Biological Technical Report for the Hemet 30 Project (Case Number TTM37737)

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ACRONYMS, ABBREVIATIONS, AND GLOSSARY OF TERMS

BLM	United States Bureau of Land Management
BMPs	Best Management Practices
BUOW	Burrowing Owl
CAGN	coastal California gnatcatcher
CDF	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	United States Army Corps of Engineers
CRPR	California Rare Plant Rank
CSLS	Carlson Strategic Land Solutions
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
FESA	Federal Endangered Species Act
FGC	California Fish and Game Code
GIS	Geographic Information System
GPS	Global Positioning System
LBV	least Bell's vireo
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation, Monitoring, and Reporting Program
MSHCP	Western Riverside Multiple Species Habitat Conservation Plan
MSL	mean sea level
NEPA	National Environmental Protection Act
NHD	National Hydrography Dataset
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High-Water Mark

Project	Hemet 30 Project
RWQCB	Regional Water Quality Control Board
SAA	Section 1600 Streambed Alteration Agreement
SWPPP	Storm Water Pollution Prevention Plan
U.S.	United States
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WQC	Section 401 Water Quality Certification

1.0 Introduction

1.1 Purpose and Approach

On behalf of Global Investments and Development, LLC (Global Investment), Carlson Strategic Land Solutions (CSLS) prepared this Biological Technical Report for the proposed Hemet 30 Project (Project) located on approximately 30 acres in the County of Riverside. The Biological Technical Report for the approximately 30-acre Project site and the surrounding 500-feet, collectively known as the "Study Area," incorporates the findings from field surveys for Biological Assessment, focused Narrow Endemic Plant Surveys and focused Burrowing Owl Surveys conducted on May 31, June 10, 17, and July 01, 26, and August 7, 2019. An additional updated survey took place on May 17, 2021 to confirm results and to document any change in existing conditions.

The purpose of this study is to satisfy the requirements of the California Environmental Quality Act (CEQA) and incorporate the findings from the field surveys conducted in June 2019 and May 2021, focused Burrowing Owl (BUOW) Surveys conducted in 2019 and 2021; and coastal California gnatcatcher surveys conducted in May and June 2021.

1.2 Sources

This Biological Technical Report (BTR) is based on information compiled through field reconnaissance and appropriate reference materials. A general biological survey, vegetation mapping, jurisdictional waters and wetlands delineation, focused burrowing owl survey, and narrow endemic plant survey conducted by CSLS Biologists on the Project site and surrounding 500-feet, collectively referred to as the "Study Area". The potential biological significance of site construction and development in view of federal, state, and local laws and regulations are also identified in this report. While general biological resources are discussed, the focus of this assessment is on those resources considered to be sensitive. The information sources used in preparation of this Biological Resource Report are provided in Section 9.0, *References*.

1.3 Project Terms

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

- Project site: the approximate 30 -acres Hemet 30 Project site in the County of Riverside, near the City of Hemet.

- Study Area: the area evaluated during the field survey, including the 30 -acre Project site and the surrounding 500-feet (150-meters).

- Project Vicinity: intended to be a general term to describe the broader area surrounding the Study Area.

1.4 Project Location

The 30-acre Project site is located in the County of Riverside California on the U.S Geological Survey (USGS) Map *Winchester* topographic map within Section 14 of Township 5 South, Range 2 West. The Project Site is located south of Highway 74 and west of Joel Drive. Areas surrounding the Project Site include Highway 74 to the north, vacant land to the east and west; and rural housing to the south (Figures 1 and 2).

The Project Site includes Assessor's Parcel Numbers (APN) of 465-040-025, 465-040-026, and 465-040-027.

Access to the Project site occurs from Highway 74 located to the north of the Project site or Joel Street located to the east of the Project site.

1.5 Existing Conditions and Historical Land Use

From the 1940s to early 2000s, the Project site was used as a rock quarry. A residence existed on the Project site from 1949 to early 1980s. The mining operations stopped in the early 2000's. Since 2004, the Project site has been vacant land.

A gently northeast sloping alluvial fan occupies the northern portion of the property. Elevations range from 1,520 feet above Mean Sea Level (MSL) in the northeast to 1,575 feet MSL in the southwest portion.

The 30-acre Project site consists primarily of ruderal habitat with the remaining acreage consisting of California buckwheat scrub and disturbed habitats. The Project site is subject to dumping of trash and debris, specifically within the southwestern portion of the Project site. Furthermore, abandoned homeless encampments were observed within the middle portion of the Project site within an area of scattered tamarisk trees.

Immediate surrounding land uses for the Project site include vacant land to the east and west; a rural residence to the south; and Highway 74 to the north.

1.6 Scope of Study

The scope of this BTR encompasses descriptions of the Project site, methods of study, and existing site conditions including tree survey, vegetation communities, and the potential for sensitive biological resources. Further, avoidance, minimization, and/or mitigation measures are included within this BTR to reduce any potentially significant impacts to sensitive species.

1.7 Project Information Summary

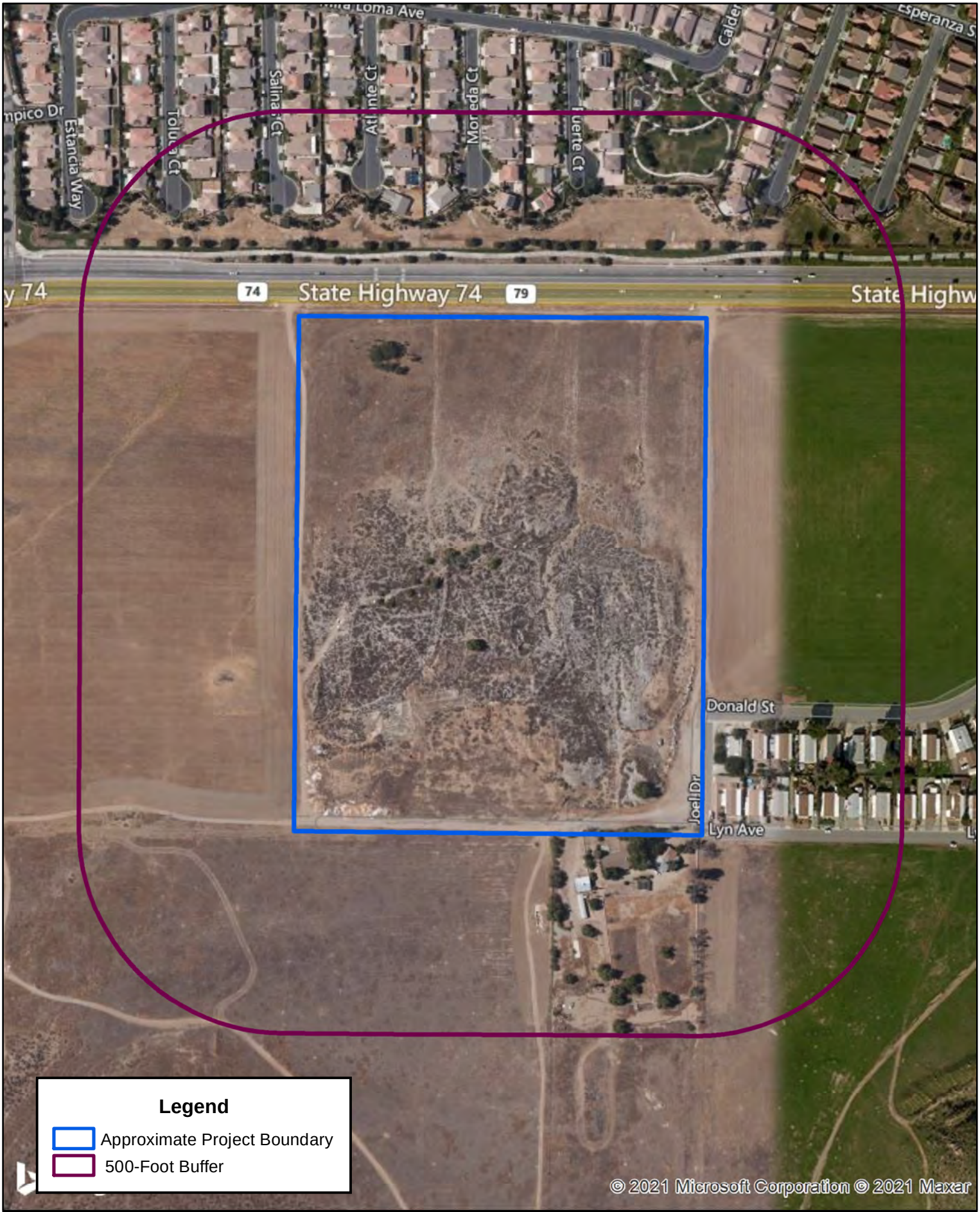
Report Date:	November 8, 2021
Report Title:	Biological Technical Report for the Hemet 30 Project in Riverside County, California
Case Number:	CZ2100016 and TTM37737
APN Numbers:	465-040-026, 465-040-027, and 465-040-025.
Owner/Applicant:	Joseph Rivani Global Investment & Development, LLC 3470 Wilshire Blvd. Suite 1020 Los Angeles, CA 90010 213.369.9600 jrivani@gidllco.com
Principal Investigator:	Brianna Bernard Carlson Strategic Land Solutions 27134A Paseo Espada, Suite 323 San Juan Capistrano, CA 92675 949.542.7042 Office 916.218.2644 Mobile bbernard@carlsonsls.com
Survey Information:	Brianna Bernard, Biologist Crysta Dickson, Biologist Justinne Manahan, Biologist Survey dates: May 31, June 10, 17, and July 01, 26, and August 7, 2019. An additional updated survey took place on May 17, 2021

2.0 Project Description

The Project proposes to construct 151-residential units with associated streets and infrastructure on 30-acres. The Project site is a rectangle-shaped parcel and is bounded on the north by Highway 74, on the south by Lyn Avenue, on the east by Joel Drive, and on the west by an open field. Land uses surrounding the Project site include a trailer park to the southeast; rural residence to the south; vacant fields to the east and west; and Highway 74 to the north of the Project site.

GIS Prepared By: Carlson SLS Created: May 1, 2021	0 1,250 2,500 5,000 Feet 1 inch = 5,000 feet	Data Sources: Bing Maps	*Global Investments: Hemet 30* **Regional Map**

FIGURE 1



GIS Prepared By:
Carlson SLS

Created: June 28, 2019

0 50 100 200 300 Feet
1 inch = 300 feet

Data Source: Bing Map

Global Investments: Hemet 30

Project Location

FIGURE 2

3.0 Regulatory Framework

The following discussion describes the plant and wildlife species present, or potentially present, within the Project site that have been afforded special recognition by Federal, State, or local resource conservation agencies and organizations. These species have declining or limited population sizes, typically resulting from habitat loss. Also discussed are sensitive habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by either Federal or State resource management agencies, or both, as threatened or endangered, under provisions of the Federal and State Endangered Species Acts (FESA and CESA, respectively).

3.1 Federal Sensitive Resource Protection and Classifications

3.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA, unless properly permitted, it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action which could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the ESA if there is a federal nexus, or pursuant to Section 10 of the ESA. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. All references to federally-protected species in this BTR include the most current published status or candidate category to which each species has been assigned by USFWS.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, MBTA protects against activities that potentially impact migratory birds and contains conditions that require pre-disturbance surveys for nesting birds during the breeding season. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. The size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is

based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

3.1.3 Federal Clean Water Act, Section 401 and 404

The Clean Water Act (CWA), Section 401 provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The RWQCB administers the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the US Army Corps of Engineers (Corps) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The Corps implementing regulations are found at 33 CFR 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the United States Environmental Protection Agency in conjunction with Corps (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Under Section 401 of the CWA, the local RWQCB must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

Jurisdictional non-wetland features for the Waters meeting the CWA definition are typically determined through the observation of an Ordinary High Water Mark (OHWM), which is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." On April 21, 2020 the U.S. Environmental Protection Agency (EPA) and the Corps published the Navigable Waters Protection Rule to define "Waters of the United States" in the Federal Register. The April 2020 definition includes four simple categories of jurisdictional waters, including:

(1) the territorial seas and traditional navigable waters;
(2) perennial and intermittent tributaries to those waters;
(3) certain lakes, ponds and impoundments; and
(4) wetlands adjacent to jurisdictional waters.

The April 2020 definition provides clear exclusions for many water features that traditionally have been regulated, such as ephemeral drainages. The April 2020 definition has been formally adopted by EPA and the Corps and was used for this Jurisdictional Delineation.

3.1.4 Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and fall under the jurisdiction of several regulatory agencies. The US Army Corps of Engineers (Corps) exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams, mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features.

Wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, are defined by Corps as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by Corps (Corps 1987).

To determine the presence of a jurisdictional wetland for the Waters of the United States, three indicators are required: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The methodology published in the *United States Army Corps of Engineers 1987 Wetland Delineation Manual* and the *Arid West Supplement* sets the standards for meeting each of the three indicators, which normally require more than 50 percent cover of dominant plant species typical of a wetland, soils exhibiting characteristics of saturation, and hydrological indicators be present.

It is important to note that the RWQCB definition of wetland was redefined and the new definition went into effect May 28, 2020. The definition of a wetland is as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation. This RWQCB modified three-parameter definition is similar to the federal definition in that it identifies three wetland characteristics that determine the presence of a wetland: wetland hydrology, hydric soils, and hydrophytic vegetation. Unlike the federal definition, however, the RWQCB wetland definition allows for the presence of hydric substrates as a criterion for wetland identification (not just wetland soils) and wetland hydrology for an area devoid of vegetation (less than 5% cover) to be considered a wetland.

However, if any vegetation is present, then the Corps delineation procedures would apply to the vegetated component (i.e., hydrophytes must dominate). Examples of waters that would be considered wetlands by the RWQCB definition, but not by the federal wetland definition, are non-vegetated wetlands, or wetlands characterized by exposed bare substrates like mudflats and playas, as long as they meet the three-parameters as described in the RWQCB definition. It is important to note that while the Corps may not designate a feature as a wetland, that feature could be considered a special aquatic site or other water of the U.S. by the Corps and potentially subject to Corps' jurisdiction.

3.2 State Sensitive Resource Protection

3.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is "consistent" with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species listed under the CESA only, the project operator would have to apply for a take permit under Section 2081(b).

3.2.2 Protection of Birds

Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

3.2.3 California Fish and Game Code

CDFW has jurisdiction over water of the Department's interest (California Fish and Game Code §§1600 et seq.; California Code of Regulations, Title 14, §720), referred to as Waters of the State. Section 1602 of the California Fish and Game Code (FGC) applies to all rivers, streams, lakes and streambeds. CDFW defines a stream as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators" (Brady and Vyverberg 2013). Likewise, CDFW regulates

jurisdictional areas of riparian habitat only to the extent that those areas are part of a stream, river, or lake as defined above. Waters of the State pertaining to Porter-Cologne in relation to RWQCB jurisdiction are defined by California Water Code Section 13050(e) as any surface or ground water within the boundaries of the state. CDFW reviews the proposed project to determine whether it affects streambed habitats within the project area. CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

3.2.4 California Fully Protected Species

California fully protected species are described in Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

3.2.5 Native Plant Protection Act

California's Native Plant Protection Act (NPPA) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The project operator is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

3.2.6 California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2012). The list serves as the candidate list for Threatened and Endangered by CDFW. CNPS has developed five categories of rarity, of which Ranks 1A, 1B, and 2 are particularly considered sensitive.

Sensitive species that occur or potentially could occur within the Project site are based on one or more of the following: (1) the direct observation of the species within the project site during any field surveys; (2) a record reported in the CNDDB; and (3) the project site is within known distribution of a species and contains appropriate habitat.

3.2.7 Sensitive Plant Communities

Sensitive plant communities include those habitat types considered sensitive by resource agencies, namely CDFW, due to their scarcity and/or their ability to support State and Federally-listed Endangered, Threatened, and Rare vascular plants, as well as several sensitive bird and reptile species. CDFW maintains a natural plant community list, the List of California Terrestrial Natural Communities. Sensitive natural communities

(also referred to by CDFW as 'rare', 'special-status', or 'special concern') are identified on the list by an asterisk and are considered high priority vegetation types (CDFW 2003; CDFW 2000).

3.2.8 Porter-Cologne Water Quality Act

The RWQCB also has jurisdiction over waters deemed "isolated" or not subject to Section 404 jurisdiction under the Solid Waste Agency of Northern Cook County v. Corps decision. Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the state and prospective dischargers are required to obtain authorization through an Order of Waste Discharge or waiver thereof from the RWQCB and comply with other requirements of Porter-Cologne Act.

3.3 Local Sensitive Resource Protection and Classifications

3.3.1 Western Riverside Multiple Species Habitat Conservation Plan (MSHCP)

The Project site is located within the MSHCP. The MSHCP is a comprehensive plan that includes portions of the County of Riverside and numerous cities. The MSHCP plans for conservation of 146 species and proposes a reserve system of approximately 500,000 acres. The MSHCP is intended to contribute to the economic viability of the County of Riverside by providing landowners, developers, and public infrastructure projects a streamlined regulatory process.

The Riverside Conservation Authority (RCA) MSHCP Information Application website was reviewed to verify any overlays, Criteria Cells, Cell Groups, Subunits or Conservation Areas that may occur on the Project site. The Project is located within the Harvest Valley/Winchester Area Plan of the MSHCP. Commonly, projects contain the following overlays:

- MSHCP Section 6.1.2 Riparian and Riverine Areas and associated species,
- MSHCP Section 6.1.3 Narrow Endemic Plants – Survey Area 3
- MSHCP Section 6.1.4 Urban/Wildlands Interface,
- MSHCP Section 6.3.2 Species Survey Requirements for the western burrowing owl (*Athene cunicularia hypugaea* [BUOW]) habitat

3.3.2 Section 6.1.2 Riparian/Riverine Areas and Vernal Pools

Regardless of other overlays or protected areas, MSHCP Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, is applicable to all projects within the MSHCP and describes the process through which protection of riparian/riverine areas, and vernal pools will occur within the MSHCP Area. Protection of these resources is important for a number of MSHCP conservation objectives. An assessment of a Project's potentially significant effects on riparian/riverine areas and vernal pools is required. Guidelines for determining whether or not these resources exist on site are described as follows:

- Riparian/Riverine Areas include "lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens which occur close to or which depend upon soil moisture from a nearby fresh water source or areas with fresh water flow during all or a portion of the year." Riparian/riverine areas under the MSHCP also include drainage areas that are vegetated or have upland (non-riparian/riverine) vegetation and that drain directly into an area that is described for conservation under the MSHCP (or areas already conserved).

- Vernal Pools are described by the MSHCP as "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." This definition excludes artificially created wetlands created for proving wetlands habitat or human actions to create open waters or altering natural streams demonstrating characteristic as described above.

3.3.3 Section 6.1.3 Narrow Endemic Plant – Survey Area 3

Portions of the Project Study Area are located within the Narrow Endemic Plant Species Survey Areas (NEPSSA) Number 3. A list of target plants from Survey Area 3 was developed and incorporated into a survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floral compendium; and (3) document the distribution and abundance of any special-status plant species within the Project Study Area.

General surveys were conducted to identify potential sensitive plant habitats. The reconnaissance surveys also considered the guidelines adopted by CNPS and CDFW (Nelson 1984, CNPS 2001). Where potentially suitable habitat was present, focused plant surveys included those MSCHP Covered Species identified by the NEPSSA Survey Area Number 3. For locations with positive survey results, the MSHCP requires that 90 percent of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Findings of equivalency shall be made demonstrating that the 90-percent standard has been met.

3.3.4 Section 6.1.4 Urban/Wildlands Interface

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area.

3.3.5 Section 6.3.2 Burrowing Owl Habitat Assessment

A majority of Riverside County falls within MSHCP Section 6.3.2 Burrowing Owl (BUOW) Habitat Assessment overlay. All surveys were conducted in accordance with the MSHCP Burrowing Owl Survey Instructions (RCA 2006). The Burrowing Owl Survey Instructions

are divided into two steps, including the habitat assessment (Step 1) and locating burrows and BUOWs (Step II). Step I of the MSHCP Survey Instructions requires that an assessment be conducted to determine the presence of suitable habitat for the BUOW. The MSHCP Survey Instructions acknowledge that the presence of suitable burrows is not the deciding factor on whether a site contains suitable habitat for BUOWs. The presence/absence of suitable burrows is to be determined during Step II of the Survey Instructions (Part A: Focused Burrow Survey, and Part B: Additional Focused Burrowing Owl Surveys), once it has been determined that a site contains suitable habitat for the BUOW. Should the Study Area exhibit suitable burrowing owl habitat, a focused burrow survey (Step II Part A) was required for the Project.

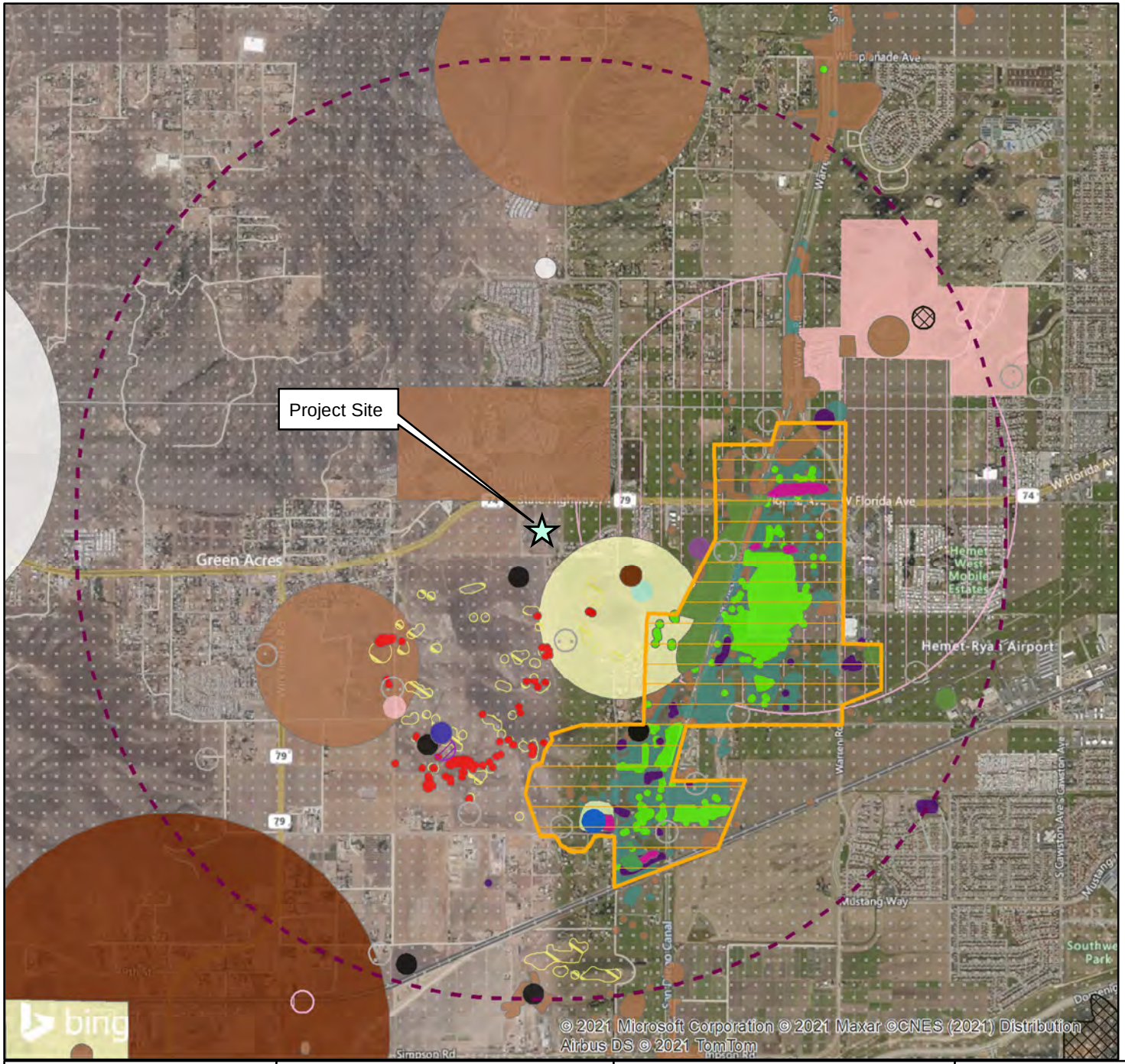
4.0 Methods of Study

4.1 Approach

This BTR is based on information compiled through field reconnaissance and appropriate reference materials. Surveys included a general biological survey and vegetation mapping, focused BUOW surveys, narrow endemic plant surveys, and a jurisdictional waters and wetlands delineation.

4.2 Literature Review

Assessment of the Project site began with a review of relevant literature on the biological resources of the site and the surrounding vicinities. The California Natural Diversity Database (CNDDB), a CDFW species account database, was reviewed for all pertinent information regarding the localities of known observations of sensitive species and habitats in the vicinity of the site (CNDDB 2021; Figure 3). The vicinity of the site included the following USGS topographic quadrangles: Winchester, Hemet, San Jacinto, Lakeview, Romoland, Perris, Bachelor Mountain, Murrieta, and Sage. Federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) (USFWS 2021a), CDFW, and the California Native Plant Society (CNPS) (CNPS 2021) were reviewed in conjunction with anticipated listed species with potential to occur within the Project vicinity. Additional data sources reviewed include USFWS critical habitat maps (USFWS 2021b) and United States Department of Agriculture Natural Resources Conservation Service (NRCS) soils mapping (NRCS 2021). In addition, numerous regional flora and fauna field guides were utilized to assist in the identification of species and suitable habitats. A list of all relevant references reviewed is included in Section 9.0, *References*.



Legend

- Approximate Project Boundary
- 2-mile Buffer
- Spreading Navarretia Critical Habitat

CNDDB Occurence

- Bell's sage sparrow
- burrowing owl
- California Orcutt grass
- coast horned lizard
- coastal California gnatcatcher
- Cooper's hawk
- Coulter's goldfields
- Davidson's saltscale
- little mousetail
- long-spined spineflower
- orange-throated whiptail
- Parry's spineflower
- Payson's jewelflower
- red-diamond rattlesnake
- San Diego black-tailed jackrabbit
- San Jacinto Valley crownscale
- smooth tarplant
- southern California rufous-crowned sparrow
- spreading navarretia
- thread-leaved brodiaea
- Stephens' kangaroo rat
- vernal pool fairy shrimp
- western spadefoot
- white-tailed kite

GIS Prepared By:
Carlson SLS

Created: May 24, 2021

0 875 1,750 3,500 5,250 7,000 Feet
1 inch = 3,500 feet

Data Source: Bing Map
CDFW (August 2021)

Global Investments: Hemet 30

CNDDB Occurences and Critical Habitat

FIGURE 3

4.2.1 Plant Community Mapping

Plant communities were mapped in the field directly onto a 200-scale (1" = 200') aerial map, focusing on dominant plant species. Plant species were identified using plant field and taxonomical guides, such as The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al. 2012). Vegetation communities were characterized utilizing vegetation alliances in accordance with The Manual of California Vegetation, Second Edition (MCVII) (Sawyer et al. 2009). Where necessary, deviations were made on best professional judgment when areas did not fit into a specific habitat description provided by MCVII. After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

4.2.2 Sensitive Habitats

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

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

4.2.3 Sensitive Plant Species

The potential for sensitive plant species was assessed based upon the known occurrence of species in the area as identified from CDFW, USFWS, and CNPS databases, and the presence or absence of suitable habitat within the Project site. Suitable habitat is defined as areas with appropriate vegetation communities, soils and/or topography (elevation at MSL) to support sensitive plant species based on known occurrences in those habitats. The available literature, databases, and existing field conditions were reviewed and compared to identify sensitive plant species that have the potential to occur within the Project site (Appendix A). During the field assessment, any observed special plant species location(s) and extent(s) were recorded in field notes and mapped using GPS.

4.2.4 Critical Habitat

Under the ESA, the federal government is required to designate "critical habitat" for any species it lists under the ESA (Figure 3). Federal agencies are prohibited from authorizing, funding or carrying out actions that "destroy or adversely modify" critical habitats. Section 3 of the ESA defines critical habitat as:

- The specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection.

- The specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

"Conservation" means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the ESA is no longer necessary. Critical habitat receives protection under Section 7(a)(2) of the ESA through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a federal agency. Section 7(a)(2) also requires conferences on federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat.

The USFWS's online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California was reviewed to determine if the Project site occurs within any species' designated Critical Habitat. The USFWS regulatory mapping process for the designation of critical habitat is an imprecise, broad-based, mapping exercise of areas that may or may not include constituent elements of the critical habitat designation. Due to this approach in mapping, large areas are designated as critical habitat regardless of the existing habitat, and as a result may include developed areas, such as buildings, roads, hardscape, and other such facilities, as well as natural habitats.

The constituent elements of the critical habitat designation consider the physical and biological features needed for life processes and successful reproduction of the listed species. These include:

- Space for individual and population growth for normal behavior;
- Habitat cover or shelter;
- Food, water, or other nutritional or physiological requirements;
- Sites for breeding and rearing offspring; and
- Habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

4.2.5 Sensitive Wildlife Species

The potential for sensitive wildlife species was assessed based upon the known occurrence of species in the area as identified from CDFW and USFWS databases, and the presence or absence of suitable habitat within the site. Suitable habitat is defined as areas with appropriate vegetation communities and/or topography (elevation at MSL) to support sensitive wildlife species based on known occurrences in those habitats and/or CDFW and USFWS documented habitat descriptions for the species. The available literature, databases, and existing field conditions were reviewed and compared to identify sensitive wildlife species that have the potential to occur within the Project site (Appendix B).

4.2.6 Regional Connectivity/Wildlife Movement Corridor

An analysis of wildlife movement was conducted based on information compiled from the literature, analysis of aerial photographs and topographic maps, direct observations made in the field during survey work, and an analysis of existing wildlife movement functions. Relative to corridor issues, the focus of this assessment was to determine if development of the Project site would have significant impacts on the regional wildlife movement associated with the site and the immediate vicinity.

4.3 Field Investigations

A general biological survey, vegetation mapping, focused BUOW surveys, focused rare plant survey, and a delineation of jurisdictional waters and wetlands were conducted for the Project site by CSLS biologists Brianna Bernard, Crysta Dickson, and Justinne Manahan. Findings from field surveys for Biological Assessment, Jurisdictional Delineation, focused Narrow Endemic Plan Survey and focused Burrowing Owl Surveys were conducted on May 31, June 10, 17, and July 01, 26, and August 7, 2019. The table below outlines the surveys and surveyors. The site was re-visited in 2021 to confirm 2019 survey results and assess any changes in environment by CSLS Biologists Brianna Bernard and Justinne Manahan on May 17, 2021. During the field visit, the biologists assessed the existing habitat on the Project site. The plant communities observed were identified and mapped. The biologists paid special attention to those habitat areas that appeared to provide suitable habitat for special status plant and wildlife species. Aerial photographs and maps were used to assist in the delineation of plant community boundaries.

Table 1. Survey Information

Survey Date	Time	Surveys	Surveyors
May 31, 2019	0800 - 1350	Biological Assessment, Jurisdictional Delineation, Burrowing Owl Assessment, coastal California gnatcatcher Survey, Narrow Endemic Plant Survey.	Brianna Bernard and Crysta Dickson
June 10, 2019	0800 - 1350	Burrowing Owl Survey #1, coastal California gnatcatcher	Brianna Bernard and Crysta Dickson

Survey Date	Time	Surveys	Surveyors
		Survey, Narrow Endemic Plant Survey.	
June 17, 2019	0900 - 1030	Jurisdictional Delineation	Brianna Bernard
July 01, 2019	0800 - 1055	Burrowing Owl Survey #2, Narrow Endemic Plant Survey.	Brianna Bernard and Crysta Dickson
July 26, 2019	0730 - 1045	Burrowing Owl Survey #3, Narrow Endemic Plant Survey.	Brianna Bernard and Justinne Manahan
August 7, 2019	0730 - 1107	Burrowing Owl Survey #4, Narrow Endemic Plant Survey.	Brianna Bernard and Justinne Manahan
May 17, 2021	0715 - 1052	Reconfirm Biological Assessment, Jurisdictional Delineation, Burrowing Owl, Narrow Endemic Plant Survey.	Brianna Bernard and Justinne Manahan

4.3.1 General Plant Inventory

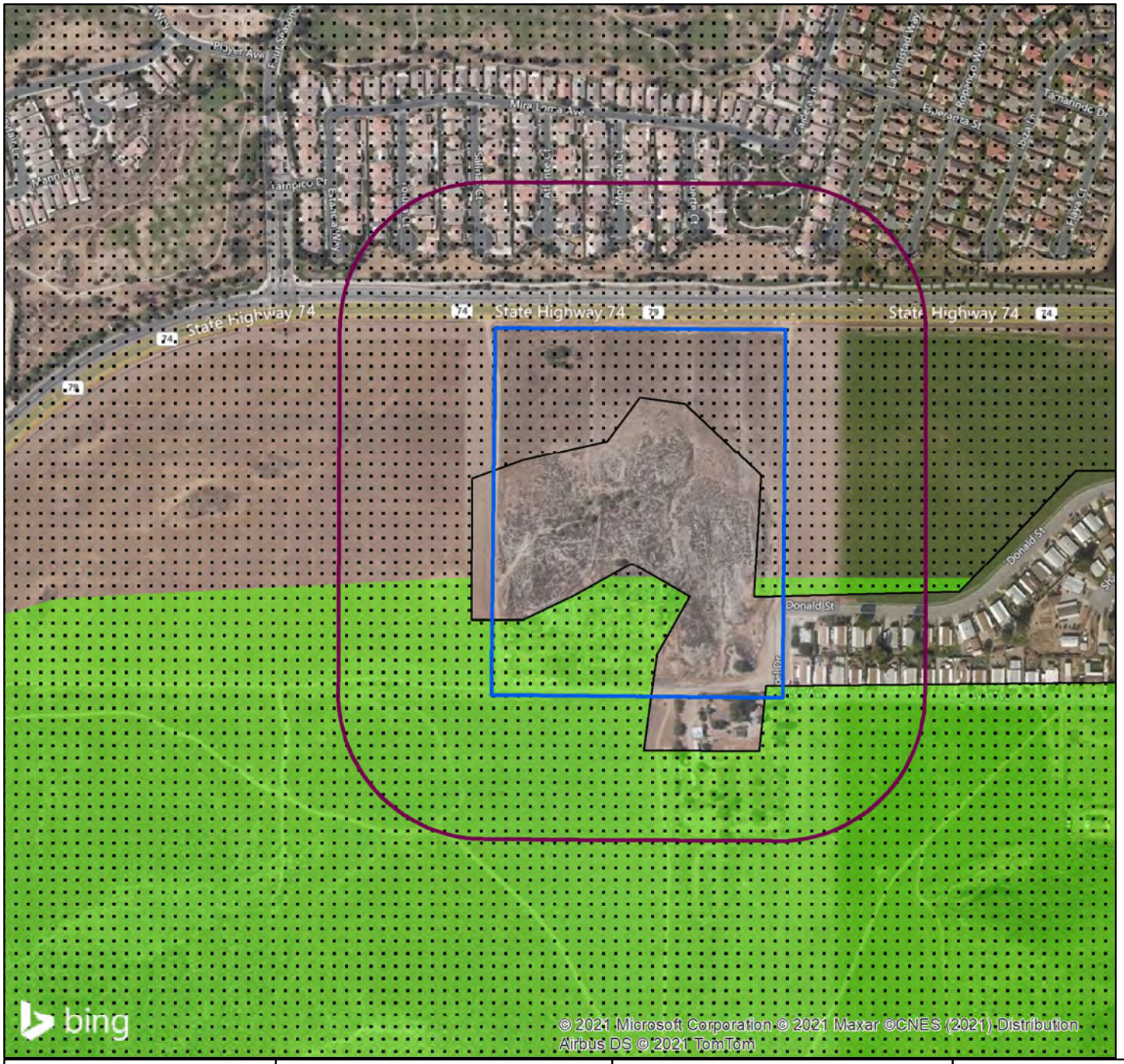
All plant species observed during the general and focused surveys were either identified in the field or collected and later identified using taxonomic keys. Vegetation communities were characterized utilizing vegetation alliances in accordance with The Manual of California Vegetation, Second Edition (MCVII) (Sawyer et al. 2009). All plant species observed were recorded in field notes.

4.3.2 General Wildlife Inventory

All wildlife species observed on the Project site, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Wildlife taxonomy follows Stebbins (2003) and California Herps (2015) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. All wildlife species detected were recorded in field notes.

4.4 MSHCP

The Project is located within the Harvest Valley/Winchester Area Plan of the MSHCP. The Project is not located within MSHCP Criteria Cell, MSHCP survey areas for Criteria Area Plant Species, Amphibians, Mammals, or Special Linkage Areas. The Study Area was assessed for MSHCP Section 6.1.2 Riparian and Riverine Areas and associated species, MSHCP Section 6.1.3 Narrow Endemic Plants – Survey Area 3, MSHCP Section 6.1.4 Urban/Wildlands Interface, MSHCP Section 6.3.2 Species Survey Requirements for the western burrowing owl (*Athene cunicularia hypugaea* [BUOW]) habitat (Figure 4).



Legend

- Approximate Project Boundary
- 500-Foot Buffer

MSHCP Overlays

- Burrowing Owl
- Narrow Endemic Plants

GIS Prepared By:
Carlson SLS

Created: June 4, 2019

0 125 250 500 750 1,000 Feet

1 inch = 500 feet

Data Source: Bing Map
CDFW (August 2021)

Global Investments: Hemet 30

MSHCP Overlays

FIGURE 4

4.4.1 Section 6.1.2 Riparian/Riverine Areas and Vernal Pools

Volume I, Section 6.1.2 of the MSHCP describes the process through which protection of riparian/riverine areas and vernal pools would occur within the MSHCP Plan Area. The purpose is to ensure that the biological functions and values of these areas throughout the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed. The Study Area was evaluated for the presence/absence of MSHCP riparian/riverine areas and vernal pools. With respect to riparian habitat, the Study Area was evaluated for the potential habitat to support the special status species including the least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii traillii*), the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), listed fairy shrimp, and other species identified in Section 6.1.2 of the MSHCP.

The Project site was evaluated to determine the limits of MSHCP riparian/riverine areas and vernal pools. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Any MSHCP riparian/riverine features were recorded onto a 200-scale (1" = 200') color aerial photograph and a GPS unit paired with the ARCGIS Collector Application.

4.4.2 Section 6.1.3 Narrow Endemic Plant – Survey Area 3

The CNDDB and MSHCP were initially consulted to determine known occurrences of special- status plants in the region. Based on this information, a list of target plants (including their suitable habitats and soil) was developed and incorporated into a survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floral compendium; and (3) document the distribution and abundance of any special-status plant species within the Project Study Area.

General surveys were conducted to identify potential sensitive plant habitats, and to establish the accuracy of the data identified from the literature review. An aerial photograph and topographic map were used to determine the community types and other physical features that may support sensitive species or communities within the Project Study Area. The reconnaissance surveys also considered the guidelines adopted by CNPS and CDFW (Nelson 1984, CNPS 2001).

All plant species encountered during the field surveys were identified and recorded following the guidelines adopted by CNPS (2001) and CDFW by Nelson (1984). A complete list of the species observed is provided in Appendix C.

4.4.3 Section 6.1.4 Urban/Wildlands Interface

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to an MSHCP Conservation Area. In order to

evaluate direct, indirect, and cumulative impacts of the proposed Project on urban/wildlands interface, an analysis of wildlife use/movement was conducted for the Project site and adjacent buffer area. The analysis considered the movement and use of large mammals (i.e., mountain lion and mule deer), medium-sized mammals (mesocarnivores), and other wildlife such as small mammals, birds, reptiles, and amphibians. Methods utilized for the wildlife analysis included a review of existing information on wildlife use (including the MSHCP), general and focused biological surveys to document the presence/absence of wildlife, and opportunistic observations of mammal tracks and scat.

4.4.4 Section 6.3.2 Burrowing Owl Habitat Assessment

The Project site falls within a MSHCP Burrowing Owl (BUOW) overlay (Figure 4). A Habitat Assessment was conducted on May 31, 2019 to determine any suitable BUOW habitat onsite. Following the assessment, a series of Focused Burrowing Owl survey were conducted on June 10, July 01, 26, and August 7, 2019 pursuant to MSHCP Section 6.3.2, MSHCP Protocol Survey Instructions, and the methods used to detect and identify BUOW included observation of key signs identified by the *California Burrowing Owl Consortium (CBOC).* The Study Area was assessed for the suitability to support burrowing owls and all suitable burrows were inspected for signs of use by burrowing owls, such as sight, scat, tracks, burrows, nests, and calls. The survey involved walking through suitable habitat within the Study Area (the Project site and a 500-foot buffer). The pedestrian survey transects were spaced approximately 10 to 15 meters apart to allow 100 percent visual coverage of the ground surface. All encountered burrows or structure entrances were checked for the presence of BUOWs, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement at or near a burrow entrance. Natural or man-made structures that could support BUOWs were also surveyed when present. An updated survey occurred on May 17, 2021, to confirming that existing conditions remain the same as the 2019 surveys. The complete results for the Protocol Focused BUOW Report can be found in Appendix D.

4.5 Jurisdictional Delineation

A jurisdictional delineation to denote the limits of any potential jurisdictional features was conducted by CSLS biologists Brianna Bernard and Crysta Dickson on May 31, 2019 and confirmed by Brianna Bernard on June 17, 2019, and reconfirmed by Brianna Bernard and Justinne Manahan on May 17, 2021. The purpose of the delineation was to assess the location, extent and acreage of "waters of the U.S." and/or wetlands under the jurisdiction of the Corps, "waters of the State" and/or wetlands under the jurisdiction of the RWQCB, and/or streambed and associated riparian habitat under the jurisdiction of CDFW.

Prior to the field investigation, CSLS biologist reviewed historical aerial imagery and topography for the Project site to determine the potential for perennial, intermittent, or ephemeral drainages and associated riparian resources. Generally, indicators of jurisdictional drainages on an aerial photo include vegetation and/or incised lines

indicating the path of flowing water. Following the desktop research, CSLS biologists conducted an onsite field investigation. Based on the collective results of the desktop investigation and the field surveys, any observed jurisdictional features were mapped using the following parameters:

- The limits of the Corps' jurisdiction extend to the OHWM. OHWM indicators include: the observation of benches, break in bank slope, particle size distribution, sediment deposits, drift, litter, and/or change in plant community.
- The RWQCB shares the Corps' jurisdictional methodology, and the Regional Board's May 2020 wetland definition.
- CDFW's jurisdiction applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the state. CDFW's authority also includes riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, CDFW jurisdiction is mapped to the top of bank of the stream or the extent of streambed dependent vegetation.

5.0 Results

5.1 Critical Habitat and CNDDB Occurrences

The USFWS's online service for information regarding Threatened and Endangered Species Final Critical Habitat designation within California was reviewed to determine if the Project site is within any species' designated Critical Habitat. No critical habitat is mapped on the Project site or within the surrounding 500-foot buffer. The closest mapped critical habitat is for spreading navarretia (*Navarretia fossalis*) and it is located approximately 0.5-miles to the east (Figure 3).

Spreading Navarretia (*Navarretia fossalis*)
Status: California Rare Plant Rank 1B.1, federally threatened
Distribution: Los Angeles, Riverside, San Diego, and San Luis Obispo Counties.
Habitat(s): Suitable habitats include chenopod scrub, marshes and swamps (shallow freshwater), playas, and vernal pools. Known from 30 to 655 meters (100 to 2,150 feet) MSL. Blooms April through June.
Status onsite: None. The Project site lacks suitable habitat. Not observed during field visit.

5.2 Plant Communities

The vegetation communities and habitat conditions were inspected to confirm presence and habitat quality of the vegetation found onsite. Vegetation mapping and acreages for each vegetation community is based on the observations of the field surveys, which are listed below in Table 2 and graphically depicted on Figure 5. Representative photographs of the vegetation communities can be found Figure 6 and 7.

The field survey and aerials encompassing the Project site and surrounding 500-foot buffer around the Project site were used to determine existing vegetation communities. The general description of the habitats observed during the field survey are described below (Figure 5). A complete plant compendium can be found in Appendix C.

Table 2. Vegetation Communities Observed

Vegetation Community	Onsite Acreage	Offsite Acreage
California Buckwheat Scrub	9.88	-
Disturbed California Buckwheat Scrub	1.16	-
Ruderal	13.84	44.89
Disturbed/Developed	3.72	24.56
TOTAL	28.60	69.45

5.2.1 California Buckwheat Scrub

Approximately 9.88 acres of the Project site is comprised of California Buckwheat Scrub. This community is dominated by California buckwheat (*Eriogonum fasciculatum*) shrubs. There is a scattering of other species within this community including deerweed (*Acmispon glaber*), brittlebush (*Encelia californica),* white sage (Salvia apiana), California sagebrush (*Artemisia californica*), and black sage (*Salvia mellifera*). The understory of the community is primarily bare but includes some non-native grass species such as red brome (*Bromus madritensis ssp. rubens*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), tocalote (*Centaurea melitensis*), and summer mustard (*Hirschfeldia incana*). Scattered Tamarisk trees (*Tamarix ramosissima*) occur within this community along with a single Fremont cottonwood (*Populous fremontii*).

5.2.2 Disturbed California Buckwheat Scrub

Approximately 1.16 acres of the Project site is comprised of disturbed buckwheat scrub. Species within this community consist of those found in the California Buckwheat Scrub, however, this plant community shows signs of disturbances, such as walking/pedestrian trails, biking paths, off-roading paths, or maintained as part of fire abatement.

5.2.3 Ruderal

A majority of the Project site consist of the ruderal community with a total of 13.84 acres. This vegetation community appears to be maintained (trimmed) annually. Vegetation within this area is comprised of Russian thistle (*Salsola tragus*), rat-tail fescue (*Festuca microstachys*), foxtail brome (*Bromus madritensis ssp. rubens*), ripgut brome (*Bromus diandrus*), tocalote (*Centaurea melitensis*), chaparral nightshade (*Solanum xanti*), summer mustard (*Hirschfeldia incana*), castor bean (*Rincus communis*), Jimson weed (*Datura stramonium*), cheeseweed (*Malva parviflora*), and a few scattered Peruvian pepper trees (*Schinus Molle*) and laurel sumac (*Malosma laurina*).

5.2.4 Disturbed/ Developed

A total of 3.72 acres of disturbed area consisting of bare dirt, dirt roads, and sparse vegetation is mapped onsite. The developed/disturbed community contains limited habitat value and includes non-native or invasive species.

5.2.5 Surrounding 500-foot Buffer

A majority of the surrounding 500-foot buffer consists of residential housing and Highway 74 to the north, vacant land with ruderal vegetation to the east and west that appears to be routinely maintained, and rural residential to the south.

5.3 General Wildlife Inventory

Observations regarding the wildlife species present were made during the field visit (Table 3). Sensitive wildlife species occurring or potentially occurring are discussed below in Section 5.7, *Sensitive Wildlife Species*.

Table 3. Wildlife Species Observed during the Field Visits

Scientific Name	Common Name
Accipiter cooperii	Cooper's Hawk
Bubo virginianus	Great horned owl
Buteo jamaicensis	red-tailed hawk
Calypte anna	Anna's hummingbird
Canis latrans	Coyote
Carpodacus mexicanus	house finch
Cathartes aura	Turkey Vulture
Chordeiles acutipennis	Lesser nighthawk
Columba livia	Rock pigeon
Corvus corax	Common raven
Euphagus cyanocephalus	Brewer's blackbird
Hirundo rustica	Barn swallow
Lepus californicus bennettii	San Diego black-tailed jackrabbit
Melospiza melodia	Song Sparrow
Melozone crissalis	California towhee
Polioptila californica californica	coastal California gnatcatcher
Psaltriparus minimus	Bushtit
Salpinctes obsoletus	Rock wren
Sayornis saya	Say's phoebe
Spermophilus (Otospermophilus) beecheyi	California ground squirrel
Spinus psaltria	lesser goldfinch
Sylvilagus audubonii	desert cottontail
Tyrannus verticalis	Western Kingbird
Zenaida macroura	mourning dove

GIS Prepared By:
Carlson SLS

Created: August 2021

0 50 100 200 300 400 Feet
1 inch = 350 feet

Data Source: Bing Map
Field Survey (June 2019)
Field Survey (May 2021)

Global Investments: Hemet 30

Vegetation Map

FIGURE 5

Figure 6 – Site Photographs

Representative photos of the ruderal Habitat. (May 31, 2019)

Ruderal Habitat with distant buckwheat scrub (May 31, 2019).

California Buckwheat scrub found onsite (May 31, 2019).

Disturbed California Buckwheat scrub found onsite (May 31, 2019).

Disturbed areas included historically mined areas with little no to vegetation and invasive or non-native species (May 31, 2019).

The Project site include large piles of trash and debris (May 31,2019).

5.4 Sensitive Plant Communities

A CNDDB search within the Winchester USGS topographic quadrangle found the following special-status vegetation community designated by CDFW: Southern Coast Live Oak Riparian Forest and Southern Cottonwood Willow Riparian Forest. Neither of these special-status vegetation communities occur on the Project site.

5.5 Sensitive Plant Species

Sensitive plants include those listed, or candidates for listing, by the USFWS and CDFW; and species considered sensitive by the CNPS (particularly Lists 1A, 1B, and 2). thirteen sensitive plant species were reported within 2-miles of the Project site based on the CNDDB and within the USGS 7.5' Winchester quadrangle search. The potential for sensitive plant species to occur on the Project site is discussed below and as indicated in Appendix A.

5.5.1 Sensitive Plant Species with Potential to Occur

Due to the non-native cover of the Project site, it was determined no sensitive plant species had potential to occur and the Project site does not support the vegetation associations, soils, or hydrology required by many of the special status plants known to the region. A complete list of species and their potential to occur onsite can be found in Appendix A.

Chaparral sand-verbena *(Abronia villosa var. aurita)*
Status: California Rare Plant Rank 1B.1
Distribution: Imperial, Los Angeles, Orange, Riverside, San Bernardino, Ventura, and San Diego Counties.
Habitat(s): Annual herb found in sandy soils. Habitats include chaparral, coastal sage scrub, and desert dunes. Known from 75 to 1600 meters (246 to 5,200 feet) MSL. Blooms March through September.
Status onsite: None. The Project site lacks suitable soil. Not observed during field visit.

Munz's Onion (*Allium munzii*)
Status: California Rare Plant Rank 1B.1, state threatened, federally endangered
Distribution: Riverside County.
Habitat(s): Clay soils supporting chaparral, cismontane woodland, coastal scrub, pinyon-juniper woodland, and valley and foothill grassland. Known from 300 to 1,070 meters (1,000 to 3,500 feet) MSL. Blooms March through May.
Status onsite: None. The Project site lacks suitable habitat and soils. While California buckwheat scrub occurs onsite, the vegetation community is either too dense or extremely disturbed providing no opportunity for Munz's Onion. Not observed during field visit.

San Jacinto Valley crownscale (*Atriplex coronata var. notatior*)
Status: California Rare Plant Rank 1B.1, federally endangered
Distribution: Riverside County.
Habitat(s): Alkaline soils supporting playas, valleys and foothill grassland (mesic) and vernal pools. Known from 139 to 500 meters (455 to 1,640 feet) MSL. Blooms April through August.
Status onsite: None. The Project site lacks suitable habitat and soils. Not observed during field visit.

Parish's brittlescale *(Atriplex parishii)*
Status: California Rare Plant Rank 1B.1
Distribution: Los Angeles, Orange, Riverside, San Bernardino and San Diego Counties.
Habitat(s): Alkaline soils supporting chenopod scrub, playas, and vernal pools. Known from 25 to 1,900 meters (80 to 6,235 feet) MSL. Blooms June through October.
Status onsite: None. The site lacks suitable habitat and soils. Not observed during field visit.

Davidson's saltscale *(Atriplex serenana var. davidsonii)*
Status: California Rare Plant Rank 1B.2
Distribution: Los Angeles, Orange, Riverside, San Luis Obispo, Santa Barbara, and Ventura Counties.
Habitat(s): Habitats supporting Chaparral, coastal scrub, and valley and foothill grassland. Known from 180 to 850 meters (600 to 2,800 feet) MSL. Blooms June through July.
Status onsite: None. The site lacks suitable habitat and soils. Not observed during field visit.

Thread-leaved brodiaea *(Brodiaea filifolia)*
Status: California Rare Plant Rank 1B.1, federally threatened, state endangered
Distribution: Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.
Habitat(s): Alkaline soils supporting coastal bluff scrub and coastal scrub. Known from below 10 to 200 meters (35 to 655 feet) MSL. Blooms April through October.
Status onsite: None. The site is located at approximately 1,527 feet to 1,571 feet and lacks suitable soil. Not observed during field surveys.

Intermediate Mariposa-lily *(Calochortus weedii var. intermedius)*
Status: California Rare Plant Rank 1B.2
Distribution: Los Angeles, Orange, Riverside and San Bernardino Counties.
Habitat(s): Habitats supporting Chaparral, coastal scrub, and valley and foothill grassland. Known from 180 to 850 meters (600 to 2,800 feet) MSL. Blooms June through July.
Status onsite: None. The site lacks suitable soils and is located from approximately 1,527 feet to 1,571 feet MSL. Not observed during field visit.

Smooth tarplant *(Centromadia pungens ssp. laevis)*
Status: California Rare Plant Rank 1B.1
Distribution: Los Angeles, Riverside, San Bernardino, and San Diego Counties.
Habitat(s): Alkaline soils supporting chenopod scrub, meadows and seep, playas, riparian woodland, and valley foothill grassland. Known from 0 to 640 meters (0 to 2,100 feet) MSL. Blooms April through September.
Status onsite: None. The site lacks suitable habitats and soil. Not observed during field surveys.

Parry's spineflower *(Chorizanthe parryi var. parryi)*
Status: California Rare Plant Rank 1B.1
Distribution: Los Angeles, Riverside, and San Bernardino Counties.
Habitat(s): Suitable habitat include chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. Found sandy or rocky openings. Known from 275 to 1,220 meters (900 to 4,005 feet) MSL. Blooms April through June.
Status onsite: None. The coastal scrub observed onsite is dense in nature and lacks sandy or rocky openings. Not observed during field surveys.

Long-spined spineflower *(Chorizanthe polygonoides var. longispina)*
Status: California Rare Plant Rank 1B.2
Distribution: Orange, Riverside, and San Diego Counties.
Habitat(s): Habitats supporting chaparral, coastal sage, meadows and seeps, valley and foothill grasslands, and vernal pools. Often found in clay soils. Known from 30 to 1,530 meters (100 to 5,020 feet) MSL. Blooms April through July.
Status onsite: None. The site lacks suitable soils. Not observed during field visit.

Coulter's goldfields (*Lasthenia glabrata ssp. coulteri)*
Status: California Rare Plant Rank 1B.1
Distribution: Colusa, Kern, Los Angeles, Merced, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Solano, Tehama, Tulare, Ventura, and Yolo Counties.
Habitat(s): Suitable habitat include marshes and swamps (coastal salt), playas, and vernal pools. Known from 1 to 1,220 meters (4 to 4,005 feet) MSL. Blooms February through June.
Status onsite: None. The site lacks suitable habitat. Not observed during field visit.

Spreading Navarretia (*Navarretia fossalis*)
Details included within *Section 5.1*.

5.6 Sensitive Wildlife Species

Sensitive wildlife include those species listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the USFWS or CDFW, and California Watch List, Fully Protected and Species of Special Concern to CDFW. Several sensitive wildlife

species were reported in the vicinity of the Project site based on the CNDDB and within the USGS 7.5' Winchester quadrangle search (Appendix B). However, the following species were listed through the CNDDB as being observed within 2-miles of the Project site: Cooper's Hawk (*Acciptiter cooperii*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's Sage (*Artemisiospiza belli belli*), orange-throated whiptail (*Aspidoscelis hyperythra*), coastal whiptail (*Aspidoscelis tigrus stejneger*), burrowing owl (*Athene cunicularia*), vernal pool fairy shrimp (*Branchinecta lynchi*), red-diamond rattlesnake (*Crotalus ruber*), Stephen's kangaroo rat (*Dipodomys stephensi*), white-tailed kite (*Elanus leucurus),* San Diego black-tailed jackrabbit *(Lepus californicus bennettii),* coast horned lizard (*Phrynosoma blainvillii*), coastal California gnatcatcher (*Polioptila californica californica*), and western spadefoot (*Spea hammondii*). Furthermore, additional sensitive species are included due to the observations during the field survey. A brief description of those species and their habitat is included below.

Cooper's Hawk (*Acciptiter cooperii*)
Status: CDFW watch list
MSHCP: Covered Species
Habitat(s): This species breeds primarily in riparian areas and oak woodlands and is most common in montane canyons. It frequents landscapes where wooded areas occur in patches and groves and often uses patchy woodlands and edges with snags for perching. Dense stands with moderate crown-depths are usually used for nesting. They hunt in broken woodland and habitat edges. Within the range in California, it most frequently uses dense stands of live oak, riparian deciduous or other forest habitats near water. They are also found and can breed in suburban and urban settings.
Status onsite: High. The site lacks suitable nesting habitat but consists of suitable foraging habitat. This species was observed foraging during the field surveys.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
Status: CDFW watch list
MSHCP: Covered Species
Habitat(s): They are found on grass-covered hillsides, coastal sage scrub, and chaparral and often occur near the edges of the denser scrub and chaparral associations. Preference is shown for tracts of California sagebrush. Optimal habitat consists of sparse, low brush or grass, hilly slopes preferably interspersed with boulders and outcrops. The species may occur on steep grassy slopes without shrubs if rock outcrops are present. It is a very secretive species.
Status onsite: None. The site lacks suitable habitat, the California buckwheat scrub found onsite appears too dense for the species. Not observed during field visit.

Bell's Sage (*Artemisiospiza belli belli*)
Status: CDFW watch list
MSHCP: Covered Species
Habitat(s): Suitable habitat includes Chaparral and coastal sage scrub along the coastal lowlands, inland valleys and in the lower foothills of local mountains.
Status onsite: Moderate potential to occur onsite. Suitable habitat exists onsite within the coastal sage scrub. Not observed during field visit.

Orange-Throated Whiptail (*Aspidoscelis hyperythra*)
Status: CDFW Watch List
MSHCP: Covered Species
Habitat(s): The species is generally found in semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. Habitat types include low elevational chaparral, non-native grassland, (Riversidean) coastal sage scrub, juniper woodland and oak woodland. Associations include alluvial fan scrub and riparian areas. Friable soil appears to be a necessary requirement for excavating burrows and hiding eggs.
Status onsite: None. The site lacks suitable habitat and soil. Not observed during field visit.

Coastal whiptail (*Aspidoscelis tigrus stejnegeri*)
Status: CDFW species of special concern
MSHCP: Covered Species
Habitat(s): This species is found in a variety of habitats, primarily hot and dry open areas with sparse vegetation including chaparral, woodland, and riparian areas. This subspecies is found in coastal southern California, north into Ventura County, and south into Baja California. Additional important habitat characteristics include Important habitat components include shrub cover with accumulated leaf litter, and an abundance of invertebrate prey, particularly termites.
Status onsite: None. The site lacks suitable habitat. Not observed during field visit.

Burrowing owl (*Athene cunicularia)*
Status: CDFW species of special concern
MSHCP: Covered Species
Habitat(s): Burrowing owls are a year-round resident of California including habitats of open, dry grassland and desert. They are generally restricted to mostly flat, open country with suitable nest sites. They use rodent or other burrows for roosting and nesting cover and acquire their burrows from either abandonment or eviction. Burrowing owls typically hunt from a perch.
Status onsite: None. A series of focused surveys was conducted for burrowing owl (**Appendix D**) to which it was determined that the site lacked suitable burrows and is not considered occupied by burrowing owl. Not observed during field surveys.

Vernal pool fairy shrimp (*Branchinecta lynchi*)
Status: federally threatened
MSHCP: Covered Species
Habitat(s): Suitable habitat includes vernal pools, valley and foothill grassland; and wetland. They range from clear rock pools to muddy grassland pools. They fill seasonal with rain during fall and winter.
Status onsite: None. The site lacks suitable habitat. Not observed during field visit.

Red-Diamond Rattlesnake (*Crotalus ruber*)
Status: species of special concern
MSHCP: Covered Species
Habitat(s): It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake, however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats. They need rodent burrows, cracks in rocks or surface cover objects.
Status onsite: Moderate. Limited habitat is found onsite due to the presence of rodent burrows and dense California buckwheat scrub brush found onsite. Not observed during field visit.

Stephen's Kangaroo Rat (*Dipodomys stephensi*)
Status: federally endangered, state threatened
MSHCP: Covered Species
Habitat(s): This species prefers large areas of disturbed or patchy annual and perennial grasslands and open coastal sage scrub. Preferred perennials plant species include buckwheat and chamise and preferred annual plant species include brome grass. The nearest known populations are in Rancho Guejito and at the Naval Weapons Station in Fallbrook.
Status onsite: None. The site is routinely maintained and includes dense coastal sage scrub, therefore, the site lacks suitable habitat. Not observed during field visit.

White-tailed kite (*Elanus leucurus*)
Status: California Fully-Protected Species
MSHCP: Covered Species
Habitat(s): This species prefers cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetland habitats.
Status onsite: None. The site lacks suitable habitat. Not observed during field visit.

San Diego black-tailed jackrabbit *(Lepus californicus bennettii)*
Status: California Fully-Protected Species
MSHCP: Covered Species
Habitat(s): The black-tailed jackrabbit is a habitat generalist occurring in open areas or semi-open country, typically in grasslands, agricultural fields or sparse coastal scrub. It primarily is found in arid regions supporting short grass habitats. Jackrabbits typically are not found in high grass or dense brush where it is difficult for them to locomote, and the openness of open scrub habitat probably is preferred over dense chaparral. They have also been found in annual grassland, Riversidean sage scrub, alluvial fan sage scrub, Great Basin sagebrush, chaparral, disturbed habitat, southern willow scrub and juniper woodland. They are not found in high mountain forests. It prefers valley bottoms or intermontane valleys.
Status onsite: High. The site consists of suitable habitat. This species was observed foraging during the field surveys.

Coast horned lizard (*Phrynosoma blainvillii*)
Status: CDFW species of special concern
MSHCP: Covered Species
Habitat(s): Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland and riparian woodlands.
Status onsite: None. The site lacks suitable habitat. Not observed during field visit.

Coastal California gnatcatcher (*Polioptila californica californica*)
Status: federally threatened, CDFW species of special concern
MSHCP: Covered Species
Habitat(s): A non-migratory, permanent resident of coastal sage scrub habitat, which is a broad category of vegetation that includes the following plant communities: Ventura coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. They also use chaparral, grassland and riparian habitats next to coastal sage scrub, but these habitats are used dispersal and foraging. They avoid nesting on steep slopes.
Status onsite: High. The site contains suitable nesting and foraging habitat. This species was observed foraging during the field surveys.

Western Spadefoot (*Spea hammondii*)
Status: CDFW species of special concern
MSHCP: Covered Species
Habitat(s): May be found in coastal sage scrub, open chaparral, pine-oak woodlands and grassland habitats, but is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Within these habitats, they require rain pools/vernal pools in which to reproduce and that persist with more than three weeks of standing water in which to metamorphose successfully. They can also breed in slow-moving

streams (e.g., areas flooded by intermittent streams). Water breeding sites must lack fish, bullfrogs, and crayfish in order for to successfully reproduce and metamorphose.
Status onsite: None. The site lacks suitable habitat. Not observed during field visit.

Summary of Sensitive Wildlife Species
A total of 3 special status wildlife species or evidence of their presence were observed or heard during the field surveys conducted onsite. These species include the coastal California gnatcatcher, Cooper's Hawk, and the San Diego black-tailed jackrabbit. A total of 2 species with moderate to high potential to occur onsite were not observed during field surveys. These species include the Red-diamond rattlesnake and Bell's sage. A total of 9 of the 14 sensitive wildlife species lack suitable habitat to occur within the Project site. While not special status species, a great horned owl and red-tailed hawk were observed utilizing the site for foraging.

The potential for sensitive wildlife species identified within the USGS Quad to occur on the Project site is discussed further in Appendix B.

5.6.1 Migratory Birds and Raptors

The Project site supports foraging and nesting habitat for nesting birds including raptors. The ruderal habitat provides suitable foraging habitat. Furthermore, the California buckwheat scrub and scattered trees found onsite are suitable nesting habitat. Along with the trees scattered onsite, the Project site contains large open areas of ruderal habitat suitable for foraging.

5.7 Wildlife Movement

5.7.1 Overview

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat, separating different populations of a single species. Corridors effectively act as links between these populations.

The Project site was evaluated for evidence of a wildlife movement corridor. The following resources were used to determine the potential for the site to be used as a wildlife corridor:

- MSHCP overlays;
- information compiled from the literature review, including, aerial photographs, USGS topographic maps, and resource maps for the vicinity;
- field survey; and
- knowledge of desired topography and resource requirements.

Important corridors and linkages have been identified on a local and regional scale throughout the MSHCP area and conserved lands.

5.7.2 Wildlife Movement Within the Project site

No known wildlife corridors or linkage areas are identified in the MSHCP as a Core Linkage onsite. While the Project site is composed of large spans of ruderal habitat, the habitat is routinely maintained. The ruderal habitat located to the east and west of the site also appears to be routinely maintained. The Project site includes rural residential located to the south and southeast, further isolating the site. Furthermore, the north Project boundary is Highway 74. For these reasons, movement on a regional scale is restricted in its potential to support regional wildlife movement. The Project site is further characterized by exposed areas that lack suitable cover outside of the California buckwheat scrub area and resources that are typically associated with wildlife movement areas (i.e. water).

Although there is no regional movement through the Project site, there is some potential for smaller or "local" movement through the site. Movement on a smaller scale could occur within the site for species that are less restricted in movement pathway requirements or are adapted to urban areas [e.g., raccoon (*Procyon lotor*), stripped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), and bird species in general). Habitat within the site is dominated by ruderal habitat and California buckwheat scrub. As such, it may support some wildlife movement within the site and/or nearby areas for nesting and foraging. Common bird species may utilize the site for foraging and nesting.

In summary, the Project site supports foraging and nesting habitat for species on a local scale. However, the Project site would not be expected to be utilized as a wildlife corridor, linkage, or specific travel route to and from nursery sites other important resources. This is due to the reason stated above, therefore, the Project site provides no function to facilitate movement for wildlife species on a regional scale.

5.8 MSHCP

The Project is located within the Harvest Valley/Winchester Area Plan of the Riverside County Multiple Species Habitat Conservation Plan (MSHCP); however, the Project site is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits. Furthermore, the Project site is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. Portions of the Project site are located within overlay areas, as follows:

- Riparian and Riverine Areas (Section 6.1.2)
- Narrow Endemic Plants (Section 6.1.3)
- Urban Wildlands Interface Guidelines (Section 6.1.4)
- Western burrowing owl (*Athene cunicularia hypugaea*) (Section 6.3.2)

5.8.1 Section 6.1.2 Riparian Riverine

The total inventory of MSHCP Riparian and Riverine resources is presented in Table 4 and shown on Figure 8. The Project site contains no vernal pools as defined under MSHCP vernal pool features.

Table 4. Riparian/Riverine Habitat within the Study Area

Drainage	Riparian/Riverine
Unnamed Drainage Ditch[1]	0.52 ac
[1]. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species.	

5.8.1.1 Species Protected under Section 6.1.2

During vegetation mapping and biological surveys conducted for the Project site, no special status plants were detected. Likewise, the Project site did not contain any suitable habitat for the avian species listed in Section 6.1.2: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools.

5.8.1.2 Vernal Pools

No evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on the Project Site. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools became completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (lacking oxygen or air) develop.

The Project Site is characterized as Cajalco sandy loam, Greenfield sandy loam, Hanford sandy loam, and Honcut sandy loam all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project Site. Furthermore, a review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented. Aerials taken in 2011 represent an ideal baseline during which know (previously documented) inundated vernal pools, seasonal depressions and road ruts can easily be seen. No sign or indication of inundation was documented within the Project Site during a review of historic aerials.

In summary, none of the conditions (i.e., no inundated depressions including road ruts, hydric soils, historic inundation, etc.) were observed on documented within the Project Site. No features are present that would support fairy shrimp. No standing water or other sign of areas that pond water was observed.

GIS Prepared By:
Carlson SLS

Created: August 2021

0 62.5 125 250 375 Feet

1 inch = 350 feet

Data Source: Bing Map
Field Survey (June 2019)
Field Survey (May 2021)

Global Investments: Hemet 30

Riparian/Riverine Resource Map

FIGURE 8

5.8.2 Section 6.1.3 Narrow Endemic Plant

Portions of the Project site are located within the Narrow Endemic Plant Species Survey Areas (NEPSSA) Number 3, which include the following target species. The Focused Narrow Endemic Plant surveys were conducted on May 31, June 10, and July 01, 26, and August 7, 2019. An additional updated survey took place on May 17, 2021. The focused narrow endemic plant survey was conducted by CSLS Biologists Brianna Bernard, Crysta Dickson and Justinne Manahan during the 2019 surveys and CSLS Biologists Brianna Bernard and Justinne Manahan.

Munz's Onion (*Allium munzii)*
Status: federally endangered, state threatened, California Rare Plant Rank 1B.1
Distribution: Riverside County.
Habitat(s): Suitable habitat include chaparral, cismontane woodlands, coastal scrub, pinyon and juniper woodland, and valley and foothill grasslands that support clay and mesic soils. Known from 297 to 1,070 meters (975 to 3,510 feet) MSL. Blooms March through May.
Status onsite: None. The site contains coastal scrub vegetation, however, lacks suitable soils. The species was included within the narrow endemic plant survey. Not observed during field visit.

San Diego Ambrosia (*Ambrosia pumila)*
Status: federally endangered, California Rare Plant Rank 1B.1
Distribution: Riverside and San Diego Counties.
Habitat(s): Suitable habitat include chaparral, coastal scrub, vernal pools, and valley and foothill grasslands that support alkaline, clay, and sandy soils. Known from 20 to 415 meters (65 to 1,360 feet) MSL. Blooms April through October.
Status onsite: None. The site contains coastal scrub vegetation, however, contains no suitable soils. The MSL of the site ranges between 1,520 feet to 1,575 feet, outside of the known MSL. The species was included within the narrow endemic plant survey. Not observed during field visit.

Many-stemmed Dudleya (*Dudleya multicaulis)*
Status: California Rare Plant Rank 1B.2
Distribution: Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.
Habitat(s): Suitable habitat include chaparral, coastal scrub, and valley and foothill grasslands. Known from 15 to 790 meters (50 to 2,590 feet) MSL. Blooms April through July.
Status onsite: None. The site contains coastal scrub vegetation, however, lacks suitable soils. The species was included within the narrow endemic plant survey. Not observed during field visit.

Spreading Navarretia (*Navarretia prostrata)*
Status: federally threatened, California Rare Plant Rank 1B.1
Distribution: Los Angeles, Riverside, San Diego, and San Luis Obispo Counties.
Habitat(s): Suitable habitat include chenopod scrub, marshes and swamps (shallow freshwater), playas, and vernal pools. Known from 30 to 655 meters (100 to 2,150 feet) MSL. Blooms April through June.
Status onsite: None. The site lacks suitable habitat. The species was included within the narrow endemic plant survey. Not observed during field visit.

California Orcutt grass (*Orcuttia californicai)*
Status: federally endangered, state endangered, California Rare Plant Rank 1B.1
Distribution: Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties.
Habitat(s): Suitable habitat include vernal pools. Known from 15 to 660 meters (50 to 2,165 feet) MSL. Blooms April through August.
Status onsite: None. The site lacks suitable habitat. The species was included within the narrow endemic plant survey. Not observed during field visit.

Wright's Trichocoronis (*Trichocoronis wrightii var. wrightii)*
Status: California Rare Plant Rank 2B.1
Distribution: Colusa, Merced, Riverside, San Joaquin and Sutter Counties.
Habitat(s): Suitable habitat include meadows and seeps, marshes and swamps, riparian forest, and vernal pools with alkaline soils. Known from 5 to 435 meters (15 to 1,425 feet) MSL. Blooms February through June.
Status onsite: None. The site lacks suitable habitat and soils. The MSL of the site ranges between 1,520 feet to 1,575 feet, outside of the known MSL. The species was included within the narrow endemic plant survey. Not observed during field visit.

5.8.3 Section 6.1.4 Urban/Wildlands Interface

The Project site is not located adjacent to an existing or proposed MSHCP Conservation Area or Core Linkage areas. While the Project site is composed of large spans of ruderal habitat, the habitat is routinely maintained. The ruderal located to the east and west of the site also appears to be routinely maintained. The Project site includes rural residential located to the south and southeast, further isolating the site. Furthermore, the north Project boundary is Highway 74. For these reasons, movement on a regional scale is restricted in its potential to support regional wildlife movement. The Project site is further characterized by exposed areas that lack suitable cover outside of the California buckwheat scrub area and resources that are typically associated with wildlife movement areas (i.e. water).

5.8.4 Section 6.3.2 Focused Burrowing Owl Habitat Assessment

Per the MSHCP BUOW Survey Instructions, a Habitat Assessment was conducted on May 31, 2019 to determine any suitable BUOW habitat onsite. Following the habitat assessment, additional focused surveys took place on June 10, July 01, 26, and August 7, 2019 generally between 7:00 a.m. and 12:20 p.m. An update survey occurred on May

17, 2021 to confirm existing conditions remain the same as the 2019 surveys. Temperatures during the surveys ranged between 70° F and 98° F, with predominant sunny, clear skies and 0-2 mph winds. The survey was conducted during typical BUOW peak activity time and was not conducted during rain, high winds (> 20 miles per hour), dense cloud cover >75%, or extreme temperatures. Prior to the commencement of the survey, CSLS biologist scanned the Study Area using binoculars to look for burrowing owl. The Study Area was assessed for the suitability to support burrowing owls and all suitable burrows were inspected for signs of use by burrowing owls. The survey involved walking through suitable habitat within the Study Area (the Project site and a 500-foot buffer). Pedestrian survey transects were spaced approximately 10 to 15 meters apart to allow 100 percent visual coverage of the ground surface.

No BUOWs, suitable sized burrows, or evidence of BUOWs were observed on site within the Study Area during the focused survey. A majority of the Project site was characterized by actively maintained ruderal fields, lacking necessary sized burrows to provide suitable nesting habitat for BUOW or densely vegetated California buckwheat scrub. Much of the buffer area is developed or actively maintained ruderal fields. California ground squirrels and their burrows were observed within the Study Area. These burrows were actively utilized by the California ground squirrels and contained no BUOW or keys signs (sight, whitewash, burrows, bones, feathers, pellets, nests, and calls). Therefore, based on the focused surveys it is determined the Project site is not occupied by BUOW. Please refer to Appendix D for the complete results for the focused survey.

5.9 Jurisdictional Waters and Wetlands

Prior to the site visit, a thorough review of historic aerials was performed to help determine the presence of historical or current jurisdictional features. Further, the National Wetlands Inventory map was reviewed, along with USGS 7.5-minute topo map to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within any watersheds associated with the site, and other features that might contribute to federal authority located within watersheds associated with the Project Site. Lastly, a field survey was performed on May 31, 2019 and May 17, 2021.

5.9.1 Waters of the United States

This section relies on the term "Waters of the United States" as it applies to the jurisdictional limits under the authority of the Army Corps of Engineers under the Clean Water Act and applies to the jurisdiction of the Regional Water Quality Control Board under the Porter-Cologne Water Quality Act. The NWI maps, NHD, USGS 7.5-minute topo map and an aerial image were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within any watersheds associated with the Project site, and other features that might contribute to federal authority located within watersheds associated with the Project site.

The total inventory of Waters of the U.S. consists of an ephemeral unvegetated drainage ditch that runs parallel to Highway 74 is presented in Table 5 and shown on Figure 9. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species. Furthermore, this ditch is routinely maintained by Caltrans. Specifically, the area is mowed and or cleared regularly to maintain storm flows. The Drainage Ditch enters the Study Area in the northwestern portion of the Study Area and flows in an easterly direction just outside of the Project boundary's northern edge. The earthen ditch drains into an earthen basin located downstream near the intersection of Highway 74 and California Avenue.

Table 5. Jurisdictional Waters – Corps and RWQCB Found within the Study Area

Drainage	Corps Jurisdiction (wetland/non-wetland)	RWQCB Jurisdiction (wetland/non-wetland)	Linear Feet
Unnamed Drainage Ditch[1]	0.00 / 0.26 ac	0.00 ac / 0.52 ac	1,852
[1]. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species.			

5.9.1.1 Wetlands

As outlined within the Corps and RWQCB protocol and field observations, no wetlands were identified or observed within the Unnamed Drainage Ditch.

5.9.2 Waters of the State

The delineation determined that the Project site includes Waters of the State meet CDFW characteristics that defines waters under the jurisdiction of FGC Section 1600 (Brady and Vyverberg 2013). A single feature is located within the Study Area. The feature consists of an earthen drainage ditch that runs parallel and adjacent to Highway 74. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species. Furthermore, this ditch is routinely maintained by Caltrans. Specifically, the area is mowed and/or cleared regularly to maintain storm flows. The Drainage Ditch enters the Study Area in the northwestern portion of the Study Area and flows in an easterly direction just outside of the Project boundary's northern edge. The ditch outlets into an earthen basin adjacent to the intersection of Highway 74 and California Avenue. The ditch is considered Waters of the State due to the presence of biological and physical characteristics of a stream subject to the Jurisdiction of CDFW under FGC §1600 et seq. The ditch exhibits biological and physical indicators of Waters of the State through the presence of channel bed and bank. The total inventory of Waters of the State is presented in Table 6 and shown on Figure 9.

Table 6. Jurisdictional Waters of the State within the Study Area

Drainage	CDFW Jurisdiction
Unnamed Drainage Ditch[1]	0.52 ac
[1]. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species.	

5.10 Soils

The United States Department of Agriculture NRCS lists several soil types (series) for the Project site. Please see below for the following soil type, which was used to determine the possibility for sensitive wildlife and plant species. No unique soil types exist on the Project site. None of the soil types are designated as sensitive soil by the MSHCP.

The following soil types are mapped within the Study Area and shown on Figure 10:

- Cajalco fine sandy loam, 8 to 15 percent slopes, eroded (CaD2)
- Cajalco fine sandy loam, 15 to 35 percent slopes, eroded (CaF2)
- Gravel pits (GP)
- Greenfield sandy loam, 0 to 2 percent slopes (GyA)
- Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2)
- Hanford fine sandy loam, 0 to 2 percent slopes (HgA)
- Honcut sandy loam, 2 to 8 percent slopes (HnC)
- Honcut sandy loam, 8 to 15 percent slopes, eroded (HnD2)
- Wyman loam, 2 to 8 percent slopes, eroded (WyC2)
- Yokohl loam, 8 to 25 percent slopes, severely eroded (YbE3)

GIS Prepared By:
Carlson SLS

Created: August 2021

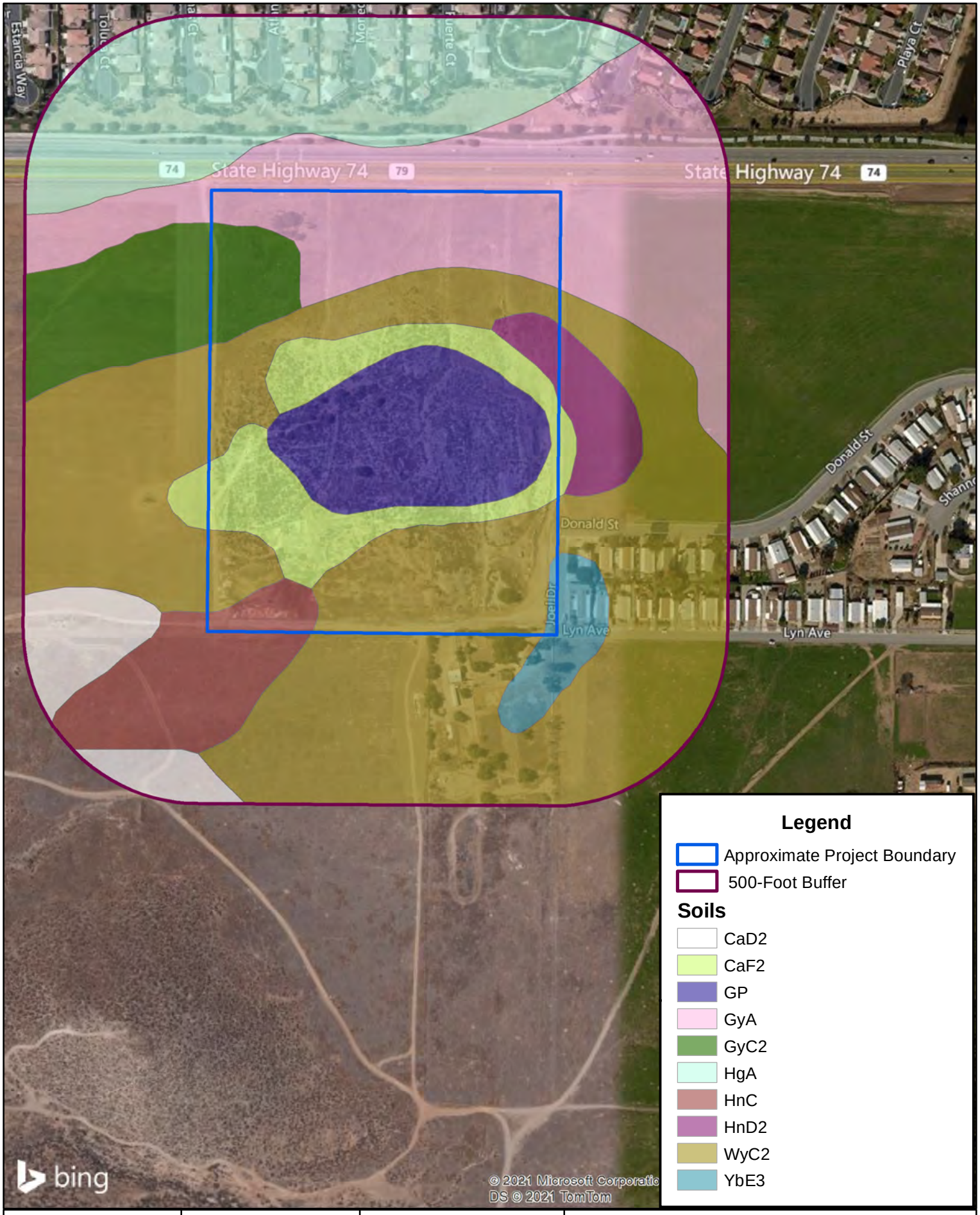
0 62.5 125 250 375 Feet
1 inch = 350 feet

Data Source: Bing Map
Field Survey (June 2019)
Field Survey (May 2021)

Global Investments: Hemet 30

Jurisdictional Features

FIGURE 9



GIS Prepared By:
Carlson SLS

Created: August 2021

0 62.5 125 250 375 Feet
1 inch = 350 feet

Data Source: Bing Map
USDA Soil (August 2021)

Global Investments: Hemet 30

Soils Map

FIGURE 10

6.0 Threshold of Significance

Appendix G of the CEQA Guidelines is used by public agencies in determining whether a project may have a significant impact on biological resources. Under Appendix G, a project may have a significant impact on biological resources if it would:

Threshold BIO-A 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 CDFW or USFWS.

Threshold BIO-B Have a substantial adverse effect on any riparian habitat or other sensitive plant community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

Threshold BIO-C 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.

Threshold BIO-D 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 areas.

Threshold BIO-E Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Threshold BIO-F Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

For the purposes of this impact analysis the following definitions apply:

- "Substantial adverse effect" means loss or harm of a magnitude which, based on current scientific data and knowledge would: (1) substantially reduce population numbers of a listed, candidate, sensitive, rare, or otherwise special status species; (2) substantially reduce the distribution of a sensitive plant community/habitat type; or (3) eliminate or substantially impair the functions and values of a biological resource (e.g., streams, wetlands, or woodlands) in a geographical area defined by interrelated biological components and systems. In the case of this analysis, the prescribed geographical area is considered to be the region that includes the USGS topographic quadrangle for the site. For some species,

the geographic area may extend to the vicinity of the site based on known distributions of the species.

- "Conflict" means contradiction of a magnitude, which based on foreseeable circumstances, would preclude or prevent substantial compliance.

- "Rare" means: (1) that the species exists in such small numbers throughout all, or a significant portion of, its range that it may become endangered if its environment worsens; or (2) the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered "threatened" as that term is used in the FESA.

7.0 Significance Determination and Proposed Mitigation

7.1 Regulatory Setting

Sensitive species are provided protection by either Federal or State resource management agencies, or both, under provisions of the FESA and CESA.

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

7.2 Project Related Impacts

For the purpose of this assessment, project-related impacts consist of direct and indirect impacts. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of no to low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability.

Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-native animals), and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to the Project site.

7.2.1 Vegetation Community Impacts

The determination of impacts in this analysis is based on the proposed Project development plan (Figure 11) and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Any recommended mitigation measures to address impacts are discussed below, along with compliance of existing regulations. Based on the preliminary plans, the following vegetation impacts are anticipated (Table 7; Figure 12).

Table 7. Impacts to Plant Communities Observed within the Study Area[1]

Vegetation Community	Existing Acreage	Total Impacted	Total Avoided
California Buckwheat Scrub	9.88	9.88	0.00
Disturbed California Buckwheat Scrub	1.16	1.16	0.00
Ruderal	58.73	15.5	43.23
Disturbed/Developed	28.28	3.70	24.58
TOTAL	98.10	30.24	67.81

1. Acreage includes existing onsite and offsite acreages.

7.2.2 Jurisdictional Features Impacts

Permanent impacts are anticipated to occur to 0.44-acres of the earthen drainage ditch regulated under RWQCB and CDFW. A total of 0.XX acres would occur to Corps regulated waters. Impacts to the drainage ditch are due to the expansion of Highway 74. The impacts occur to non-vegetated areas and do not occur to any wetlands. Furthermore, this ditch is routinely maintained by Caltrans. Specifically, the area is mowed and/or cleared regularly to maintain storm flows. Calculations of impacts were based on the currently proposed development design in combination with the jurisdictional mapping from the field survey and aerial imagery. Impacts are presented in Tables 8 and 9 and shown on Figure 13.

Table 8. Impacts Summary to Corps and RWQCB Jurisdictional Waters

Drainage	Corps Jurisdiction (wetlands/non-wetland)			RWQCB Jurisdiction (wetlands/non-wetland)		
	Total (acres)	Impacts (acres)	Avoided (acres)	Total (acres)	Impacts (acres)	Avoided (acres)
Unnamed Drainage Ditch[1]	/ 0.26	- / 0.19	-/0.07	- / 0.52 (1,852 LF)	- / 0.44 (1,415LF)	- / 0.08 (437 LF)
TOTAL	-/0.26	-/0.19	-/0.07	- / 0.52	- / 0.44	- / 0.08
[1]. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species. Furthermore, the ditch is regularly maintained by Caltrans.						

Table 9. Impacts Summary to CDFW Jurisdictional Waters

Drainage	CDFW Jurisdiction		
	Total (acres)	Impacts (acres)	Avoided (acres)
Unnamed Drainage Ditch[1]	0.52	0.44	0.08
TOTAL	0.52	0.44	0.08
[1]. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species. . Furthermore, the ditch is regularly maintained by Caltrans.			

7.2.3 MSHCP Riparian/Riverine Impacts

Permanent impacts are anticipated to occur to 0.44-acres of the earthen drainage ditch. Impacts to the drainage ditch are due to the expansion of Highway 74. The approximately 0.44 acres impacts occur to non-vegetated areas and do not occur to any wetlands. Furthermore, this ditch is routinely maintained by Caltrans. Specifically, the area is mowed and or cleared regularly to maintain storm flows. Calculations of impacts were based on the currently proposed development design in combination with the mapping from the field survey and aerial imagery. Impacts are presented in Tables 10 and shown on Figure 14.

Table 10. Impacts Summary to MHSCP Riparian/Riverine Features

Drainage	MSHCP Riparian/Riverine Features		
	Total (acres)	Impacts (acres)	Avoided (acres)
Unnamed Drainage Ditch[1]	0.52	0.44	0.08
TOTAL	0.52	0.44	0.08
[1]. The ditch is primarily unvegetated with scatted vegetation consisting of non-native mustard species.			

SCALE: 1"=60'

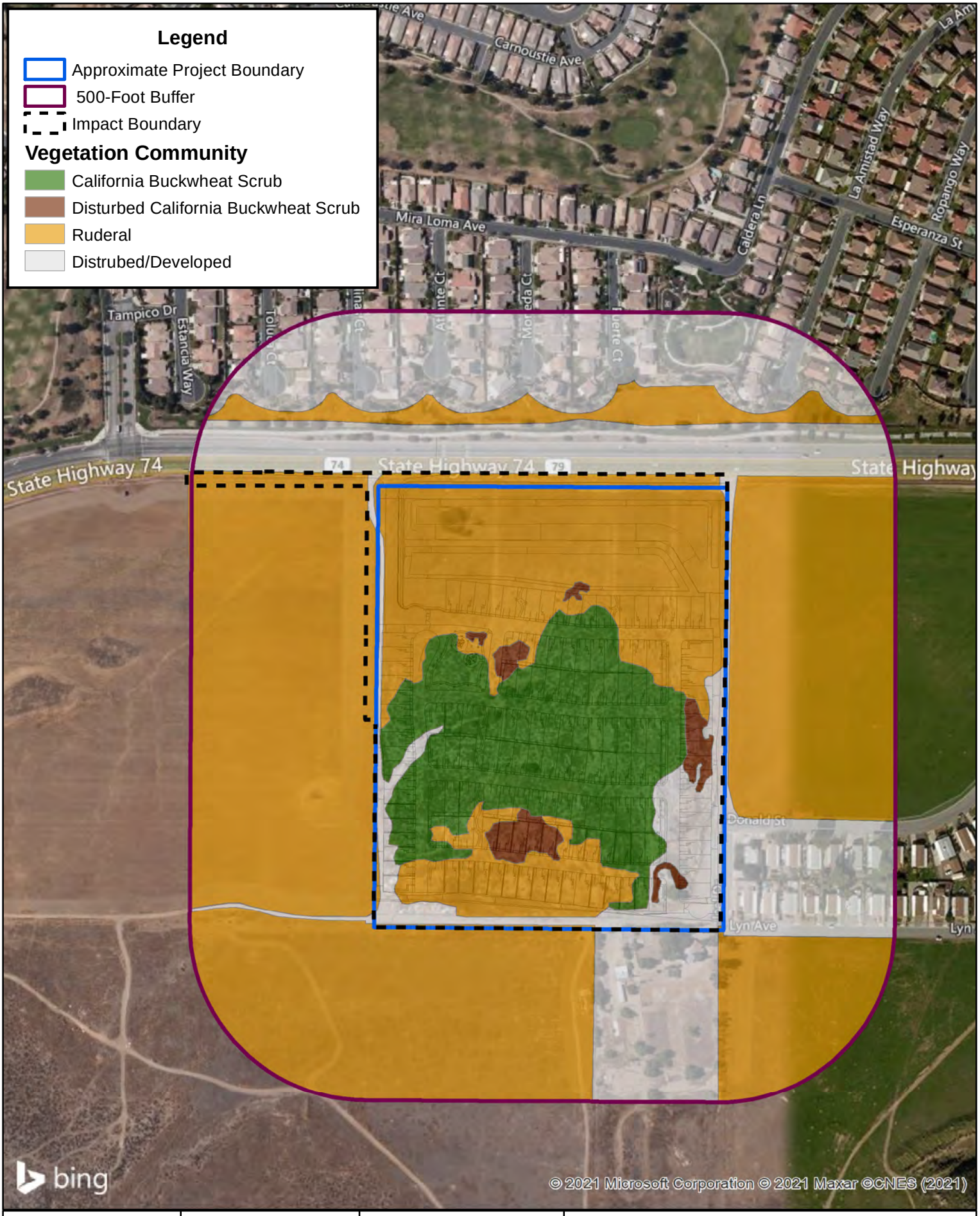
FIGURE 11

SHEET OF

ANDERSON CONSULTING ENGINEERS, INC.

HEMET 30

REVISED LAYOUT



GIS Prepared By:
Carlson SLS

Created: October 2021

0 50 100 200 300 400 Feet
1 inch = 350 feet

Data Source: Bing Map
Field Survey (June 2019)
Field Survey (May 2021)
Anderson Consulting
Engineers (Sept 24 2021)

Global Investments: Hemet 30

Vegetation Impacts Map

FIGURE 12

GIS Prepared By:
Carlson SLS

Created: October 2021

0 62.5 125 250 375 Feet
1 inch = 350 feet

Data Source: Bing Map
Field Survey (June 2019)
Field Survey (May 2021)
Anderson Consulting Engineers (Sept 24 2021)

Global Investments: Hemet 30

Jurisdictional Features Impacts

FIGURE 13

GIS Prepared By:
Carlson SLS

Created: October 2021

0 62.5 125 250 375 Feet
1 inch = 350 feet

Data Source: Bing Map
Field Survey (June 2019)
Field Survey (May 2021)
Anderson Consulting Engineers (Sept 24 2021)

Global Investments: Hemet 30

Riparian/Riverine Resource Impacts Map

FIGURE 14

7.3 Threshold BIO-A

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

Less than Significant with Mitigation Measures Incorporated.

7.3.1 Sensitive Plant Species

Of the total 30.24 acres impacted, direct impacts to 19.2 acres of Ruderal and developed/disturbed are not considered significant because the habitats are non-native and are common in the Project Vicinity and have minimal habitat value. Furthermore, these impacts do not represent CNDDB, State, or MSHCP sensitive plant communities. In addition, many of these areas within the Study Area exhibit a moderate or high level of disturbance.

A total of 11.04-acres of native California buckwheat scrub and disturbed California buckwheat scrub habitat will be impacted, no special status plant species were identified to occur onsite, nor were any observed onsite during the narrow endemic plant surveys. The Project would include the removal of portions of ruderal, California buckwheat scrub, disturbed California buckwheat scrub, and disturbed/developed habitat; therefore, impacts to sensitive plant species would not be significant and no mitigation is required.

7.3.2 Sensitive Wildlife Species

Development of the Project site would result in the impact of 11.04-acres of native buckwheat scrub causing disruption and removal of habitat and the loss and displacement of a single sensitive species, the coastal California gnatcatcher. California buckwheat scrub could be used for nesting and foraging for the coastal California gnatcatcher causing potential adverse impacts. However, the coastal California gnatcatcher and the associated habitat (sage scrub) are covered MSHCP species. Mitigation Measure Bio – 1 (MM BIO-1) is proposed to ensure that Project implementation activities affecting potential nesting habitat are restricted to periods outside of the CAGN breeding season or, where activities must occur, pre-activity surveys and avoidance measures are implemented. Therefore, vegetation impacts would be less than significant with implementation of the mitigation measure.

Due to the level of existing disturbance and urban development onsite and within the vicinity (e.g., nearby development), impacts to ruderal and disturbed/developed habitat

would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds. Therefore, impacts to common wildlife species would not be considered a significant impact and no mitigation is required.

The surrounding 500-foot buffer area consists of rural residential, ruderal, and disturbed vegetation communities. Some of these vegetation communities have potential to support sensitive wildlife foraging and nesting habitat. Potential adverse indirect impacts to common wildlife including an increase in construction related noise; an increase in litter, pollutants, dust, oil, and other human debris during construction; and an increase in noise and nighttime lighting during long-term operations.

During construction, indirect impacts may occur to the adjacent undeveloped area from the increase of noise and construction traffic. As part of the Project design, Standard Best Management Practices (BMPs) are to be implemented to provide proper trash receptacles and management of dust/oil/pollutants, and well as limiting construction noise based on the County Noise Ordinance. Further, these indirect impacts are short in duration, only occurring during construction activities.

Short-term noise from construction activities could temporarily affect certain wildlife during breeding activities. For the proposed Project, the coastal California gnatcatcher and the Cooper's Hawk were observed or heard during the field surveys conducted onsite. All sensitive species that were observed or have moderate to high potential to occur onsite are MSHCP covered species. The mature shrubs associated with the buckwheat scrub and the scattered trees could be used for nesting and foraging by avian species that are common to the area. Mitigation Measure Bio – 2 (MM BIO-2) is proposed to ensure that activities affecting potential nesting habitat are restricted to periods outside of the avian breeding season or, where activities must occur, pre-activity surveys and avoidance measures are implemented. Therefore, noise-related impacts would be less than significant with implementation of the mitigation measures.

Direct impacts associated with vegetation removal may occur to all avian species covered under the Migratory Bird Treaty Act (MBTA) with the removal of potential nesting and foraging habitat. The MBTA protects nesting activities of both native and non-native bird species. Under the Act it is unlawful to harm, harass, or take a nest. If Project construction is scheduled to occur during the typical breeding bird season (January 15 through August 31 for raptors and February 15 through August 31 for all other avian species), direct removal of vegetation and indirect short-term noise effects to birds that may forage or nest onsite or within the buffer area may occur. In order to reduce direct and indirect impacts on nesting birds, if vegetation removal and/or construction activities were to occur during nesting bird season, a pre-construction

nesting bird survey would be required within five (5) days of disturbances during typical nesting bird season to delineate any active nests found within the Project site. The loss of foraging habitat on the Project site is not a significant impact due to the adjacency to open space and additional foraging habitat located south of the Project site. Pre-construction nesting bird surveys as outlined within Mitigation Measure BIO – 2 (MM BIO - 2) would ensure protection against direct impacts associated with vegetation removal or indirect impacts associated with construction related noise impacts for avian species covered under the MBTA during the typical nesting bird season. Implementation of MM BIO-1 and MM BIO-2 would reduce potential impacts to the avian species and special status wildlife to a less than significant level.

MM BIO-1 *If grading and construction activities begin during the coastal California gnatcatcher breeding season (February 15 through August 31), a qualified biologist shall survey all potential nesting vegetation within and adjacent to the site for nesting coastal California gnatcatcher, prior to commencing vegetation removal. Surveys shall be conducted at the appropriate time of day. If no nesting coastal California gnatcatcher were observed, Project activities may begin. Prior to the removal of vegetation on the Project site, the qualified Project biologist will use appropriate techniques to flush the coastal California gnatcatcher /bird(s) from the impacted area.*

If an active coastal California gnatcatcher nest is located, the nest site shall be fenced a minimum of 500 feet in all directions, and this area shall not be disturbed until after the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by the activities. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas provided the qualified biologist develops a monitoring plan to prevent any impacts and obtain approval from the Resource Agencies prior to implementation.

MM BIO-2 *Prior to ground disturbances that would impact potentially suitable nesting habitat for avian species, the Project Applicant shall adhere to the following:*

1. *Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to the extent feasible to avoid potential impacts to nesting birds and/or ground nesters.*

2. *Any construction activities that occur during typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement ground disturbances. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to City for mitigation monitoring compliance record keeping.*

7.4 Threshold BIO - B

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

Less than Significant with Mitigation Measures Incorporated.

7.4.1 Sensitive Plant Communities

No sensitive plant community occur on the Project site. Therefore, no impacts would occur.

7.4.2 Jurisdictional Waters

A total of 0.52 acres of an earthen drainage ditch identified on the Project site is subject to Section 1602 of the California Fish and Game Code, as regulated by CDFW. The impacts would occurs to an earthen drainage ditch that runs parallel to Highway 74. The Waters of the State have minimal biological value, composed mainly of bare areas or non-native species, and is routinely maintained by Caltrans by mowing or clearing the

ditch to maintain storm flows. The quality of the drainage is characterized as poor due to the presence of dense non-native species, bare area, lack of typical riparian species, regular maintenance by Caltrans, and does not exhibit the typical characteristics of a natural stream or watercourse.

A total of 0.44 -acres of direct impacts to Waters of the State would occur due to the expansion of Highway 74 and Project entrance, storm drain outlets, and associated headwalls.

While an approximate 0.44 acres of Waters of the State would be impacted, the impacts to Waters of the State are potentially significant. To offset the impacts to Waters of the State, Mitigation Measure BIO – 3 (MM BIO-3) requires the applicant to obtain regulatory permits and Mitigation Measure BIO – 4 (MM BIO-4) to purchase 0.44-acres of re-establishment and/or rehabilitation credits through a CDFW approved mitigation bank or in-lieu fee program with written approval from CDFW. The purchase of 0.44-acres of re-establishment and/or rehabilitation credits represents a 1:1 ratio of mitigation to impacts. Given the current limited biological value of the drainage ditch, bare or invasive earthen bottom, routine maintenance by Caltrans, and lack of consistent hydrology within the drainage, the issuance of regulatory permits and purchase of 0.44-acres of re-establishment and/or rehabilitation credits outlined within MM BIO-3 and MM BIO- 4 would reduce impacts to less than significant.

MM BIO-3: *Prior to the issuance of any grading permit for permanent impacts in the areas designated as jurisdictional features, the Applicant shall obtain regulatory permits from the Resource Agencies.*

MM BIO-4: *Prior to impacts to jurisdictional waters and to mitigate for the impacts to 0.44-acres of non-wetland drainage ditch, the Applicant shall purchase 0.44-acres of re-establishment and/or rehabilitation credits through an approved mitigation bank or in-lieu fee program with written approval from the Resource Agencies.*

A total of 0.52 acres of an earthen drainage ditch identified on the Project site subject to Porter-Cologne Waters under California Water Code Section 13050(e), as regulated by RWQCB. The impacts would occurs to an earthen drainage ditch that runs parallel to Highway 74. The Waters of the State have minimal biological value, composed mainly of bare areas or non-native species, as well as regular maintenance by Caltrans. The quality of the drainage is characterized as poor due to the presence of dense non-native species, bare area, routine maintenance, lack of typical riparian species, and does not exhibit the typical characteristics of a natural stream or watercourse.

A total of 0.44 -acres of direct impacts to Porter-Cologne Waters under the jurisdiction of RWQCB. The impacts would occur due to the expansion of Highway 74 and Project entrance, storm drain outlets, and associated headwalls.

While an approximate 0.44 acres of Porter-Cologne Waters would be impacted, the impacts would be considered significant. To offset the impacts, MM BIO- 3 and MM BIO-4 requires the applicant to obtain regulatory permits and to purchase 0.44-acres of re-establishment and/or rehabilitation credits through a RWQCB approved mitigation bank or in-lieu fee program with written approval from RWQCB. The purchase of 0.44-acres of re-establishment and/or rehabilitation credits represents a 1:1 ratio of mitigation to impacts. Given the current limited biological value of the drainage ditch, bare or invasive earthen bottom, and lack of consistent hydrology within the drainage, the issuance of Regulatory permits and purchase of 0.44-acres of re-establishment and/or rehabilitation credits outlined within MM BIO-3 and MM BIO-4 would reduce impacts to less than significant.

With the implementation of MM BIO-3 and MM BIO-4, potential impacts to jurisdictional waters are reduced to a less than significant level.

7.5 Threshold BIO - C

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

Less than Significant with Mitigation Incorporated.

A total of 0.26 acres of an ephemeral earthen drainage ditch identified on the Project site subject to Section 404 under Clean Water Act, as regulated by the Corps. The impacts would occurs to an earthen drainage ditch that runs parallel to Highway 74. The Waters of the United State have minimal biological value, composed mainly of bare areas or non-native species, as well as regular maintenance by Caltrans. The quality of the drainage is characterized as poor due to the presence of dense non-native species, bare area, routine maintenance, lack of typical riparian species, and does not exhibit the typical characteristics of a natural stream or watercourse.

A total of 0.19 -acres of direct impacts to Section 404 waters under the jurisdiction of the Corps. The impacts would occur due to the expansion of Highway 74 and Project entrance, storm drain outlets, and associated headwalls.

While an approximate 0.19 acres of Section 404 Waters would be impacted, the impacts would be considered significant. To offset the impacts, MM BIO- 3 and MM BIO-4 requires the applicant to obtain regulatory permits and to purchase 0. 44 -acres of re-

establishment and/or rehabilitation credits through a Corp approved mitigation bank or in-lieu fee program with written approval from Corps. The purchase of 0.44-acres of re-establishment and/or rehabilitation credits sufficiently mitigates for the impacts to the waters given the current limited biological value of the drainage ditch, bare or invasive earthen bottom, and lack of consistent hydrology. The issuance of Regulatory permits and purchase of 0.44-acres of re-establishment and/or rehabilitation credits outlined within MM BIO-3 and MM BIO-4 would reduce impacts to less than significant.

With the implementation of MM BIO-3 and MM BIO-4, potential impacts to Section 404 Waters are reduced to a less than significant level.

7.6 Threshold BIO - D

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

Less than Significant with Mitigation Incorporated.

7.6.1 Wildlife Movement

While the Project site is composed of large spans of ruderal habitat, the habitat is routinely maintained. The ruderal located to the east and west of the site also appears to be routinely maintained. The Project site includes rural residential located to the south and southeast, further isolating the Project site. Furthermore, the north Project boundary is Highway 74. For these reasons, movement on a regional scale is restricted in its potential to support regional wildlife movement. The Project site is further characterized by exposed areas that lack suitable cover outside of the California buckwheat scrub area and resources that are typically associated with wildlife movement areas (i.e. water). No known wildlife corridors or linkage areas are identified in the MSHCP as a Core Linkage onsite.

Movement on a local scale likely occurs with species adapted to urban environments due to the surrounding development and disturbances in the vicinity of the site. Although implementation of the Project would result in disturbances to local wildlife movement within the site, those species adapted to urban areas would be expected to persist on-site following construction. As such, impacts would be less than significant, and no mitigation measures would be required.

7.6.2 Migratory Birds and Raptors

The Project site supports foraging habitat for migratory birds and raptors due to the ruderal and coastal buckwheat scrub habitat occurring on the Project site. The Project site provides nesting habitat for avian species due to the buckwheat scrub and scattered Brazilin peppertrees present on the Project site. Nesting activity typically occurs from

January 15 through August 31 for raptors and February 15 through August 31 for all other avian species. Disturbing or destroying active nests is a violation of the MBTA (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code Section 3503. As such, direct impacts to breeding birds (e.g. through nest removal) or indirect impacts (e.g. by noise causing abandonment of the nest) is considered a potentially significant impact. Compliance with the MBTA would reduce impacts to a less than significant level, as detailed in MM BIO-1 and MM BIO-2.

7.7 Threshold BIO - E

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

No Impact.

The County of Riverside has an Oak Tree Ordinance. The Project does not contain any oak trees and therefore is not subject to any local policies, such as a tree preservation ordinance, that protect biological resources. Therefore, no impacts would occur, and no mitigation is necessary.

7.8 Threshold BIO - F

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

Less than Significant with Mitigation Incorporated.

The Project site is located within the MSHCP. The Project site is not located within any MSHCP Criteria Areas, Cell Groups, or Subunits. Furthermore, the Project site is not located in survey areas for Amphibians, Mammals, or Special Linkage areas. The Project site is subject to Riparian and Riverine Areas pursuant to MSHCP Section 6.1.2, Narrow Endemic Plants Overlay pursuant to Section 6.13, Urban/Wildland Interface pursuant to Section 6.1.4, and Western Burrowing Owl overlay pursuant to MSHCP Section 6.3.2.

A total of 0.52-acres of features that meet the definition of riparian and/or riverine as outline within the MSHCP Section 6.1.2. The Project site does not contain suitable habitat for any of the riparian/riverine vernal pool species listed in Section 6.1.2 of the MSHCP, including listed fairy shrimp. No impacts to those species listed in Section 6.1.2 of the MSHCP are associated with Project implementation due to the lack of suitable habitat onsite. Specifically, the Project site lacks suitable soils, sign of inundation (seasonal depression, soil cracking, etc.) and/or characteristic vernal pool plant species, no suitable habitat for fairy shrimp is present onsite. The project site is dominated by well drained substrates and focused surveys for fairy shrimp are not warranted.

A total of 0.44-acres of impacts to MSHCP Riparian/Riverine features would occur to the earthen drainage ditch that runs parallel to Highway 74. The MSHCP Riparian/Riverine feature have minimal biological value, composed mainly of bare areas or non-native species and is regularly mowed and/or cleared by Caltrans to maintain storm flows. The quality of the drainage is characterized as poor due to the presence of dense non-native species, bare area, lack of typical riparian species, regular maintenance, and does not exhibit the typical characteristics of a natural stream or watercourse. Furthermore, a Consistency Analysis and Determination of Biologically Equivalent or Superior Preservation (DBESP) was prepared for impacts to MSHCP features.

While an approximate 0.44 acres of MSHCP Riparian/riverine areas would be impacted, the impacts would be considered significant. To offset the impacts, Mitigation Measure BIO – 4 (MM BIO-4) requires the applicant to purchase 0.44-acres of re-establishment and/or rehabilitation credits through an approved mitigation bank or in-lieu fee program. The purchase of 0.44-acres of re-establishment and/or rehabilitation credits represents a 1:1 ratio of mitigation to impacts. Given the current limited biological value of the drainage ditch, bare or invasive earthen bottom, regular maintenance, and lack of consistent hydrology within the drainage, the purchase of 0.44-acres of re-establishment and/or rehabilitation credits would be biologically superior to the impacts to the earthen drainage. The mitigation measure outlined within MM BIO-4 would reduce impacts to less than significant.

With the implementation of MM BIO-4, potential impacts to MHSCP riparian/riverine features are reduced to a less than significant level. Therefore, the Project is consistent with the goals and objectives within MSHCP Section 6.1.2.

Pursuant to Section 6.1.3 Narrow Endemic Plants, no narrow endemic plant species were observed during the 2019 surveys or 2021 survey, and the Project site does not contain suitable habitat or soils as outlined within *Section 5.8.2* above; therefore, no impacts are anticipated to occur, and no mitigation is required and the Project is consistent with the goals and objectives within MSHCP Section 6.1.3.

The Project site is not located to an existing or proposed MSHCP Conservation Area as pursuant to Section 6.1.4 of the MSHCP. Furthermore, the Project site does not function as a regional wildlife corridor but may function on a local scale. Movement on a local scale likely occurs with species adapted to urban environments due to the surrounding development and disturbances in the vicinity of the site. Although implementation of the Project would result in disturbances to local wildlife movement within the site, those species adapted to urban areas would be expected to persist on-site following construction. As such, impacts would be less than significant, and no mitigation measures would be required.

Project impacts by themselves would not be expected to interfere with the wildlands interface within the region; however, the following Urban/Wildland Interface Guidelines will be implemented through the participation in the MSHCP and implemented through the Conditions of Approval.

Water Quality/Hydrology

The Project will comply with all applicable water quality regulations and Best Management Practices as part of prepared Water Quality Management Plan (WQMP) and Stormwater Pollution Prevention Plan (SWPPP) prepared for the Project and required by Conditions of Approval.

Toxics

Toxic sources within the Project Site would be limited to those commonly associated with landscape activities such as pesticides, insecticides, herbicides, and fertilizers. The Project will comply with all applicable water quality regulations to ensure adequate long-term treatment.

Lighting

Night lighting associated with the proposed Project Site improvements that are adjacent to proposed open space areas would be directed away to reduce potential indirect impacts to wildlife species.

Noise

The site is surrounded by rural development and Highway 74 therefore, the Project site is already subject to ambient roadway noise; wildlife within adjacent open space area habitats will not be subject to noise that exceeds this ambient noise. Short-term construction related noise impacts will be reduced by the implementation of the following as implemented within the Conditions of Approval:

- During all Project Site excavation and construction on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the Project Site during all project construction.
- The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours.

Invasive Species

As part of Project design, the landscape plans do not utilize any invasive species adjacent to the proposed open space areas.

Implementation of the aforementioned guidelines will minimize Project indirect impacts to a less than significant level and would be consistent with the goals and objectives within MSHCP Section 6.1.4.

Furthermore, based on the Habitat Assessment and focused burrowing owl surveys it was determined the Project site is not occupied by BUOW. No BUOWs, suitable sized burrows, or evidence of BUOWs were observed within the Study Area during the focused survey. A majority of the Project site was characterized by actively maintained ruderal fields, lacking necessary sized burrows to provide suitable nesting habitat for BUOW or densely vegetated California buckwheat scrub. Much of the buffer area is developed or actively maintained ruderal fields. California ground squirrels and their burrows were observed within the Study Area. These burrows were actively utilized by the California ground squirrels and contained no BUOW or keys signs (sight, whitewash, burrows, bones, feathers, pellets, nests, and calls). However, with the County's participation in the MSHCP, a BUOW pre-construction survey outlined within Mitigation Measure BIO-5 (MM BIO-5) will be required to ensure protection for this species and compliance with the conservation goals as outlined within the MSHCP.

MM BIO-5: *Prior to impacts, a pre-construction survey for burrowing owl within the Study Area (Project site and surrounding 500-foot buffer) shall be conducted by a qualified biologist where suitable habitat is present within 30 days to the commencement of ground disturbing activities.*

If active burrowing owl burrows are detected during the breeding season, all work within 300 feet of any active burrow will be halted until that nesting effort is finished. The on-site biologist will review and verify compliance with these boundaries and will verify the nesting effort has finished. Work can resume when no other active burrowing owl nesting efforts are observed.

If active burrowing owl burrows are detected outside the breeding season, then passive and/or active relocation pursuant to a Burrowing Owl Exclusion Plan that shall be prepared by the Applicant and approved by the County of Riverside Environmental Programs Department (EPD) in consultation with CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and MSHCP.

Burrowing owl burrows shall be excavated with hand tools by a qualified biologist when determined to be unoccupied, and backfilled to ensure that animals do not reenter the holes/dens.

With the implementation of MM BIO-5, potential impacts to burrowing owls are reduced to a less than significant level and the Project is consistent with the goals and objectives within MSHCP Section 6.3.2.

8.0 Cumulative Impacts

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

The loss of biological resources on the Project site must be considered in the context of the other development in the area. The Project's direct impact analysis identified four biological resources including; nesting and foraging birds, coastal California gnatcatchers, jurisdictional waters, and burrowing owl. When combined with impacts from other reasonably past, present, and future projects, could result in a cumulative biological impact.

Direct impacts may occur to nesting birds and coastal California gnatcatchers, should construction activities and ground disturbances begin during the typical nesting season. However, adherence and implementation of MM BIO – 1 and MM BIO - 2 will ensure impacts to avian species or their habitats are minimized thus reducing the Project's contribution to cumulative impacts to less than significant. Loss of foraging habitat is not considered significant due to adjacency of additional open space lands located within the vicinity, specifically south of the Project site. Impacts to jurisdictional features under the Jurisdiction of CDFW, Corps, and RWQCB may result in a significant impact. Furthermore, impacts to MSHCP Riparian/Riverine features may result in a significant impact. However, adherence and implementation of MM BIO–3 and MM BIO-4 will ensure impacts to the drainage ditch is minimized thus reducing the Project's contribution to cumulative impacts to less than significant. Furthermore, the purchase of the credits represents a biological superior habitat and preservation than the drainage ditch feature that occurs onsite.

Finally, impacts to burrowing owl could result in significant impacts. Pursuant to the MSHCP requirements, a pre-construction survey shall be conducted by a qualified Biologist to ensure protection for this species and compliance with the conservation

goals as outlined within the MSHCP. With the implementation of MM BIO–5 impacts to the species are minimized thus reducing the Project's contribution to cumulative impacts to less than significant.

With the implementation of the above, the cumulative impacts would be less than significant with mitigation incorporated.

9.0 Literature Cited

Amphibiaweb. 2021. Species Accounts. Retrieved from: http://amphibiaweb.org/search/index.html

American Ornithologists' Union. 1998. The American Ornithologists' Union Checklist of North American Birds. 7th Edition. American Ornithologists' Union, Washington, D.C. June.

Baldwin, B. G., Editor. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley, California Barbour, Michael G., Keeler-Wolf, Todd, and Schoenherr, Allan A. 2007. Terrestrial Vegetation of California Third Edition. University of California Press.

Bowers, N., R. Bowers, and K. Kaufman. 2004. Mammals of North America. Houghton Mifflin Company, New York.

California Herps. 2021. A Guide to the Amphibians and Reptiles of California. Available online (http://www.californiaherps.com).

Cal-IPC (California Invasive Plant Council). 2021. California Invasive Plant Inventory. Cal-IPC Publication. California Invasive Plant Council: Berkeley, CA. Retrieved from: http://www.cal-ipc.org/ip/inventory/index.php.

CDFW (California Department of Fish and Wildlife). 2021. Natural Communities List. Biographic Data Branch. The Vegetation Classification and Mapping Program. https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities.

CDFW (California Department of Fish and Wildlife). 2021a. California Endangered Species Act (CESA). Retrieved from: https://www.wildlife.ca.gov/Conservation/CESA.

CDFW (California Department of Fish and Wildlife). 2021b. California Environmental Quality Act (CEQA). Retrieved from: https://www.wildlife.ca.gov/Conservation/CEQA.

CDFW (California Department of Fish and Wildlife). 2021c. Fish and Game Code Section 1600- 1616. Retrieved from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3784.

CDFW (California Department of Fish and Wildlife). 2021d. Lake and Streambed Alteration Program. Retrieved from: https://www.wildlife.ca.gov/Conservation/LSA.

CDFW (California Department of Fish and Wildlife). 2021e. Life History Accounts and Range Maps – California Wildlife Habitat Relationship System. Retrieved from: https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range.

CDFW (California Department of Fish and Wildlife). 2021f. RareFind, California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB). State of California, The Natural Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Database, Sacramento, CA.

CDFW (California Department of Fish and Wildlife), Natural Diversity Database. Aug 2021g. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 140 pp.

CDFW (California Department of Fish and Wildlife), Natural Diversity Database. Aug 2021h. Special Animals List. Periodic publication. 67 pp.
Retried from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406.

CDFW (California Department of Fish and Wildlife). 2021i. State and Federally Listed Endangered, Threatened, and Rare Plants of California. State of California, The Resources Agency, Department of Fish and Wildlife, Resource Management and Planning Division, Biogeographic Data Branch, California Natural Diversity Database, Sacramento, CA.

Clark, W.S. and B.K. Wheeler. 2001. A Field Guide to Hawks of North America, Second Edition. Houghton Mifflin Company, Boston and New York.

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 12 March 2018].

Corps (United States Army Corps of Engineers). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Eder, Tamara. 2005. Mammals of California. Lone Pine Publishing International Inc, Auburn, WA.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg,
Mississippi.

EPA (United States Environmental Protection Agency). 2011. Laws and Regulations. Summary of the Endangered Species Act.
Retrieved from: http://www.epa.gov/lawsregs/laws/esa.html

Fahrig, L., and G. Merriam. 1985. Habitat patch connectivity and population survival. Ecology 66:1762-1768.

Federal Interagency Committee for Wetland Delineation. 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and USDA Soil Conservation Service, Washington, DC Cooperative technical publication.

Fish and Game Commission. 2021. California Law. California Fish and Game Code.
Retrieved from:
http://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC

Google. 2021. GoogleEarth© website.

Government Printing Office. 1991. Federal Register, 1989 "Federal Manual for Identifying Jurisdictional Wetlands; Proposed Revisions." August 14, 1991, Vol. 56, No. 157, pp 40446-40480.

Harris, L.D. and Gallagher, P.B. 1989. New initiatives for wildlife conservation: The need for movement corridors. In defense of wildlife: Preserving communities and corridors. pp. 11-34. Edited by G. Mackintosh. Defenders of Wildlife, Washington, DC.

Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Submitted to the California Department of Fish and Game Inland Fisheries Division. Rancho Cordova, CA.

National Geographic Society. Edited by Jonathan Alderfer. 2006. Complete Birds of North America. National Geographic Society. Washington D.C.

NatureServe. 2021. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available http://explorer.natureserve.org.

NRCS (Natural Resource Conservation Service). 2021. Web Soil Survey. U.S. Department of Agriculture Natural Resources Conservation Service. Retrieved from: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Oberbauer, T., Meghan, K., and J. Buegge. March 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California", Robert F. Holland, Ph.D., October 1986.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, CA. 1300 pp.

Sibley, David Allen. 2000. National Audubon Society, The Sibley Guide to Birds. Alfred A. Knopf, New York.

SWRCB (State Water Resources Control Board). 2011. Porter-Cologne Water Quality Control Act with Additions and Amendments Effective April 2017. Compiled by the Office of Chief Counsel. Retrieved from: http://www.swrcb.ca.gov/laws_regulations/docs/portercologne.pdf

USDA (United States Department of Agriculture) Natural Resources Conservation Service. 1995. Hydric Soils of California.

USFWS (United States Fish and Wildlife Service). 2021a. FWS Critical Habitat for Threatened and Endangered Species. Retrieved from https://www.fws.gov/endangered/.

USFWS (United States Fish and Wildlife Service). 2021b. Migratory Birds & Habitat Programs. Migratory Bird Treaty Act. Retrieved from: https://www.fws.gov/birds/policies-and-regulations.php.

USFWS (United States Fish and Wildlife Service). 2021c. National Wetlands Inventory. Wetlands Mapper. Retrieved from: http://www.fws.gov/wetlands/Data/mapper.html.

WTI (Wetland Training Institute, Inc.). 1999. Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual. Glenwood, NM WTI 99-1. 143 pp.

WTI (Wetland Training Institute, Inc.). 2003. Wetland Delineation Lecture Notes and Field Guide for Wetland Delineation based on the Corps of Engineers 1987 Manual. WTI, New Mexico.

APPENDIX A

Special Status Plant Species Potential Occurrence Determination

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Special Status Plant Species Potential Occurrence Determination

This table summarizes conclusions from analysis and field surveys regarding the potential occurrence of special status plant species within the Project site for the USGS 7.5-Minute Topographic Map Winchester and the surrounding two-mile radius. During the field surveys, the potential for special status plant species to occur within the Project site was assessed based on the following criteria:

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

- Known to Occur: observed on site in the recent past, but not observed during the most recent biological survey.

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

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

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

- None: a focused study failed to detect the species or no suitable habitat is present.

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

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

Special Status Plants: Potential to Occur within the Study Area

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence within the Study Area
Abronia villosa var. aurita	chaparral sand-verbena	CRPR: 1B1	Annual herb found in sandy. Habitat include chaparral, coastal sage scrub, and desert dunes. Known from 75 to 1600 meters (246 to 5,200 feet) MSL. Blooming period: March through September.	None. No suitable habitat is found within the Study Area. Not observed during field survey.
Allium munzii	Munz's onion	FE, ST CRPR:1B.1	Clay soils supporting chaparral, cismontane woodland, coastal scrub, pinyon-juniper woodland, and valley and foothill grassland. Known from 300 to 1,070 meters (1,000 to 3,500 feet) MSL. Blooming period: March through May	None. No suitable habitat is found within the Study Area. Not observed during field survey.
Atriplex coronata var. notatior	San Jacinto Valley crownscale	FE CRPR:1B.1	Alkaline soils supporting playas, valleys and foothill grassland (mesic) and vernal pools. Known from 139 to 500 meters (455 to 1,640 feet) MSL. Blooms April through August.	None. The Project site lacks suitable habitat and soils. Not observed during field visit.
Atriplex parishii	Parish's brittlescale	CRPR:1B.2	Alkaline soils supporting chenopod scrub, playas, and vernal pools. Known from 25 to 1,900 meters (80 to 6,235 feet) MSL. Blooms June through October.	None. The site lacks suitable habitat and soils. Not observed during field visit
Atriplex serenana var. davidsonii	Davidson's saltscale	CRPR: 1.B2	Alkaline soils supporting coastal bluff scrub and coastal scrub. Known from 10 to 200 meters (32 to 660 feet) MSL. Blooms April through October.	None. The site lacks suitable habitat and soils. Not observed during field visit.
Brodiaea filifolia	Thread-leaved brodiaea	FE, SE CRPR: 1.B1	Alkaline soils supporting coastal bluff scrub and coastal scrub. Known from below 10 to 200 meters (35 to 655 feet) MSL. Blooms April through October.	None. The site is located at approximately 1,527 feet to 1,571 feet and lacks suitable soil. Not observed during field surveys.
Calochortus plummerae	Plummer's mariposa lily	CRPR:4.2	Perennial bulbiferous herb found in granitic or rocky areas. Habitat include chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, and valley and foothill grasslands. Known from 100 to 1,700 meters (330 to 5,500 feet) MSL.	None. No suitable habitat is found within the Study Area. Not observed during field survey.

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence within the Study Area
			Blooming period: May through July	
Calochortus weedii var. intermedius	Intermediate mariposa lily	CRPR: 1.B2	Rocky and calcareous soils supporting chaparral, valley and foothill grassland and coastal scrub. Known from 105 to 855 meters (344 to 2,800 feet) MSL. Blooms May through July.	None. The site lacks suitable soils and is located from approximately 1,527 feet to 1,571 feet MSL. Not observed during field visit.
Caulanthus simulans	Payson's jewelflower	CRPR: 4.2	Habitats supporting chaparral and coastal scrub. Known from 90 to 2200 meters (295 to 7,220 feet) MSL. Blooms (February) March through (June) May.	None. The site lacks suitable habitats and soil. Not observed during field surveys.
Centromadia parryi ssp. australis	Smooth tarplant	CRPR: 1.B2	Habitats supporting marshes and swamps (margins), valley and foothill grasslands (vernally mesic), and vernal pools. Known from 0 to 480 meters (0 to 1,575 feet) MSL. Blooms May through November.	None. The site lacks suitable habitats and soil. Not observed during field surveys.
Chorizanthe leptotheca	Peninsular spineflower	CRPR:4.2	Annual herb found in granitic or alluvial fan areas. Habitat include chaparral, coastal sage scrub, and lower montane coniferous forest. Known from 300 to 1,900 meters (980 to 6,200 feet) MSL. Blooming period: May through August	None. No suitable habitat is found within the Study Area. Not observed during field survey.
Chorizanthe parryi var. parryi	Parry's spineflower	CRPR: 1.B2	Suitable habitat include chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. Found sandy or rocky openings. Known from 275 to 1,220 meters (900 to 4,005 feet) MSL. Blooms April through June.	None. The coastal scrub observed onsite is dense in nature and lacks sandy or rocky openings. Not observed during field surveys.
Chorizanthe polygonoides var. longispina	Long-spined spineflower	CRPR: 1.B1	Habitats supporting chaparral, coastal sage, meadows and seeps, valley and foothill grasslands, and vernal pools. Often found in clay soils. Known from 30 to 1,530 meters (100 to 5,020 feet) MSL. Blooms April through July.	None. The site lacks suitable soils. Not observed during field visit.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	CRPR: 1B.2	Habitats include marshes and swamps (coastal salt), playas, and vernal pools. Known from 1 to 1,220 meters (3 to 4,000 feet) MSL. Blooms February through June.	None. The site lacks suitable habitat. Not observed during field visit.

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence within the Study Area
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	CRPR: 4.3	Habitats include chaparral and coastal scrub. Known from 1 to 885 meters (3 to 2,900 feet) MSL. Blooms January through July.	None. The site lacks suitable habitat. Not observed during field visit.
Myosurus minimus ssp. apus	little mousetail	CRPR: 3.1	Suitable habitats include valley and grassland and vernal pools (alkaline). Known from 20 to 640 meters (65 to 2,100 feet) MSL. Blooms March through June.	None. The Project site lacks suitable habitat. Not observed during field visit.
Navarretia fossalis	Spreading Navarretia	FT CRPR: 1.B1	Suitable habitats include chenopod scrub, marshes and swamps (shallow freshwater), playas, and vernal pools. Known from 30 to 655 meters (100 to 2,150 feet) MSL. Blooms April through June.	None. The Project site lacks suitable habitat. Not observed during field visit.
Orcuttia californica	California Orcutt grass	FE, SE CRPR: 1.B1	Suitable habitats include vernal pools. Known from 15 to 660 meters (50 to 2,162 feet) MSL. Blooms April through August.	None. The Project site lacks suitable habitat. Not observed during field visit.

Legend

Federal Endangered Species Act (ESA) Listing Codes: federal listing is pursuant to the Federal Endangered Species Act of 1973, as amended (ESA).
FE = federally listed as endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range.
FT = federally listed as threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a significant portion of its range within the foreseeable future.

California Endangered Species Act (CESA) Listing Codes: state listing is pursuant to § 1904 (Native Plant Protection Act of 1977) and §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals.
SE = state listed as endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range.
ST = state listed as threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future.

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

CRPR: 1B - California Rare Plant Rank 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere. All of the plants constituting California Rare Plant Rank 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062

and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

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

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

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

0.1 = seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2 = fairly endangered in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

Sources:

- Calflora website - search for plants (Calflora 2021).
- CRPR Inventory of Rare and Endangered Plants (CRPR 2021).
- The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000–2004 (CDFW 2021).
- The Jepson Manual: *Vascular Plants of California,* second edition (Baldwin *et al.* 2012).
- RareFind, CDFW, California Natural Diversity Database (CNDDB) (CDFW 2021f).
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2021i).

APPENDIX B

Special Status Wildlife Potential Occurrence Determination

APPENDIX B

Special Status Wildlife Potential Occurrence Determination

This table summarizes conclusions from analysis and field surveys regarding the potential occurrence of special status wildlife species within the Project site for the USGS 7.5-Minute Topographic Map Winchester and the surrounding two-mile radius. During the field surveys, the potential for special status wildlife species to occur within the Project Site was assessed based on the following criteria:

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

- Known to Occur: observed on site in the recent past, but not observed during the most recent biological survey.

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

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

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

- None: a focused study failed to detect the species or no suitable habitat is present.

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

Even with field surveys, biologists assessed probability of occurrence rather than make definitive conclusions about species presence or absence. Failure to detect the species is not definitive and may be due to variable effects associated with migration, weather, fire, and/or time of day and year.

Special Status Wildlife: Potential to Occur within the Study Area

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
Accipiter cooperii	Cooper's hawk	WL	The Cooper's hawk breeds primarily in riparian areas and oak woodlands and is most common in montane canyons. It frequents landscapes where wooded areas occur in patches and groves and often uses patchy woodlands and edges with snags for perching. Dense stands with moderate crown-depths are usually used for nesting. They hunt in broken woodland and habitat edges. Within the range in California, it most frequently uses dense stands of live oak, riparian deciduous or other forest habitats near water. They are also found and can breed in suburban and urban settings.	High. The site lacks suitable nesting habitat but consists of suitable foraging habitat. This species was observed foraging during the field surveys.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	WL	They are found on grass-covered hillsides, coastal sage scrub, and chaparral and often occur near the edges of the denser scrub and chaparral associations. Preference is shown for tracts of California sagebrush. Optimal habitat consists of sparse, low brush or grass, hilly slopes preferably interspersed with boulders and outcrops. The species may occur on steep grassy slopes without shrubs if rock outcrops are present. It is a very secretive species.	None. The site lacks suitable habitat, the California buckwheat scrub found onsite appears too dense for the species. Not observed during field visit.
Artemisiospiza belli belli	Bell's Sage	WL	Suitable habitat includes Chaparral and coastal sage scrub along the coastal lowlands, inland valleys and in the lower foothills of local mountains.	Moderate potential to occur onsite. Suitable habitat exists onsite within the coastal sage scrub. Not observed during field visit.
Aspidoscelis hyperythra	Orange-Throated Whiptail	WL, USS	The species is generally found in semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. Habitat types include low elevational chaparral, non-native grassland, (Riversidean) coastal sage scrub, juniper woodland and oak	None. The site lacks suitable habitat and soil. Not observed during field visit.

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			woodland. Associations include alluvial fan scrub and riparian areas. Friable soil appears to be a necessary requirement for excavating burrows and hiding eggs.	
Aspidoscelis tigrus stejnegeri	Coastal whiptail	SSC	This species is found in a variety of habitats, primarily hot and dry open areas with sparse vegetation including chaparral, woodland, and riparian areas. This subspecies is found in coastal southern California, north into Ventura County, and south into Baja California. Additional important habitat characteristics include Important habitat components include shrub cover with accumulated leaf litter, and an abundance of invertebrate prey, particularly termites.	None. The site lacks suitable habitat. Not observed during field visit.
Athene cunicularia hypugaea	burrowing owl	SSC, BLMS, BCC	Burrowing owls are a year-round resident of California including habitats of open, dry grassland, and desert. They are generally restricted to mostly flat, open country with suitable nest sites. They use rodent or other burrows for roosting and nesting cover and acquire their burrows from either abandonment or eviction. Burrowing owls typically hunt from a perch.	None. No suitable habitat is found within the Project site. Not observed during field surveys.
Bombus crotchii	Crotch bumble bee	SCE	The crotch bumble bee inhabits open grassland and scrub habitats. This species occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California.	None. No suitable habitat is found within the Project site. Not observed during field surveys.
Branchinecta lynchi	Vernal pool fairy shrimp	FT	Suitable habitat includes vernal pools, valley and foothill grassland; and wetland. They range from clear rock pools to muddy grassland pools. They fill seasonal with rain during fall and winter.	None. The site lacks suitable habitat. Not observed during field surveys.
Buteo regalis	Ferruginous hawk (wintering)	WL	Open, dry country, perching on trees, posts, and mounds. In California, wintering habitat consists of open terrain and grasslands of the plains and	High. The site lacks suitable nesting habitat but consists of suitable foraging habitat. This species was observed foraging during

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			foothills.	the field surveys.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	SSC	This species is a common resident of sandy herbaceous areas, often on sandy substrates (rocks or coarse gravel) in southwestern California. In San Diego County the species occurs mainly in arid coastal and desert border areas. Habitats include coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland.	None. No suitable habitat is found within the Study Area. Not observed during field survey.
Circus hudsonius	northern harrier	SSC	Occurs from annual grassland up to lodge pole pine and alpine meadow habitats. Frequents open fresh and saltwater wetlands, grasslands, pastures, upland prairies, dry uplands, croplands, shrub-steppe, meadows, desert sinks. It is seldom found in wooded areas. It uses tall grasses and forbs in wetlands for cover and it roosts on ground. It is mostly found in flat, open areas of tall, dense grasses, moist or dry shrubs, in the vicinity of marshes, rivers, ponds, or grassy valleys for nesting, cover, and feeding.	High. The site lacks suitable nesting habitat but consists of suitable foraging habitat. This species was observed foraging during the field surveys.
Coleonyx variegatus abbotti	San Diego banded gecko	SSC	The San Diego Banded Gecko is found in southwestern California just inland from the Pacific coast, from Ventura County south into northwestern and central Baja California. It is found in coastal scrub chaparral and desert scrub habitats, preferring granite or rocky outcrops within these habitat	None. White California buckwheat scrub occurs onsite, there are no associated rocky outcrops. No suitable habitat is found within the Study Area. Not observed during field survey.
Crotalus ruber	Red-Diamond Rattlesnake	SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal	Moderate. Limited habitat is found onsite due to the presence of rodent burrows and dense California buckwheat scrub brush found onsite. Not observed during field visit.

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake, however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats. They need rodent burrows, cracks in rocks or surface cover objects.	
Dipodomys stephensi	Stephens' kangaroo rat	FE, ST	This species prefers large areas of disturbed or patchy annual and perennial grasslands and open coastal sage scrub. Preferred perennials plant species include buckwheat and chamise and preferred annual plant species include brome grass. The nearest known populations are in Rancho Guejito and at the Naval Weapons Station in Fallbrook.	None. The site is routinely maintained and includes dense coastal sage scrub, therefore, the site lacks suitable habitat. Not observed during field visit.
Elanus leucurus	White-tailed kite	Fully Protected, BLMS	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands and oak woodlands. Dense canopies used for nesting and cover.	None. The site lacks suitable habitat. Not observed during field visit.
Eremophila alpestris actia	California horned lark	WL	A year-long resident within the state and within a variety of open habitats, usually where trees and large shrubs are absent. They are not particular about the nature of the field, so long as it has very little vegetation. Range-wide, they breed in level or gently sloping short grass prairies, montane meadows, "bald" hills, open coastal plains, fallow grain fields, alkali flats, and rangelands. Within southern California, California horned larks breed primarily in open fields, (short) grasslands, and rangelands. Grasses, shrubs, forbs, rocks, litter, clods of soil, and other surface irregularities provide cover.	None. No suitable habitat is found within the Project site. Not observed during field surveys.
Euphydryas editha quino	quino checkerspot	FE	Quino checkerspot butterfly habitat is characterized by patchy shrub or small tree	None. No suitable habitat is found within the Project site. Not observed during field

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
	butterfly		landscapes with openings of several meters between large plants, or a landscape of open swales alternating with dense patches of shrubs; such habitats are often collectively termed "scrublands." Quino will frequently perch on vegetation or other substrates to mate or bask, and they require open areas to facilitate movement. Optimal habitat appears to contain little or no invasive exotic vegetation. Sustained drought conditions can lead to extirpation of local populations, and broad scale climate anomalies may lead to phenological incompatibility between Quino checkerspot butterfly and their host plants.	surveys.
Emys marmorata	western pond turtle	SCC, BLMS	Inhabits permanent or nearly permanent water below 1,830 meters (6000 feet) throughout California, west of the Sierra Cascade.	None. No suitable habitat is found within the Project site. Not observed during field surveys.
Lanius ludovicianus	loggerhead shrike	SSC	They breed mainly in shrublands or open woodlands with a fair amount of grass cover and areas of bare ground. They require tall shrubs or trees (also use fences or power lines); open areas of short grasses, forbs, or bare ground for hunting; and large shrubs or trees for nest placement. These requirements are met in shrub steppe, western juniper woodland, chaparral, oak woodland, oak savannah, riparian edges, desert scrub, Joshua tree habitats, riparian woodland and occasionally through-out in rural and agricultural hedgerows.	Moderate. Suitable foraging habitat occurs onsite. Not observed during the field surveys.
Lasiurus xanthinus	western yellow bat	SSC	Roost in trees, hanging from the underside of a leaf. Commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and non- native palm trees and have also been documented roosting in cottonwood trees.	None. No suitable habitat on site. Not observed during field survey.
Lepus californicus	San Diego black-	FP	The black-tailed jackrabbit is a habitat generalist	High. The site consists of suitable habitat.

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
bennettii	tailed jackrabbit		occurring in open areas or semi-open country, typically in grasslands, agricultural fields or sparse coastal scrub. It primarily is found in arid regions supporting short grass habitats. Jackrabbits typically are not found in high grass or dense brush where it is difficult for them to locomote, and the openness of open scrub habitat probably is preferred over dense chaparral. They have also been found in annual grassland, Riversidean sage scrub, alluvial fan sage scrub, Great Basin sagebrush, chaparral, disturbed habitat, southern willow scrub and juniper woodland. They are not found in high mountain forests. It prefers valley bottoms or intermontane valleys.	This species was observed foraging during the field surveys.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	SSC	Suitable habitat for the LA Pocket Mouse includes Riversidean sage scrub, coastal sage scrub, Riversidean alluvial fan sage scrub, desert scrub, chaparral, grassland, and playas and vernal pools on sandy soils, typically found within or adjacent to, but not limited, sandy washes or areas of wind blown sand.	None. No suitable habitat on site. Not observed during field survey.
Phrynosoma blainvillii	coast horned lizard	SSC, BLMS	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland and riparian woodlands.	None. The site lacks suitable habitat. Not observed during field visit.
Polioptila californica californica	coastal California gnatcatcher	FT, SSC	A non-migratory, permanent resident of coastal sage scrub habitat, which is a broad category of vegetation that includes the following plant communities: Ventura coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. They also use chaparral, grassland and riparian habitats next to coastal sage scrub, but these habitats are used	High. The site contains suitable nesting and foraging habitat. This species was observed foraging during the field surveys.

Scientific Name	Common Name	Status	General Habitat Description	Potential For Occurrence
			dispersal and foraging. They avoid nesting on steep slopes.	
Spea hammondii	western spadefoot	SSC, BLMS	May be found in coastal sage scrub, open chaparral, pine-oak woodlands and grassland habitats, but is most common in grasslands with vernal pools or mixed grassland/coastal sage scrub areas. Within these habitats, they require rain pools/vernal pools in which to reproduce and that persist with more than three weeks of standing water in which to metamorphose successfully. They can also breed in slow-moving streams (e.g., areas flooded by intermittent streams). Water breeding sites must lack fish, bullfrogs, and crayfish in order for to successfully reproduce and metamorphose. They estivates in sandy, gravelly soil in upland habitats adjacent to potential breeding sites in burrows approximating 1 meter in depth.	None. The site lacks suitable habitat. Not observed during field visit.
Streptocephalus woottoni	Riverside fairy shrimp	FE	Narrow habitat requirements and is restricted to deep lowland vernal pools that retain water for 2-8 months, and are generally 12 in (30 cm) or deeper. They will not hatch in shallow vernal pools or in vernal pools that receive cooler waters from early winter rains. In San Diego, Riverside fairy shrimp are found in vernal pools that are closely tied to Diablo, Huerhuero, Redding, Stockpen, Linnea, Placentia, Olivenhain, and Salinas soil series in flat to gently sloping landscapes.	None. The site lacks suitable habitat. Not observed during field visit.

Legend
<u>*Federal Endangered Species Act (ESA) Listing Codes:*</u> federal listing is pursuant to the Federal Endangered Species Act (ESA) of 1973, as amended. The official federal listing of Endangered and Threatened Animals is published in the Federal Register, 50 CFR 17.11. FE = federally listed as endangered: any species, subspecies, or variety of plant or animal that is in danger of extinction throughout all or a significant portion of their range. FT = federally listed as threatened: any species, subspecies, or variety of plant or animal that is considered likely to become endangered throughout all or a

significant portion of its range within the foreseeable future.
FC = federal candidate for listing.
FPT = federally proposed threatened.

California Endangered Species Act (CESA) Listing Codes: state listing is pursuant to §2074.2 and §2075.5 (California Endangered Species Act of 1984) of the Fish and Game Code, relating to listing of Endangered, Threatened and Rare species of plants and animals. The official California listing of Endangered and Threatened animals is contained in the California Code of Regulations, Title 14, and Section 670.5.
SE = state listed as endangered: any species, subspecies, or variety of plant or animal that are in serious danger of becoming extinct throughout all, or a significant portion, of their range.
ST = state listed as threatened: any species, subspecies, or variety of plant or animal that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future.
SCT = state candidate for listing as threatened.
SCE = state candidate for listing as endangered.

California Department of Fish and Wildlife (CDFW):
SSC = species of special concern: status applies to animals which 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist. The CDFW has designated certain vertebrate species as "species of special concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.
Fully protected = animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.
WL = watch list: these birds have been designated as "Taxa to Watch" in the *California Bird Species of Special Concern report* (Shuford and Gardali 2008). The report defines "Taxa to Watch" as those that are not on the current special concern list that (1) formerly were on the 1978 (Remsen 1978) or 1992 (CDFG 1992) special concern lists and are not currently listed as state threatened and endangered; (2) have been removed (delisted) from either the state or federal threatened and endangered lists (and remain on neither), or (3) are currently designated as "fully protected" in California.

United States Fish and Wildlife Service (USFWS):
BCC = USFWS bird of conservation concern: listed in the USFWS'S 2008 *Birds of Conservation Concern* report. The report identifies species, subspecies, and populations of all migratory non-game birds that, without additional conservation actions, are likely to become candidates for listing under the ESA. While all of the bird species included in the report are priorities for conservation action, the list makes no finding with regard to whether they warrant consideration for ESA listing.

United States Forest Service (USFS):
FSS = Forest Service sensitive: those plant and animal species identified by a Regional Forester that are not listed or proposed for listing under the ESA and for which population viability is a concern, as evidenced by: (a) significant current or predicted downward trends in population numbers or density or (b) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution."

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

California Department of Forestry and Fire Protection (CDF):
CDF: S = CDF sensitive: species is a California Department of Forestry and Fire Protection sensitive species. The Board of Forestry classifies as sensitive species those species that warrant special protection during timber operations.

Sources:

- A Guide to the Reptiles and Amphibians of California (CaliforniaHerps.com 2021).
- *A Field Guide to Hawks of North America, Second Edition* (Clark and Wheeler 2001).
- *Atlas of Breeding Birds, Orange County, California* (Gallagher 1997).
- Amphibian and Reptile Species of Special Concern in California (Jennings and Hayes 1994).
- *A Field Guide to Mammals of North America North of Mexico. Fourth Edition* (Reid 2006).
- *A Natural History of California* (Schoenherr 1992).
- *A Field Guide to Western Reptiles and Amphibians*, *Third Edition* (Stebbins 2003).
- Amphibian species accounts (Amphibiaweb 2021).
- *California Bird Species of Special Concern*: *A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California* (Shuford and Gardali 2008).
- Check-List of North American Birds, 7th edition (American Ornithologists' Union [AOU] 1998).
- *Complete Birds of North America* (National Geographic Society 2006).
- *Field Guide to the Birds of North America*, 4th Ed (National Geographic Society 2002).
- Fifty-first supplement to the AOU Check-List of North American Birds (Chesser et. al. 2010).
- Life History Accounts and Range Maps (CDFW 2021e).
- *Life on the Edge: A Guide to California's Endangered Natural Resources. Wildlife* (Thelander et al. 1994).
- *Mammals of North America* (Bowers et al. 2004).
- *Mammals of California* (Eder 2005).
- *Mammals of North America* (Kays and Wilson 2002).
- Mammalian Species of Special Concern in California (Williams 1986).
- *Mammal Species of the World* (Wilson and Reeder 2005).
- NatureServe Explorer (NatureServe 2021).
- *National Audubon Society, the Sibley Guide to Birds* (Sibley 2000).
- RareFind, CDFW, California Natural Diversity Database (CNDDB) (CDFW 2021).
- *Reference Atlas to the Birds of North America* (National Geographic Society 2003).
- *Shorebirds of North America. The Photographic Guide* (Paulson 2005).
- Special Animals List (CDFW 2021h).

- Standard Common and Current Scientific Names (Center for North American Herpetology website [CNAH] website 2021).
- *The Smithsonian Book of North American Mammals* (Wilson and Ruff 1999).
- Terrestrial Mammal Species of Special Concern in California (Bolster 1998).

APPENDIX C

Plant Species Recorded During Field Surveys

Appendix C contains the list of vascular plant taxa recorded during the 2019 biological surveys conducted within the Study Area. Plant nomenclature and taxonomic order is based on *The Jepson Manual: Vascular Plants of California, s*econd Edition (Baldwin *et al.* 2012).

Appendix C
Plant Species Observed during the Field Survey

Scientific Name	Common Name
Eudicots	
Anacardiaceae	Sumac or Cashew Family
*Schinus terebinthifolius**	Brazilian peppertree
Asteraceae (*Compositae*)	Sunflower Family
Artemisia californica	California sagebrush
Baccharis salicifolia	Mulefat
*Centaurea melitensis**	tocalote (Malta star thistle)
Deinandra paniculata	Paniculate tarplant
Encelia californica	California brittle bush
*Matricaria discoidea**	disc mayweed
Stephanomeria exigua	small wirelettuce
Stylocline gnaphaloides	mountain neststraw
*Euchiton involucratus**	Common cudweed
*Helminthotheca echioides**	bristly oxtongue
Boraginceae	Borage Family
Amsinckia menziesii	Menzies' fiddleneck
Phacelia cicutaria	caterpillar phacelia
Plagiobothrys nothofulvus	Popcorn flower
Brassicaceae (Cruciferae)	Mustard Family
*Hirschfeldia incana**	summer mustard
*Brassica nigra**	black mustard
*Sisymbrium irio**	London rocket
Chenopodiaceae	Goosefoot Family
*Salsola tragus**	prickly Russian thistle
Cleomaceae	Cleome Family
Peritoma arborea	bladderpod spiderflower
Convolvulaceae	Morning-glory Family
Cuscuta californica	chaparral dodder

Scientific Name	Common Name
Euphorbiacae	Spurge Family
Croton setiger	Dove weed
Fabaceae	Legume Family
Acmispon glaber	deer weed
Geraniacae	Geranium Family
*Erodium botrys**	longbeak stork's bill
*Erodium brachycarpum**	shortfruit stork's bill
Lamaicae	Mint Family
Trichostema lanceolatum	vinegarweed
Malvaceae	Mallow Family
*Malva parviflora**	Cheeseweed mallow
Polygonaceae	*Buckwheat Family*
Eriogonum fasciculatum	California buckwheat
Salicaceae	Willow Family
Populus fremontii	Fremont cottonwood
Tamaricaceae	Tamarisk Family
*Tamarix ramosissima**	Tamarisk
Monocots	
Poaceae	Grass Family
*Avena fatua**	wild oat
*Bromus diandrus**	ripgut grass
*Bromus madritensis**	Foxtail brome
*Centaurea melitensis**	tocolote
*Festuca microstachys**	Rat-tail fescue
*Hordeum murinum**	Foxtail barley
Legend	
* exotic plant species	

APPENDIX D

Focused Burrowing Owl Survey

Information Summary

Report Date:	October 1, 2021
Report Title:	Results of MSHCP Focused Burrowing Owl Survey for the Hemet 30 Project in Riverside County, California
Case Number:	CZ2100016 and TTM37737
APN Numbers:	465-040-026, 465-040-027, and 465-040-025.
Project Location:	The Project site is generally located in the Hemet area of Riverside County. The Project Site is located south of Highway 74 and west of Joel Drive. The Project is located on the U.S. Geological Survey (USGS) 7.5' Winchester topographic quadrangle map within Section 14 of Township 5 South, Range 2 West.
Owner/Applicant:	Joseph Rivani Global Investment & Development, LLC 3470 Wilshire Blvd. Suite 1020 Los Angeles, CA 90010 213.369.9600 jrivani@gidllco.com
Principal Investigator:	Brianna Bernard Carlson Strategic Land Solutions 27134A Paseo Espada, Suite 323 San Juan Capistrano, CA 92675 949.542.7042 Office 916.218.2644 Mobile bbernard@carlsonsls.com
Survey Information:	Brianna Bernard, Biologist Crysta Dickson, Biologist Justinne Manahan, Biologist Survey dates: May 31, June 10, and July 01, 26, and August 7, 2019. An additional updated survey took place on May 17, 2021

Report Summary

This letter describes the methods and results of a focused burrowing owl (*Athene cunicularia* [BUOW]) survey for the Hemet 30 Project (Project) Case Number CZ2100016 and TTM37737, located in the Riverside County. The Project site is generally located in the Hemet area of Riverside County. The Project Site is located south of Highway 74 and west of Joel Drive (Figures 1 and 2). The Project is located on the U.S. Geological Survey (USGS) 7.5' Winchester topographic quadrangle map within

Section 14, Township 5 South, Range 2 West. The assessor's parcel numbers for the Project are 465-040-025, 465-040-026, and 465-040-027. Areas surrounding the Project Site include Highway 74 to the north, vacant land to the east and west; and rural housing to the south. The Project site and surrounding 500-foot buffer (Study Area) was surveyed.

The surveys were performed on the following days:

Survey	Survey Date	Time	Temperature	Surveyors
Burrowing Owl Assessment	May 31, 2019	0800 - 1350	68° F – 90° F Clear Skies	Brianna Bernard and Crysta Dickson
Burrowing Owl Survey #1	June 10, 2019	0800 - 1350	68° F – 92° F Clear Skies	Brianna Bernard and Crysta Dickson
Burrowing Owl Survey #2	July 01, 2019	0800 - 1055	75° F – 88° F Clear Skies	Brianna Bernard and Crysta Dickson
Burrowing Owl Survey #3	July 26, 2019	0730 - 1045	75° F – 87° F Clear Skies	Brianna Bernard and Justinne Manahan
Burrowing Owl Survey #4	August 7, 2019	0730 - 1107	77° F – 90° F Clear Skies	Brianna Bernard and Justinne Manahan
Revisit Burrowing Owl Survey	May 17, 2021	0715 - 1052	73° F – 91° F Clear Skies	Brianna Bernard and Justinne Manahan

The Project site is dominated by ruderal vegetation and coastal sage scrub found on the hills. A riparian drainage is located on the southern portion of the site. The ruderal vegetation appears to be routinely maintained. Scattered burrows were observed on the Project site. All observed burrows were inspected carefully for any evidence of BUOW presence. Based on the lack of direct observation of BUOW or evidence of BUOW activity (e.g. evidence of active burrows with whitewash, pellets, feather, etc.) during the survey, the Study Area is not currently considered occupied by BUOW.

Field Survey Methods

Prior to the field survey, available literature and databases including the California Natural Diversity Database (CNDDB), were reviewed to identify sensitive habitats and special status wildlife species, including BUOW in the vicinity of the Study Area. Consistent with the MSHCP Survey Instructions, a burrowing owl habitat assessment was conducted on May 31, 2019 and pedestrian survey transects were spaced approximately 15 to 25 meters apart to allow 100 percent visual coverage of the ground surface.

According to the MSHCP guidelines, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars. Parcels of land that could not be accessed (e.g. private property) were viewed using binoculars from vantage points to survey for BUOW activity or signs thereof, as well as other nesting bird activity.

The Project site and surrounding 500-foot buffer, collectively referred to as the Study Area, was assessed for the suitability to support burrowing owls and all suitable burrows were inspected for signs of use by burrowing owls. After the initial assessment of the site and surrounding areas, the Project site was systematically walked in an east-west direction of the Project site within suitable habitat for BUOW. Adjacent suitable areas, where accessible, were also surveyed to determine possible presence of owls within the buffer area (500-feet surrounding the Project site). Areas not accessible were surveyed using binoculars.

All encountered burrows or structure entrances were checked for the presence of BUOWs, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement at or near a burrow entrance. Natural or man-made structures and debris piles that could support BUOWs were also surveyed.

All wildlife species encountered, visually or audibly during the field survey, were identified and recorded in the field notes. Binoculars were used to aid in the identification of observed wildlife. Photographs were taken to document existing conditions within the Project site (Attachment A).

Results

The BUOW survey was performed on May 31, 2019 between the hours of 8:00 a.m. – 1:50 p.m. on the Project site and surrounding 500-foot area (Figure 2). The survey was performed by Carlson Strategic Land Solutions (CSLS) biologists Brianna Bernard and Crysta Dickson. The Project site consists of a total of approximately 30-acres. The Biologists performed transects within areas that could potentially provide suitable BUOW habitat, which totals approximately 30-acres. Weather conditions during the survey was conducive to observing signs of BUOW activity, such as owls outside burrows. Temperatures during the survey ranged from 68° F to 90° F with clear skies and winds from 0-1 mph. The survey was conducted during typical BUOW peak activity time and was not conducted during rain, high winds, or dense fog.

Following the habitat assessment, additional focused surveys took place on June 10, July 01, 26, and August 7, 2019 generally between 7:00 a.m. and 12:20 p.m. by CSLS Biologists Brianna Bernard and Crysta Dickson, and Brianna Bernard and Justinne Manahan on select dates. An update survey occurred on May 17, 2021 to confirm

existing conditions remain the same as the 2019 surveys by Brianna Bernard and Justinne Manahan. Temperatures during the surveys ranged between 70° F and 98° F, with predominant sunny, clear skies and 0-2 mph winds. The survey was conducted during typical BUOW peak activity time and was not conducted during rain, high winds (> 20 miles per hour), dense cloud cover >75%, or extreme temperatures.

The Study Area consist primarily of ruderal habitat and coastal sage scrub found on the hills. The ruderal habitat appears to be routinely maintained. There were disturbed areas affected by human activities, including walking trails, biking trails, and dirt roads that support little to no vegetation. The ruderal habitat is dominated by foxtail barley (*Hordeum murinum*), ripgut brome (*Bromus diandrus*), and common wild oat (*Avena fatua*), rat-tail fescue (*Festuca microstachys*), foxtail brome (*Bromus madritensis ssp. rubens*), tocalote (*Centaurea melitensis*), and short podded mustard (*Hirschfeldia incana*).

The Study Area also includes California buckwheat scrub found on the hills. The coastal sage scrub areas consist of California buckwheat (*Eriogonum fasciculatum*) and California Sagescrub (*Artemisia californica*) scattered with scattered California cholla (*Cylindropuntia californica*), coyote brush (*Baccharis pilularis*), California brittlebush (*Encelia californica*), white sage (*Salvia apiana*), clustered tarweed (*Deinandra fasciculata*), star thistle (*Centaurea solstitialis*), and shortpod mustard (*Hirschfeldia incana*).

The Study Area contains a small population of California ground squirrels (*Spermophilus beecheyi*), which in turn results in various burrows that could potentially support suitable BUOW foraging and nesting habitat. These burrows were generally located along the hillside with some scattered within the ruderal habitat and in the locations of the prior mining activities (Figure 3). These areas were inspected carefully for the presence of BUOWs and active nests. No pellets, whitewash, feathers, tracks or any other signs indicative of burrowing owl presence were observed within the Study Area.

The Study Area provides suitable foraging and nesting habitats to support wildlife. Bird activity during the survey was moderate. During the field surveys the following species were observed/detected:

- Cooper's Hawk *(Accipiter cooperii)*
- Great horned owl *(Bubo virginianus)*
- red-tailed hawk *(Buteo jamaicensis)*
- Anna's hummingbird (*Calypte anna)*
- Coyote (*Canis latrans)*
- house finch (*Carpodacus mexicanus)*
- Turkey Vulture (*Cathartes aura)*
- Lesser nighthawk (*Chordeiles acutipennis)*

- Rock pigeon (*Columba livia)*
- Common raven (*Corvus corax)*
- Brewer's blackbird (Euphagus cyanocephalus)
- Barn swallow (Hirundo rustica)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii)*
- Song Sparrow *(Melospiza melodia)*
- California towhee *(Melozone crissalis)*
- coastal California gnatcatcher *(Polioptila californica californica)*
- Bushtit *(Psaltriparus minimus)*
- Rock wren (*Salpinctes obsoletus*)
- Say's phoebe (*Sayornis saya)*
- California ground squirrel *(Spermophilus (Otospermophilus) beecheyi)*
- lesser goldfinch *(Spinus psaltria)*
- desert cottontail *(Sylvilagus audubonii)*
- Western Kingbird *(Tyrannus verticalis)*
- mourning dove *(Zenaida macroura)*

Conclusion

Based on the lack of direct observation of BUOW or evidence of BUOW activity (e.g. evidence of active burrows with whitewash, pellets, feather, etc.) during the survey, the Study Area is not currently considered occupied by BUOW.

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.

Signed: _____ Dated: 10/01/2021

If you have any questions, please feel free to contact me at bbernard@carlsonsls.com or at 916-218-2644.

Figures

- Figure 1: Site Location Map
- Figure 2: Study Area Map
- Figure 3: Transect and Burrow Map

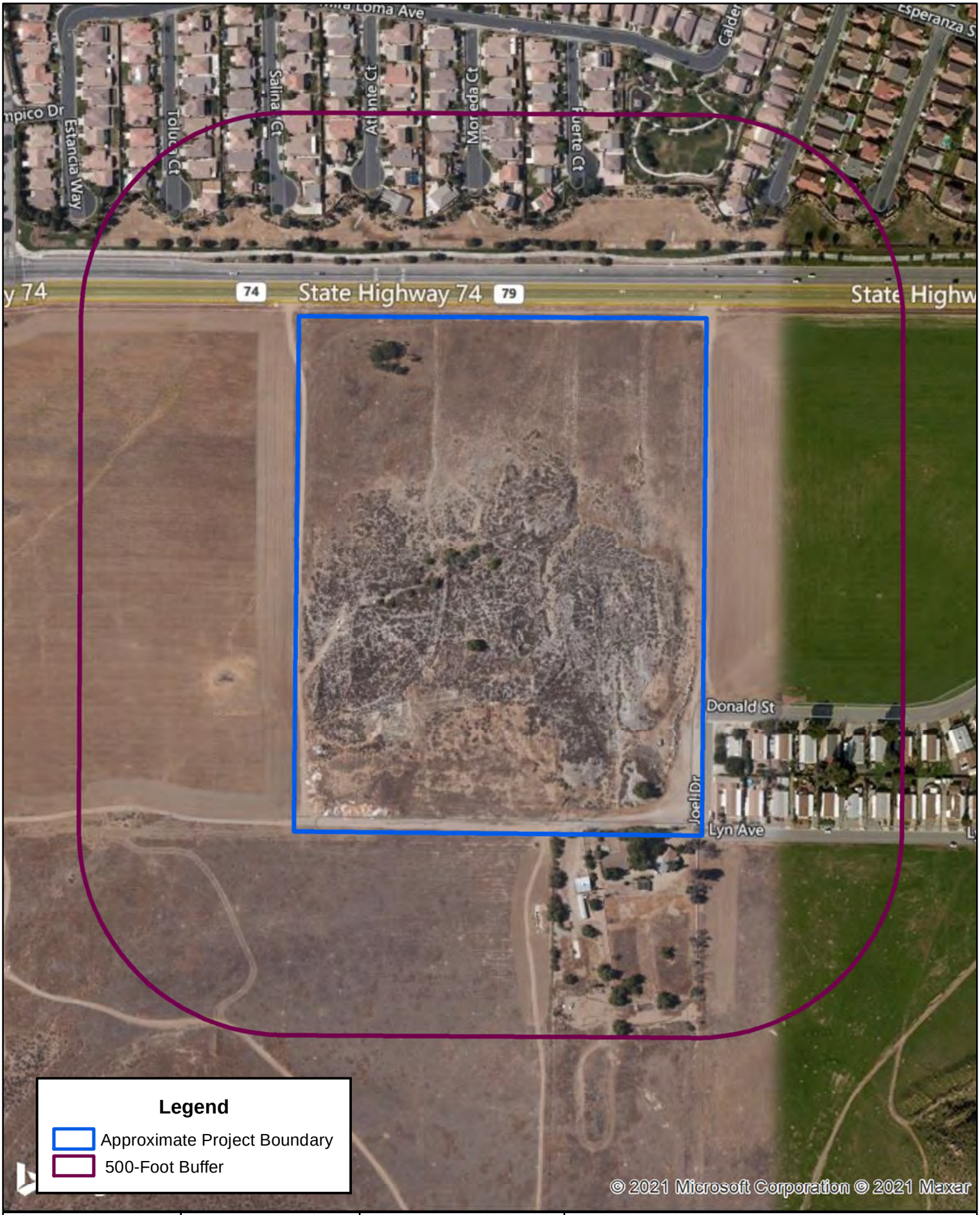
Attachments

- Attachment A: Site Photographs

Figures

GIS Prepared By: Carlson SLS Created: May 1, 2021	0 1,250 2,500 5,000 Feet 1 inch = 5,000 feet	Data Sources: Bing Maps	*Global Investments: Hemet 30* **Regional Map**

FIGURE 1



GIS Prepared By:
Carlson SLS

Created: June 28, 2019

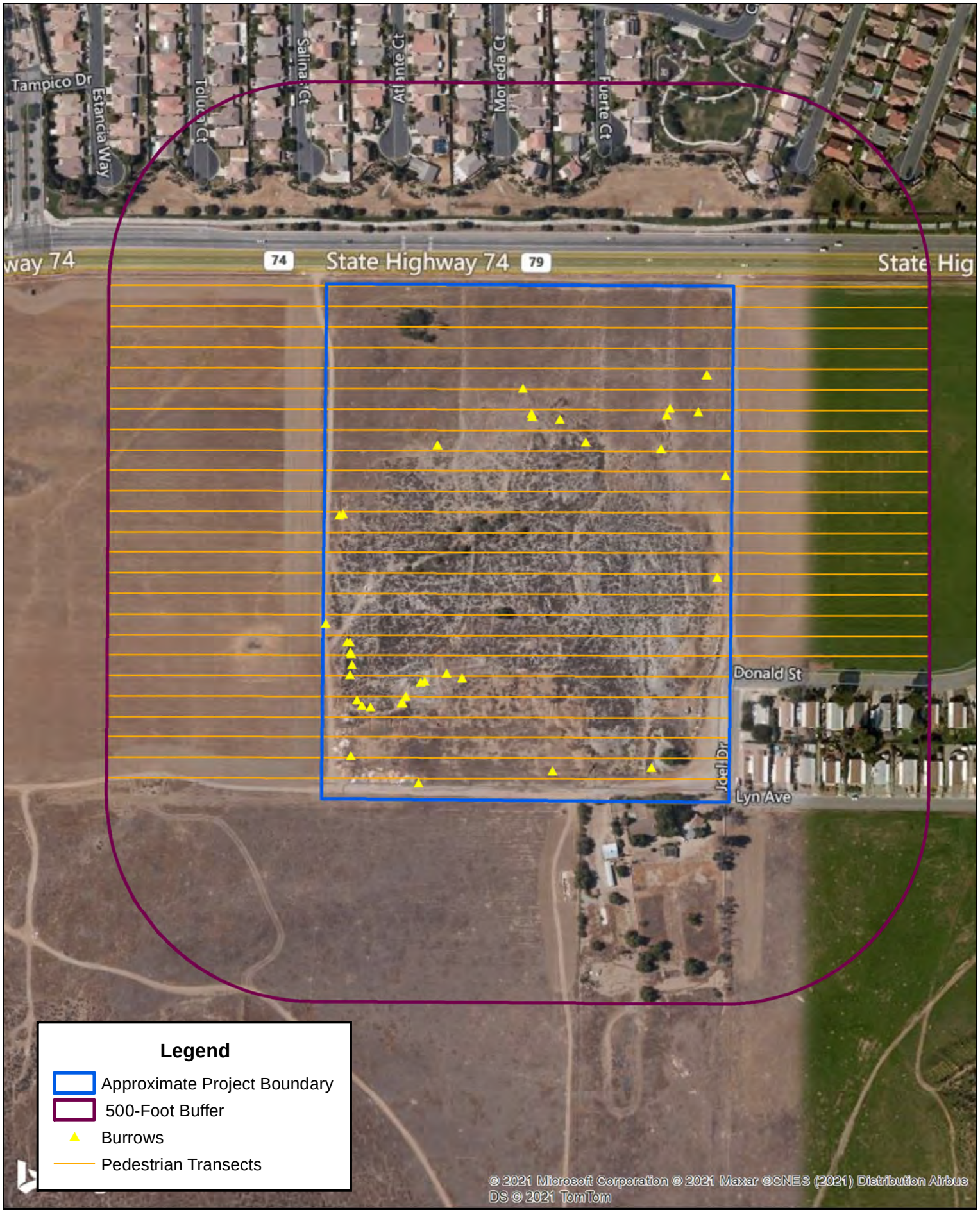
0 50 100 200 300 Feet
1 inch = 300 feet

Data Source: Bing Map

Global Investments: Hemet 30

Study Area Map

FIGURE 2



GIS Prepared By:
Carlson SLS

Created:September 2019

0 37.5 75 150 225 300 Feet
1 inch = 300 feet

Data Source: Bing Map
BUOW Field Surveys

Global Investments: Hemet 30

Transect and Burrow Map

FIGURE 3

Attachment A:
Site Photographs

Looking northeast over the Project site containing suitable BUOW habitat.

Typical size of burrows observed. Each burrow was examined for signs of Burrowing Owl.

Interface between coastal sage scrub and ruderal grasslands.

All rock debris piles were examined for signs of Burrowing Owl.

Looking northeast over the area that appears to be routinely maintained.

Looking south over the suitable burrowing owl habitat.