project is consistent with MSHCP *Table 9-3.*

MSHCP SECTION 6.1.4 - URBAN WILDLANDS INTERFACE GUIDELINES

The guidelines presented in *Section 6.1.4* of the MSHCP are intended to address indirect effects associated with development in proximity to the MSHCP Conservation Area (i.e., the portions of the Criteria Cells which will be, or have been, conserved). Below is a summary of the Urban Wildlands Interface Guidelines and their relationship to the proposed project:

Drainage- The proposed project will impact existing runoff conditions. BMPs established in Section 8.0 will be taken to ensure that the quantity and quality of runoff will be comparable to existing conditions.

Toxics- It is not anticipated that this proposed project will use chemicals or generate bi- products that are potentially toxic or may adversely affect wildlife species, habitat or water quality. If a toxic substance is identified during construction, measures such as those employed to address drainage issues, as presented in Section 8.0, will be implemented to avoid potential for adverse impacts. An information pamphlet will be prepared for each business owner regarding the use of toxics.

Lighting- Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated into project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.

Noise- Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards.

Invasives- Project related landscaping within or adjacent to the Conservation Area, will comply with not utilizing the invasive nonnative plant species listed in *Table 6-2* of *Section 6.1.4* of the MSHCP. Minimization and avoidance measures as presented in Section 8.0 of this report will be implemented in order to avoid the spread of invasive species within the project area.

Barriers- Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping into the MSHCP Conservation Areas.

Grading/Land Development- All manufactured slopes associated with site development will be within the project site.

MIGRATORY BIRD TREATY ACT COMPLIANCE

Pursuant to MSHCP *Section 14.13*, the Section 10(a) Permit issued for the MSHCP constitutes a Special Purpose Permit under 50 Code of Federal Regulations Section 21.27, for the Take of Covered Species Adequately Conserved listed under Federal ESA and which are also listed under the MBTA of 1918, as amended (16 U.S.C. §§ 703-712), in the amount and/or number specified in the MSHCP, subject to the terms and conditions specified in the Section 10(a) Permit. Any such Take will not be in violation of the MBTA. The MBTA Special Purpose Permit will extend to Covered Species Adequately Conserved listed under Federal ESA and also under the MBTA, valid for a period of three (3) years from its Effective Date, provided the Section 10(a) Permit remains in effect for such period. The Special Purpose Permit shall be renewed pursuant to the requirements of the MBTA if needed valid for a period of three (3) additional years.

The period from approximately 15 February to 15 September covers the breeding season for most birds in the project area, but unseasonal active nests must also be avoided if encountered. Although minimal direct impacts are anticipated in habitats for nesting birds, nesting in adjacent areas may suffer indirect impacts from project activity, such as disturbance related nest abandonment. In these areas, work should be conducted in the non-breeding season when possible. If project activity must be conducted during the breeding season, a qualified biologist should check for nesting birds prior to such activity. Implementation of avoidance/minimization measures presented in Section 8.0 would ensure that migratory and/or nesting bird species would not be impacted by the proposed project. As it relates to nesting birds covered under MSHCP *Section 14.13*, the proposed project is consistent with the MSHCP.

SUMMARY OF MITIGATION MEASURES AND BMPS

This section provided a comprehensive list of avoidance, minimization and compensation measures. Implementation of these measures, as proposed, ensures compliance and consistency with the MSHCP.

MSHCP BMPs AND MITIGATION MEASURES

Table 2 presents MSHCP BMPs (Appendix C of the MSHCP), Construction Guidelines (*Section 7.5.*3 of the MSHCP), and species specific mitigation measures that have been incorporated in the MSHCP and will be implemented as part of the project.

TABLE 2

MSHCP BMPS AND SPECIES SPECIFIC MITIGATION MEASURES

MSHCP BMPs (MSHCP Vol. I, Appendix C)	
MSHCP BMP-1	Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
MSHCP BMP-2	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, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
MSHCP BMP-3	Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
MSHCP BMP-4	To avoid attracting predators of the species of concern, the project site 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).
MSHCP BMP-5	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.
MSHCP Construction Guidelines (MSHCP Section 7.5.3)	
MSHCP CONST-1	Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and

	approved by the City of Lake Elsinore and participating jurisdiction prior to construction.
MSHCP CONST-2	Timing of construction activities will consider seasonal requirements for breeding birds and migratory non- resident species. Habitat clearing will be avoided during species active breeding season defined as February 15-September 15
MSHCP CONST-3	Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
MSHCP CONST-4	Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site.
MSHCP CONST-5	Settling ponds where sediment is collected will be cleaned in a manner that prevents sediment from re-entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds will be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care will be exercised during removal of silt fencing to minimize release of debris or sediment into streams.
MSHCP CONST-6	No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
MSHCP CONST-7	The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible.
MSHCP CONST-8	Equipment storage, fueling and staging areas will be sited on non-sensitive upland Habitat types with minimal risk of direct discharge into riparian areas or other sensitive Habitat types.
MSHCP CONST-9	The limits of disturbance, including the upstream, downstream and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.
MSHCP CONST-10	During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland Habitats occupied by Covered Species that are outside of the project footprint will be avoided.
MSHCP CONST-11	Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.
MSHCP CONST-12	Training of construction personnel will be provided.
MSHCP CONST-13	Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices.
MSHCP CONST-14	Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation.
MSHCP CONST-15	All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
MSHCP CONST-16	Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat.
MSHCP CONST-17	Wildlife Biologist required to be present during

	construction of the project.
MSHCP Species/Habitat Specific Measures	
MSHCP-BUOW	A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (including but not limited to vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies, and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

Appendix D

Plant & Animal Compendium

Non-native	SCIENTIFIC NAMES	COMMON NAMES
	DIVISION ANTHOPHYTA	**FLOWERING PLANTS**
	Class Dicotyledones	**Dicots**
	FAMILY AMARANTHACEAE	**AMARANTH FAMILY**
X	*Amaranthus albus*	Tumbleweed
	FAMILY ASTERACEAE	**SUNFLOWER FAMILY**
	Astragalus gambelianus	Dwarf loco weed
	Lasthenia gracilis	Needle goldfields
	FAMILY BORAGINACEAE	**BORAGE FAMILY**
	Amsinckia intermedia	Common Fiddleneck
	Amsinckia menziesii	Fiddleneck
	Plagiobothrys canescens	Valley popcorn flower
	FAMILY BRASSICACEAE	**MUSTARD FAMILY**
X	*Brassica nigra*	Black Mustard
X	*Brassica tournefortii*	Saharan Mustard
X	*Hirschfeldia incana*	Short-pod Mustard
	FAMILY CHENOPODIACEAE	**GOOSEFOOT FAMILY**
X	*Salsola australis*	Russian Thistle
	FAMILY FABACEAE	**PEA FAMILY**
X	*Cercidium* 'Desert Museum' Low Branch	Palo Verde
	Class Monocotyledones	**Monocots**
	FAMILY ARECACEAE	**PALM FAMILY**
	Washingtonia filifera	California palm tree
	FAMILY POACEAE	**GRASS FAMILY**
X	*Bromus berteroanus*	Chilean chess
X	*Bromus diandrus*	Ripgut grass
X	*Bromus hordeaceus*	Soft Chess
X	*Bromus madritensis ssp. rubens*	Foxtail Chess
X	*Hordeum murinum*	Hare Barley
X	*Schismus barbatus*	Mediterranean schismus

Legend:
X = Non-native

BIRDS

ACCIPITRIDAE	**KITES, HAWKS, AND EAGLES FAMILY**
Buteo jamaicensis	Red-tailed hawk
FALCONIDAE	**FALCON FAMILY**
Falco sparverius	American kestrel
COLUMBIDAE	**PIGEONS AND DOVE FAMILY**
Zenaida macroura	Mourning dove
TYTONIDAE	**BARN AND BAY OWL FAMILY**
Tyto alba	Barn owl
TROCHILIDAE	**HUMMINGBIRD FAMILY**
Calypte anna	Anna's Hummingbird
TYRANNIDAE	**TYRANT FLYCATCHER FAMILY**
Sayornis nigricans	Black Phoebe
Tyrannus verticalis	Western Kingbird
CORVIDAE	**CROWS AND RAVENS FAMILY**
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
MIMIDAE	**MIMIC THRUSH FAMILY**
Mimus polyglottos	Northern mockingbird
STURNIDAE	**STARLING FAMILY**
*Sturnus vulgaris**	European Starling
EMBERIZIDAE	**NEW WORLD SPARROW FAMILY**
Melozone crissalis	California towhee
Melospiza melodia	Song Sparrow
Passerculus sandwichensis	Savannah sparrow
PASSERELLIDAE	**OLD WORLD SPARROW**
Zonotrichia leucophrys	White-crowned sparrow
PASSERIDAE	**OLD WORLD SPARROW FAMILY**
*Passer domesticus**	English sparrow

Legend:
*Not protected by MBTA
** Sensitive Species

MAMMALS	
FAMILY CANIDAE	**DOGS, FOXES AND ALLIES**
Canis lupus familiaris	Domestic Dog
FAMILY FELIDAE	**CATS**
Felis catus	Domestic cat
INVERTEBRATES	
CLASS INSECTA	**INSECTS**
FAMILY APIDAE	**HONEY BEES**
Apis mellifera	Honey Bee
FAMILY CULICIDAE	**MOSQUITOES**
Culex quinquefasciatus	Mosquito
FAMILY FORFICULIDAE	**EARWIGS**
Forficula auricularia	European Earwigs
FAMILY BOMBYLIIDAE	**ROBBER FLIES**
Mallophora fautrix	Robber fly
FAMILY MUSCIDAE	**HOUSE FLY**
Musca domestica	Common House Fly
CLASS ARACHNIDA	**SPIDERS, MITES, TICKS AND SCORPIONS**
FAMILY CTENIZIDAE	**TRAP DOOR SPIDER**
Bothriocyrtum californicum	California Trapdoor Spider

*Indicates non-nativespecies
** Indicates sensitive species

HABITAT ASSESSMENT & FOCUSED SURVEYS FOR BURROWING OWL
Tentative Tract Map 37858
(APN 478-090-018, 478-090-024, and 478-090-025)
In the
City of Moreno Valley, County of Riverside
USGS 7.5-minute Sunnymead topographic quadrangle map in Section 14 of Township 3 South, Range 3 West

Prepared By:

GONZALES
ENVIRONMENTAL CONSULTING, LLC

358 Crystal Drive
San Jacinto, CA 92583
(760) 777-1621

Report Date: June 17, 2020
Revised per comments 1/22/2021

TABLE OF CONTENTS

I. TITLE PAGE

A. **Date report prepared**: June 17, 2020, Revised comments 1/22/2021

B. Report Title: FOCUSED BURROWING OWL SURVEYS for Tentative Tract Map 37858 (APN 478-090-018, 478-090-024, and 478-090-025)In the City of Moreno Valley, County of Riverside

C. Project site location: USGS 7.5-minute Sunnymead topographic quadrangle map in Section 14 of Township 3 South, Range 3 West

D. Owner/Applicant:
Roger Hobbs, President
RC Hobbs Companies
1428 E. Chapman Avenue
Orange, CA 92866

E. Principal Investigator(s): Teresa Gonzales and Paul Gonzales
Address: 358 Crystal Drive
San Jacinto, CA 92583
Phone: 760.777-1621

G. Name and phone number of person preparing report and of all persons who performed fieldwork on the site

Name of Person	Role on project
Teresa Gonzales	Prepared report and performed fieldwork
Paul Gonzales	Performed fieldwork

This document should be cited as:
Gonzales Environmental Consulting, LLC. 2020. FOCUSED BURROWING OWL SURVEYS for Tentative Tract Map 37858 (APN 478-090-018, 478-090-024, and 478-090-025)In the City of Moreno Valley, County of Riverside; USGS 7.5-minute topographic Sunnymead topographic quadrangle map in Section 14 of Township 3 South, Range 3 West. June 17, 2020, Revised per comments 1/22/2021. San Jacinto, California. Prepared for RC Hobbs Companies.

II. EXECUTIVE SUMMARY

The project site is located in the City of Moreno Valley, Riverside County, California. In February, March, April, May and June 2020, Teresa Gonzales and Paul Gonzales, Biologists for Gonzales Environmental Consulting, LLC (GEC), conducted focused surveys for burrowing owl.

The vegetation communities within the project area are California Annual Grassland Alliance, Amaranthus albus (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*) Previous and current anthropogenic activities and invasion of nonnative plant species have contributed to the disturbed condition of many vegetation communities within the project vicinity.

The proposed project site is within the Western Riverside Multiple Species Habitat Conservation Plan (WRMSHCP) and MSHCP Burrowing Owl Survey Area. A preconstruction Burrowing Owl Survey will be required as it is a mitigation measure for the project.

In February, March, April, May and June 2020, Teresa Gonzales, Principal Biologist and Paul Gonzales, Senior Biologist for Gonzales Environmental Consulting, LLC (GEC), conducted focused surveys for Burrowing owl on the proposed project site. No burrowing owl(s) were found during our surveys of the area.

III. PROJECT AND PROPERTY DESCRIPTION

This report summarizes the findings of focused surveys to determine presence or absence of burrowing owl (*Athene cunicularia*) on the project site(site).

PROJECT LOCATION

Property Description

The project site (site) discussed in this report is located north of Cactus Avenue, west of Bradshaw Circle in the City of Moreno Valley, Riverside County, California. See Figures 3.1 and 3.2.

The site is located within San Bernardino Meridian in a portion of Section 14, Township 3 South, Range 3 West, City of Moreno Valley, Riverside County, California (Figures 3.1, 3.2 and 3.3). This location is shown on the Sunnymead, California 7.5-minute U.S. Geological Survey (USGS) quadrangle (Sunnymead Photorevised 1980); page 718 Grid D6 of the Riverside County Street Guide and Directory (Thomas Brothers Maps Design 2013). The approximate center of the site is located at 33.911044°, -117.170339°.

Elevation of the assessment area ranges from a from a low of 1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land. The project site has been impacted by anthropogenic activities. Land use in the surrounding area varies between disturbed undeveloped areas, semi-rural and single family residential.

The primary vegetation communities in the project area are California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*) Previous and current anthropogenic activities and invasion of nonnative plant species have contributed to the disturbed condition of many vegetation communities within the project vicinity.

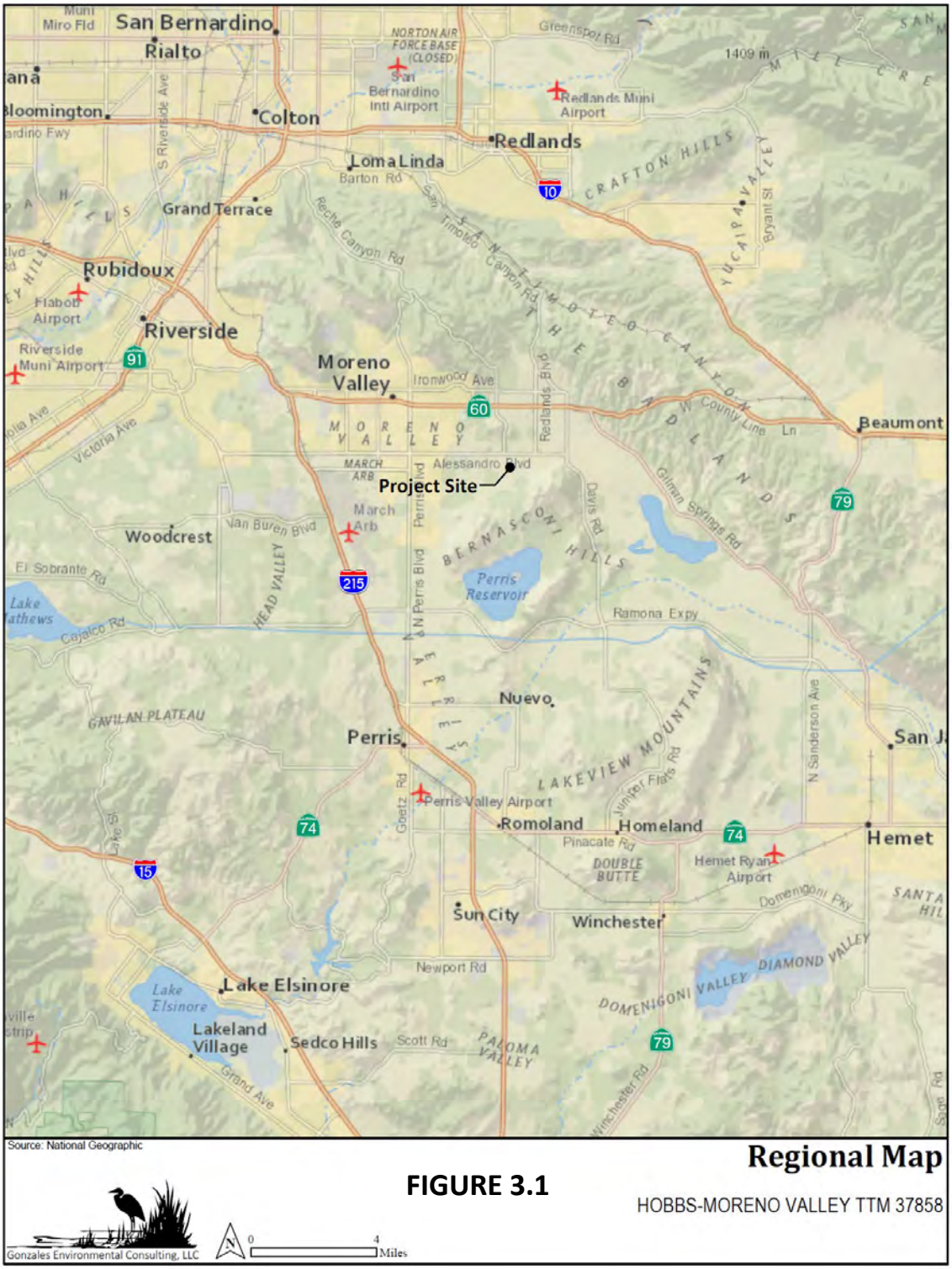

FIGURE 3.1

Regional Map

HOBBS-MORENO VALLEY TTM 37858

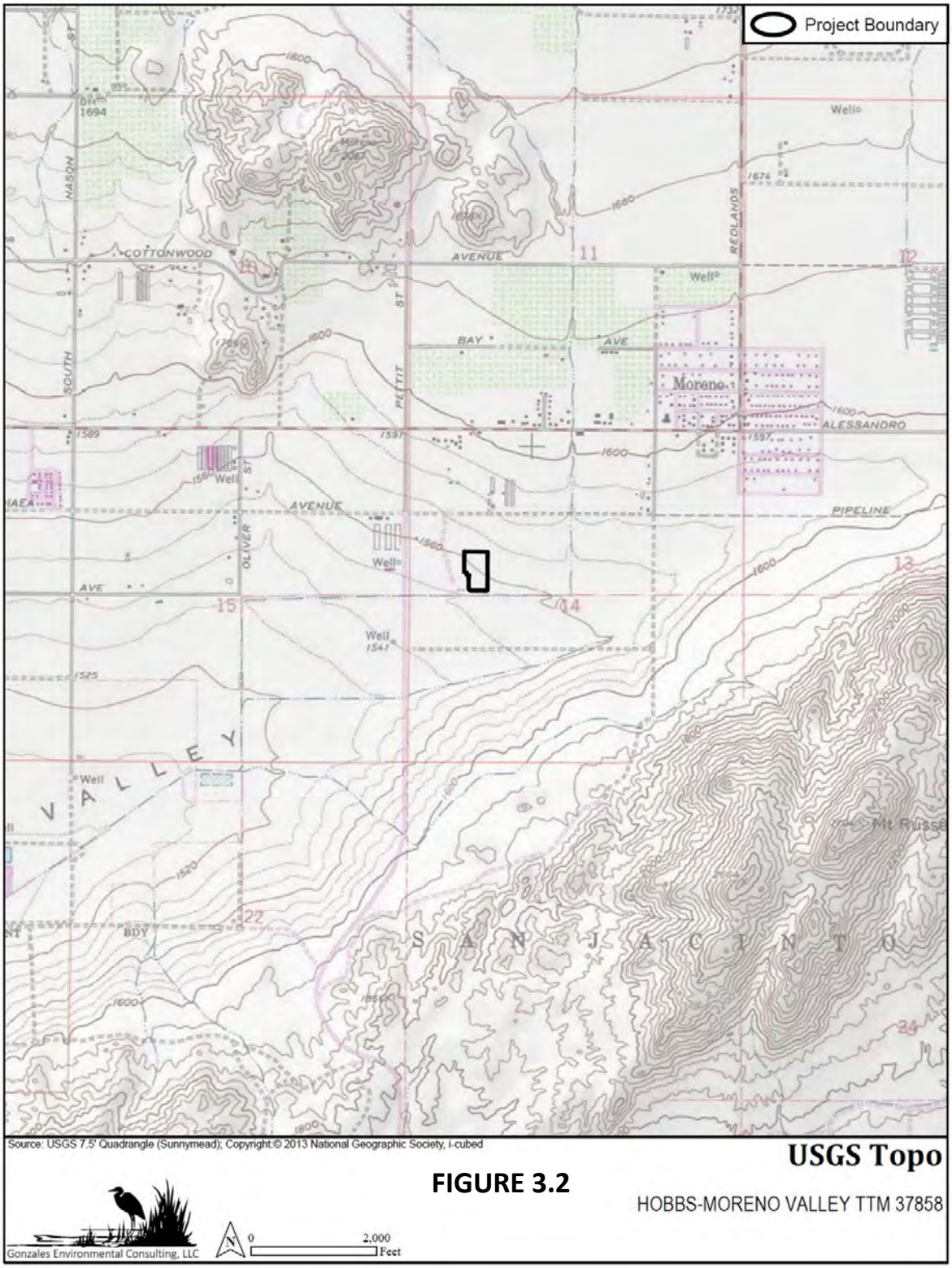
Project Boundary
COTTONWOOD AVENUE
BAY AVE
Moreno
ALESSANDRO
PIPELINE
AVENUE
AVE
NASON
SOUTH
PETTIT ST
OLIVER ST
REDLANDS
Well
VALLEY
SAN JACINTO
Mt Russe
Source: USGS 7.5' Quadrangle (Sunnymead); Copyright:© 2013 National Geographic Society, i-cubed
USGS Topo
HOBBS-MORENO VALLEY TTM 37858
Gonzales Environmental Consulting, LLC
0
2,000
Feet

FIGURE 3.2


Arborglenn Dr
Bradshaw Cir
Cactus Ave
Medinah Way
Project Boundary
Aerial Source: Nearmap 2019
Gonzales Environmental Consulting, LLC
N
0
100
Feet
Aerial Photograph
HOBBS-MORENO VALLEY TTM 37858

FIGURE 3.3

IV. STUDY AREA CONDITIONS

The following sections summarize the study area conditions. For purposes of this report, the term study area includes the proposed project construction limits and a surrounding 500-meter buffer (Figure 5.1).

Physical Conditions

The project site has relatively level topography ranging from a low of 1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The project site has been impacted by anthropogenic activities. Land use in the surrounding area varies between disturbed undeveloped areas, semi-rural and single family residential.

Definitions

Vegetation Communities

Vegetation habitats or communities are assemblages of plant species that usually coexist in the same area. The classification of vegetation communities is based upon the life form of the dominant species within the community and the associated flora. The nomenclature for vegetation communities follows CDFW Vegetation Alliances of Western Riverside County, California.

Wildlife Habitats

Wildlife habitats differ from vegetation communities in that a wildlife habitat may contain several vegetation communities that are similar in structure but different in the plant species composition, location, and soil substrate. This distinction becomes an important factor when assessing the sensitivity of a particular wildlife habitat to impacts. In addition, the interaction of various wildlife species occurs between many different wildlife habitats. This becomes more evident where these habitats overlap in areas known as ecotones. These ecotones support a combination of species from two or more adjoining habitats that generally increases the number and diversity of species within these areas. Wildlife habitats encountered on the project site approximate the vegetation communities discussed is this report.

Vegetation

The project encompasses seven vegetation community types. Vegetation communities currently present are California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*) are located on the southern boundary of the project site. The existing plant communities are described in more detail below.

California Annual Grassland Alliance

This alliance of non-native annual grasslands and forb lands is composed of cool-season, annual grasses mostly introduced from Europe. They are invasive in disturbed areas throughout much of California. The composition varies widely. Many alien annual species may be present, including *Avena fatua, Brassica* spp., *Bromus diandrus, Bromus hordeaceus* and *Bromus madritensis*. The composition of this alliance is largely determined by amount of disturbance coupled with fall temperatures and precipitation, light intensity, litter thickness and micro topography. The percentage of exotic alien species is often directly related to disturbance history with heavy disturbance correlating with heavy exotic invasion. Annual grasses are supremely adapted to the Mediterranean climate of California; many species evolved under similar conditions in southern Europe and northern Africa. Plants germinate during winter rains, and complete their life cycles by the beginning of the summer drought. Seeds often remain viable for many years.

PICTURE 4.1

***Amaranthus albus* (Tumbleweed) herb alliance**

This alliance of non-native *Amaranthus albus* (Tumbleweed) is actually a sub alliance of California annual grasslands is composed of Amaranthus albus (Tumbleweed). Tumbleweed is invasive in disturbed areas throughout much of California. We subcategorized this alliance as there are such large areas with this species.

PICTURE 4.2

Disturbed/Developed

Disturbed areas are characterized by predominantly non-native species introduced and established through human action. Disturbed or barren areas are areas that either completely lack vegetation or have a predominance of non-native species.

PICTURE 4.3

TABLE 4.1
ACREAGE OF HABITAT TYPES

Vegetation	Existing (Acres) On-Site
Amaranthus albus (Tumbleweed) herb alliance	1.630
California Annual Grassland Alliance	3.120
Developed	0.050
Palm Tree (1)	0.003
Palo Verde (1)	0.007
TOTAL (acres)	**4.811**

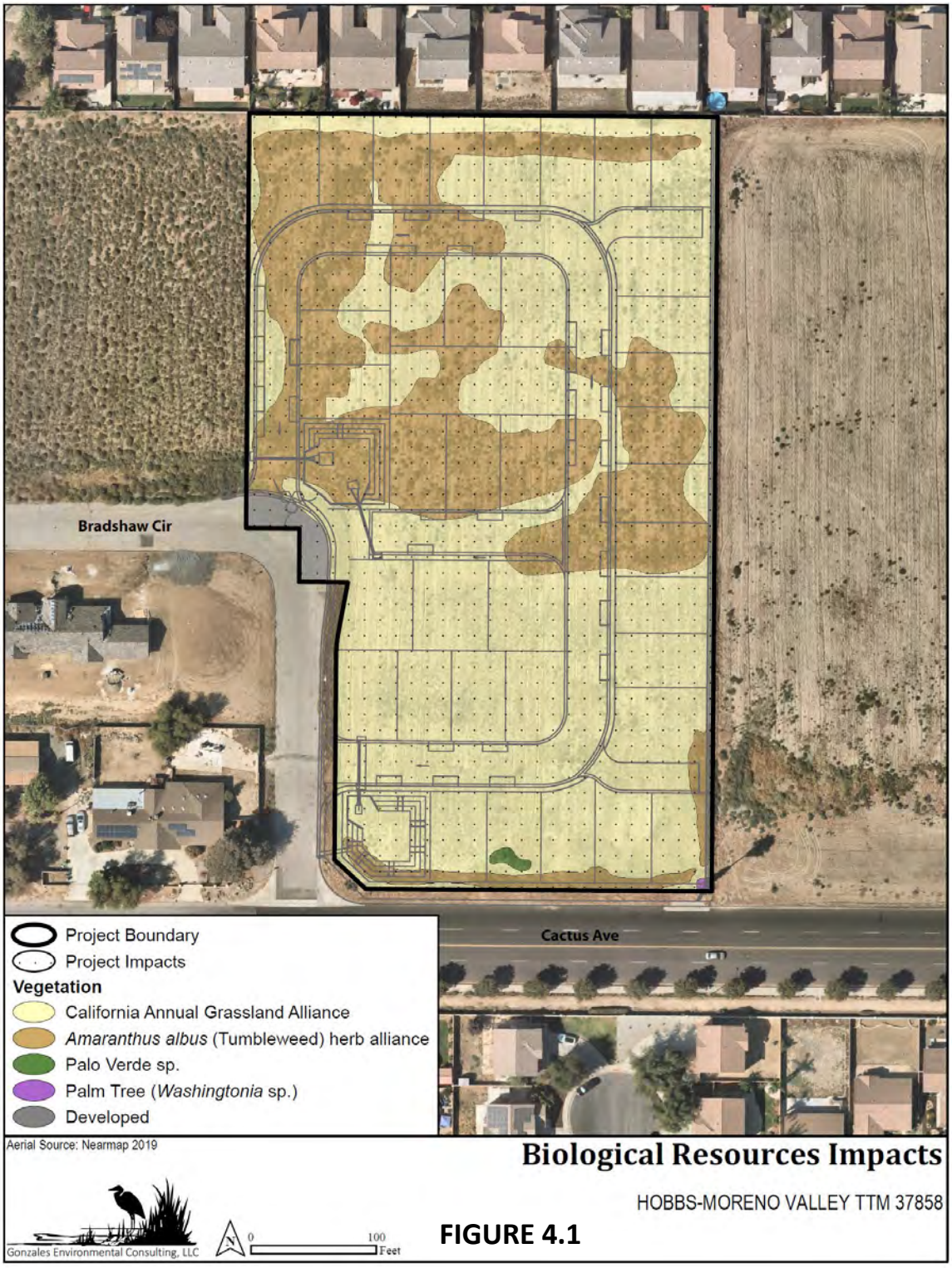
Bradshaw Cir
Cactus Ave
Project Boundary
Project Impacts
Vegetation
California Annual Grassland Alliance
Amaranthus albus (Tumbleweed) herb alliance
Palo Verde sp.
Palm Tree (Washingtonia sp.)
Developed
Aerial Source: Nearmap 2019
Biological Resources Impacts
HOBBS-MORENO VALLEY TTM 37858
Gonzales Environmental Consulting, LLC
N
0
100
Feet

FIGURE 4.1

V. METHODOLOGY

For the development of this document, a systematic approach was taken to identify and characterize biological resources, including vegetation community types, and special status plant and animal species in the project area. The biological resource study area is defined as the area either directly or indirectly impacted by the project. Records of known occurrences were reviewed to identify those plant and wildlife species that may occur in the project area. Those records were then compared with federal or state listed threatened, endangered, or special status species. General biological surveys; vegetation mapping; and surveys for special status wildlife and plant species for the project were conducted. Methods that were used during these surveys are summarized by resource type in the following sections.

Records Search

Preliminary investigations included review of information obtained from the USFWS, and CDFW; literature searches; examination of aerial photographs; and database searches including California Native Plant Society (CNPS), the California Natural Diversity Data Base (CNDDB) records, and sensitive species accounts for Riverside County. Reviewed environmental documents included Environmental Impact Reports prepared for other projects in the vicinity. The following resources were used in background research and during field surveys:

- Topographic maps (USGS 7.5 minute quadrangle)
- Aerial photos
- California Natural Diversity Database (CDFW 2020)
- USFWS sensitive species occurrence database (USFWS 2020)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2020)
- Western Riverside Area, California Soil Survey (U.S. Department of Agriculture [USDA] 1971)
- Volume 1, Parts I and II of the MSHCP (County of Riverside 2003)
- County of Riverside Conservation Summary Report Generator (County of Riverside 2017)

A list of special status species was compiled, including all species in the project area that were:
Listed as endangered or threatened, proposed for listing, or candidates for listing under the Federal Endangered Species Act (FESA);
Listed as endangered or threatened, or candidates for listing under the California Endangered Species Act (CESA);
Included in one of the CDFW publications on species of special concern;
"Fully protected" by the State of California;
Included in the CNPS compilation; or
Identified as plants meeting the definition of rare or endangered under CEQA.

The information provided by these agencies included both regional and site-specific data on sensitive species. These species are listed in Table 5.1.
Appendix F presents a list of special-status species that were determined to have potential to occur within the project area based on literature and database review, as well as initial habitat assessments.

FIELD SURVEY OVERVIEW

The general biological study area consisted of the proposed project area with some focused surveys out to 500 feet on either side of the proposed project area. A number of biological resources assessments and focused surveys have been performed within the project area to date. General and focused biological surveys and habitat assessments were conducted in order to assess the following:

- General biological characteristics of the project area;
- Presence or potential presence of any listed, special-status, or MSHCP species;
- Vegetation communities;
- Flora and fauna species inventories;
- Habitat suitability for burrowing owls (*Athene cunicularia*) within MSHCP survey area;
- Presence or potential presence of species not covered by the MSHCP;
- Presence or potential presence of MSHCP defined fairy shrimp, *Vernal Pool*, and *Riparian/Riverine* habitats; and
- Presence or potential presence of waters and wetlands under U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW) jurisdiction.

Data was collected in the field by numerous techniques including the use of field notes, hand-held Global Positioning System (GPS) devices, standardized data forms, photographs, and field maps. Field maps with an aerial view of the project area included CNDDB, USFWS, and MSHCP sensitive species data points. Potentially occurring habitats for special-status species were identified prior to field investigations through aerial photo-interpretation. Initial reconnaissance level wildlife and botanical surveys were conducted in conjunction with vegetation mapping. The project area was traversed on foot and by vehicles as needed to gain 100 percent access of the survey area.

Focused surveys were scheduled based on the results of the initial assessments. Lists of all vertebrate wildlife species and all plant species encountered within the entire project area are included in Appendix D. Table 4 identifies all field work conducted within the project area in 2020.

Vegetation Methods

Aerial photography and digital vegetation maps were reviewed to determine potential community types within the project area. Preliminary ground-truthing surveys concurred with digital vegetation maps, and additional surveys were performed to accurately define the community types and boundaries.

Wetlands and Aquatic Resources Methods

General wetland and streambed assessments of the proposed project site were conducted in January and February 2020 by GEC, which included general mapping of habitat(s) that may be subject to jurisdiction of CDFW pursuant to sections 1600-12 of the California Fish and Game Code, ACOE and MSHCP Section 6.1.2 if present. Potential MSHCP Section 6.1.2 seasonal watercourses were not found on the project site.

A brief assessment of the wetland/riparian jurisdictional communities encountered (if they were encountered) was also conducted which described the dominant and associate plant

species of each community and the presence and/or absence of visual field indicators (e.g., dominance of hydrophytic species, presence of drift lines).

Wildlife Survey and Habitat Assessment Methods

General reconnaissance and habitat assessment surveys were completed to determine habitat suitability for listed species and special status plant, wildlife, and aquatic species. Suitable habitat for listed species and special status species was determined by the presence of specific habitat elements. The surveys coincided with the period during which many wildlife species, including migratory species, would have been most detectable. A faunal inventory of all species observed during the course of the surveys was also prepared.

SPECIAL STATUS SPECIES METHODS

Special Status Rare Plant Species Survey Methods

Information on special status rare plant species within the project area was gathered from several sources including California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2020), CNDDB (CNDDB 2020), and CalFlora (CalFlora 2020). Maps depicting all known sensitive plant species locations within the project area were produced to aid in determining the target species for survey. General reconnaissance and habitat assessment surveys were completed to determine habitat suitability for listed species and special status plants. Suitable habitat for listed species and special status species was determined by the presence of specific habitat elements.

Plant surveys of the project area were conducted in January and February 2020. This time period corresponds to the time during which early ephemeral spring annuals and herbaceous perennials in Riverside County would be detectable. No sensitive plant species were located. The likelihood of these species occurrence (expected, high, moderate, low, or not expected) was also assessed. A floral inventory of all species observed during the course of the surveys was also documented.

Special Status Wildlife Species Survey Methods

Prior to conducting habitat assessment surveys, CNDDB and other sources were reviewed for the records of special status wildlife species potentially occurring in the project area. General reconnaissance and habitat assessment surveys were conducted to assess the presence of special status wildlife species habitats within the project area. Maps depicting all known sensitive wildlife species locations within the regional vicinity of the project were produced to aid in determining the target species to survey. All wildlife species encountered during surveys were documented. Any specific areas (e.g., potential nesting, breeding, and foraging habitat) encountered during the surveys that have a high probability for supporting sensitive wildlife were documented. The likelihood of these species occurrence (not expected, low, moderate, high, expected) was also assessed. General habitat assessments and focused protocol-level surveys for other species including, but not limited to, burrowing owl (*Athene cunicularia*), were also conducted. General habitat assessments involved evaluating the specific vegetation communities encountered and their potential to support these sensitive species (expected, high, moderate, low, not expected).

Surveys

Based on the findings of the biological surveys, focused habitat assessment and species-specific surveys were scheduled for burrowing owl (*Athene cunicularia*) to determine presence of sensitive, listed, and covered species within the project area. Please see Table 5.2. A complete floristic survey of the project area, as required in a complete CEQA analysis, was conducted in 2020 to determine whether listed or special status plant species or sensitive plant communities occur. Burrowing owl surveys were also conducted in the spring of 2020. All plants encountered were identified to a level necessary to ensure detection of covered or special status species.

The following table identifies the sensitive species for which protocol-level surveys were required for the project.

TABLE 5.1
PROTOCOL SURVEYS

Protocol Surveys			
Species		**Survey Protocol**	**Location**
Scientific Name	**Common Name**		
Athene cunicularia	burrowing owl	A minimum of four surveys are required between March 15 and August 31.	Grasslands, debris piles, disturbed areas

Transects for general reconnaissance and habitat assessment surveys were conducted to assess the presence of burrowing owl within the project area. Survey information is included in Table 5.2.

Surveys

Based on the findings of the biological surveys, focused habitat assessment and species-specific surveys were conducted for burrowing owl (*Athene cunicularia*) to determine presence of sensitive, listed, and covered species within the project area. Burrowing owl habitat surveys were conducted on February 7, 2020. The habitat assessment and focused surveys followed the

California Burrowing Owl Consortium Burrowing Owl Survey Protocol and Mitigation Guidelines[1] and Riverside County Burrowing Owl Survey Instructions[2].

The schedule and field conditions during the visits are summarized below.

TABLE 5.2

BURROWING OWL SURVEY SUMMARY 2020

Date	Air Temperature (F)	Wind Speed (mph)	Cloud Cover	Precipitation	Sunrise/Sunset Times	Time-Duration*
February 7	43-55	3-9	Clear-30% cloud cover	No	0641/1725	0541/0841 3 hrs
February 18	48-58	0-10	10% cloud cover	No	0630/1735	0530/0830 3 hrs
February 26	43-56	0-7	Clear	No	0621/1742	0521/0821 3 hrs
March 1	37-54	0-10	40% cloud cover	No	0616/1745	0516/0816 3 hrs
April 17	43-61	0-2	60% cloud cover	No	0613/1922	0513/0813 3 hrs
May 17	52-66	0-6	Clear	No	0545/1945	0445/0745 3 hrs
June 17	63-72	7-9	Clear	No	0537/2002	1802/2102 3 hrs

*Approved hours for burrowing owl surveys are one hour prior to sunrise until two hours after and two hours prior to sunset and one hour after sunset.

[1] The California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. 15 pgs.

[2] Riverside County. 2006. Burrowing Owl Instructions for the Western Riverside MSHCP. 4 pgs

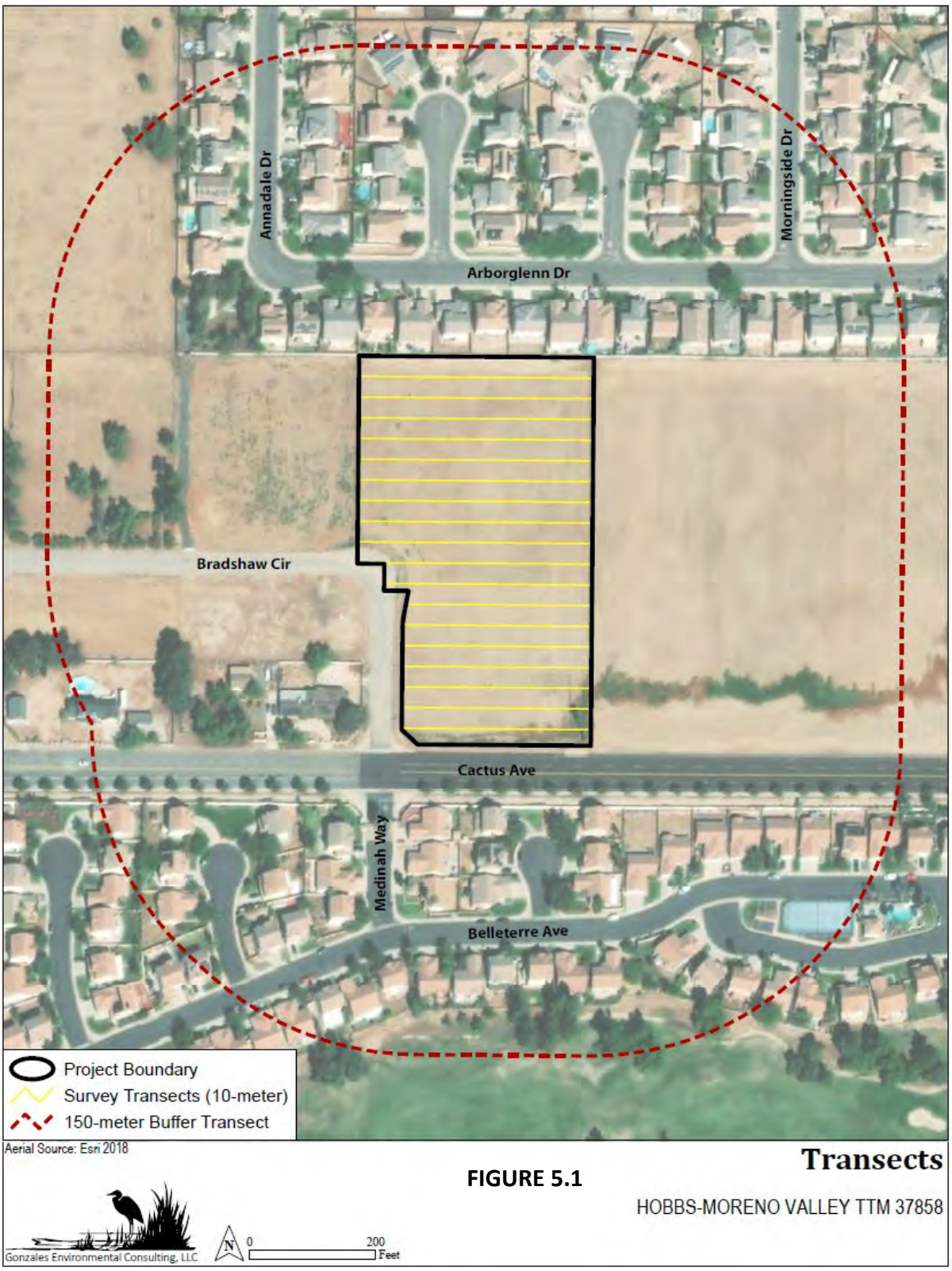

FIGURE 5.1

Transects

HOBBS-MORENO VALLEY TTM 37858

Burrowing owl habitat assessment surveys and focused surveys were conducted in 2020 (refer to Table 3.2 for dates and Table 3.3 for 2020 survey information) according to the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006).

GEC biologists knowledgeable in BUOW habitat, ecology, and field identification of the species conducted surveys on the dates shown in Table 3.2 and 3.3. The weather conditions during these surveys were conducive to observing BUOW outside their burrows and detecting BUOW sign. Data was collected by numerous techniques including the use of a hand-held GPS device, standardized data forms, photographs, and aerial field maps. Details regarding each survey method are provided below:

Habitat Assessment (Step 1)

Habitat within the project area was assessed for BUOW presence, use, and potential use. Areas with potential BUOW habitat, including pasture and debris piles were surveyed by GEC for potential burrows and BUOW. Biologists walked areas of potential habitat while searching for BUOW, potential and active burrows, and owl sign, such as feathers, pellets, and prey items. The survey area included a 150-meter (500-foot) buffer zone outside the project site. Transect surveys for burrows, including owl sign, was conducted by walking or being escorted through suitable habitat over the entire survey area (the proposed route and the 150-meter [500-foot] buffer zone). Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 10 meters (30 feet) and was reduced when necessary to account for differences in terrain, vegetation density, and ground surface visibility.

Focused Burrow Surveys (Step 2 A)

GEC conducted focused burrow surveys including natural burrows or suitable debris piles. Transect surveys for burrows, including owl sign, was conducted by walking or being escorted through suitable habitat over the entire survey area (the proposed route and the 150-meter [500-foot] buffer zone). Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 10 meters (30 feet) and was reduced when necessary to account for differences in terrain, vegetation density, and ground surface visibility. The locations of all potential owl burrows, observed owl sign, and observed BUOW were recorded and mapped with a GPS device.

Focused Owl Surveys (Step 2B)

Focused BUOW surveys consisted of seven site visits covering all project areas and adjacent areas. Surveys were conducted in the morning 1 hour before sunrise to 2 hours after sunrise and 1 hour before sunset to 2 hours after sunset. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors used binoculars and/or spotting scopes to scan all suitable habitats, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. A survey for owls and owl sign was then conducted by walking through suitable habitat over the entire project site and within the adjacent 150-meter (500-foot) buffer zone. These pedestrian surveys followed transects spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines were no more than 10 meters (30 feet) and

were reduced to account for differences in terrain, vegetation density, and ground surface visibility. In areas where access was not obtained, the area adjacent to the project site was surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to the project site.

Focused Burrowing Owl Survey Results

No burrows or burrowing owls were observed on the proposed project site or in adjacent areas.

VII. RESULTS

GEC conducted habitat assessment (Step 1) and focused Burrowing Owl Burrow (Step IIA) and burrowing owl (Step IIB) surveys as outlined by Burrowing Owl Instructions for the Western Riverside MSHCP. Step 1 of the survey identified suitable burrowing owl habitat on-site with the presence of low-growing vegetation. **Results of the Step II A surveys found no owl burrows on the proposed project site or in adjacent areas. Step II B found no burrowing owl on the proposed project site or adjacent to the project site.**

A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (including but not limited to vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies, and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

VIII. REFERENCES

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IX. CERTIFICATION

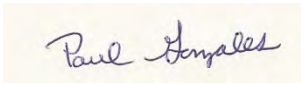
CERTIFICATION*: "I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project."*

DATE: 1/22/21 SIGNED: 

1) Teresa Gonzales

1) Fieldwork Performed By:

Teresa Gonzales



Paul Gonzales

Check here _____ If Adding any additional Names/Signatures, below or on other side of page.

Appendix F

List of special-status species that
were determined to have potential
to occur within the project area

TABLE 1
SPECIAL-STATUS PLANT SPECIES LISTED FOR SUNNYMEAD & SURROUNDING NINE QUADRANGLES

Scientific Name	Common Name	Status Federal/ State	CNPS List	Primary Habitat Associations	Status Onsite or Potential to Occur
Texosporium sancti-jacobi	woven-spored lichen	None/None	3	Arid to semi-arid shrub-steppe, grassland or savannah communities up to 1,000 meters in elevation	Habitat present; Low potential- was not observed during surveys

Legend

FE: Federally-listed as endangered
FT: Federally-listed as threatened
SCE: State candidate for listing as endangered
FC: Federal Candidate
SE: State-listed as endangered
ST: State-listed as threatened
SR: State rare

CNPS List= California Native Plant Society
CNPS 1B= Rare or Endangered In California and Elsewhere
CNPS 2= Rare or Endangered in California, More Common Elsewhere
CNPS 3= Need More Information
CNPS 4= Plants of Limited Distribution
CNPS New Threat Code extensions and their meanings:
.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Appendix F
Tentative Tract Map 37858
(APN 478-090-018, 478-090-024, and 478-090-025)

Scientific Name [1]	Common Name	Status [2]	Habitat	Potential to Occur in Study Area (High, Moderate, Low)
Birds				
Scientific Name [1]	**Common Name**	**Status [2]**	**Habitat**	**Potential to Occur in Study Area (High, Moderate, Low)**
Accipiter striatus	Sharp-Shinned Hawk	CSC, MSHCP Covered Species	Grasslands, coastal sage scrub	Low. Has potential to occur within study area as a winter migrant.
Aimophila ruficeps canescens	Southern California Rufous-Crowned Sparrow	CSC, MBTA, MSHCP Covered Species	Open coastal sage scrub	Low. Has potential to occur within study area.
Ammodramus savannarum	grasshopper sparrow	CSC, MBTA, MSHCP Covered Species	Grasslands with patches of bare ground	Low. Has potential to occur within study area.
Aquila chrysaetos	Golden Eagle	FBCC, BEPA, CSC, CFP, MBTA, MSHCP Covered Species	Grasslands, trees, cliffs, scrub	Low. Has potential to forage within study area.
Athene cunicularia	Burrowing Owl	FSC, FBCC, CSC (Burrow sites) MBTA, MSHCP Covered Species	Open land, old ground squirrel burrows	Low. Has potential to occur within study area. Potential to nest in study area (i.e. low growing vegetation present).
Buteo regalis	Ferruginous Hawk	FBCC, CSC (wintering), MBTA, MSHCP Covered Species	Grasslands	Low. Has potential to forage within study area.
Buteo swainsoni	Swainson's hawk	ST, MBTA, MSHCP Covered Species	Forage in adjacent grasslands, suitable grain or alfalfa fields, or in livestock pastures	Low. Has potential to forage within study area.

Scientific Name [1]	Common Name	Status [2]	Habitat	Potential to Occur in Study Area (High, Moderate, Low)
Circus cyaneus	Northern Harrier	CSC (nesting), MBTA, MSHCP Covered Species (breeding)	Grasslands, marshes, open habitats	Low. Has potential to occur within study area.
Elanus leucurus	White-Tailed Kite	CFP, MBTA, MSHCP Covered Species	Open habitats with perches	Low. Has potential to occur within study area.
Eremophila alpestris actia	California Horned Lark	CSC, MBTA, MSHCP Covered Species	Open habitats, bare dirt	Low. Has potential to occur within study area.
Falco columbarius	merlin	WL, MBTA, MSHCP Covered Species	Open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds	Low. Has potential to occur within study area.
Falco mexicanus	prairie falcon	WL, MBTA, MSHCP Covered Species	Open grassland habitats	Low. Has potential to occur within study area.
Falco peregrinus anatum	American peregrine falcon	FP,MBTA, MSHCP Covered Species	Forage over extensive areas and can be expected to occur almost anywhere in California during the winter	Low. Has potential to occur within study area.
Lanius ludovicianus	Loggerhead Shrike	FBCC, CSC (nesting), MBTA, MSHCP Covered Species	Open habitats, scrub	Low. Has potential to occur within study area.
Spinus lawrencei	Lawrence's goldfinch	MBTA	Dry grassy slopes with weed patches, chaparral and open woodlands	Low. Has potential to occur within study area.
Mammals				
Taxidea taxus	American badger	CSC	Dry, open grasslands, fields, and pastures	Low. Has potential to occur within study area.
Dipodomys stephensi	Stephens' Kangaroo Rat	ST/FE, MSHCP Covered Species	Grasslands with sparse to no shrub cover	Low. Has potential to occur within study area.

Appendix F
Tentative Tract Map 37858
(APN 478-090-018, 478-090-024, and 478-090-025)

Lepus californica bennettii	San Diego Black- Tailed Jackrabbit	CSC, MSHCP Covered Species	Scrub/grassland interface	Low. Has potential to occur within study area.
Perognathus (Chaetodipus) fallax fallax	Northwestern San Diego Pocket Mouse	CSC, MSHCP Covered Species	Sage scrub, grassland, desert scrub	Low. Has potential to occur within study area.

Federal Status

FE = Federal Endangered

FT = Federal Threatened

FBCC= Federal Birds of Conservation Concern

MBTA = Migratory Bird Treaty Act Species

FP=Fully Protected

State/CDFG Status

SE = State Endangered

ST = State Threatened

CFP= California Fully Protected Species

CSC = California Species of Concern

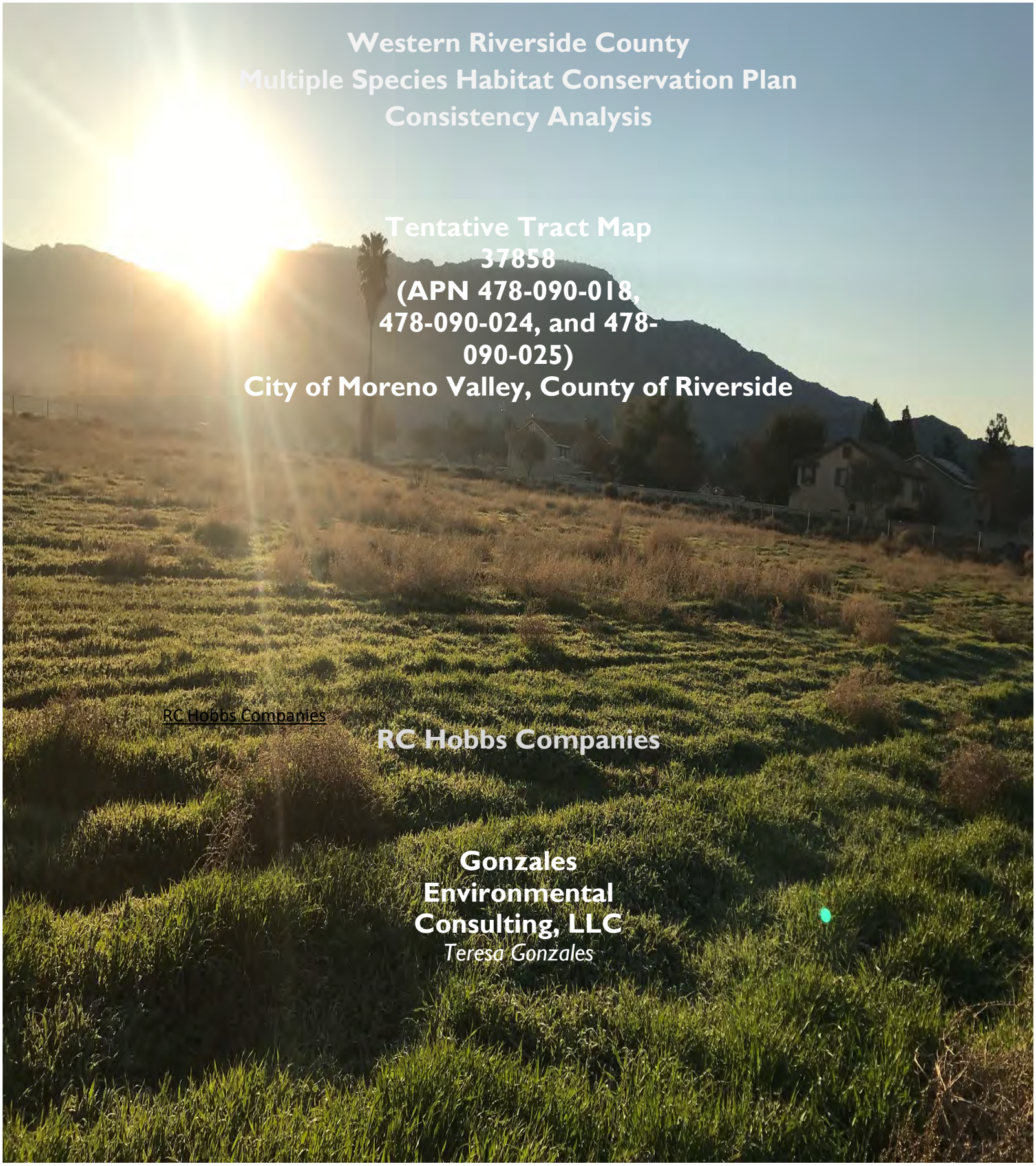
CNDDB = has a California Natural Diversity DataBase ranking only

County Status

MSHCP Covered Species = Covered species under County of Riverside Multiple Species Habitat Conservation Plan

Appendix G

MSHCP Consistency Analysis



Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

Tentative Tract Map 37858 (APN 478-090-018, 478-090-024, and 478-090-025) City of Moreno Valley, County of Riverside

RC Hobbs Companies

RC Hobbs Companies

Gonzales Environmental Consulting, LLC
Teresa Gonzales

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: 1-21-2020

Contents

1 EXECUTIVE SUMMARY

In February and March 2020, Teresa Gonzales and Paul Gonzales of Gonzales Environmental Consulting, LLC (GEC) conducted biological resources assessment of the project site (site) including focused burrowing owl surveys, which will continue until June 2020. The purpose of our assessment was to characterize biological resources on the site, and to identify any biological constraints to land-use changes. The site consists of vegetation communities, characterized as California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*). The project site has been subject to anthropogenic disturbances.

Western Riverside Multiple Species Habitat Conservation Plan

The site is in within Reche Canyon/Badlands Area Plan of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). No Criteria cell, Core, Linkage, Covered Road, are located in or around the project area. Habitat assessments are required for burrowing owl as it is MSHCP Burrowing Owl Survey Area.

Based on biological resource assessments, the Riverside County Integrated Project Conservation Report Generator, and maps of MSHCP survey areas, it was determined that the following studies would be required for the proposed Project's consistency with the MSHCP:

- Focused surveys for the burrowing owl (*Athene cunicularia*)

No burrowing owl was found on the project site.

Endangered, Threatened and Sensitive Species

No special-status plant and animal species have the potential to occur on site, and none were observed on the project site. A circumstance of a negative result is not necessarily evidence that the species does not exist on the site or that the site is not actual or potential habitat of the species. The survey results are only good for one year. Regardless of the survey results, sensitive species cannot be taken under State and Federal law. The survey report and any mitigation measures included do not constitute authorization for incidental take of any sensitive species.

Streambed Resources

There are no streambed resources on site.

2 INTRODUCTION

The purpose of this Consistency Analysis (Analysis) report is to summarize the biological data for the proposed TTM 37858 and to document project's consistency with the goals and objectives of the Western Riverside County Multiple Species Habitat Conservation Plan. The proposed project consists of the development of APN 478-090-018 (3.16 acres), 478-090-024 (0.90 acres), and 478-090-025 (0.76 acres). TR 37858 proposes the subdivision of approximately 4.8 acres of undeveloped land into 38 single family residential lots, 4 lettered lots and streets. One of the lettered lots will be dedicated as water quality basin for compliance with Regional Water Quality Control Board requirements. One lettered lot will be for recreation, one for landscape and another for wall drainage. All streets (5 plus two courts) proposed as a part of this development will be public streets. Access to the tract can be taken from Bradshaw Circle.

2.1 Project Area

The project site (site) discussed in this report is located north of Cactus Avenue, west of Bradshaw Circle in the City of Moreno Valley, Riverside County, California. See Figures 1.1 and 1.2.

The site is located within San Bernardino Meridian in a portion of Section 14, Township 3 South, Range 3 West, City of Moreno Valley, Riverside County, California (Figures 1.1, 1.2 and 1.3). This location is shown on the Sunnymead, California 7.5-minute U.S. Geological Survey (USGS) quadrangle (Sunnymead Photorevised 1980); page 718 Grid D6 of the Riverside County Street Guide and Directory (Thomas Brothers Maps Design 2013). The approximate center of the site is located at 33.911044°, -117.170339°.

Elevation of the assessment area ranges from a from a low of 1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land. The project site has been impacted by anthropogenic activities. Land use in the surrounding area varies between disturbed undeveloped areas, semi-rural and single family residential.

The primary vegetation communities in the project area are California Annual Grassland Alliance, Amaranthus albus (Tumbleweed) herb alliance and developed. One Palo Verde (Cercidium 'Desert Museum' Low Branch) and one Palm Tree (Washingtonia filifera) Previous and current anthropogenic activities and invasion of nonnative plant species have contributed to the disturbed condition of many vegetation communities within the project vicinity.

Land immediately adjacent to the site's northern, southern and part of western boundary contains medium high density residential properties. Land to the northwest and east includes disturbed open space.

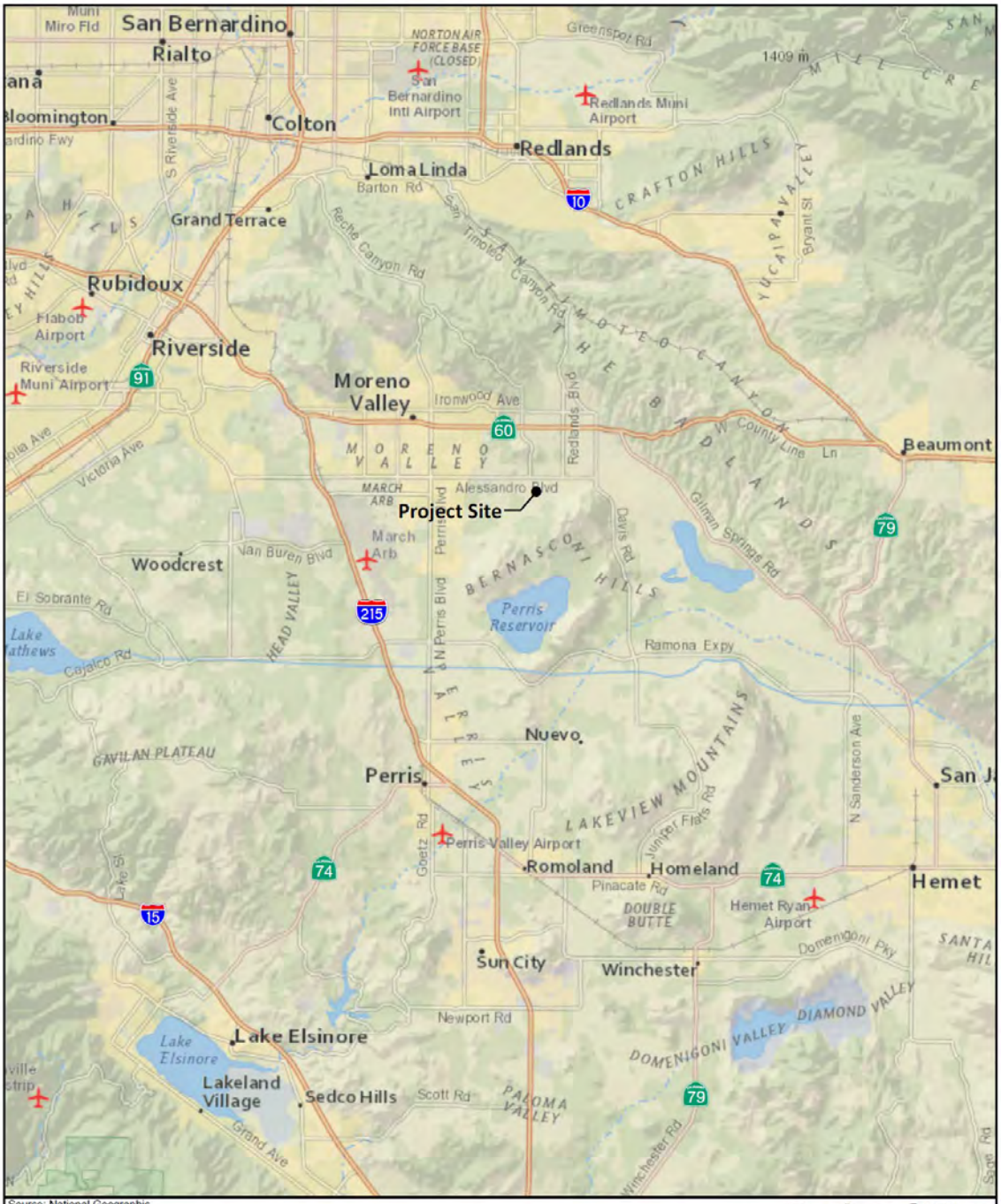


FIGURE 1

Regional Map

HOBBS-MORENO VALLEY TTM 37858

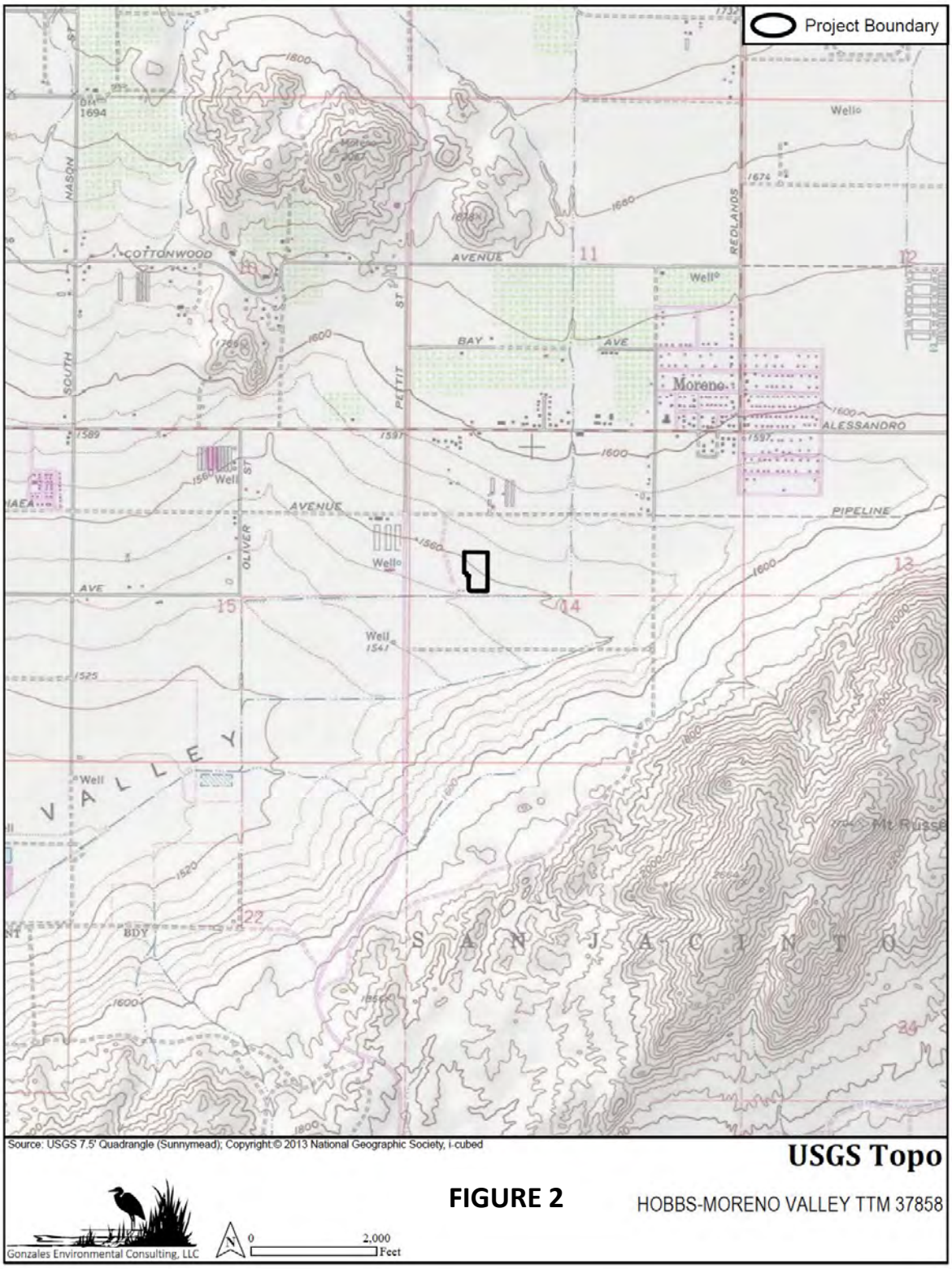


FIGURE 2

USGS Topo

HOBBS-MORENO VALLEY TTM 37858

FIGURE 3

Aerial Photograph

HOBBS-MORENO VALLEY TTM 37858

2.2 Project Description

The site is comprised of 4.82 acres of disturbed property situated in the City of Moreno Valley in Riverside County, California.

1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land. TR 37858 proposes the subdivision of approximately 4.82 acres of undeveloped land into 38 single family residential numbered lots, five lettered lots (1 WQMP basins-open space, wall drainage, landscape area and recreation-open space), and 8 streets. Access to the tract can be taken from Bradshaw Circle.

Estimated Duration of Construction:
Estimated duration of construction is 18 months.

Full Avoidance Infeasibility:
The project, as designed proposes to disturb only where required in order to allow for subdivision of the surrounding property. Where avoidance was not possible, mitigation of these impacts is being provided offsite as a part of this project.

Existing Conditions

Elevation of the assessment area ranges from a from a low of 1560± feet above mean sea level (msl) in the southern portion of the assessment area to a high of 1566± feet above msl in the northwestern portion of the assessment area. This represents an elevational change across the assessment area of 6± feet. The entire site consists of relatively level land. The project site has been impacted by anthropogenic activities. Land use in the surrounding area varies between disturbed undeveloped areas, semi-rural and single family residential.

Land immediately adjacent to the site's northern, southern and part of western boundary contains medium high density residential properties. Land to the northwest and east includes disturbed open space.

Soils

The soil associations mapped for the area are San Emigdio-Grangeville-Metz association. San Emigdio-Grangeville-Metz association: Very deep, poorly drained to somewhat excessively drained, nearly level to strongly sloping soils that have a surface layer of calcareous loamy sand to loam; on alluvial fans and flood plains. The soil series mapped for the area are described in Table 1. The soils found are similar in texture and color to those mapped, but were highly

disturbed from anthropogenic activities. The soils were compacted and unstratified over the majority of the project site. Figure 4 maps the soils of the area.

TABLE 1
SOIL SERIES MAPPED FOR THE AREA

Name	Description
San Emigdio fine sandy loam 2-8% slopes, eroded	Soils on broad smooth fans and flood plains along the rivers and creeks of the survey area. The soils formed in alluvium washed from weakly consolidated sediment and sandstone of the San Timoteo Badlands. Slopes range from 2-8%. Elevations range from 600-2,500 feet. The average annual rainfall ranges from 10-18 inches, the average annual temperature from 61-64 degrees F, and the average frost-free season from 200-280 days.
San Emigdio loam 2-8% slopes	Soils on broad smooth fans and flood plains along the rivers and creeks of the survey area. The soils formed in alluvium washed from weakly consolidated sediment and sandstone of the San Timoteo Badlands. Slopes range from 2-8%. Elevations range from 600-2,500 feet. The average annual rainfall ranges from 10-18 inches, the average annual temperature from 61-64 degrees F, and the average frost-free season from 200-280 days.

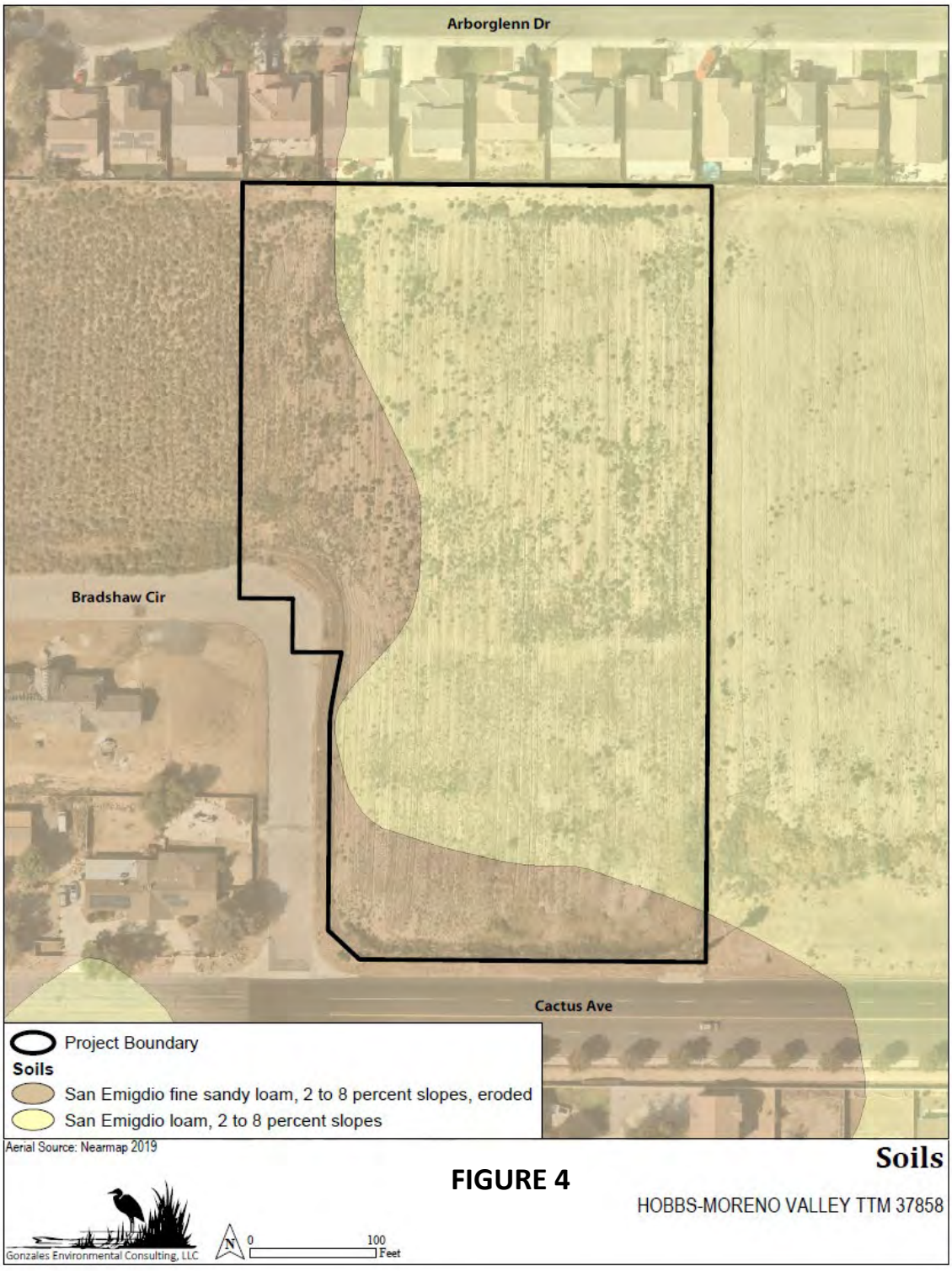


FIGURE 4

Soils

HOBBS-MORENO VALLEY TTM 37858

2.3 Covered Roads

This section would only apply if the proposed project entails the construction of, or improvements to, one or more Covered Roads. The proposed project does not include the improvement of any of the Covered Roads.

2.4 Covered Public Access Activities

The proposed project does not include Covered Public Access Activities.

2.5 General Setting

The project site is located south, north and partially east of existing single family development(s). Cactus Avenue forms the southern boundary and Bradshaw Circle partially forms the western boundary of the project site. Existing open space is located to the east and partially to the west. The project site has been impacted by anthropogenic activities, mowed and disced repeatedly for weed control and fire safety purposes.

3 RESERVE ASSEMBLY ANALYSIS

The project area is located in MSHCP Reche Canyon/Badlands Area Plan. The Area Plan is further divided into Subunits that contain Criteria Cells that are targeted for conservation. Target conservation acreages have been established along with a description of the planning species, biological issues and considerations, and criteria for each Subunit within the MSHCP. In some areas, Cells that have a common habitat goal are combined forming a Cell Group. The design for conservation involves core areas of habitat, blocks of habitat, and linkages between the core and block areas. The project area is not in a Subunit or Criteria Cell. The following specific target planning species and conservation goals are included within the biological considerations for Reche Canyon/Badlands Area Plan:

Planning Species:

- Bell's sage sparrow
- Cactus wren
- Loggerhead Shrike
- Southern California rufous-crowned sparrow
- Bobcat
- Stephens' kangaroo rat
- Nevin's barberry
- Los Angeles pocket mouse
- mountain lion
- San Bernardino kangaroo rat
- American bittern
- black-crowned night heron
- burrowing owl
- California horned lark
- double-crested cormorant
- mountain plover
- northern harrier
- osprey
- peregrine falcon
- prairie falcon
- tricolored blackbird
- white-faced ibis
- white-tailed kite
- California orcutt grass
- Coulter's goldfields
- Davidson's saltscale

- San Jacinto Valley crownscale
- smooth tarplant
- spreading navarretia
- thread-leaved brodiaea
- vernal barley
- Wright's trichocoronis

Biological Issues and Considerations:

- Conserve existing, intact upland Habitat augmenting existing Box Springs Mountain Reserve.
- Conserve existing populations of Bell's sage sparrow and cactus wren.
- Maintain linkage area to Box Springs Mountain for bobcat.
- Conserve upland Habitat in the Badlands.
- Maintain a connection between Blue Mountain to the west and Reche Canyon to the east.
- Conserve existing populations of Bell's sage sparrow.
- Maintain Core Area for bobcat.
- Maintain Core and Linkage Habitat for mountain lion.
- Determine presence of potential small population of San Bernardino kangaroo rat.
- Determine presence of potential Core Area for Los Angeles pocket mouse.
- Maintain Core Area for Nevin's barberry.
- Conserve large habitat blocks in the Badlands.
- Maintain Core Area for bobcat.
- Maintain Core and Linkage Habitat for mountain lion.
- Maintain linkage area to San Jacinto Wildlife Area for Stephens' kangaroo rat.
- Determine potential for scattered populations of San Bernardino kangaroo rat along San Timoteo Creek.
- Determine presence of potential Core Area for Los Angeles pocket mouse in San Timoteo Creek and tributaries and Badlands.
- Conserve alkali playa and other Habitat to augment existing Conservation in the San Jacinto Wildlife Area and Mystic Lake.
- Conserve existing vernal pool complexes associated with the San Jacinto River floodplain, in the Mystic Lake/San Jacinto Wildlife Area. Conservation should focus on vernal pool surface area and supporting watersheds.
- Provide for a connection of intact Habitat between San Jacinto Wildlife Area/Mystic Lake to adjacent Badlands area to the north.

- Conserve Willow-Domino-Travers soils supporting sensitive plants such as San Jacinto Valley crownscale, Davidson's saltscale, Coulter's goldfields, spreading navarretia, vernal barley and Wright's trichocoronis.
- Provide for and maintain a continuous Linkage along the San Jacinto River from the southern boundary of the Reche Canyon/Badlands Area Plan to the southeastern Area Plan boundary.
- Maintain linkage area for bobcat.
- Maintain linkage area for Stephens' kangaroo rat to San Jacinto Wildlife Area.
- Determine presence of potential Core Area for Los Angeles pocket mouse in connection between Badlands and San Jacinto Wildlife area.

Cores and Linkages within Conservation Area

MSHCP Conservation Area is comprised of a variety of existing and proposed cores, extensions of existing cores, linkages, constrained linkages and non-contiguous habitat blocks. These features are generally referenced as cores and linkages. A Core is a block of habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species. Although a more typical definition is population-related and refers to a single species, in the MSHCP this term is habitat-related because of the multi-species nature of the MSHCP Plan. An MSHCP linkage is defined as a connection between Core Areas with adequate size, configuration and vegetation characteristics to generally provide for "live-in" habitat and/or provide for genetic flow for identified planning species. A constrained linkage is a constricted connection expected to provide for movement of identified planning species between Core Areas, where options for assembly of the connection are limited due to existing patterns of use. Areas identified as linkages in MSHCP may provide movement habitat but not live-in habitat for some species, thereby functioning more as movement corridors.

Project site is not in a Criteria Cell. There are no proposed cores or linkages within the project area.

MSHCP SURVEY REQUIREMENTS

MSHCP survey areas for the proposed project were identified by conducting an initial search of the RCA MSHCP Information Map (RCA 2020). As a result, the study area was identified to be located within the burrowing owl survey area.

TABLE 2

MSHCP PROJECT REVIEW CHECKLIST

Checklist	Yes	No
Is the project located in a Criteria Area or Public/Quasi-Public Land?		✓
Is the project located in Criteria Area Plant Survey Area?		✓
Is the project located in Criteria Area Amphibian Survey Area?		✓
Is the project located in Criteria Area Mammal Survey Area?		✓
Is the project located in Narrow Endemic Plant Species Survey Area?		✓
Are riverine/riparian/wetland habitats or vernal pools present?		✓
Is the project located in Burrowing Owl Survey Area?	✓	
Is the project located in a Special Linkage Area?		✓

MSHCP SECTION 6

Section 6 of the MSHCP provides provision for MSHCP implementation. Two particular subsections of this section are relevant to the proposed project:

- *6.1.2 Protection of Species Associated with Riparian/Riverine areas and Vernal Pools*
- *6.1.3 Protection of Narrow Endemic Plant Species*
- *6.1.4 Guidelines Pertaining to the Urban/Wildlands Interface (relevant)*
- *6.3.2 Additional Survey Needs (relevant)*

The MSHCP covers 146 species, 38 of which require additional surveys if the proposed project occurs in the specific survey area for a species. As noted in Table 4 the proposed project occurs within the burrowing owl survey areas. The project area does not traverse *Riparian/Riverine* and *Vernal Pool* habitats as defined by the MSHCP. Based on biological resource assessments, the RCIP Conservation Report Generator, and maps of MSHCP survey areas, it was determined that surveys for *Riparian/Riverine* habitats, *Vernal Pools*, and associated species are not required pursuant to *Sections 6.1.2, 6.1.3, and 6.3.2* of the MSHCP.

Section 6.1.3 of the MSHCP describes the 14 Narrow Endemic Plant Species and the procedures necessary for surveying, mapping and documenting these species. In addition to the Narrow Endemic Plant Species listed in *Section 6.1.3*, additional surveys may be needed for certain species listed in *Section 6.3.2* in conjunction with Plan implementation in order to achieve coverage for

these species. These species are referred to as "Criteria Area Species". Furthermore, per *Section 6.1.2* of the MSHCP, if potential *Riparian/Riverine*, and/or *Vernal Pool* habitat (as defined by the MSHCP) occurs within the project area, additional surveys are necessary for specific species that have potential to occur within these habitats.

The MSHCP does not supersede existing federal and state regulations covering lakes, streams, vernal pools, and other wetland areas. Thus, projects must comply with existing regulations for these aquatic resources pursuant to Clean Water Act (CWA) and California Fish and Game Code (CFGC). However, pursuant to the MSHCP, an assessment of the potentially significant effects of projects on Riparian/Riverine areas, and Vernal Pools as it relates to habitat functions and values for MSHCP-covered species is required. If an avoidance alternative is not feasible and a more practicable alternative is selected instead, a DBESP would be provided to ensure replacement of any lost functions and values of habitat as it relates to the needs of Covered Species that rely on that habitat.
Section 6.1.2 of the MSHCP defines *Riparian/Riverine* and *Vernal Pool* habitats as follows:

Riparian/Riverine Areas: are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or unvegetated, ephemerals that transport water supporting downstream resources in the MSHCP Conservation Area.

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. Obligate and facultative wetland plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

In addition to mapping *Vernal Pools*, the MSHCP requires mapping of stock ponds, ephemeral pools, and other features which may be suitable habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Brachinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae).*

The MSHCP describes a strategy of impact avoidance, minimization, and mitigation for these resources and further requires that long-term conservation of these areas is assured, and recommends that indirect impacts be reviewed to provide protection for these areas.

Section 6.1.4 of the MSHCP describes a process to ensure that projects located outside of, but

adjacent to, the Conservation Area do not undermine conservation planning objectives of the MSHCP. This process is called the Urban/Wildlands Interface Guidelines (UWIG).

"Future Development in proximity to the MSHCP Conservation Area may result in Edge Effects that will adversely affect biological resources within the MSHCP Conservation Area. To minimize such Edge Effects, the following guidelines shall be implemented in conjunction with review of individual public and private Development projects in proximity to the MSHCP Conservation Area."

Specific elements to be considered in UWIG compliance include:

- Drainage
- Toxics
- Lighting
- Noise
- Invasives
- Barriers
- Grading and land development

As stated in the MSHCP:*"Existing local regulations are generally in place that address the issues presented in this section. Specifically, the County of Riverside and the 18 Cities within the MSHCP Plan Area have approved general plans, zoning ordinances and policies that include mechanisms to regulate the development of land. In addition, project review and impact mitigation that are currently provided through the CEQA process address these issues."* UWIG compliance, therefore, relies heavily on the application of Standard Best Management Practices (BMPs) during site development and project operation. These BMPs can be found in *Appendix C* of the MSHCP. Projects must accordingly demonstrate that they will not adversely affect any Conservation Area and must adequately consider the elements listed above per the UWIG.

MSHCP TABLE 9-3 REQUIREMENTS TO BE MET FOR 28 SPECIES PRIOR TO INCLUDING THOSE SPECIES ON THE LIST OF COVERED SPECIES ADEQUATELY CONSERVED

Of the 146 Covered Species addressed in the MSHCP, 118 species are considered to be Adequately Conserved. The remaining 28 Covered Species will be considered to be adequately conserved when certain conservation requirements are met (by RCA) as identified in the species-specific conservation objectives for those species. For 16 of the 28 species, particular species-specific conservation objectives, which are identified in *Table 9-3* of the MSHCP, must be satisfied to shift those particular species to the list of Covered Species Adequately Conserved.

TABLE 3

MSHCP SECTION 6 SPECIES LIST

MSHCP Section	Species
Section 6.1.2 Riparian/ Riverine and Vernal Pools	*Plants:* Brand's phacelia, California orcutt grass, California black walnut, coulter's Matilija poppy, Engelmann oak, fish's milkwort, graceful tarplant, lemon lily, Mojave tarplant, mud nama, ocellated Humboldt lily, orcutt's brodiaea, parish's meadowfoam, prostrate navarretia, San Diego button-celery, San Jacinto Valley crownscale, San Miguel savory, Santa Ana river woolly-star, slender-horned spine flower, smooth tarplant, spreading navarretia, thread-leaved brodiaea, and vernal barley. *Invertebrates:* Riverside fairy shrimp and vernal pool fairy shrimp *Fish:* Santa Ana sucker
Section 6.1.3 Narrow Endemic Plant Species	Brand's phacelia, California Orcutt grass, Hammitt's clay-cress, Johnston's rockcress, many-stemmed dudleya, Munz's mariposa lily, Munz's onion, San Diego ambrosia, San Jacinto Mountains bedstraw, San Miguel savory (Santa Rosa Plateau, Steele Rock), slender-horned spine flower, spreading navarretia, Wright's trichocoronis, and Yucaipa onion.
Section 6.3.2 Additional Survey Needs and Procedures	*Plants*:* Coulter's goldfields, Davidson's saltscale, heart-leaved pitcher sage, little mud nama, Nevin's barberry, Parish's brittlescale, prostrate navarretia, round-leaved filaree, San Jacinto Valley crownscale, smooth tarplant, thread-leaved, and Vail Lake ceanothus. *Amphibians*:* arroyo toad, mountain yellow-legged frog, and California red-legged frog *Birds:* burrowing owl *Mammals*:* Aguanga kangaroo rat, San Bernardino kangaroo rat, Los Angeles pocket mouse

*Note: Project does not occur within the plants, amphibian, fish and mammal species survey areas.

**Note: Project does not have appropriate habitat for 6.1.2 and 6.1.3 species.

3.1 Public Quasi-Public Lands

3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis

The project site is outside of PQP lands.

3.1.2 Project Impacts to Public Quasi-Public Lands

There are no impacts to PQP lands.

4 VEGETATION MAPPING

Aerial photography and digital vegetation maps were reviewed to determine potential community types within the project area. Preliminary ground-truthing surveys concurred with digital vegetation maps, and additional surveys were performed to accurately define the community types and boundaries.

The site consists of five vegetation communities, described below. The site shows signs of recent disturbance, including cutting of vegetation. Portions of the project site have been subject to anthropogenic disturbances. The locations of the native plant communities have been generally the same over the years. The existing plant communities are described in more detail below.

The project encompasses seven vegetation community types. Vegetation communities currently present are California Annual Grassland Alliance, *Amaranthus albus* (Tumbleweed) herb alliance and developed. One Palo Verde (*Cercidium* 'Desert Museum' Low Branch) and one Palm Tree (*Washingtonia filifera*) are located on the southern boundary of the project site. The existing plant communities are described in more detail below.

The major plant communities in the survey area are California Annual Grassland Alliance.

California Annual Grassland Alliance

This alliance of non-native annual grasslands and forb lands is composed of cool-season, annual grasses mostly introduced from Europe. They are invasive in disturbed areas throughout much of California. The composition varies widely. Many alien annual species may be present, including *Avena fatua*, *Brassica* spp., *Bromus diandrus*, *Bromus hordeaceus* and *Bromus madritensis*. The composition of this alliance is largely determined by amount of disturbance coupled with fall temperatures and precipitation, light intensity, litter thickness and micro topography. The percentage of exotic alien species is often directly related to disturbance history with heavy disturbance correlating with heavy exotic invasion. Annual grasses are supremely adapted to the Mediterranean climate of California; many species evolved under similar conditions in southern Europe and northern Africa. Plants germinate during winter rains, and complete their life cycles by the beginning of the summer drought. Seeds often remain viable for many years.

Amaranthus albus (Tumbleweed) herb alliance

This alliance of non-native *Amaranthus albus* (Tumbleweed) is actually a sub alliance of California annual grasslands is composed of Amaranthus albus (Tumbleweed). Tumbleweed is invasive in disturbed areas throughout much of California. We subcategorized this alliance as there are such large areas with this species.

Disturbed/Developed

Disturbed areas are characterized by predominantly non-native species introduced and established through human action. Disturbed or barren areas are areas that either completely lack vegetation or have a predominance of non-native species.

Table 4 below summarizes vegetation types/land uses and associated acreages on-site. Figure 5 provides a vegetation map for the project site.

TABLE 4

VEGETATION TYPES MAPPED FOR THE AREA

Vegetation	Existing (Acres) On-Site
Amaranthus albus (Tumbleweed) herb alliance	1.630
California Annual Grassland Alliance	3.120
Developed	0.050
Palm Tree (1)	0.003
Palo Verde (1)	0.007
TOTAL (acres)	4.811

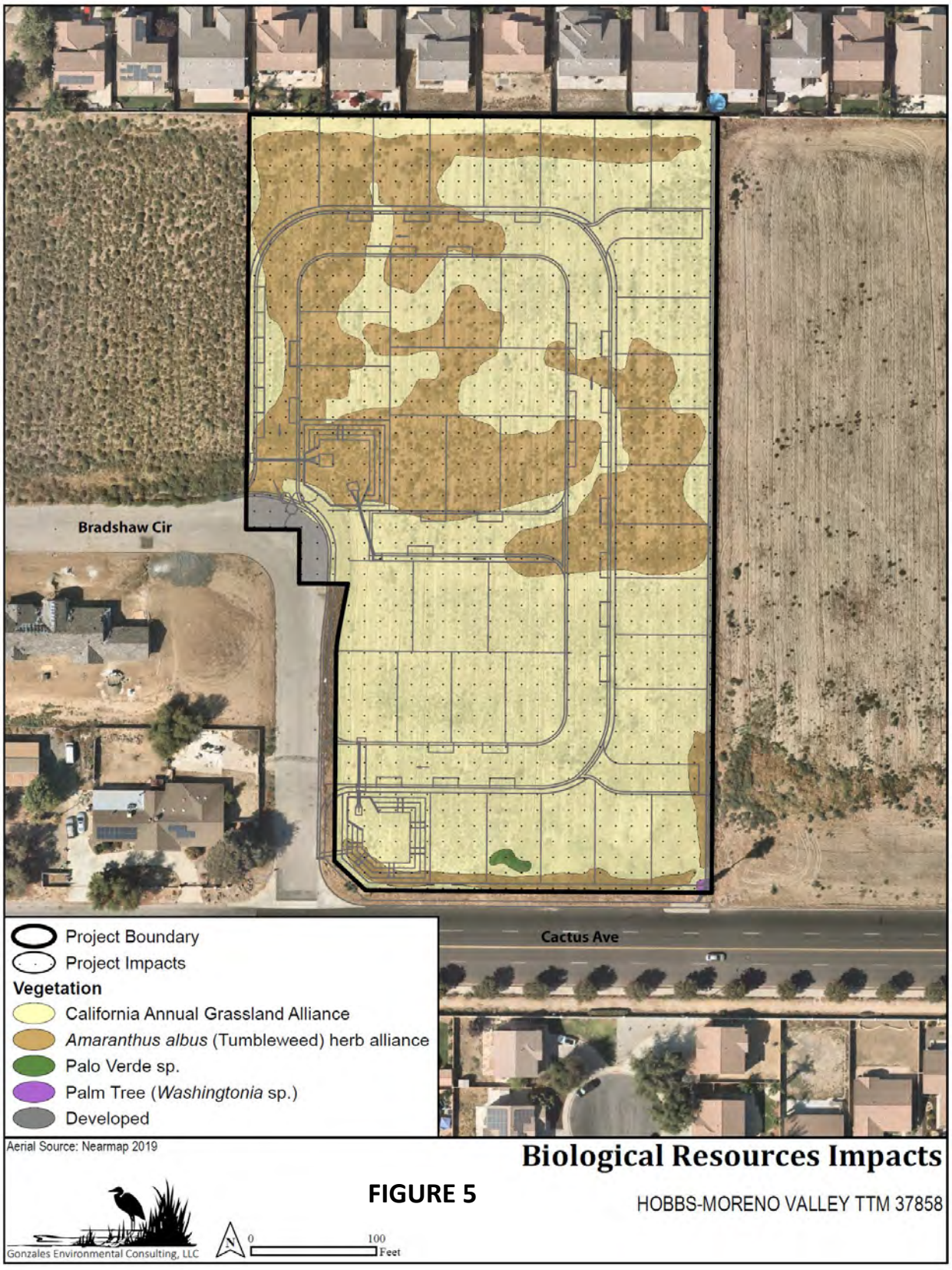

Bradshaw Cir
Cactus Ave
Project Boundary
Project Impacts
Vegetation
California Annual Grassland Alliance
Amaranthus albus (Tumbleweed) herb alliance
Palo Verde sp.
Palm Tree (Washingtonia sp.)
Developed
Aerial Source: Nearmap 2019
Gonzales Environmental Consulting, LLC
0
100
Feet
Biological Resources Impacts
HOBBS-MORENO VALLEY TTM 37858

FIGURE 5

5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

5.1 Riparian/Riverine

5.1.1 Methods

General wetland and streambed assessments of the proposed project site were conducted in February 2020 by GEC, which included general mapping of habitat(s) that may be subject to jurisdiction of CDFW pursuant to sections 1600-12 of the California Fish and Game Code, ACOE and MSHCP Section 6.1.2. Potential MSHCP Section 6.1.2 seasonal watercourses were not found on the project site.

A brief assessment of the wetland/riparian jurisdictional communities encountered (if they were encountered) was also conducted which described the dominant and associate plant species of each community and the presence and/or absence of visual field indicators (e.g., dominance of hydrophytic species, presence of drift lines).

Streambed/wetland delineation and MSHCP Section 6.1.2 areas were conducted in February 2020. Assessment of riparian/riverine and vernal pools took place on February 7, 2020. Data forms were used, onto which recorded information or otherwise compiled notes regarding the descriptive physical and biological attributes from the area. From a combination of field experience, references, assistance from others, and reconnaissance trips information resources were compiled from which the jurisdictional determinations have been made. Photographs were taken on each visit, some of which are included in this document. Field notes and photographs were arranged by date. Section 6.1.2 riverine and riparian were delineated in the field concurrently with the delineation of federal waters/wetlands and state wetlands/streambed.

Data sources used:

a. USGS quadrangle maps
b. Soil Surveys
c. Aerial photos
d. State list of hydric soils
e. National Wetland Plant List 2017
f. Munsell Soil Charts
g.6.1.2 information

The following steps were performed:

1. Project area was identified and mapped on USGS quadrangle map.
2. Vegetation for the project area was summarized and identified utilizing transects and observation points.

3. Area soils were characterized and identified.
4. Hydrology data was gathered utilizing field hydrologic indicators and available data.

Prior to conducting field assessments, transects (ranging from 0.15 to 0.5 miles in length) were drawn on a one-meter resolution aerial photograph. During the field assessment, points where these transects intercepted potentially jurisdictional waters were mapped on the aerial photographs or with a Trimble GeoXT GPS unit. Field maps were digitized using GIS technology and the total area of jurisdictional features was calculated.

5.1.2 Existing Conditions and Results

All parts of the project site were closely examined for biological resources. An assessment of the potentially significant effects of the proposed project on riparian, riverine and vernal pool areas was conducted. Seasonal watercourses are present and evidence of recent surface water was observed on site. There are no seasonal watercourses and no evidence of recent surface water was observed on site. No potential MSHCP 6.1.2 areas were found on the project site. There are no Riparian/Riverine associated species on the project site (i.e. least Bell's vireo, southwestern willow flycatcher, blue grosbeak, etc.) as there is no appropriate habitat.

Soils found on the project site are consistent with upland soils and not riparian, riverine and/or vernal pools.

Potential impacts to water quality could occur during construction and operation of the proposed project due to increased erosion and storm water runoff. However, construction BMPs would be implemented during construction of the proposed project to reduce impacts to water quality and beneficial water resource values.

During construction of the current sites existing vegetation will be trimmed and/or removed. Impacts to these features would result in impacts to conservation of habitats and may result in impacts to covered species.

5.1.3 Impacts

GEC found no Section 6.1.2 riparian/riverine/vernal pool areas on the project site.

5.1.4 Mitigation

GEC found no Section 6.1.2 riparian/riverine/vernal pool areas on the project site.

5.2 Vernal Pools

5.2.1 Methods

The starting point for this study was a field trip to the project site in February 2020. Data forms were used, onto which recorded information or otherwise compiled notes regarding the descriptive physical and biological attributes from the area. From a combination of field experience, references, assistance from others, and reconnaissance trips information resources were compiled from which the jurisdictional determinations have been made. Photographs were taken on each visit, some of which are included in this document. Field notes and photographs were arranged by date. Section 6.1.2 vernal pools were delineated in the field concurrently with the delineation of federal waters/wetlands and state wetlands/streambed.

Data sources used:

a. USGS quadrangle maps
b. Soil Surveys
c. Aerial photos
d. State list of hydric soils
e. National Wetland Plant List 2017
f. Munsell Soil Charts
g. 6.1.2 information

The following steps were performed:

1. Project area was identified and mapped on USGS quadrangle map.
2. Vegetation for the project area was summarized and identified utilizing transects and observation points.
3. Area soils were characterized and identified.
4. Hydrology data was gathered utilizing field hydrologic indicators and available data.

Prior to conducting field assessments, transects (ranging from 0.15 to 0.5 miles in length) were drawn on a one-meter resolution aerial photograph. During the field assessment, points where these transects intercepted potentially jurisdictional waters were mapped on the aerial photographs or with a Trimble GeoXT GPS unit. Field maps were digitized using GIS technology and the total area of jurisdictional features was calculated.

Criteria used to determine whether there are vernal pools on the project site included the following: whether there is evidence of a watershed supporting vernal pool hydrology: if the area exhibits upland and wetland characteristics (inundated or not) and length of time if that is the case, evidence of the persistence of wetness using historic information (e.g. aerials),

vegetation, soils, drainage characteristics, uses to which the site has been subjected, and weather and hydrologic records.

5.2.2 Existing Conditions and Results

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. Obligate and facultative wetland plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. We conducted our assessment during the wet season (February 2020) when obligate and facultative wetland plant species are normally dominant and found none present on the project site. None of the area exhibited upland and wetland characteristics (inundated or not), evidence of the persistence of wetness (current conditions and using historic information (e.g. aerials)), vegetation, soils, drainage characteristics, uses to which the site has been subjected, and weather and hydrologic records appropriate for vernal pools. There are no vegetation, hydric soils or hydrology present on the project site for vernal pools. No evidence of vernal pools was found on the project site. None of the area exhibited upland and wetland characteristics (inundated or not), evidence of the persistence of wetness (current conditions and using historic information (e.g. aerials)), vegetation, soils, drainage characteristics, uses to which the site has been subjected, and weather and hydrologic records.

5.2.3 Impacts

No impacts to vernal pools will occur on the proposed project.

5.2.4 Mitigation

No mitigation for vernal pools will be necessary as there are no vernal pools on the project site.

5.3 Fairy Shrimp

5.3.1 Methods

The starting point for this study was a field trip to the project site in February 2020. Data forms were used, onto which recorded information or otherwise compiled notes regarding the descriptive physical and biological attributes from the area. From a combination of field experience, references, assistance from others, and reconnaissance trips information resources were compiled from which the jurisdictional determinations have been made. Photographs were taken on each visit, some of which are included in this document. Field notes and photographs were arranged by date. Fairy shrimp resources, if present, were delineated in the field concurrently with the delineation of federal waters/wetlands and state wetlands/streambed.

Data sources used:
a. USGS quadrangle maps
b. Soil Surveys
c. Aerial photos
d. State list of hydric soils
e. National Wetland Plant List 2017
f. Munsell Soil Charts
g. fairy shrimp information

The following steps were performed:
1. Project area was identified and mapped on USGS quadrangle map.
2. Vegetation for the project area was summarized and identified utilizing transects and observation points.
3. Area soils were characterized and identified.
4. Hydrology data was gathered utilizing field hydrologic indicators and available data.

Prior to conducting field assessments, transects (ranging from 0.15 to 0.5 miles in length) were drawn on a one-meter resolution aerial photograph. During the field assessment, points where these transects intercepted potentially jurisdictional waters were mapped on the aerial photographs or with a Trimble GeoXT GPS unit. Field maps were digitized using GIS technology and the total area of jurisdictional features was calculated.

Criteria used to determine whether there are fairy shrimp on the project site included the following: stock ponds, ephemeral pools, road ruts, human-made depressions, or other depressions that may pond water.

5.3.2 Existing Conditions and Results

We found no stock ponds, ephemeral pools, road ruts, human-made depressions, or other depressions that may pond water on the project site.

5.3.3 Impacts

There are no stock ponds, ephemeral pools, road ruts, human-made depressions, or other depressions that may pond water on the project site so there are no impacts.

5.3.4 Mitigation

No mitigation for fairy shrimp will be necessary as there are no stock ponds, ephemeral pools, road ruts, human-made depressions, or other depressions that may pond water on the project site.

5.4 Riparian Birds

5.4.1 Methods

Preliminary investigations included review of information obtained from the USFWS, and CDFW; literature searches; examination of aerial photographs; and database searches including California Native Plant Society (CNPS), the California Natural Diversity Data Base (CNDDB) records, and sensitive species accounts for Riverside County. Reviewed environmental documents included Environmental Impact Reports prepared for other projects in the vicinity. The following resources were used in background research and during field surveys:

- Topographic maps (USGS 7.5 minute quadrangle)
- Aerial photos
- California Natural Diversity Database (CDFW 2018)
- USFWS sensitive species occurrence database (USFWS 2018)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2018)
- Western Riverside Area, California Soil Survey (U.S. Department of Agriculture [USDA] 1971)
- Volume 1, Parts I and II of the MSHCP (County of Riverside 2003)
- County of Riverside Conservation Summary Report Generator (County of Riverside 2018)

A list of special status species was compiled, including all species in the project area that were:

Listed as endangered or threatened, proposed for listing, or candidates for listing under the Federal Endangered Species Act (FESA);

Listed as endangered or threatened, or candidates for listing under the California Endangered Species Act (CESA);

Included in one of the CDFW publications on species of special concern;

"Fully protected" by the State of California;

Included in the CNPS compilation; or

Identified as plants meeting the definition of rare or endangered under CEQA.

Biological Surveys

Baseline biological studies of the proposed project were conducted in previous years, for the current year surveys began in February 2020. Existing biological data was collected using Personal Computers (PCs) and Geographic Positioning System (GPS). This allowed for data to be collected in real time. Data layers uploaded onto these PCs included recent aerial photography, and topographic contours. Biological data was mapped onto the aerial photograph layers as polygon, line, and point attributes.

Checklists of biological information were uploaded onto the PCs, which allowed us to accurately label all data points, ensure consistency, and keep a running electronic account of all species encountered during the surveys. Finally, these checklists allowed for the inclusion of supplemental field notes, most notably, ranking of the quality of the various habitats including dominant and associate species for each vegetation polygon; assessing habitats for the potential presence of sensitive species not observed during the surveys; and identifying areas that would require protocol-level sensitive species surveys (i.e., USFWS protocol-level surveys for federal threatened and endangered species.

Habitats for specific species of wildlife and plants identified during surveys were classified as: not expected, low, moderate, high, or expected. These classifications were based on the quality of the habitat for each species and the proximity of the habitat to a known occurrence of a species obtained from CNDDB data. The definitions of each of the classifications are as follows:

- Not Expected: Species not previously reported in the vicinity of the site, and suitable habitat very marginal due to disturbances, fragmentation, and/or isolation.
- Low: Species previously reported from the vicinity of the site, but suitable habitat is marginal due to disturbances, fragmentation, and/or isolation.
- Moderate: Species previously reported from the vicinity of the site and large areas of contiguous high-quality habitat present; or species previously reported in the vicinity of the site, but suitable habitat quality is moderate due to disturbances, fragmentation, and/or isolation.
- High: Species previously reported from regional vicinity of the site, and large areas of contiguous high-quality habitat are present.
- Expected: Species previously reported from very close vicinity of the site, and large areas of contiguous high-quality habitat are present.

Wildlife Survey and Habitat Assessment Methods

General reconnaissance and habitat assessment surveys were completed to determine habitat suitability for listed species and special status plant, wildlife, and aquatic species. Suitable habitat for listed species and special status species was determined by the presence of specific habitat

elements. The surveys coincided with the period during which many wildlife species, including migratory species, would have been most detectable. A faunal inventory of all species observed during the course of the surveys was also prepared.

Special Status Species Methods
Special Status Wildlife Species Survey Methods
Prior to conducting habitat assessment surveys, CNDDB and other sources were reviewed for the records of special status wildlife species potentially occurring in the project area. General reconnaissance and habitat assessment surveys were conducted to assess the presence of special status wildlife species habitats within the project area. Maps depicting all known sensitive wildlife species locations within the regional vicinity of the project were produced to aid in determining the target species to survey. All wildlife species encountered during surveys were documented. Any specific areas (e.g., potential nesting, breeding, and foraging habitat) encountered during the surveys that have a high probability for supporting sensitive wildlife were documented. The likelihood of these species occurrence (not expected, low, moderate, high, expected) was also assessed. Least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo prefer riparian habitat of dense willow-cottonwood forest, streamside thickets near water; moist woodland, bottomlands, woodland edge, scattered cover and hedgerows in cultivated areas; willow-dominated riparian woodlands; and, open woodland, brush in winter.

5.4.2 Existing Conditions and Results

There is no appropriate habitat on the project site for Least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo which prefer riparian habitat of dense willow-cottonwood forest, streamside thickets near water; moist woodland, bottomlands, woodland edge, scattered cover and hedgerows in cultivated areas; willow-dominated riparian woodlands; and, open woodland, brush in winter.

5.4.3 Impacts

No impacts to Least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo will occur on the proposed project.

5.4.4 Mitigation

No impacts to Least Bell's vireo, southwestern willow flycatcher and yellow-billed cuckoo will occur on the proposed project, therefore no mitigation is required.

6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

6.1 Methods

Biological surveys were completed on February 7, 18, 26, March 1, 2020. Surveys were completed by County-approved biologists and their assistants along 10-meter wide linear transects that spanned the length of each parcel. Surveys included buffer area transects where access was permitted off-site. Botanical surveys were completed on February 7, 18, 26, March 1, 2020 and all plant communities were mapped. A habitat assessment for sensitive plant species was completed during the plant community evaluation field surveys. Habitat requirements for these species were reviewed prior to the site visit. During the survey, the site was analyzed for the presence of suitable habitats and/or soils to support these species. Surveys were conducted during a year with below average rainfall. No NARROW ENDEMIC PLANT SPECIES have been documented for the project site.

6.2 Existing Conditions and Results

No habitat for narrow endemic plant species is present because clay soils are absent, associated vegetation communities are impacted by anthropogenic activities.

6.3 Impacts

No impacts to narrow endemic plant species will occur on the project site as appropriate soils are not present and existing anthropogenic activities impacts.

6.4 Mitigation

No mitigation for narrow endemic plant species is required as no impacts will occur to these plant species.

7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The proposed project is not located within a Section 6.3.2 survey area.

7.1 Criteria Area Plant Species

Proposed project does not fall within a mapped survey area for Criteria Area plant species.

7.2 Amphibians

Proposed project does not fall within a mapped survey area for Criteria Area amphibian species.

7.2.1 Methods

Proposed project does not fall within a mapped survey area for Criteria Area amphibian species.

7.2.2 Existing Conditions and Results

Proposed project does not fall within a mapped survey area for Criteria Area amphibian species.

7.2.3 Impacts

Proposed project does not fall within a mapped survey area for Criteria Area amphibian species.

7.2.4 Mitigation

Proposed project does not fall within a mapped survey area for Criteria Area amphibian species.

7.3 Burrowing Owl

The proposed project falls within the mapped survey area for burrowing owl.

7.3.1 Methods

Protocol burrowing owl surveys were completed by the GEC utilizing the following methodology.

Burrowing owl habitat assessment surveys and focused surveys were conducted in 2020 (refer to Table 3.2 for dates and Table 3.3 for 2020 survey information) according to the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside 2006).

GEC biologists knowledgeable in BUOW habitat, ecology, and field identification of the species conducted surveys on the dates shown in Table 3.2 and 3.3. The weather conditions during these surveys were conducive to observing BUOW outside their burrows and detecting BUOW sign. Data was collected by numerous techniques including the use of a hand-held GPS device, standardized data forms, photographs, and aerial field maps. Details regarding each survey method are provided below:

Habitat Assessment (Step 1)

Habitat within the project area was assessed for BUOW presence, use, and potential use. Areas with potential BUOW habitat, including pasture and debris piles were surveyed by GEC for potential burrows and BUOW. Biologists walked areas of potential habitat while searching for BUOW, potential and active burrows, and owl sign, such as feathers, pellets, and prey items. The survey area included a 150-meter (500-foot) buffer zone outside the project site. Transect surveys for burrows, including owl sign, was conducted by walking or being escorted through suitable habitat over the entire survey area (the proposed route and the 150-meter [500-foot] buffer zone). Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 10 meters (30 feet) and was reduced when necessary to account for differences in terrain, vegetation density, and ground surface visibility.

Focused Burrow Surveys (Step 2 A)

GEC conducted focused burrow surveys including natural burrows or suitable debris piles. Transect surveys for burrows, including owl sign, was conducted by walking or being escorted through suitable habitat over the entire survey area (the proposed route and the 150-meter [500-foot] buffer zone). Pedestrian survey transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 10 meters (30 feet) and was reduced when necessary to account for differences in terrain, vegetation density, and ground surface visibility. The locations of all potential owl burrows, observed owl sign, and observed BUOW were recorded and mapped with a GPS device.

Focused Owl Surveys (Step 2B)

Focused BUOW surveys consisted of eleven site visits covering all project areas and adjacent areas. Surveys were conducted in the morning 1 hour before sunrise to 2 hours after sunrise and 1 hour before sunset to 2 hours after sunset. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors used binoculars and/or spotting scopes to scan all suitable habitats, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. A survey for owls and owl sign was then conducted by walking through suitable habitat over the entire project site and within the adjacent 150-meter (500-foot) buffer zone. These pedestrian surveys followed transects spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines were no more than 10 meters (30 feet) and were reduced to account for differences in terrain, vegetation density, and ground surface visibility. In areas where access was not obtained, the area adjacent to the project site was surveyed using binoculars and/or spotting

scopes to determine if owls are present in areas adjacent to the project site.

TABLE 5

BURROWING OWL SURVEYS 2020 BY GONZALES ENVIRONMENTAL CONSULTING, LLC**

Date	Air Temperature (F)	Wind Speed (mph)	Cloud Cover	Precipitation	Sunrise/Sunset Times	Time-Duration*
February 7	43-55	3-9	Clear-30% cloud cover	No	0641/1725	0541/0841 3 hrs
February 18	48-58	0-10	10% cloud cover	No	0630/1735	0530/0830 3 hrs
February 26	43-56	0-7	Clear	No	0621/1742	0521/0821 3 hrs
March 1	37-54	0-10	40% cloud cover	No	0616/1745	0516-0816 3 hrs

*Approved hours for burrowing owl surveys are one hour prior to sunrise until two hours after and two hours prior to sunset and one hour after sunset.

** Surveys will continue until June, 2020

Although burrowing owls were not detected during the habitat assessment and focused surveys, because habitat is present (low growing vegetation and disturbed vegetation) on the project site, burrowing owl may utilize the site in the future. A pre-construction survey will be required and burrowing owl may be found present at that time and if so, impacts would occur.

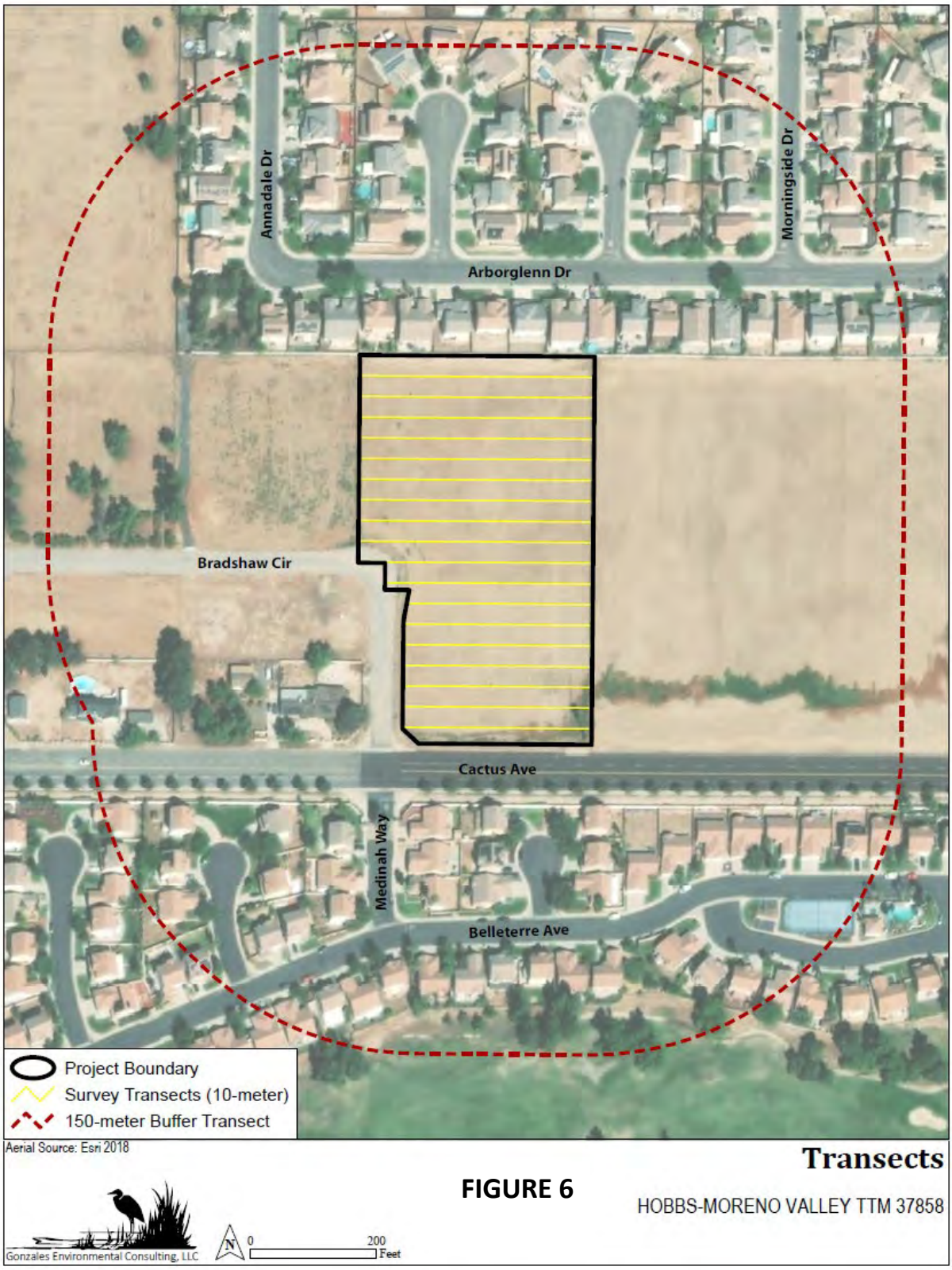


FIGURE 6

Transects

HOBBS-MORENO VALLEY TTM 37858

7.3.2 Existing Conditions and Results

The project site is south, north and partially east of existing single family housing. The project site is frequently mowed and plowed for vegetation and fire suppression. No burrows, signs or burrowing owl(s) were observed on-site.

7.3.3 Impacts

No impacts to burrowing owl occur on the project site. Although burrowing owls were not detected during the habitat assessment and focused surveys, because habitat is present on the project site, burrowing owl may utilize the site in the future. A pre-construction survey will be required and burrowing owl may be found present at that time and if so, impacts would occur.

7.3.4 Mitigation

A 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (including but not limited to vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies, and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

7.4 Mammals

The proposed project does not fall within a mapped survey area for mammal species. The project site is within the Stephen's Kangaroo rat fee area.

7.4.1 Methods

Proposed project does not fall within a mapped survey area for Criteria Area for mammals.

7.4.2 Existing Conditions and Results

7.4.3 Impacts

Proposed project does not fall within a mapped survey area for Criteria Area for mammals.

7.4.4 Mitigation

Proposed project does not fall within a mapped survey area for Criteria Area for mammals.

8 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The proposed project does not fall within an area with Delhi soils mapped within the MSHCP baseline data.

8.1.1 Methods

The proposed project does not fall within an area with Delhi soils mapped within the MSHCP baseline data.

8.1.2 Existing Conditions and Results

The proposed project does not fall within an area with Delhi soils mapped within the MSHCP baseline data.

8.1.3 Impacts

The proposed project does not fall within an area with Delhi soils mapped within the MSHCP baseline data.

8.1.4 Mitigation

The proposed project does not fall within an area with Delhi soils mapped within the MSHCP baseline data therefore no mitigation is required.

8.2 Species Not Adequately Conserved

No Species Not Adequately Conserved were found on the proposed project site.

9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

To preserve the integrity of areas described as existing or future MSHCP Conservation Areas, the guidelines contained in Section 6.1.4 Urban Wildlands Interface Guidelines (UWIG) shall be implemented by the Permittee in their actions relative to the project.

All proposed projects that are located adjacent or have on-site connection to either existing conservation or land described for conservation are required to address how they plan to implement all of the UWIG guidelines:
The entire site has been previously impacted by anthropogenic activities. Thus, there will be relatively few new impacts to any existing or future portions of the Conservation Area, and such impacts will be minor. Mitigation measures and BMPs are located in Section 10 of this document. Nevertheless, below is a summary of the Urban Wildlands Interface Guidelines and their relationship to the proposed project:

Drainage- Siltation and erosion resulting from the proposed activities are potentially significant indirect impacts associated with this proposed project because of the proximity of the proposed work area to natural areas. Surface water quality could be diminished as a result of scraping and grading, and material laydown. As such, erosion from these activities can remove topsoil necessary for plant growth both in the graded areas and in lower areas affected by increased runoff. The eroded soil can be deposited as silt and alluvium off of the project site. Siltation from these activities can damage wetlands and aquatic habitats and bury vegetation or topsoil. Implementation of avoidance and minimization measures described above under direct impacts is proposed. These measures include implementation of an effective SWPPP or WQMP that employs appropriate BMPs to avoid or limit runoff, erosion, and siltation. With these measures, project related runoff, erosion, and siltation would not result in significant impacts to any offsite water features or sensitive habitats.

Toxics- Toxic substances can kill wildlife and plants or prevent new growth where soils or water are contaminated. Toxic substances can be released into the environment through several scenarios including planned or accidental releases, leaching from stored materials, pesticide or herbicide use, or fires, among others. No intentional releases of toxic substances are planned as part of the proposed project. Accidental releases could occur from several sources such as leaking equipment, or fuel spills during the course of the construction. The implementation of BMPs during construction will reduce the risk of leaks and fuel spills below a level of significance.

A spill contingency plan, written by the construction contractor and approved prior to construction will be in effect during all phases of construction activities. The project would result in the additional use of hazardous materials in limited quantities associated with normal residential use

such as cleaning products, solvents, herbicides, and insecticides. However, compliance with regulations will reduce the potential risk of hazardous material exposure to a level that is less than significant. An information pamphlet will be prepared for each homeowner regarding the use of toxics.

Lighting- No nighttime work is anticipated. However, if such work is required in or adjacent to the Conservation Area, lighting would be temporary, shielded, and directed away from the Conservation Area to the extent possible. No permanent lighting will be installed in or near the Conservation Area.

Noise- Although some noise will be generated by project activities in or adjacent to open space, it will be of short duration and will be kept as low as possible. Wildlife within open space should not be subject to noise that would exceed residential noise standards. The implementation of avoidance and minimization measures will be implemented in order to minimize impact to species.

Invasives- Project related landscaping within or adjacent to the Conservation Area, will comply with not utilizing the invasive nonnative plant species listed in *Table 6-2* of *Section 6.1.4* of the MSHCP. Minimization and avoidance measures will be implemented in order to avoid the spread of invasive species within the project area.

Barriers- The proposed project may include theme walls along project perimeter streets adjacent to public streets. The project will include walls and/or fencing located where public view and/or important interfaces are of concern. The project will incorporate special edge treatments designed to separate development areas from open space areas. These areas of native landscaping and fencing will serve to minimize unauthorized public access, domestic animals predation, and illegal trespass and dumping.

Grading/Land Development- All manufactured slopes associated with site development will be within the project site. Manufactured slopes will only occur within the portion of the project where impacts are proposed and not within proposed conservation areas.

10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

Table 6 presents MSHCP BMPs (Appendix C of the MSHCP), Construction Guidelines (Section 7.5.3 of the MSHCP), and species specific mitigation measures that have been incorporated in the MSHCP and will be implemented as part of the project. Mitigation Measures Detailed in Table 6 shall be included in the Mitigation Monitoring and Reporting Program for the project and completed prior to the issuance of a Grading Permit.

TABLE 6
MSHCP BMPS AND SPECIES SPECIFIC MITIGATION MEASURES

MSHCP BMPs (MSHCP Vol. I, Appendix C)	
MSHCP BMP-1	Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
MSHCP BMP-2	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, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
MSHCP BMP-3	Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
MSHCP BMP-4	To avoid attracting predators of the species of concern, the project site 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).
MSHCP BMP-5	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.

MSHCP Construction Guidelines (MSHCP Section 7.5.3)	
MSHCP CONST-1	Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, use of plant material for erosion control. Plans will be reviewed and approved by the City of Riverside and participating jurisdiction prior to construction.
MSHCP CONST-2	Timing of construction activities will consider seasonal requirements for breeding birds and migratory non- resident species. Habitat clearing will be avoided during species active breeding season defined as March 1 to June 30.
MSHCP CONST-3	Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
MSHCP CONST-4	Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site.
MSHCP CONST-5	Settling ponds where sediment is collected will be cleaned in a manner that prevents sediment from re- entering the stream or damaging/disturbing adjacent areas. Sediment from settling ponds will be removed to a location where sediment cannot re-enter the stream or surrounding drainage area. Care will be exercised during removal of silt fencing to minimize release of debris or sediment into streams.
MSHCP CONST-6	No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
MSHCP CONST-7	The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible.
MSHCP CONST-8	Equipment storage, fueling and staging areas will be sited on non-sensitive upland Habitat types with minimal risk of direct discharge into riparian areas or other sensitive Habitat types.
MSHCP CONST-9	The limits of disturbance, including the upstream, downstream and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance prior to initiation of construction activities.
MSHCP CONST-10	During construction, the placement of equipment within the stream or on adjacent banks or adjacent

	upland Habitats occupied by Covered Species that are outside of the project footprint will be avoided.
MSHCP CONST-11	Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.
MSHCP CONST-12	Training of construction personnel will be provided.
MSHCP CONST-13	Presence of a biological monitor is required. Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices.
MSHCP CONST-14	Active construction areas shall be watered regularly to control dust and minimize impacts to adjacent vegetation.
MSHCP CONST-15	All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances shall occur only in designated areas within the proposed grading limits of the project site. These designated areas shall be clearly marked and located in such a manner as to contain run-off.
MSHCP CONST-16	Waste, dirt, rubble, or trash shall not be deposited in the Conservation Area or on native habitat.
MSHCP CONST-17	Wildlife Biologist required to be present during construction of the project.
MSHCP Species/Habitat Specific Measures	
Stephen's Kangaroo Rat	As part of the mitigation for the project, Stephen's kangaroo rat mitigation fee is required for the project. Fee is required to be paid prior to the issuance of a Grading Permit.
Raptors-Nesting Birds	As part of the mitigation for the project, Seven days prior to the onset of construction activities during the raptor nesting season (February 1 to June 30), a qualified biologist shall survey within 500 feet of the Project impact area for the presence of any active raptor nests (common or special status). Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW. If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any occupied nest, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any occupied nest, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the known nest shall only be

	allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active nest is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will flush any raptor to open space areas. A qualified biologist, or construction personnel under the direction of the qualified biologist, shall then remove the nest site so raptors cannot return to a nest.
MSHCP-BUOW	As part of the mitigation for the project, a 30-day pre-construction survey for burrowing owls is required prior to initial ground-disturbing activities (including but not limited to vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding the ground-disturbing activities. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent will immediately inform the Regional Conservation Authority (RCA) and the Wildlife Agencies, and will need to coordinate further with RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

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SUPPORTING APPENDICES

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