



Appendix D

Biological Technical Report



MIRO WAY AND AYALA DRIVE DEVELOPMENT PROJECT BIOLOGICAL TECHNICAL REPORT

City of Rialto, California

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1 INTRODUCTION

1.1 PROJECT LOCATION

The Miro Way and Ayala Drive Development Project (project or proposed project) consists of approximately 35 acres in the City of Rialto (City), San Bernardino County, California (Figure 1) within the Renaissance Specific Plan Amendment (RSPA) area. The City encompasses approximately 22 square miles in San Bernardino County. The project site is in the western/central part of the City, approximately 0.65 mile south of State Route (SR) 210. Specifically, the project site is located approximately 450 linear feet north of W Baseline Road, west of N Ayala Drive, east of N Linden Avenue, and south of Miro Way. The site is located within U.S. Geological Survey (USGS) 7.5' quadrangles Fontana and Devore (USGS 2024b).

1.2 PROJECT DESCRIPTION

The approximately 35-acre project site is comprised of Planning Areas 123, 126, and 133. The Project would include the rezone of Planning Area 123 (north of Miro Way) from School to General Commercial with a Residential Overlay. The Project would also include the rezone of Planning Areas 126 and 133 (south of Miro Way) from Park and Employment (with a designated Park Overlay) to Business Center, to allow for an industrial warehouse development. Offsite utility and roadway improvements would extend slightly north of Miro Way and along the right-of-way of Linden Avenue and Ayala Drive at the project frontage. With off-site improvements, the total construction footprint is approximately 27.19 acres.

1.3 EXISTING CONDITIONS

The project site is primarily composed of vacant, undeveloped disturbed habitat, which was historically used as agricultural land. A small area of disturbed Riversidean sage scrub is also present in the central portion of the project site. The topography of the project site is generally flat with minimal change in elevation. Portions of the project site are partially fenced, and gravel piles are located on the southern portion of the project site. Sidewalks and streetlights exist at the project boundary along Ayala Drive and Linden Avenue. Overhead electric utilities are located along the project boundary at Linden Avenue, south of Miro Way. The project site is primarily surrounded by developed land, composed of commercial and industrial properties, paved roads and lots, compacted dirt roads, and disturbed habitat.

1.4 REGULATORY FRAMEWORK

Federal, state, and local agencies have established several regulations to protect and conserve biological and aquatic resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. The regulating agencies make the final determination as to what types of permits are required.

FEDERAL REGULATIONS

Federal Endangered Species Act

The federal ESA of 1973 (16 U.S.C. § 1531 et seq.), as amended, provides for listing of endangered and threatened species of plants and animals and designation of critical habitat for listed species. The ESA regulates the “take” of any endangered fish or wildlife species, per Section 9. As development is proposed, the responsible agency or individual landowner is required to consult with the U.S. Fish and Wildlife Service (USFWS) to assess potential impacts on listed species (including plants) or their critical habitat, pursuant to Sections 7 and 10 of the ESA. USFWS is required to make a determination as to the extent of impact a project would have on a particular species. If it is determined that potential impacts on a species would likely occur, measures to avoid or reduce such impacts must be identified. USFWS may issue an incidental take statement, following consultation and the issuance of a Biological Opinion. This allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties with the development of a habitat conservation plan (HCP); Section 7 provides for permitting of federal projects.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 U.S.C. § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and listed at 50 Code of Federal Regulations (CFR) 10.13. The USFWS enforces the MBTA, which prohibits “by any means or in any manner, to pursue, hunt, take, capture, [or] kill” any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Act of 1899

The Rivers and Harbors Act of 1899 (33 U.S.C. § 401 et seq.) prohibits discharge of any material into navigable waters, or tributaries thereof, of the United States without a permit. The act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the CWA of 1972 (33 U.S.C. § 1251 et seq.), discussed below. However, the 1899 act retains relevance and created the structure under which the U.S. Army Corps of Engineers (Corps) oversees CWA Section 404 permitting.

Clean Water Act

Pursuant to Section 404 of the CWA (33 U.S.C. § 1344), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 CFR 328.3 (88 Federal Register [FR] 61964, September 8, 2023; Revised Definition of “Waters of the United States”; Conforming). The Corps, with oversight from the U.S. Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 permits. Substantial impacts on waters of the U.S. may require an

Individual Permit. Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits.

A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board, provides oversight of the Section 401 certification process in California. The RWQCBs are required to provide Water Quality Certification for licenses or permits that authorize an activity that may result in a discharge from a point source into a water of the U.S. Water Quality Certification authorization "is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements" (40 CFR 121.3).

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA (33 U.S.C. § 1342).

STATE REGULATIONS

California Environmental Quality Act

The CEQA (California Public Resources Code § 21000 et seq.) was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA). CEQA requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, where feasible.

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity, which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

California Endangered Species Act and Natural Community Conservation Planning Act

The California Endangered Species Act of 1984 (CESA; CFGC § 2050 et seq.), in combination with the California Native Plant Protection Act of 1977 (CFGC § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists species of special concern (SSC) based on limited distribution; declining populations; diminishing habitat; or unusual scientific, recreational, or educational value. The California Department of Fish and Wildlife (CDFW) is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

In 1991, the California Natural Community Conservation Planning (NCCP) Act (CFGC § 2800 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. The NCCP program was established "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Lake or Streambed Alteration Agreement Application must be submitted to CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake” (CFGC § 1602). CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3801, 4700, 5050, and 5515

CDFW protects and manages fish, wildlife, and native plant resources within California. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

California Native Plant Protection Act (California Fish and Game Code §§ 1900–1913)

The California Native Plant Protection Act requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. The California Native Plant Protection Act prohibits the take of such plants, with certain exceptions.

California Desert Native Plants Act (California Food and Agriculture Code §§ 80001–80201)

The California Desert Native Plants Act prohibits the removal of certain species of California desert native plants on public and privately owned lands without a valid permit from the sheriff or commissioner of the county where collecting would occur. This act applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code § 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis.

The RWQCBs have primary responsibility for protecting water quality in California. As discussed above, the RWQCBs regulate discharges to surface waters under the CWA. In addition, the RWQCBs are responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline

waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if a Section 404 permit is not required for the activity. “Waste” is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

REGIONAL AND LOCAL PLANS

San Bernardino County, Countywide Policy Plan

The 2020 Countywide Policy Plan outlines countywide goals and policies as they relate to biological resources. Natural Resource (NR) goals and policies applicable to the project include:

Goal NR-5. Biological Resources: An interconnected landscape of open spaces and habitat areas that promotes biodiversity and healthy ecosystems, both for their intrinsic value and for the value placed on them by residents and visitors.

Policy NR-5.1: Coordinated habitat planning. We participate in landscape-scale habitat conservation planning and coordinate with existing or proposed habitat conservation and natural resource management plans for private and public lands to increase certainty for both the conservation of species, habitats, wildlife corridors, and other important biological resources and functions; and for land development and infrastructure permitting.

Policy NR-5.7: Development review, entitlement, and mitigation. We comply with state and federal regulations regarding protected species of animals and vegetation through the development review, entitlement, and environmental clearance processes.

Per the policies outlined in the Countywide Policy Plan, the County reviews land development permits for adequacy in assessing potential impacts on NRs. The Planning Division of the County’s Land Use Services has developed Biotic Resources Overlay Maps to identify sensitive biotic resources that may occur within specific areas of the County. All discretionary permit applications must disclose potential impacts on these identified resources and propose mitigation measures to eliminate or reduce significant impacts.

According to the County’s Biotic Resources Overlay Map, the project site is located within the Burrowing Owl Overlay Zone (County of San Bernardino 2012); the burrowing owl (*Athene cunicularia*) is a candidate species for listing under CESA. Therefore, land development permit applications must include an analysis of potential impacts on burrowing owl and provide proposed mitigation measures, if necessary, to reduce or eliminate such impacts. Though the site does not occur in unincorporated county land, the mapping provides a useful guide for identifying potential habitat for this species. The County’s owl requirements fall within the state requirements and are followed herein.

City of Rialto, General Plan

The biological resource policies outlined in the City’s General Plan that relate to the project can be found in Chapter 2, Managing Our Land Supply: Land Use, Community Design, Open Space and Conservation (City of Rialto 2010).

Policies that may be applicable to the project include:

Policy 2-39.3: Continue to work with the United States Fish and Wildlife Service to adopt a habitat conservation plan to protect viability of the Delhi Sands Flower-loving Fly. Until a habitat conservation plan is established, continue to support the implementation of the existing Delhi Sands Flower-loving Fly Recovery Plan.

Due to the project site's location within the species' range, the potential for Delhi Sands flower-loving fly to occur on site was evaluated, as discussed below.

2 METHODS

Rocks Biological Consulting (RBC) biologists conducted vegetation mapping, habitat assessments for special-status species, and an initial general biological survey on October 11, 2022, as well as a follow-up survey on July 31, 2024. Table 2 lists survey dates and conditions. Additionally, RBC examined the site for the presence of potentially jurisdictional aquatic resources; however, a formal aquatic resources delineation to identify areas that may be considered jurisdictional under the Corps pursuant to Section 404 of the CWA, under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act, and under the CDFW pursuant to Section 1602 of the CFGC, was not conducted.

Table 1. Summary of Surveys Conducted for the Miro Way and Ayala Drive Project

Date	Activity	Surveyor(s)	Time (Start- End)	Temp. (F) (Start- End)	Cloud Cover (%) (Start- End)	Wind Range (mph) (Start; End)
10/11/2022	General biological survey, vegetation mapping, constraints-level aquatic resources assessment	AG, KW	0800-1400	63-73	100-45	0-1; 3-5
2/16/2023	Burrowing owl survey	AG, HS	0700-1030	45-54	5-25	8-12; 12-18
4/26/2023	Burrowing owl survey	AG	0700-0945	53-65	0-0	1-3; 1-3
6/12/2023	Burrowing owl survey	HS, SM	0745-1115	55-62	100-98	3-5; 4-6
7/3/2023	Burrowing owl survey	AG, HS	0915-1200	80-91	0-1	1-3; 1-3
7/11/2024	Crotch's bumble bee survey	AG	0700-1100	71-89	10-15	1-2; 1-3
7/31/2024	General biological survey, vegetation mapping, constraints-level aquatic resources assessment	AG, KW	0830-1100	72-84	0-0	1-3; 1-3
7/31/2024	Crotch's bumble bee survey	AG, KW	0830-1100	72-84	0-0	0-3; 1-3
8/15/2024	Crotch's bumble bee survey	AG, HS	0830-1130	75-88	0-0	1-3; 1-3
AG=Alec Goodman, HS=Hannah Swarthout, KW=Kelsey Woldt, SM=Shannon Mindeman						

The general biological surveys, vegetation mapping, and habitat assessments were conducted within the approximately 35.3-acre project site and a surrounding 100-foot buffer (survey area) for a total of 50.8 acres. The constraints-level aquatic resources assessment was conducted within the project site plus a surrounding 50-foot buffer (review area). Note that buffer areas are included in this analysis to assess the potential for special-status species or resources in areas immediately adjacent to the project site that could be impacted by the project analyzed herein. Such information should not be considered comprehensive for all biological resources or aquatic resources that may occur in buffer areas, and buffer mapping is intended only for the project analysis outlined herein; such information is not intended for impact analysis of any potential future projects within or adjacent to project buffer areas.

2.1 DATABASE SEARCH

Prior to conducting field surveys, existing information regarding biological resources present or potentially present within the project site was obtained through a review of pertinent literature and databases, including, but not limited to:

- CDFW California Natural Diversity Database (CNDDB; CDFW 2024a)
- California Native Plant Society (CNPS) Electronic Inventory (CNPS 2024a)
- USFWS Special-Status Species Database (USFWS 2024a)
- USFWS Information for Planning and Consulting (IPaC) Database (USFWS 2024b)
- USFWS National Wetlands Inventory (NWI) Database (USFWS 2024c)
- USGS National Hydrography Dataset (NHD) Database (USGS 2024a)
- Natural Resources Conservation Service (NRCS) Soils Survey Database (NRCS 2024)

Database results, along with local biological knowledge, were used for assessment of special-status species' potential for occurrence on or adjacent to the project site. The potential for occurrence tables created for the project include federally and state-listed species, candidate species, and other state-designated special-status species that have been reported within three miles of the project site (CDFW 2024a; USFWS 2024a) and determined to be potentially present in the IPaC Database (USFWS 2024b), as well as California Rare Plant Rank (CRPR) 1 and 2 species that occur within the 'Nine Quads' search for the elevational range of the project site: 1,385 to 1,420 feet above mean sea level (amsl; CNPS 2024a). The CNPS 'Nine Quads' search queries the USGS quadrangle in which the project site is located and the surrounding eight quadrangles. The potential for special-status species to occur within the project site was refined by considering the habitat affinities of each species, field habitat assessments, vegetation mapping, and knowledge of local biological resources.

2.2 VEGETATION MAPPING AND GENERAL BIOLOGICAL SURVEYS

On October 11, 2022 and July 31, 2024, RBC biologists conducted vegetation mapping in the field to provide a baseline of the biological resources that occur or have the potential to occur within the project site. RBC conducted vegetation mapping by walking throughout the survey area and mapping vegetation communities on aerial photographs at a 1:2400 scale (1 inch = 200 feet).

The extent of each habitat type (delineated as a habitat polygon on the vegetation maps) was calculated using the Geographic Information System (GIS) application ArcGIS Collector. Habitats were classified based on the dominant and characteristic plant species in accordance with vegetation community classifications outlined in Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). The vegetation communities were also crosswalked with *The Manual of California Vegetation, 2nd Edition* (MCV2; Sawyer et al. 2009), and the equivalent classification is provided.

RBC biologists conducted general biological surveys for plants and wildlife concurrently with vegetation mapping. Photos taken during the general biological surveys are provided in Appendix

A. Plant species encountered during the field survey were identified and recorded in field notebooks. Plant species that could not be identified were brought to the laboratory for identification using the dichotomous keys in the *Jepson Manual* (Baldwin et al. 2012). A list of the vascular plant species observed in the survey area is presented in Appendix B.

RBC conducted habitat assessments for special-status plants during the general biological field surveys. Special-status plant species include those that are: 1) listed or proposed for listing by federal or state agencies as threatened or endangered; 2) CRPR 1 or 2 species (CNPS 2024a); or 3) considered rare, endangered, or threatened by the CDFW (CDFW 2024a) or other local conservation organizations or specialists.

In the state of California, CNPS is a statewide resource conservation organization that has developed an inventory of California's sensitive plant species. The CRPR system is recognized by the CDFW and essentially serves as an early warning list of potential candidate species for threatened or endangered status. The CRPR system is categorized as outlined in Table 3.

Table 2. CRPR Definitions

CRPR	1A	Presumed extirpated in California and rare or extinct elsewhere
	1B	Rare, threatened, or endangered in California and elsewhere
	2A	Presumed extirpated in California but more common elsewhere
	2B	Rare, threatened, or endangered in California but more common elsewhere
	3	Plants for which more information needed
	4	Plants of limited distribution
CRPR Threat Ranks	0.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
	0.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
	0.3	Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Wildlife species were documented during the field survey by sight, calls, tracks, scat, or other signs, and were recorded in field notebooks. Binoculars (10X42 magnification) were used to aid in the identification of wildlife. In addition to species observed during the surveys, expected wildlife use of the project site was assessed based on known habitat preferences of local species and knowledge of their biogeographic distribution in the region. RBC conducted habitat assessments for special-status wildlife during the general biological field surveys. Special-status wildlife species include those that are: 1) listed or proposed for listing by federal or state agencies as threatened or endangered; or 2) considered endangered, threatened, or rare by the CDFW (CDFW 2024b).

A list of wildlife species observed in the project site is presented in Appendix B; scientific and common names of wildlife follow CDFW's Complete List of Amphibian, Reptile, Bird and Mammal

Species in California (CDFW 2016). Twilight/nighttime surveys were not conducted, therefore crepuscular and nocturnal animals are likely under-represented in the project species list; however, habitat assessments were performed for all special-status species to ensure that any potentially present rare species are adequately addressed herein.

If observed, the location of biological resources designated as special-status by the USFWS, CDFW, and/or CNPS, were recorded in field notebooks, on aerial maps, and/or through the use of Global Positioning System (GPS) units.

2.3 SPECIAL-STATUS SPECIES SURVEYS

2.3.1 FOCUSED BURROWING OWL SURVEYS

RBC biologists conducted focused burrowing owl surveys during the breeding season (February 1 – August 31), in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW BUOW Guidelines; CDFW 2012). RBC qualified biologists conducted four burrowing owl surveys during the breeding season; one survey was conducted between February 1 – April 15 and three surveys, at least three weeks apart, were conducted between April 15 and July 15, in accordance with CDFW BUOW Guidelines. Surveys were conducted during favorable weather conditions.

Due to project boundary changes, the burrowing owl survey area consisted of a larger area than the current project site, which included approximately six additional acres to the northwest plus a 500-foot (150-meter) buffer. Surveys were conducted by walking transects spaced approximately 20 meters apart throughout all suitable habitat within the survey area. At the beginning of each transect, and approximately every 100 meters, RBC biologists used binoculars (10x42) to scan the survey area for burrowing owl, active and potential burrows, and/or sign of burrowing owl. Any inaccessible areas of the 500-foot buffer were surveyed with binoculars to greatest extent possible. All observed burrows suitable for burrowing owl occupation were examined for sign, including feathers, pellets, prey remains, whitewash, and/or decoration at or near burrow entrances. Additional details of survey methodology can be found in Appendix C.

2.3.2 CROTCH'S BUMBLE BEE SURVEYS

Focused Crotch's bumble bee surveys were conducted by RBC biologists two to four weeks apart in July and August within the time period when detection of Crotch's bumble bee is greatest. Three surveys were performed in accordance with the CDFW *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023). Surveys were conducted by walking transects through the survey area focusing on areas where ample nectar sources were present, with a minimum of one person-hour of searching per three acres of suitable habitat. Surveyors were prepared to record the location of any observed Crotch's bumble bee, along with population size and nesting status, and to collect non-lethal photo vouchers captured at various angles to confirm accurate identification. All arthropods and potential nectar sources were identified and recorded. Full survey methods, details, and species lists can be found in Appendix D.

2.4 CONSTRAINTS-LEVEL AQUATIC RESOURCES ASSESSMENT

RBC conducted a constraints-level assessment of the review area to identify areas that may be considered potentially jurisdictional under the Corps pursuant to Section 404 of the CWA, the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Act, or CDFW pursuant to CFGC §1602. Areas with depressions, drainage patterns, wetland vegetation, and/or riparian vegetation within the review area were assessed for potential jurisdictional status, with focus on the presence of defined channels, soils, and hydrology. No formal jurisdictional delineation was conducted as part of this effort.

3 RESULTS

This section includes results of the literature review, vegetation mapping, general biological surveys, constraints-level aquatic resources assessment, and focused burrowing owl surveys. Special-status biological resources are also addressed in this section and are defined as follows: 1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened/endangered population sizes; 2) species and their associated habitat types recognized by local and regional resource agencies as sensitive; 3) habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; 4) wildlife corridors and habitat linkages; and/or 5) biological resources that may or may not be considered sensitive, but are regulated under local, state, and/or federal laws.

3.1 PHYSICAL SETTING

The project site is a relatively flat parcel that supports primarily disturbed and developed habitats. A small area of native disturbed Riversidean sage scrub also occur on site. To the north, the project site borders former Rialto Airport land that supports sparse, disturbed native habitat and contains associated disturbances, such as old roads and graded land, and the site currently undergoes regular discing where vegetation remains. To the south, east, and west, the site is surrounded by commercial and industrial development with little to no native habitat.

On-site elevations range from approximately 1,385 to 1,420 feet amsl. Soils mapped on site include Tujunga loamy sand, 0 to 5 percent slopes and Tujunga gravelly loamy sand, 0 to 9 percent slopes (NRCS 2024).

3.2 VEGETATION COMMUNITIES AND LAND USES

The project site supports little diversity in vegetation communities and other land covers. Table 4 provides a summary of vegetation/land cover on the site, which are depicted on Figure 2.

Table 3. Summary of Vegetation/Land Cover Within the Survey Area and Project Site

Vegetation (Holland) ¹	Vegetation ²	Global/State Rank	Survey Area (acres)	Project Site (acres)
Developed	Developed/Disturbed	No Rank	16.2	5.2
Disturbed habitat	Developed/Disturbed	No Rank	33.9	29.4
Disturbed Riversidean Sage Scrub	<i>Eriogonum fasciculatum</i> Shrubland Alliance	G5/S5	0.7	0.7
Total			50.8	35.3

¹ Vegetation communities recognized by Holland (1986)

² Vegetation communities from Holland (1986) crosswalked to Sawyer et al. (2009)

Natural communities with ranks of S1 through S3 are considered sensitive natural communities by CDFW to be addressed in the environmental review processes of CEQA. The project site does not contain habitat that is considered a sensitive vegetation community by CDFW (CDFW 2024c).

Developed

Developed land is typically classified as lands regularly utilized by humans that are devoid of natural habitat. Developed land within the survey area consists primarily of industrial buildings, parking and loading areas, and roads. Developed land on the project site (5.2 acres) is primarily comprised of compacted dirt roads. Ornamental landscaping, such as bottlebrush tree (*Callistemon* sp.), Chinese juniper (*Juniperus chinensis*), holly (*Ilex* sp.), and London plane tree (*Platanus x hispanica*), is present within the developed land on site.

Developed habitat is not recognized by CDFW (CDFW 2024c); therefore, it is not considered a sensitive natural community under CEQA.

Disturbed

Disturbed land is typically classified as land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a plant association (e.g., disturbed Riversidean sage scrub). Disturbed habitat is typically found in vacant lots, along roadsides, within construction staging areas, and in abandoned fields. The habitat is typically dominated by non-native annual species and perennial broadleaf species.

Disturbed habitat occurs within most of the project site (29.4 acres). The site is currently disced for weed abatement multiple times per year. It is primarily vegetated by non-native species such as short-pod mustard (*Hirschfeldia incana*), red brome (*Bromus rubens*), Russian thistle (*Salsola* sp.), and slender wild oat (*Avena barbata*). There are a few scattered native species throughout the disturbed habitat, such as short winged deerweed (*Acmispon glaber* var. *brevialatus*), common sunflower (*Helianthus annuus*), California croton (*Croton californicus*), mule fat (*Baccharis salicifolia*), and Menzies' fiddleneck (*Amsinckia menziesii*); however, they are isolated occurrences and do not function as separate vegetation communities or land cover types.

Disturbed habitat is not recognized by CDFW (CDFW 2024c); therefore, it is not considered a sensitive natural community under CEQA.

Disturbed Riversidean Sage Scrub

Disturbed Riversidean sage scrub is Riversidean sage scrub, a type of coastal scrub community, that has a marked disturbance resulting in an atypical vegetation community. The disturbed Riversidean sage scrub within the project site (0.7 acre) supports small to medium sized woody shrubs dominated by California buckwheat (*Eriogonum fasciculatum*) amongst lower numbers of other sage scrub species, including Spanish lotus (*Acmispon americanus*) and brittlebush (*Encelia farinosa*), and contains an overgrown understory of non-native grasses. Within the project site, disturbed Riversidean sage scrub is found in the northern portion, bordering the road that bisects the project site, as well as a small patch in the southwestern corner (Figure 2).

Riversidean sage scrub is ranked as G5/S5, meaning it is “demonstrably secure because of its worldwide/statewide abundance” (CDFW 2024c); therefore, it is not considered a sensitive natural community under CEQA.

3.3 PLANTS AND WILDLIFE

The project site supports a low diversity of wildlife and plant species. A total of 40 plant species (40 percent native, 60 percent non-native) were observed during the general biological surveys (Appendix B). A total of 35 bird species, one reptile species, three mammal species, and 35 invertebrate species were observed (Appendix B).

3.3.1 SPECIAL-STATUS PLANT SPECIES

No special-status plant species were observed on site and none are expected based on the relatively disturbed nature of the site. Special-status plants assessed for their potential to occur on site are presented in Table 5, below. Please note that CRPR 3 and 4 species were omitted from the potential to occur analysis below due to their relatively low threat status, consistent with standard practice.

No federally or state threatened or endangered plant species or other special-status plant species were observed during the field survey and none have a moderate or high potential to occur within the project site based on the highly disturbed nature of the site and lack of suitable habitat (Table 5). Although there are documented occurrences of special-status plant species within three miles from the project site (Figures 3a and 3b), the significant disturbances on the undeveloped portions of the site make it highly unlikely to support populations of these or other special-status plants, as detailed further in Table 5, below. Please note that special-status plant species with low potential to occur or not expected to occur are not addressed further in this report; because these species have low or no potential for occurrence, no impacts are anticipated on these species.

Table 4. Assessment of Special-Status Plant Species Potential to Occur Within the Project Site

Species	Status	Habitat Description	Potential to Occur
Aparejo grass (<i>Muhlenbergia utilis</i>)	CRPR 2B.2	Perennial rhizomatous herb. Blooms October-May. Chaparral, cismontane woodland, coastal scrub, marshes and swamps, and meadows and seeps. Elevation 80-7,630 feet.	None. Species occurs in wet habitats which are not naturally occurring on site. A detention basin with intermittent surface water occurs adjacent to the project site and within the survey buffer but is unnatural and surrounded by development.
Black bog-rush (<i>Schoenus nigricans</i>)	CRPR 2B.2	Perennial glasslike herb. Blooms August-September. Marshes and swamps. Elevation 490-6,650 feet.	None. Suitable aquatic habitat not present in the vicinity. The detention basin in the project buffer is not suitable for this species.
Bristly sedge (<i>Carex comosa</i>)	CRPR 2B.1	Perennial rhizomatous herb. Blooms May-September. Coastal prairie, marshes and swamps (lake margins), valley and foothill grasslands. Elevation 0-2,050 feet.	None. Suitable aquatic habitat not present in the vicinity. Grassland habitat on site is dominated by invasive species.

Species	Status	Habitat Description	Potential to Occur
California satintail (<i>Imperata brevifolia</i>)	CRPR 2B.1	Perennial rhizomatous herb. Blooms September-May. Chaparral, coastal scrub, meadows and seeps, Mojavean desert scrub, and riparian scrub. Elevation 0-3,985.	None. Suitable aquatic habitat not present in the vicinity. Species occurs in wet springs, meadows, streambanks, and floodplains which are not present in the disturbed scrub habitat on site.
California saw-grass (<i>Cladium californicum</i>)	CRPR 2B.2	Perennial rhizomatous herb. Blooms June-September. Marshes and swamps, and meadows and seeps. Elevation 195-5,250 feet.	None. Suitable aquatic habitat not present in the vicinity. The detention basin in the project buffer is not suitable for this species.
Chaparral ragwort (<i>Senecio aphanactis</i>)	CRPR 2B.2	Annual herb. Blooms January-April. Chaparral, cismontane woodland, and coastal scrub. Elevation 50-2,625 feet.	Low. Native scrub habitat on site is isolated and disturbed, and woodland habitat is not present in the project site or surrounding landscape. Not recently documented within project vicinity (Calflora 2024).
Greata's aster (<i>Symphyotrichum greatae</i>)	CNPR 1B.3	Perennial rhizomatous herb. Blooms June-October. Chaparral, cismontane woodland, and coastal scrub. Elevation 985-6,895 feet.	None. Species occurs in damp canyons which are not present in the native scrub habitat on site.
Horn's milk-vetch (<i>Astragalus hornii</i> var. <i>hornii</i>)	CRPR 1B.1	Annual herb. Blooms May-October. Lake margins, alkaline, meadows and seeps, playas. Elevation 195-2,790 feet.	None. Suitable aquatic habitat not present in the vicinity. The detention basin in the project buffer is not suitable for this species.
Hot springs fimbriatylis (<i>Fimbristylis thermalis</i>)	CRPR 2B.2	Perennial rhizomatous herb. Blooms July-September. Meadows and seeps. Elevation 360-4,395 feet.	None. Suitable aquatic habitat not present in the vicinity. The detention basin in the project buffer is not suitable for this species.
Intermediate mariposa lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	CRPR 1B.2	Perennial bulbiferous herb. Blooms May-July. Chaparral, coastal scrub, valley and foothill grassland. Elevation 345-2,805 feet.	Low. On-site native scrub and grassland habitat is disturbed. Chaparral, coastal scrub, and native grasslands are not found in the surrounding adjacent areas. Not known from project vicinity (Calflora 2024).
La Panza mariposa-lily (<i>Calochortus simulans</i>)	CRPR 1B.3	Perennial bulbiferous herb. Blooms April-June. Chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation 1,065-3,775 feet.	None. Grassland habitat on site is dominated by invasive species and other preferred habitats are not present on site. There are no records of this species in San Bernardino County.

Species	Status	Habitat Description	Potential to Occur
Latimer's woodland gilia (<i>Saltugilia latimeri</i>)	CNPR 1B.2	Annual herb. Blooms March-June. Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Elevation 1,310-6,235 feet.	None. Preferred native scrub and woodland habitats not present on site. Not known from project vicinity (Calflora 2024).
Los Angeles sunflower (<i>Helianthus nuttallii</i> ssp. <i>parishii</i>)	CRPR 1A	Perennial rhizomatous herb. Blooms August-October. Marshes and swamps (coastal salt and freshwater). Elevation 30-5,005 feet.	None. No suitable aquatic habitats present in the vicinity. Species is presumed extinct. Not documented within the project vicinity in 100 years (Calflora 2024).
Mesa horkelia (<i>Horkelia cuneata</i> var. <i>puberula</i>)	CRPR 1B.1	Perennial herb. Blooms February-September. Maritime chaparral, cismontane woodland, and coastal scrub. Elevation 230-2,657 feet.	Low. Native scrub habitat present in the project site is disturbed. Species prefers foothills which are not present on site.
Nevin's barberry (<i>Berberis nevinii</i>)	CNPR 1B.1	Perennial evergreen shrub. Blooms (February) March-June. Chaparral, cismontane woodland, coastal scrub, and Riparian scrub. Elevation 230-2,705 feet.	None. Native scrub habitat present in the project site is disturbed. Occurs in riparian habitat and/or washes that are not present on site. This species would have been observed if present.
Parish's bush-mallow (<i>Malacothamnus parishii</i>)	CRPR 1A	Perennial deciduous shrub. Blooms June-July. Chaparral and coastal scrub. Elevation 1,000-1,495 feet.	None. Native scrub habitat present in the project site is disturbed. This conspicuous perennial shrub would have been observed if present. Species is presumed extinct.
Parish's desert-thorn (<i>Lycium parishii</i>)	CRPR 2B.3	Perennial shrub. Blooms March-April. Coastal scrub and Sonoran desert scrub. Elevation 445-3,280 feet.	None. Native scrub habitat present in the project site is disturbed. Prefers rocky slopes and canyons which are not present on site. This species would have been observed if present.
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	CRPR 1B.1	Annual herb. Blooms April-June. Chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation 900-4,000 feet.	Low. Disturbed native scrub habitat with sandy soil present on site that could support this species; however, repeated disturbance to the site reduces the likelihood of species presence. This species has not been recorded in the vicinity of the project site since 1938 (Calflora 2024). Nearest modern records are from the Lytle Creek Wash approximately two miles northeast of the site (Calflora 2024).

Species	Status	Habitat Description	Potential to Occur
Prairie wedge grass (<i>Sphenopholis obtusata</i>)	CRPR 2B.2	Perennial herb. Blooms April-July. Cismontane woodland, meadows and seeps. Elevation 984-6,561 feet.	None. Woodland habitat not present. Species prefers wet meadows, streambanks, and ponds which are not present on the site.
Prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)	CRPR 1B.2	Annual herb. Blooms April-July. Coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Elevation 10-3,970 feet.	None. Species occurs in alkaline floodplains, vernal pools, and wetland habitats which are not present on site.
Salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	CRPR 2B.2	Perennial herb. Blooms March-June. Chaparral, coastal scrub, lower montane coniferous forests, Mojavean desert scrub, and playas. Elevation 50-5,020 feet.	None. Species occurs in alkaline springs, marshes, and playas which are not present in the vicinity.
San Bernardino aster (<i>Symphyotrichum defoliatum</i>)	CRPR 1B.2	Perennial rhizomatous herb. Blooms July-November. Cismontane woodlands, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernal mesic valley/foothill grasslands. Elevation 7-6,690 feet.	Low. Disturbed native scrub habitat with sandy soil present on site that could support this species; however, repeated disturbance to the site reduces the likelihood of species presence. This species has been recorded within two miles of the site, but the project site is located just outside the estimated species range (CNPS 2024b).
San Diego Ambrosia (<i>Ambrosia pumila</i>)	FE; CRPR 1B.1	Perennial rhizomatous herb. Blooms April-October. Sandy loam or clay soils in chaparral, coastal scrub, valley and foothill grassland, and vernal pools. Elevation 65-1,350 feet.	Very Low. Although disturbed scrub habitats occur on site, there are no records of this species in San Bernardino County.
Sanford's arrowhead (<i>Sagittaria sanfordii</i>)	CRPR 1B.2	Perennial rhizomatous herb. Blooms May-October (November). Marshes and swamps. Elevation 0-2,135.	None. No suitable aquatic habitats present in the vicinity. The detention basin in the project buffer is not suitable for this species.
Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	FE; SE; CRPR 1B.1	Perennial herb. Blooms April-September. Chaparral and coastal alluvial fan scrub. Elevation 298-2,000 feet.	None. Species occurs in washes, floodplains, and dry riverbeds which are not present in the scrub habitats on site.

Species	Status	Habitat Description	Potential to Occur
Short-joint beavertail (<i>Opuntia basilaris</i> var. <i>brachyclada</i>)	CRPR 1B.2	Perennial stem. Blooms April-June (August). Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Elevation 1,395-5,905.	None. No suitable native habitats present in the vicinity.
Singlewhorl burrowbush (<i>Ambrosia monogyra</i>)	CRPR 2B.2	Perennial shrub. Blooms August-November. Chaparral, Sonoran desert scrub. Elevation 35-1,640 feet.	None. Occurs in washes and riverbeds which are not present on site.
Slender-horned spineflower (<i>Dodecahema leptoceras</i>)	FE; SE; CRPR 1B.1	Annual herb. Blooms April-June. Chaparral, cismontane woodland, alluvial fan coastal scrub. Elevation 655-2,490 feet.	Very Low. No suitable native habitats present in the vicinity. This species has not been documented within the project vicinity in 100 years (Calflora 2024).
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	CRPR 1B.1	Annual herb. Blooms April-September. Chenopod scrub, meadows and seeps, playa, riparian woodland, valley and foothill grassland. Elevation 0-2,100 feet.	Low. Project site contains disturbed habitat. This species is tolerant of some disturbance; however, the on-site grassland and disturbed land have undergone extensive anthropogenic alterations (e.g., weed abatement, inactive agriculture, infill and leveling) that reduce the likelihood of this species' occurrence.
Southern mountains skullcap (<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>)	CRPR 1B.2	Perennial rhizomatous herb. Blooms June-August. Chaparral, cismontane woodland, lower montane coniferous forest. Elevation 1,395-6,560 feet.	None. No suitable native habitats present in the vicinity.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	CRPR 1B.1	Perennial bulbiferous herb. Blooms March-June. Chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Elevation 80-3,675 feet.	Low. Native scrub and grassland habitats occur on site; however, they are highly disturbed. Weed abatement practices, such as disking, occur regularly which results in upturned and tilled soils that have a detrimental impact on bulbiferous species, which rely on underground bulbs to store energy. Not known from project vicinity (Calflora 2024).

Species	Status	Habitat Description	Potential to Occur
White rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>)	CRPR 2B.2	Perennial herb. Blooms (July) August-November (December). Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation 0-6,890 feet.	Low. Species occurs on sandy or gravelly benches and is known to occur in disturbed sand; however, this species is most commonly associated with washes, streams, and canyon bottoms, which are not found on site. Not known from project vicinity (Calflora 2024).
White-bracted spineflower (<i>Chorizanthe xanti</i> var. <i>leucotheca</i>)	CRPR 1B.2	Annual herb. Blooms April-June. Coastal scrub, Mojavean desert scrub, pinyon and juniper woodland. Elevation 985-3,935 feet.	Low. Species occurs in sand and gravel in native scrub habitats which are present, though disturbed, on site. This species is primarily known from the San Jacinto and San Bernardino Mountains and has not been recorded within the vicinity of the project site (Calflora 2024).
FE: Federally Endangered SE: State Endangered CRPR: California Rare Plant Rank			

3.3.2 SPECIAL-STATUS WILDLIFE SPECIES AND CRITICAL HABITATS

Nine special status species were observed during the general biological surveys and focused burrowing owl surveys, as detailed below, and three additional species have a low-to-moderate or moderate potential to occur on site. A full list of special-status wildlife assessed and their potential to occur on site is presented in Table 6, below.

Table 5. Assessment of Special-Status Wildlife Species Potential to Occur Within the Project Site

Species	Status	Habitat Description	Potential to Occur
INVERTEBRATES			
Crotch's bumble bee (<i>Bombus crotchii</i>)	SE (Candidate)	Arid shrublands and grasslands in coastal and foothill areas of southern California. Nectar plants include milkweeds, buckwheat, and lupines.	Absent/Low-to-Moderate. Focused surveys conducted in 2024 were negative for Crotch's bumble bee; however, this species changes nesting locations each year and potential for future site inhabitation is low-to-moderate. This species can persist in semi-natural habitats surrounded by intensely modified landscapes, such as the sparse disturbed buckwheat scrub habitat within the project site, and inhabits abandoned rodent burrows (NatureServe 2024).
Delhi Sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>)	FE	Found in sandy areas composed of Delhi fine sands, stabilized by sparse native vegetation.	Very Low. Delhi fine sands are not present on or in the immediate vicinity of the project site; on-site soils are Tujunga loamy sands, which are not suitable habitat for this species.

Species	Status	Habitat Description	Potential to Occur
Monarch butterfly, California overwintering population (<i>Danaus plexippus plexippus</i> pop. 1)	FE (Candidate)	Found in a variety of habitats across the United States and Mexico (e.g., grasslands, urban land, mountains, and coastal habitats). Exclusively oviposit on milkweed. Nectivorous adults require flowering plants. Roost in eucalyptus, Monterey pines, and Monterey cypresses in California.	Present; potential for overwintering is low. Observed on site during general biological survey on October 11, 2022. No milkweed observed; thus, the site does not have potential to support reproduction. Eucalyptus grove exists in survey area on the eastern boundary but is unlikely to provide the necessary conditions for a suitable overwintering site, which require protection from high wind and storms, absence of freezing temperatures, varying levels of sunlight, high humidity, and the presence of water.
FISH			
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT	Found in small permanent streams.	None. Suitable aquatic habitats do not occur within the project site.
REPTILES			
California glossy snake (<i>Arizona elegans occidentalis</i>)	SSC	Found in arid scrub, rocky washes, grasslands, and chaparral habitats. Prefers habitats containing open areas and loose soils for burrowing.	Low. Disturbed scrub habitat on site is marginally suitable for this species. Loose soils suitable for burrowing occur on site.
Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	SSC	A variety of rocky, sandy, dry habitats including sage scrub, chaparral, woodlands on friable loose soil.	Moderate. Disturbed scrub habitat on-site is marginally suitable for this species.
Coast horned lizard (<i>Phrynosoma blainvillii</i>)	SSC	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub. Requires open areas, bushes, and fine loose soil.	Moderate. Sandy and friable soils are present in the disturbed scrub habitat on site which is marginally suitable for this species. Harvester ants, the primary diet of the species, are also present on site.

Species	Status	Habitat Description	Potential to Occur
Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	WL	A variety of habitats including sage scrub, chaparral, and coniferous and broadleaf woodlands. Found on sandy or friable soils with open scrub.	Very low. Disturbed scrub habitat on-site is marginally suitable for this species. Species prefers washes, stream sides, rocky hillsides which are not present on site.
Southern California legless lizard (<i>Anniella stebbinsi</i>)	SSC	Found in a variety of habitats including coastal dunes, sandy washes, and alluvial fans, containing moist, loose soils.	Low. Disturbed scrub habitat on-site is marginally suitable for this species. Leaf litter under shrubs and loose sandy soils present on site.
Southern rubber boa (<i>Charina umbratica</i>)	SE	Found in oak-conifer and mixed-conifer forests at elevations between roughly 5,000 to 8,200 feet. where rocks and logs or other debris provide shelter.	Very Low. Suitable habitat not present; project site is outside elevation range.
BIRDS			
American Peregrine falcon (<i>Falco peregrinus anatum</i>)	Delisted	Found in open country, cliffs (mountains to coast), sometimes cities. Over its wide range, found in wide variety of open habitats, from tundra to desert mountains. Often near water, especially along coast, and migrants may fly far out to sea.	Present; no potential for nesting. Species observed foraging north of the project site during general biological project survey on October 11, 2022. Suitable nesting habitat is not present on site.

Species	Status	Habitat Description	Potential to Occur
Burrowing owl (<i>Athene cunicularia</i>)	SE (Candidate)	Found in grasslands and open scrub from coast to foothills. Strongly associated with California ground squirrel and other fossorial mammal burrows.	Present/Moderate. Small mammal burrows occur within the project site including California ground squirrel burrow complexes. This species is known to occur within the general area and has been historically recorded at the Rialto Airport within 500 feet of the project site. Observed on site during focused burrowing owl surveys.
California condor (<i>Gymnogyps Californianus</i>)	FE; SE; FP	Found in rocky scrubland, coniferous forest, and oak savannah. Nest near cliffs or large trees in forested mountain regions up to about 6,000 feet elevation. Foraging areas are in open grasslands and can be far from primary nesting sites.	Very Low. Suitable nesting sites are not present. Although scrubland such as that found on site can be utilized for foraging, the on-site habitat is isolated from other native habitats by surrounding development and unlikely to support condor foraging.
California gull (<i>Larus californicus</i>)	WL	Found foraging in pastures or parking lots and breeding along inland lakes and rivers.	Present; no potential for nesting. Species observed during focused burrowing owl surveys. Foraging habitat is present; however, roosting and nesting habitat is absent.
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT; SSC	Found in sage scrub habitats, often on slopes. Nests in shrubs including sagebrush, buckwheat, and sage. Diegan coastal sage scrub and other similar open scrub habitats in coastal areas, with most populations occurring below 1,500 feet in elevation.	Low. Isolated patches of buckwheat scrub are present surrounded by large areas of disturbed habitat. Amount of suitable shrub habitat on and near the site are not large enough to support individuals of this species.
California horned lark (<i>Eremophila alpestris actia</i>)	WL	Found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline. Also seen in coniferous or chaparral habitats.	Present. Species observed on site during general biological survey on October 11, 2022, and during focused burrowing owl surveys on June 12 and July 3, 2023.

Species	Status	Habitat Description	Potential to Occur
Golden eagle (<i>Aquila chrysaetos</i>)	FP, WL	Found in open and semi open country featuring native vegetation across most of the northern hemisphere. Nest on cliffs and steep escarpments in grassland, chaparral, shrubland, forest, and other vegetated areas.	Present; no potential for overwintering or nesting. Species observed circling high above the site during general biological survey on October 11, 2022. Suitable nesting and overwintering habitat is not present on site.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE; SE	Riparian woodland with understory of dense young willows or mulefat and willow canopy. Nests often placed along internal or external edges of riparian thickets.	Very Low. Suitable habitat does not occur within the project site.
Loggerhead shrike (<i>Lanius ludovicianus</i>)	SSC	Found within grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Present. Species observed foraging on site during general biological survey on October 11, 2022. The site has limited suitable nesting habitat.
Merlin (<i>Falco columbarius</i>)	WL	Found in edges of grasslands and deserts. In open country, clumps of trees or windbreaks are required for roosting.	Present; no potential for nesting. Species observed during focused burrowing owl surveys. Foraging habitat is present; however, roosting habitat is absent, and this species is not known to nest in California.
Prairie falcon (<i>Falco mexicanus</i>)	WL	Found in desert shrubland and grasslands. Primarily forage in grassland habitats.	Present; no potential for nesting. Species observed during focused burrowing owl surveys. Foraging habitat is present; however, roosting and nesting habitat is absent.

Species	Status	Habitat Description	Potential to Occur
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT; SE	Western yellow-billed cuckoo inhabits riparian areas exclusively, typically nesting in low to moderate elevation riparian woodlands with native broadleaf trees. The species is generally observed in cottonwood-willow-dominated habitats, although riparian cover can vary. In California, habitat often consists of willow species and Fremont cottonwoods (<i>Populus fremontii</i>).	Very Low. Suitable habitat does not occur within the project site; tree species typically associated with this species are not present.
Southwestern willow flycatcher (<i>Empidonax traillii</i>)	FE; SE	Found in in thick riparian areas with willows near standing or running water.	Very Low. No suitable habitats present; riparian vegetation is not found within the project site.
MAMMALS			
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	SSC	Found in low elevation grassland, alluvial sage scrub, and coastal sage scrub.	Very low. Non-native grassland and disturbed scrub on site are marginally suitable for this species. Frequent disturbance and surrounding development make it unlikely for this species to occur. This species occurs sparingly in, or is absent from, many historic localities in the San Bernardino valley (Brylski 1998).
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	SSC	Inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities.	Very low. Non-native grassland and disturbed scrub on site are marginally suitable for this species. Frequent disturbance and surrounding development make it unlikely for this species to occur.
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	SSC	Rugged cliffs, rocky outcrops, and slopes in desert shrub and pine oak forests.	Very Low. Suitable habitat does not occur within the project site; cliffs and outcrops are not present.

Species	Status	Habitat Description	Potential to Occur
San Bernardino kangaroo rat (<i>Callospermophilus lateralis bernardinus</i>)	FE, SE, SSC	Found along floodplains, washes and alluvial fans in scrub and chaparral habitats. Soft soil required to burrow.	Very low. Scrub habitat occurs on site, however it is disturbed, surrounded by development, and impacted by regular weed abatement that alters the soil structure and vegetation. Critical habitat for the species occurs less than two miles from the site in Lytle Creek Floodway, which is also the location of the nearest suitable floodplains and washes. Development occurs between designated critical habitat and project site.
Western yellow bat (<i>Lasiurus xanthinus</i>)	SSC	Occupies a range of habitats in arid and dry areas. Inhabits secluded woodlands, agricultural lands, and sometimes even residential areas.	Very Low. Suitable habitat does not occur within the project site. Species prefers trees over three meters (10 feet) in height, which occur outside of the project area, but within the survey area. All trees over three meters in height are eucalyptus, which is not a primary roosting tree for this species.
FE: Federally Endangered FT: Federally Threatened FP: CDFW Fully Protected SE: State Endangered ST: State Threatened SSC: CDFW Species of Special Concern WL: CDFW Watch List Species			

3.3.2.1 Threatened and Endangered Wildlife Species

Burrowing Owl (Athene cunicularia)

Burrowing owl is currently a candidate for listing under the CESA as of October 10, 2024. Suitable burrowing owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable burrowing owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat; both natural and artificial burrows provide protection, shelter, and nests for burrowing owl (Henny and Blus 1981). Burrowing owl typically use burrows made by rodents, such as ground squirrels or badgers, but may also use human-made structures, such as concrete culverts; concrete, asphalt, or wood debris piles; or openings beneath concrete or asphalt pavement.

Burrowing owls have declined throughout much of their range because of habitat loss due to urbanization, agricultural conversion, and destruction of ground squirrel colonies (Remsen 1978). The incidental poisoning of burrowing owls and the destruction of their burrows during eradication programs aimed at rodent colonies have also caused their decline (Collins 1979; Remsen 1978). Although burrowing owl are relatively tolerant of lower levels of human activity, human-related impacts, such as shooting and introduction of non-native predators, have negative population impacts. Burrowing owl often nest and perch near roads where they are vulnerable to roadside shooting, fatal car strikes, and general harassment (Remsen 1978).

The project is within the Burrowing Owl Overlay Zone (County of San Bernardino 2012). Burrowing owl has historically bred in the local area (RBC 2016, eBird 2021) and suitable burrows are present throughout the project site; however, the project site is surrounded by development which limits foraging opportunities in the immediate vicinity. Focused burrowing owl surveys were conducted for the project site plus a 500-foot buffer in 2023 and though two individual burrowing owls were observed during the first survey (Figure 2), no burrowing owls, active burrows or burrowing owl sign were documented within the project site during subsequent surveys. The absence of burrowing owl during the peak breeding season suggests that the project site is not currently used by burrowing owl for nesting. The site appears to be used by burrowing owl for refuge and/or foraging outside of the nesting season. Full survey results can be found in Appendix C. Note that surveys were conducted before candidacy status, and the report classifies the burrowing owl as a species of special concern, reflecting its status at the time.

Burrowing owl has moderate potential to occur within the project site in the future based on its range, ability to establish in disturbed habitats, previous presence on site, and presence of suitable burrows.

Crotch's Bumble Bee (Bombus crotchii)

Crotch's bumble bee is currently a candidate for listing under the CESA based on a 2018 petition submitted by the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety (CDFW 2022). This species historically ranged from central California to Baja California Del Norte, though recent records indicate a reduction at longitudinal extremes, with most observations occurring in southern California (Thorp et al. 1983; NatureServe 2024; Williams et al. 2014). Largely absent from mountainous regions, Crotch's bumble bee is distributed from the coast, east to the desert edge (Thorp et al. 1983; Williams et al. 2014). Suitable habitat for this species includes a variety of open shrub and grassland vegetation communities containing ample flowers for nectaring. Due to their short tongue, Crotch's bumble bees tend to nectar on *Acmispon* spp., *Antirrhinum* spp., *Asclepias* spp., *Chaenactis* spp., *Cirsium* spp., *Clarkia* spp., *Cordylanthus* spp., *Dendromecon* spp., *Ehrendorferia* spp., *Eriogonum* spp., *Eschscholzia* spp., *Euthamia* spp., *Hypericum* spp., *Keckiella* spp., *Lantana* spp., *Lupinus* spp., *Medicago* spp., *Monardella* spp., *Phacelia* spp., *Salvia* spp., *Trichostema* spp., and/or *Vicia* spp., amongst a variety of other genera (Williams et al. 2014). Though Crotch's bumble bee is tolerant of fragmented and/or semi-urban environments, habitat loss, climate change, and pesticide use are considered imminent threats to populations (Williams et al. 2014; CDFW 2022).

Although Crotch's bumble bee has not been recorded within three miles of the project site, the species has been documented in the regional vicinity in recent years (Bumble Bee Watch 2024). Potentially suitable, though disturbed, Riversidean sage scrub habitat is present along the boundaries of the project site. Although restricted on three sides by developed land, habitat appropriate for Crotch's bumble bee was dominated by California buckwheat, short-pod mustard, deerweed, and doveweed (*Croton setiger*). Focused surveys conducted in 2024 were negative for Crotch's bumble bee. This species changes nest sites each year; therefore, the potential for this species to occur within the project site in the future is low-to-moderate due to the presence of suitable habitat and nectar sources.

Monarch, California Overwintering Population (Danaus plexippus plexippus pop. 1)

The California overwintering population of monarch is currently a candidate for listing under the FESA. The California overwintering population range extends from northern Baja California, Mexico, to Mendocino County, California. Overwintering sites require specific conditions including protection from high wind and storms, absence of freezing temperatures, varying levels of sunlight, high humidity, and the presence of water. Most of the California overwintering population cluster on non-native blue gum eucalyptus trees (*Eucalyptus globulus*), but they will also utilize native trees. Threats to this population include loss of suitable overwintering habitat from development, tree trimming, fire and fire management, tree disease, as well as herbicide, pesticide, and climate change.

One monarch butterfly was observed foraging on the project site during biological surveys (Figure 2). Host plants were not observed and no colonial roosting monarchs were observed. A eucalyptus grove exists north of the survey area on the eastern boundary but is unlikely to provide the necessary conditions for a suitable overwintering site. Most of the overwintering sites are located within 1.5 miles of the Pacific Ocean which provides the mild climactic conditions needed for monarchs to survive the winter. The project site is roughly 50 miles from the coast, therefore does not provide the suitable microclimatic conditions that are often found at sites consisting of roost trees (The Xerces Society for Invertebrate Conservation 2016). Based on these site conditions, the potential for this species to overwinter on site is low.

3.3.2.2 Wildlife Species of Special Concern and Watch List Species

American Peregrine Falcon (Falco peregrinus anatum)

American peregrine falcon is delisted from the ESA and CESA and is no longer considered a CDFW Fully Protected (FP) species (CDFW 2024b). Its range extends across much of North America inhabiting tundra, savannas, coasts, mountains, wetlands, and cities. This species primarily preys upon birds. Typical prey includes shorebirds, waterfowl, pigeons, and songbirds; however, at least 450 North American bird species have been documented as peregrine falcon prey. They also hunt bats and will pirate fish and rodents from other raptor species (White et al. 2002). Peregrine falcons nest on cliffs and manmade structures such as tall buildings, bridges, and transmission towers. They do not build nests and instead "scrape" the nest ledge to create a shallow depression; however, they will occasionally use abandoned raven, osprey, bald eagle, red-tailed hawk, or cormorant nests when cliffs are unavailable (White et al. 2002).

American peregrine falcon was once a species of great conservation concern. The number of known breeding pairs had dropped by 95% from the early 1900s to 1970 due to habitat loss and the widespread use of the pesticide DDT, which caused eggshell thinning and thus failed nesting attempts. The species was listed as endangered under the FESA in 1970 and the CESA in 1971 (CDFW 2024e). Due to the banning of DDT in 1972 and widespread recovery efforts, American peregrine falcon has recovered across its range and was delisted by USFWS in 1999 and CDFW in 2009.

One American peregrine falcon was observed hunting north of the project site during the general biological survey on October 11, 2022; however, no suitable nesting habitat is present on site.

California Horned Lark (Eremophila alpestris actia)

California horned lark is a CDFW Watch List (WL) species found from coastal deserts and grasslands to alpine dwarf-shrub habitat above tree line, and in coniferous or chaparral habitats. It is a common to abundant resident in a variety of open habitats, usually found in habitats where trees and large shrubs are absent. Within southern California, California horned larks nest on the ground in open fields, grasslands, and rangelands. Horned larks forage in areas with low-growing vegetation and feed primarily on grains and other seeds, shifting to mostly insects in the summer months. California horned lark breeds from March through July, with a peak in activity in May. Pairs do not maintain territories outside of the breeding season and instead form large gregarious, somewhat nomadic flocks.

Threats to California horned lark include habitat destruction and fragmentation. Habitats preferred by California horned lark are easily converted to other landscapes and human uses such as farmland and development. Pesticides have also been shown to poison and kill horned larks (Beason 1995). As a ground nester, California horned lark is vulnerable to mowing in a variety of habitats and pesticide use in agricultural fields.

California horned lark were observed foraging on the project site during biological surveys.

California Gull (Larus californicus)

The California gull is a CDFW WL species and USFWS Bird of Conservation Concern when in a nesting colony. California gulls can be found foraging in pastures, scrublands, and garbage dumps miles from their nesting colonies which occur primarily on islands and levees in lakes and rivers (Cornell Lab of Ornithology 2019).

California gull was observed flying over the site during focused burrowing owl surveys. Suitable foraging habitat is present; however, suitable habitat for nesting colonies does not occur within the project site.

Coastal Whiptail (Aspidoscelis tigris stejnegeri)

The coastal whiptail is a CDFW SSC. This subspecies is found west of the Peninsular Ranges, south of the Transverse Ranges, and north into Ventura County and ranges south into Baja California, Mexico. Suitable coastal whiptail habitat can be found in rocky, sandy, dry habitats including sage scrub, chaparral, woodlands, and riparian areas on friable loose soil.

Threats to this species are habitat degradation and destruction. Isolated populations are separated by development and are unlikely to cross highways or densely urbanized areas. However, species of this family typically have home ranges less than 2.5 acres (Anderson 1993); therefore, the small patch of suitable scrub habitat, though disturbed, could support this species. Coastal whiptail was not observed during project general biological surveys; however, it has a moderate potential to occur on site based on suitable habitat.

Coast Horned Lizard (Phrynosoma blainvillii)

Coast horned lizard is a CDFW SSC and ranges from Shasta County, south to northern Baja California, Mexico in scattered populations. The coast horned lizard inhabits grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. In southern California, the species is most often found where its prey, native ants, are present, and little to no invasive Argentine ants (*Linepithema humile*) are found, as these are not a suitable replacement food source (Suarez et al. 2000).

Threats to this species include habitat loss and fragmentation, and the spread of invasive ants displacing its native ant prey. Suitable disturbed native scrub habitat and native harvester ants, a suitable prey item, were observed on site. This species was not observed within the survey area during biological surveys; however, given this species' small home ranges and sedentary habits, the site has a moderate potential to support this species.

Golden Eagle (Aquila chrysaetos)

Golden eagle is a CDFW FP species and a CDFW WL species when overwintering. Golden eagle ranges from northern Mexico into Canada and Alaska in North America. The species generally inhabits open and semi-open habitats including prairie, sagebrush, alpine tundra, sparse woodland, and barren areas. They primarily nest on rock ledges and cliffs, but will also use trees, steep hillsides, or the ground.

Threats to this species include electrocution from powerlines, ingestion of poison from its prey, toxic water ingestion, habitat degradation and loss of prey from development, and collisions with structures and vehicles. This species is known to avoid large urban areas (USFWS 2011) like those surrounding the project.

One golden eagle was observed flying high near the project site during the general biological survey on October 11, 2022; however, potential overwintering or nesting habitat does not occur on the project site and the species is also not likely utilizing the site as a hunting ground. In addition, suitable nesting sites do not occur within the vicinity of the project site.

Loggerhead Shrike (Lanius ludovicianus)

Loggerhead shrike is a CDFW SSC when nesting. This species is a non-migratory year-round resident in southern California. Loggerhead shrikes prefer open habitat, typically with short vegetation and scattered shrubs. This species consumes a diet mainly consisting of insects but also feeds on reptiles, birds, and small mammals. Loggerhead shrikes use a feeding technique where the bird impales prey on spines or thorns of shrubs. Thus, loggerhead shrike suitable habitat requires vegetation with spines or thorns (Yosef 1996), or artificial objects such as barbed wire.

Leading causes of decline for this species include urban development and ingestion of pesticide-laden prey. Loggerhead shrike numbers are still fairly large across North America; however, the species has dramatically declined over the past century (Yosef 1996).

One loggerhead shrike was observed foraging along a chain link fence in the northern portion of the project site during biological surveys (Figure 2).

Merlin (Falco columbarius)

Merlin is a CDFW WL species and uncommon winter migrant in the low elevations of California (i.e., less than 3,900 feet). Merlin prefers coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, deserts, and herbaceous stage habitats. This species relies on a diet primarily comprised of small birds and occasionally preys on insects and small mammals. Shorelines act as particularly important hunting grounds during winter months.

Merlin experienced stark population declines from pesticide use prior to environmental legislation in 1972. Since the ban of harsh pesticides, populations have increased slowly, though sightings in southern California are still considered rare (Zeiner et al. 1990).

Merlin was observed flying over the project site during focused burrowing owl surveys. The project site supports non-native grasslands suitable for merlin foraging and is within the elevational range preferred by this species. However, suitable roosting habitat is not present, and this species is not known to nest in California.

Prairie Falcon (Falco mexicanus)

Prairie falcon is a CDFW WL species. It ranges from southeastern desert northwest through the Central Valley. Typical habitats include annual grasslands, savannahs, agricultural fields, and desert scrub. They primarily nest in natural crevices or ledges on steep bluffs and cliffs up to 11,000 feet (Cornell Lab of Ornithology 2019).

Prairie falcon was observed flying over the project site during focused burrowing owl surveys. Suitable foraging habitat is present throughout the site. However, suitable nesting habitat for prairie falcon does not occur within the project site and this species is not anticipated to nest on site.

3.3.2.3 Critical Habitat

The ESA defines critical habitat as a specific geographic area, or areas, that contains features essential for the survival and recovery of endangered and threatened species. USFWS designates critical habitat for endangered and threatened species and may include sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat may also include areas that are not currently occupied by the species, but that will be needed for its recovery.

No USFWS designated critical habitat occurs within or immediately adjacent the project site, or within one mile of the project site (Figure 3a).

3.4 WILDLIFE CORRIDORS

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat (Ogden Environmental and Energy Services 1996). Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Corridors can consist of large, linear stretches of connected habitat (such as riparian vegetation) or as a sequence of stepping-stones across the landscape (discontinuous areas of habitat such as wetlands and ornamental vegetation), or corridors can be larger habitat areas with known or likely importance to local fauna.

Regional corridors are defined as those linking two or more large patches of habitat, and local corridors are defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development (Ogden Environmental and Energy Services 1996). A viable wildlife migration corridor consists of more than an unobstructed path between habitat areas. Appropriate vegetation communities must be present to provide food and cover for both transient species and resident populations of less mobile animals. There must also be a sufficient lack of stressors and threats within and adjacent to the corridor for species to use it successfully.

The project site does not function as part of a wildlife corridor. Based on a review of the CDFW Biogeographic Information and Observation System data, no wildlife movement corridors are mapped within the project site (CDFW 2024d). The land within and around the project site is designated as Rank 1, "Limited Connectivity Opportunity", which is the lowest rank within the Terrestrial Connectivity, Areas of Conservation Emphasis (ACE) dataset (CDFW 2024d). The project site is composed primarily of undeveloped areas that are highly disturbed and surrounded by development. No large areas of native vegetation are contiguous with the disturbed habitat on site, nor do such areas of native habitat occur in proximity to the project site. Cumulatively, the project site and other undeveloped isolated lots in the project vicinity are unlikely to be used by wildlife species as refuge between larger areas of naturally occurring habitat.

3.5 POTENTIAL FEDERAL AND STATE JURISDICTIONAL AQUATIC RESOURCES

No aquatic resources were identified within the project site and 50-foot buffer during desktop review of the NWI and NHD databases. During the constraints-level aquatic resources assessment, no aquatic resources potentially jurisdictional per the Corps, RWQCB, and/or CDFW were observed within the project site.

A concrete v-ditch adjacent to the Valley Power Systems commercial development occurs immediately off site to the north and runs directly parallel to the northern boundary of the project site (Figure 2, D-1; Appendix A, Photo 11). The v-ditch appears to collect and convey stormwater east from the associated commercial development to the street gutter on North Fitzgerald Avenue. RBC observed sediment within the unvegetated concrete v-ditch.

Based on the lack of hydrophytic vegetation within the off-site concrete v-ditch, this feature is not anticipated to meet the appropriate wetland parameters to qualify as wetland waters of the

U.S./state per the Corps and the RWQCB or associated wetlands potentially jurisdictional by the CDFW. The concrete v-ditch would also not qualify as non-wetland waters of the U.S. per the Corps as the concrete v-ditch appeared excavated in uplands (i.e., did not relocate natural drainages or excavated tributaries) based on the field assessment and an initial review of Google Earth aerial imagery (Figure 4). Thus, based on the current definition of “waters of the U.S.,” the concrete v-ditch should be considered a ditch “excavated wholly in and draining only dry land” that does “not carry a relatively permanent flow of water” (33 CFR 328.3 (b)(3)).

However, the off-site concrete v-ditch may qualify as a non-wetland water of the state jurisdictional per the RWQCB. Although it is a maintained artificial structure functioning as localized stormwater runoff conveyance this feature continues into a culvert that may have downstream connectivity; as such, discharge of fill into the concrete v-ditch could have “detrimental impacts downstream within the watershed” (J. Bill [RWQCB], personal communication, August 2, 2019). As such, the concrete v-ditch may qualify as a non-wetland water of the state jurisdictional per the RWQCB.

The concrete v-ditch would likely not qualify as a jurisdictional streambed per the CDFW, as the concrete ditch did not replace a natural feature/streambed, lacked association with a natural feature/streambed, and did not support wildlife habitat (CFGC § 1602 – 1603).

The survey area also supports one swale (Figure 2, S-1; Appendix A, Photo 12) that is not expected to be jurisdictional by the Corps, RWQCB, or CDFW since it did not display an observable OHWM, bed and bank, or other evidence of conveying regular flows on site.

The survey area also supports one vegetated, earthen-bottom detention basin west of the project site. Standing water was observed within the detention basin during the constraints-level aquatic resources assessment and vegetation mapping on October 11, 2022 but was not observed with standing water during subsequent site visits. The detention basin would likely not qualify as jurisdictional by the Corps, RWQCB, or CDFW as the basin is a maintained artificial structure.

Please note that in order to receive an official determination from the Corps and concurrence from the RWQCB and the CDFW related to potential aquatic resources, (i.e., that the project site does not support jurisdictional aquatic resources occur), a project-specific aquatic resources delineation and reporting per Corps, RWQCB, and CDFW standards and guidelines and further coordination with the resource agencies would be required. RBC does not believe such reporting and coordination is warranted for this site unless requested by the local permitting jurisdiction or by the regulatory agencies.

4 IMPACT ANALYSIS

Direct impacts are caused by the project and occur at the same time and place as the project. Any alteration, disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Direct impacts would include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; and diverting natural surface water flows. Direct impacts could include injury, death, and/or harassment of listed and/or special-status species. Direct impacts could also include the destruction of habitats necessary for species breeding, feeding, or sheltering. Direct impacts on plants can include crushing of adult plants, bulbs, or seeds.

Indirect impacts can result from project-related activities where biological resources are affected in a manner that is not direct. Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants (weeds). As noted in Section 2, the survey area included a 100-foot buffer to identify nearby biological resources and to aid in assessment of potential indirect impacts on protected resources, if present.

Cumulative impacts refer to incremental individual environmental effects of two or more projects when considered together. Such impacts taken individually may be minor but are collectively significant in light of regional impacts.

The significance thresholds as outlined in Appendix G of the state CEQA Guidelines (CCR Title 14, Division 6, Chapter 3, Sections 15000–15387) have been used to determine whether project implementation would result in a significant direct, indirect, and/or cumulative impact. A significant biological resources impact would occur if the project would:

- 1) 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 CDFW or USFWS;
- 2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- 3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- 5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance;

- 6) Conflict with the provisions of an adopted HCP; NCCP or other approved local, regional, or state HCP.

CEQA Threshold 1: 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 CDFW or USFWS?

4.1 SPECIAL-STATUS PLANTS AND WILDLIFE IMPACTS

4.1.1 SPECIAL-STATUS PLANT SPECIES

The proposed project will not impact federally and/or state listed or other special-status plants as none are present and none have a moderate to high potential to occur within the project site due to lack of suitable habitat and the overall disturbed nature of the site.

4.1.2 SPECIAL-STATUS WILDLIFE SPECIES AND CRITICAL HABITATS

Threatened and Endangered Wildlife Species

Although monarch butterfly, a candidate for listing under FESA when overwintering in California, was observed during the general biological survey on October 11, 2022, the site has low potential to support overwintering individuals due to the lack of suitable climactic conditions, such as protection from high wind and storms, absence of freezing temperatures, varying levels of sunlight, high humidity, and the presence of water (see Section 3). Thus, impacts on monarch resulting from the project would be less than significant.

Crotch's bumble bee (state candidate for listing under the CESA) has low-to-moderate potential to occur on the project site and may be impacted with project implementation, as discussed further below. Burrowing owl (state candidate for listing under the CESA) was detected on site during focused surveys and has potential to inhabit the site in the future; therefore, this species may be impacted with project implementation, as discussed further below.

The proposed project will not impact any additional federally and/or state listed wildlife species as no additional listed species were observed during general biological surveys and none have moderate to high potential to occur on site based on lack of suitable habitat and the disturbed nature of the site.

Burrowing Owl

The project has moderate potential to support burrowing owl. During the 2023 focused burrowing owl surveys, numerous suitable burrows were present on the project site and two burrowing owl individuals were observed during the first breeding season survey. No burrowing owl individuals, active burrows, or burrowing owl sign were observed during the subsequent three surveys. The absence of burrowing owl during the peak breeding season suggests that the project site is not currently used by burrowing owl for nesting. The site appears to have been used by burrowing owl for refuge and/or foraging outside of the nesting season and burrowing owl may occur on site in the future.

With project implementation, direct impacts on burrowing owl could occur in the form of death, injury, or harassment of nesting birds, their eggs, and their young, if owls are present. Such impacts, if they were to occur, are potentially significant due to the direct reduction in local populations and loss of genetic diversity.

Injury or mortality occurs most frequently during the vegetation clearing stage of construction and affects eggs, nestlings, and recently fledged young that cannot safely avoid equipment. To avoid such impacts on burrowing owls, the following measures would be implemented:

- Prior to initial ground disturbing activities, construction personnel would be provided training with instructions to follow in the event a burrowing owl is observed or suspected to be on site (BIO-3A).
- Biological monitors would be retained to monitor construction activities, search for burrowing owls that may enter the site after the start of construction, and ensure that project activities do not result in adverse effects on burrowing owls (BIO-3B).
- Pre-construction burrowing owl clearance surveys would be conducted in accordance with CDFW BUOW Guidelines to ensure no occupied burrowing owl burrows are present within or adjacent to construction areas during ground disturbance (BIO-3C).
- If burrowing owls are detected on site or within a 500-foot buffer of the site, CDFW would be contacted within 48 hours and disturbance avoidance buffers would be set-up by a qualified biologist in accordance with recommendations from CDFW, and no work would occur within avoidance buffers until consultation with CDFW (BIO-3D).

Direct impacts on burrowing owl could still occur if owls enter the project site during active construction. Burrowing owls are particularly susceptible to vehicle strikes because they utilize roadways and adjacent areas for hunting. To avoid such impacts on burrowing owl, speed limits would be set and enforced (BIO-1A). In addition, burrowing owls are known to use manmade materials, such as pipes and culverts, for shelter and nesting. Best management practices (BMPs) would be implemented to minimize the potential for burrowing owls to use staged project materials (BIO-1B); thereby reducing the likelihood of burrowing owl being impacted by construction activities.

With the successful implementation of the BMPs listed in BIO-1, some direct impacts on burrowing owl within the project site would be avoided and/or minimized. However, project implementation would also result in potential impacts on burrowing owl through destruction or degradation of suitable habitat, including potential burrows. This impact is not anticipated to be significant since burrowing owls were not documented nesting on site. Although development of the project site would eliminate some suitable roosting burrows and potential food sources, this habitat is disturbed and low-quality, as evidenced by burrowing owls' short duration on site and lack of breeding activity. Should owls be documented on site in the future, consultation with CDFW, and potentially compensatory mitigation, would be required (BIO-3D).

Indirect impacts on burrowing owl could occur if burrowing owl is present within suitable habitat north of the project site and construction occurs at night uses lighting. Such impacts are potentially significant because lights could reduce burrowing owls' hunting success and make burrowing owls

easier targets for predators. To avoid impacts on burrowing owl from nighttime construction and lighting, construction would occur during the day (BIO-1C). In addition, indirect impacts on burrowing owl, if present in suitable habitat north of the project site, could during construction due to elevated noise, vibration, and dust levels generated by equipment. These disturbances are temporary and relatively short in duration, thus unlikely to affect burrowing owl behavior. In addition, burrowing owl pre-construction surveys would include a 500-foot buffer around the project site; therefore, burrowing owls occurring near to the site would be detected, if present (BIO-3C). If burrowing owls are detected within 500-feet of the project site, CDFW would be consulted for additional guidance (BIO-3D). As such, indirect impacts during project construction are anticipated to be less than significant.

With the adherence of mitigation measures as discussed in Section 5, impacts on burrowing owls resulting from the project would be less than significant.

Crotch's Bumble Bee

Crotch's bumble bee was not documented during focused surveys or general biological surveys; however, suitable nectar sources and marginally suitable habitat is present on the project site and the potential for this species to occur is low-to-moderate. Although Crotch's bumble bee was not observed on site, the project could result in direct impacts on Crotch's bumble bee in the form of death, injury, or harassment if Crotch's bumble bee were to occur within the project site. Such impacts on foraging bees are not anticipated to be significant since adult Crotch's bumble bee would likely flush during active construction activities. However, direct impacts on nesting sites could result in significant direct take of Crotch's bumble bee. The analysis conservatively assumed that significant impacts to the species could occur as a result of direct impacts to nesting sites.

Potential impacts on Crotch's bumble bee would be avoided or minimized through implementation of project mitigation measures outlined in Section 5.2. Within one year prior to initial ground disturbing activities, a nesting survey would be conducted to identify active colonies within the project site (BIO-2A). If active nests are documented within the project site, an appropriate non-disturbance buffer area would be established immediately prior to the start of construction activities to avoid direct take (BIO-2B). Potential direct impacts on Crotch's bumble bee would be less than significant with implementation of pre-construction nesting surveys and avoidance buffers.

Potential indirect impacts on this species could occur through destruction of viable nectar sources or occupied habitat. To determine if Crotch's bumble bee is present and therefore impacts could occur on occupied habitat, a focused survey would be conducted within one year prior to ground disturbing activities (BIO-2C). If present, destruction of nectar sources or removal of occupied habitat could be potentially significant because a reduction in essential resources could put strain on populations already experiencing declines (CDFW 2023). To mitigate for such potential impacts, if any, on-site revegetation with suitable nectar sources would be implemented following completion of construction activities (BIO-2D). With adherence to the mitigation measures described in Section 5.2, potential impacts on Crotch's bumble bee would be reduced to less than significant. If Crotch's bumble bee is no longer a candidate or listed species under CESA at the time of project construction, then mitigation measures shall not be required.

Other Special-Status Wildlife Species

Four other special-status wildlife species, California horned lark, golden eagle, loggerhead shrike and American peregrine falcon, were detected during general biological surveys and an additional two non-listed special-status wildlife species, coastal whiptail and coast horned lizard, have moderate potential to occur on the project site. The proposed project has the potential to impact these special-status species, as discussed below.

California Horned Lark and Loggerhead Shrike

California horned lark and loggerhead shrike were observed within and adjacent to the project site, therefore direct impacts through loss of suitable foraging habitat would occur with project implementation. However, California horned lark and loggerhead shrike inhabit a wide variety of habitats and are relatively tolerant of disturbance. Suitable foraging habitat for these species is present within proximity to the project site and is abundant throughout the region. As such, removal of suitable foraging habitat would be less than significant.

Project construction activities could result in direct impacts on nesting California horned lark and loggerhead shrike, if nests are present. Vegetation trimming or removal of suitable habitat within an active breeding territory could result in harassment, injury, damage or destruction of an active nest, and/or death of adults, eggs, and/or young during construction activities. Impacts that result in injury or death of California horned lark or loggerhead shrike, and/or loss of genetic diversity of these special-status species is potentially significant.

To avoid or minimize such impacts on California horned lark and loggerhead shrike, the following measures would be implemented:

- Vegetation trimming and removal, grading, and other construction activities within suitable nesting habitat would occur outside of typical avian breeding season (typically February 15 through August 31) (BIO-4A)
- If avoidance of nesting season is not feasible, then pre-construction surveys for nesting birds would be conducted prior to construction within suitable nesting habitat (BIO-4A).
- If nesting California horned lark or loggerhead shrike are documented, no-work exclusion buffers would be established and maintained around each nest until fledglings, if present, are no longer dependent on the nest and disperse from the area (BIO-4B).

With successful implementation of BIO-4, direct impacts on nesting California horned lark and loggerhead shrike during project construction would be less than significant. Additionally, a biologist would flush adult avian species from the project site prior to initial ground disturbing activities (BIO-1D). Thus, direct impacts on California horned lark and loggerhead shrike would be avoided.

Indirect impacts on California horned lark and loggerhead shrike, if present adjacent to the project site, could during construction due to elevated noise, vibration, and dust levels generated by equipment. These disturbances are temporary and relatively short in duration, thus unlikely to affect

California horned lark or loggerhead shrike behavior. As such, indirect impacts during project construction are anticipated to be less than significant.

Coastal Whiptail and Coast Horned Lizard

Coastal whiptail and coast horned lizard have a moderate potential to occur on site. Project construction activities could result in potential direct impacts on these special-status species, if present on site. Vegetation clearing and grading and other construction activities could result in harassment, injury, and/or death of coastal whiptail and coast horned lizard. Impacts that result in injury or death of coastal whiptail and coast horned lizard and/or loss of genetic diversity of these special-status species are potentially significant.

To avoid or minimize such impacts, the following BMPs would be implemented:

- A biologist would walk through habitat to be imminently removed to flush any coastal whiptail and coast horned lizard that may be present from the project site to the greatest extent practicable (BIO-1D).
- Speed limits would be set and enforced to minimize risk of vehicle collisions with coastal whiptail and coast horned lizard (BIO-1A).
- Holes and trenches excavated during construction would be covered or equipped with escape ramps to prevent entrapment of special-status lizards (BIO-1E).
- Pets, which could harass, injure, or kill lizards, would be prohibited on the project site (BIO-1F).
- Trash would be properly stored and disposed of to avoid attracting predators of coastal whiptail and coast horned lizard, such as common raven (*Corvus corax*), to the project site (BIO-1G).

Successful implementation of such measures would help minimize or avoid potential direct impacts on coastal whiptail and coast horned lizard, if present.

Project construction could also result in direct impacts on coastal whiptail and coast horned lizard through destruction of suitable habitat. However, suitable habitat is largely restricted to the 0.7 acre of disturbed Riversidean sage scrub on site. This habitat is altered by previous disturbances, surrounded by non-native vegetation communities or land uses, and is isolated from other suitable coastal whiptail and coast horned lizard habitat. As such, this land provides little biological value and does not play a substantial role in species viability. Direct impacts due to habitat destruction are anticipated to be less than significant.

Direct impacts on coastal whiptail and coast horned lizard could occur during project construction if these species are present in the adjacent suitable habitat north of the project site. If construction equipment enters these areas, harassment, injury, and/or death of coastal whiptail and coast horned lizard could occur. To avoid impacts on off-site special-status lizards, the limits of work would be clearly demarcated (BIO-1H) and construction equipment would not enter these areas. As such, direct impacts on special-status lizards potentially present adjacent to the project site would be less than significant.

Indirect impacts on coastal whiptail and coast horned lizard, if present adjacent to the project site, could during construction due to elevated noise, vibration, and dust levels generated by equipment. These disturbances are temporary and relatively short in duration, thus unlikely to affect coastal whiptail and coast horned lizard behavior. As such, indirect impacts during project construction are anticipated to be less than significant.

Golden Eagle, American Peregrine Falcon, Prairie Falcon, Merlin, and California Gull

Golden eagle, American peregrine falcon, prairie falcon, merlin, and California gull were observed during the 2022 general biological survey (Appendix B). Although golden eagle, American peregrine falcon, prairie falcon, and merlin were viewed flying over the project site during the biological surveys, these species were not observed directly using it and are not expected to rely on the project site since it is dominated by developed or disturbed habitats. Suitable nesting habitat is not present for any of these raptor species. Golden eagle, American peregrine falcon, and prairie falcon primarily nest on ledges and cliffs which are absent from the project site and merlin is not known to nest in Southern California. In addition, California gull was observed during biological surveys; however, there is no potential for the site to support nesting colonies as colonies are always located near large bodies of water. Thus, impacts on golden eagle, American peregrine falcon, prairie falcon, merlin, and California gull resulting from the project would be less than significant.

CEQA Threshold 2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS?

4.2 NATIVE VEGETATION IMPACTS

The proposed project would result in impacts on three land uses/vegetation communities, developed land, disturbed habitat, and disturbed Riversidean sage scrub (Figure 5; Table 7). Developed land and disturbed habitat are not considered native vegetation communities; however, impacts on isolated native upland habitat (e.g., disturbed Riversidean sage scrub), will occur with project implementation. Disturbed Riversidean sage scrub is not considered a sensitive natural community under CEQA and impacts on this community is not anticipated to be significant due to its abundance in the region. Therefore, impacts to native vegetation communities resulting from the project would be less than significant.

Table 6. Vegetation Communities/Land Cover Project Impacts

Vegetation (Holland) ¹	Vegetation ²	Impacts (acres)
Developed	Developed/Disturbed	4.0
Disturbed Habitat	Developed/Disturbed	22.5
Disturbed Riversidean Sage Scrub	<i>Eriogonum fasciculatum</i> Shrubland Alliance	0.7
Total		27.2

¹ Vegetation communities recognized by Holland (1986)

² *Vegetation communities from Holland (1986) crosswalked to Sawyer et al. (2009)*

CEQA Threshold 3: Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

4.3 POTENTIALLY JURISDICTIONAL AQUATIC RESOURCES IMPACTS

The proposed project will not impact state or federally protected wetlands as no potentially jurisdictional aquatic resources were observed on the project site (see Section 3.5). Note that the off-site concrete v-ditch that occurs immediately north of the site has some potential to qualify as a non-wetland water of the state jurisdictional per the RWQCB; however, impacts are not proposed in or near that area. Therefore, the project would not result in impacts on jurisdictional aquatic resources and permitting through the Corps, RWQCB, and CDFW would not be required.

CEQA Threshold 4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

4.4 NESTING BIRD IMPACTS

The proposed project has the potential to impact active bird nests if vegetation is removed or ground disturbing activities are initiated during the nesting season. The disturbed habitat and disturbed Riversidean sage scrub within the project site have the potential to support avian nests and impacts on nesting birds are prohibited by the MBTA and/or CFGC §3503. To avoid potential direct impacts on nesting birds, removal of suitable nesting habitat would occur outside of the breeding season (BIO-4A), when feasible. In addition, within three days prior to site disturbance or construction activities, a biologist would conduct a nesting bird survey (BIO-4A). If active nests are found, construction activity would be avoided in a buffer area around the nest until nestlings have fledged and the nest is determined to be inactive, and a biologist would be retained to monitor nesting activity (BIO-4B). With the adherence of such mitigation measures, described further in Section 5, impacts on nesting birds resulting from the project would be less than significant.

4.5 WILDLIFE CORRIDOR IMPACTS

The project site does not serve as part of a regional wildlife corridor. The project site is composed of highly disturbed undeveloped areas that are surrounded by development. No large areas of native vegetation are contiguous with the disturbed habitat on site, nor do such areas of native habitat occur in proximity to the project site. Cumulatively, the project site and other undeveloped isolated lots in the project vicinity are unlikely to be used by wildlife species as refuge between larger areas of naturally occurring habitat. As such, the project would not result in impacts on wildlife movement and regional corridors.

CEQA Threshold 5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance?

4.6 LOCAL POLICIES AND ORDINANCES IMPACTS

4.6.1 COUNTY OF SAN BERNARDINO BURROWING OWL OVERLAY ZONE

As previously discussed, the project site is within the Burrowing Owl Overlay Zone. As such, focused surveys and pre-construction surveys for burrowing owl should be conducted to determine presence/absence within the project site. Focused surveys have been conducted and the results are presented in Section 3. Pre-construction surveys would be conducted for the project, as detailed in Section 5. As such, the project would not conflict with the County of San Bernardino Biotic Resources Overlay Zones.

4.6.2 CITY OF RIALTO GENERAL PLAN

The project does not contain suitable soils for Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). As such, protocol surveys are not required, and the City of Rialto General Plan policy related to this species is not applicable.

CEQA Threshold 6: Conflict with the provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP?

4.7 HABITAT CONSERVATION PLAN; NATURAL COMMUNITY CONSERVATION PLAN; OR OTHER APPROVED LOCAL, REGIONAL, OR STATE HABITAT CONSERVATION PLAN IMPACTS

The project site is not located with an active HCP or NCCP area; therefore, the project would not result in impacts on HCPs or NCCPs.

4.8 INDIRECT IMPACTS ON BIOLOGICAL RESOURCES

In the context of biological resources, indirect impacts are those effects associated with developing areas adjacent to native open space. Potential indirect effects associated with development include water quality impacts from site drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The project site and abutting lands support a low diversity in vegetation communities and other land covers. The project site itself is made up of disturbed habitat, developed land, and disturbed Riversidean sage scrub. To the north, the project site borders former Rialto Airport land that supports sparse, disturbed native habitat. To the south, east, and west, the site is surrounded by commercial and industrial development with little to no native habitat. Project activities would not significantly change the conditions on adjacent lands or result in indirect effects on biological resources. Therefore, indirect impacts would be less than significant.

4.9 CUMULATIVE IMPACTS ON BIOLOGICAL RESOURCES

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 potentially significant. 'Related projects' refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. The project site is disturbed, surrounded by development, and does not support sensitive natural vegetation communities. As such, the proposed project will not result in significant cumulative effects.

However, through the environmental review process, all projects in the region would be individually required to reduce their own impacts through compensatory mitigation, as well as other project-specific mitigation measures and avoidance and minimization measures. Compensatory mitigation would be subject to agency approval and would be planning with consideration to other open space preserved in perpetuity to create large, undisturbed habitat blocks. Because the impacts associated with the project would be fully mitigated, the cumulative contribution to region-wide impacts would be less than significant.

5 MITIGATION MEASURES

The following discussion provides project-specific mitigation measures; adherence with these measures is necessary to avoid and minimize impacts on biological resources resulting from the project.

5.1 BEST MANAGEMENT PRACTICES

BIO-1A: Construction vehicles shall not exceed 15 miles per hour on unpaved roads adjacent to the project site or the right-of-way accessing the site.

BIO-1B: The Applicant, or its contractors, will screen, cover, or elevate at least one (1) foot above ground, all construction pipe, culverts, or similar structures with a diameter of three (3) inches or greater that are stored on site overnight. These pipes, culverts, and similar structures will be inspected by the project biologist for wildlife before such material is moved, buried, or capped.

BIO-1C: Construction activities shall occur during daytime hours to the greatest extent feasible. If construction must occur at nighttime, lights shall be oriented in such a way that they direct light downward and toward the active construction, ensuring that no direct light is emitted towards adjacent lands, and shields or deflectors shall be installed on lights to reduce light spill. Nighttime concrete pouring shall be performed in accordance with the City of Rialto Municipal Code.

BIO-1D: A biologist shall flush special-status species (i.e., avian or other mobile species) from suitable habitat areas within the project development footprint to the maximum extent practicable immediately (e.g., within 24 hours) prior to initial vegetation removal activities. The biologist shall flush wildlife by walking through habitat to be imminently removed.

BIO-1E: At the end of each workday during construction, the Applicant, or its contractors, will cover all excavated, steep-sided holes or trenches more than eight inches deep and that have sidewalls steeper than 1:1 (45 degree) slope with plywood or similar materials, or provide a minimum of one escape ramp per 100 feet of trenching (with slopes no greater than 3:1) constructed of earth fill or wooden planks. The project biologist will thoroughly inspect holes and trenches for trapped animals during biological monitoring.

BIO-1F: Contractors shall not permit pets on the construction site.

BIO-1G: If trash and debris need to be stored overnight during maintenance activities, fully covered trash receptacles that are animal-proof and weather-proof shall be used by the maintenance contractor to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Alternatively, standard trash receptacles may be used during the day, but must be removed or emptied each night.

BIO-1H: To prevent inadvertent disturbance to areas outside the limits of work, the construction limits shall be clearly demarcated (e.g., installation of flagging or

temporary visibility construction fence) prior to ground-disturbance activities, and all construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits. The work limit delineation shall be maintained throughout project construction.

5.2 CROTCH'S BUMBLE BEE AVOIDANCE AND MITIGATION MEASURES

BIO-2A: If Crotch's bumble bee is no longer a candidate or listed species under CESA at the time of project construction, then these mitigation measures shall not be required. Within one year prior to ground disturbing activities, a qualified biologist shall conduct active Crotch's bumble bee nest surveys during the typical colony active period (April – August) following survey guidelines provided in the CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023e). The qualified biologist shall be familiar with Crotch's bumble bee identification and life history.

BIO-2B: If suspected or active Crotch's bumble bee nests are present, a qualified biologist shall establish an appropriate non-disturbance buffer around each nest immediately prior to initiation of construction activities using stakes and/or brightly colored flagging to avoid disturbance or incidental take of the species. If avoidance buffers are not feasible during construction activities, then CDFW shall be consulted.

BIO-2C: Within one year prior to ground disturbing activities, a qualified biologist shall survey suitable nectar plants for foraging Crotch's bumble bee during the typical flight season (February – October) following survey guidelines provided in the CDFW's Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). The qualified biologist shall be familiar with Crotch's bumble bee identification and life history.

BIO-2D: If occupied foraging habitat for Crotch's bumble bee is present within project impact areas, a Revegetation Plan shall be prepared which includes native shrubs and native seed mixes that contain known nectar sources for Crotch's bumble bee. The Revegetation Plan shall be developed in consultation with a qualified Crotch's bumble bee biologist and implemented following project construction.

5.3 BURROWING OWL AVOIDANCE AND MITIGATION MEASURES

BIO-3A: Prior to initial ground disturbing activities, a Worker Environmental Awareness Program (WEAP) shall be prepared, which will include a training presentation and key fact sheet. The training will instruct construction crews to be aware of and recognize burrowing owls and other sensitive biological resources that may be encountered within, or adjacent to, the project. The training will provide workers with instructions to follow in the event a burrowing owl is observed or suspected to be on site.

Biologists shall provide WEAP training materials, including but not limited to the key fact sheet, to construction personnel before their commencement of work on the project. Additionally, all construction staff shall attend the WEAP training presentation prior to beginning work on site. A refresher WEAP training will be completed on an

annual basis thereafter. Note that the fact sheet shall be provided in other languages, as necessary, to accommodate non-English speaking workers.

Upon completion of the WEAP training, each member of the construction crew shall sign a form stating that they attended the training, understood the information presented, and agreed to comply with the requirements set out in the WEAP training. On an annual basis, the project proponent shall certify that WEAP training has been provided to all construction personnel. Biologists shall provide updates relevant to the training to construction personnel during the safety (“tailgate”) meetings, as needed.

BIO-3B: During active construction, biological monitoring will be performed to ensure unauthorized impacts on burrowing owl do not occur as a result of the project. A biologist shall be contracted to perform monitoring during all construction activities approximately every other day. The definitive frequency and duration of monitoring shall be dependent on project and site conditions, such as the type of construction activity occurring, whether it is the breeding versus non-breeding season, if a burrowing owl has been recently documented on site, and the efficacy of the exclusion buffers, as determined by a qualified biologist.

BIO-3C: No less than 14 days prior to the onset of construction activities, a qualified biologist shall survey the construction limits of the project site and a 500-foot buffer for the presence of burrowing owls and/or occupied nest burrows. A second survey shall be conducted within 24 hours prior to the onset of construction activities. The surveys shall be conducted in accordance with the most current CDFW survey methods.

The project applicant shall submit at least one burrowing owl preconstruction survey report to the satisfaction of the City and CDFW to document compliance with this mitigation measure. For the purposes of this measure, ‘qualified biologist’ is a biologist who meets the requirements set forth in the CDFW BUOW Guidelines.

BIO-3D: If burrowing owl is documented on site or within 500-feet of the site during either preconstruction surveys or biological monitoring, occupied burrowing owl burrows shall not be disturbed. -CDFW shall be contacted within 48 hours of the burrowing owl observation and disturbance avoidance buffers shall be set up by a qualified biologist in accordance with the recommendations from CDFW.

No work will occur within avoidance buffers until consultation with CDFW and issuance of permits, if required. If burrowing owl is no longer a candidate or listed species under CESA at the time of project construction, then permits shall not be required. If avoidance of burrowing owls is not possible, either directly or indirectly, consultation with CDFW will determine the appropriate course of action. CDFW may require an Incidental Take Permit (ITP) or a Burrowing Owl Relocation and Mitigation Plan (Plan). The conditions of the permit or measures outlined in the plan would be adhered to by the project proponent and any required compensatory mitigation of habitat would be provided.

5.4 NESTING BIRD AVOIDANCE

BIO-4A: To ensure compliance with CFGC sections 3503, 3503.5, and 3513 and to avoid potential impacts to nesting birds, vegetation clearing and ground-disturbing activities shall be conducted outside of the bird nesting season (generally February 15 through August 31). Regardless of the time of year, a qualified biologist will conduct a nesting bird survey within three (3) days prior to any disturbance of the site, including but not limited to vegetation clearing, diking, demolition activities, and grading.

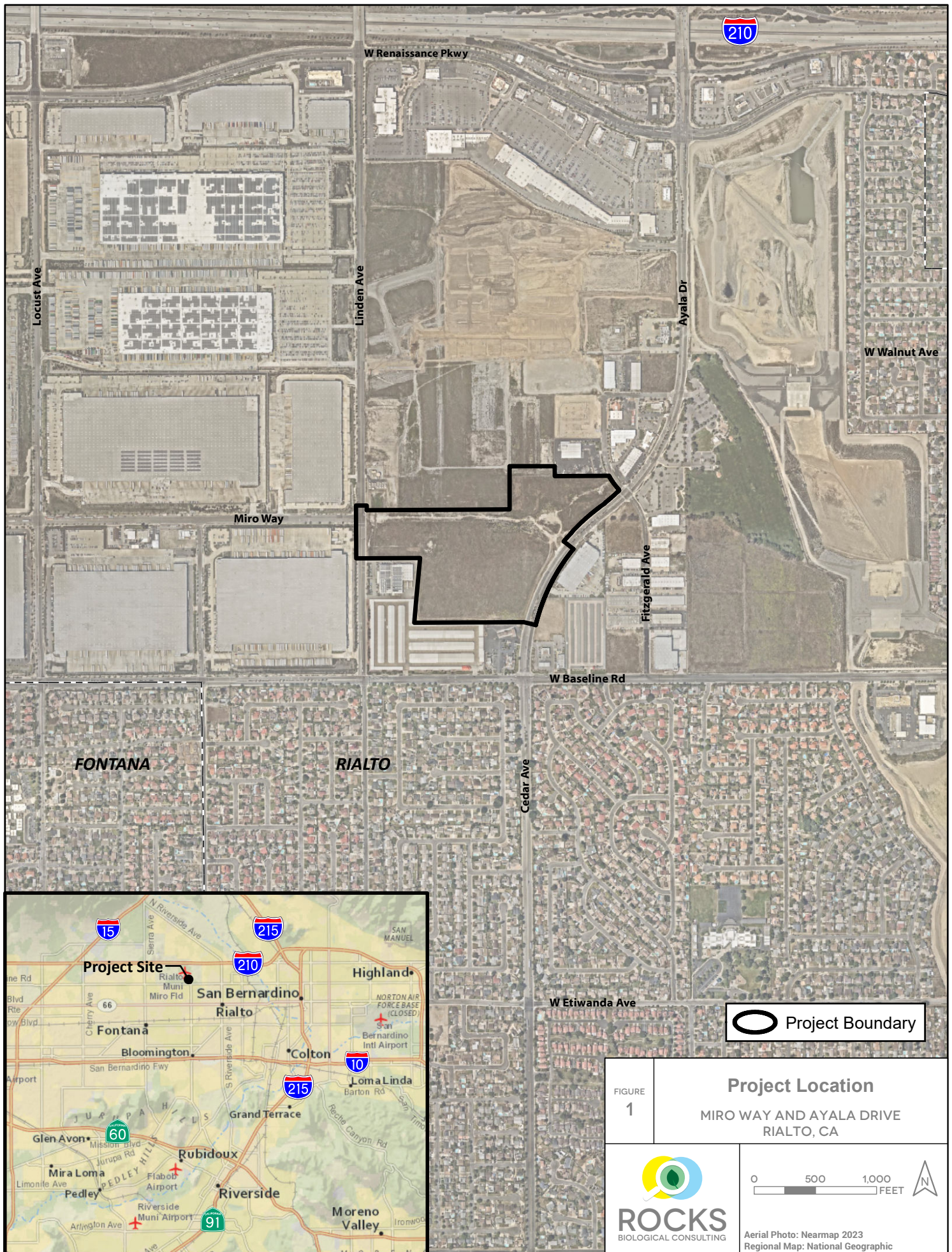
BIO-4B: If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied, and the juvenile birds can survive independently from the nests. During construction activities, the qualified biologist shall continue biological monitoring activities at a frequency recommended by the qualified biologist using their best professional judgment. If nesting birds are documented, avoidance and minimization measures may be adjusted, and construction activities stopped or redirected by the qualified biologist using their best professional judgement to avoid take of nesting birds. If nesting birds are not documented during the preconstruction survey, adherence to additional measures may not be necessary to avoid impacts to nesting birds.

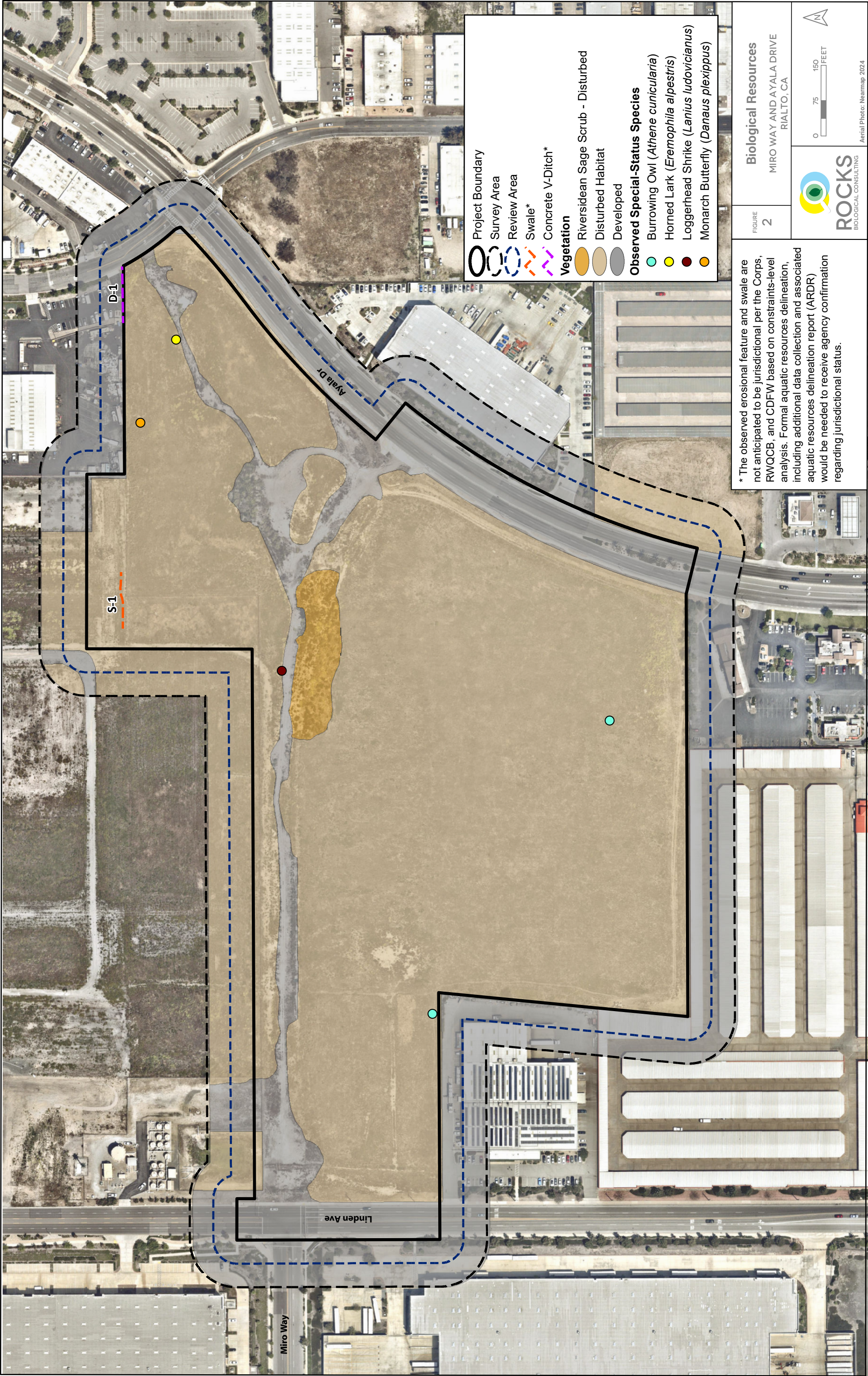
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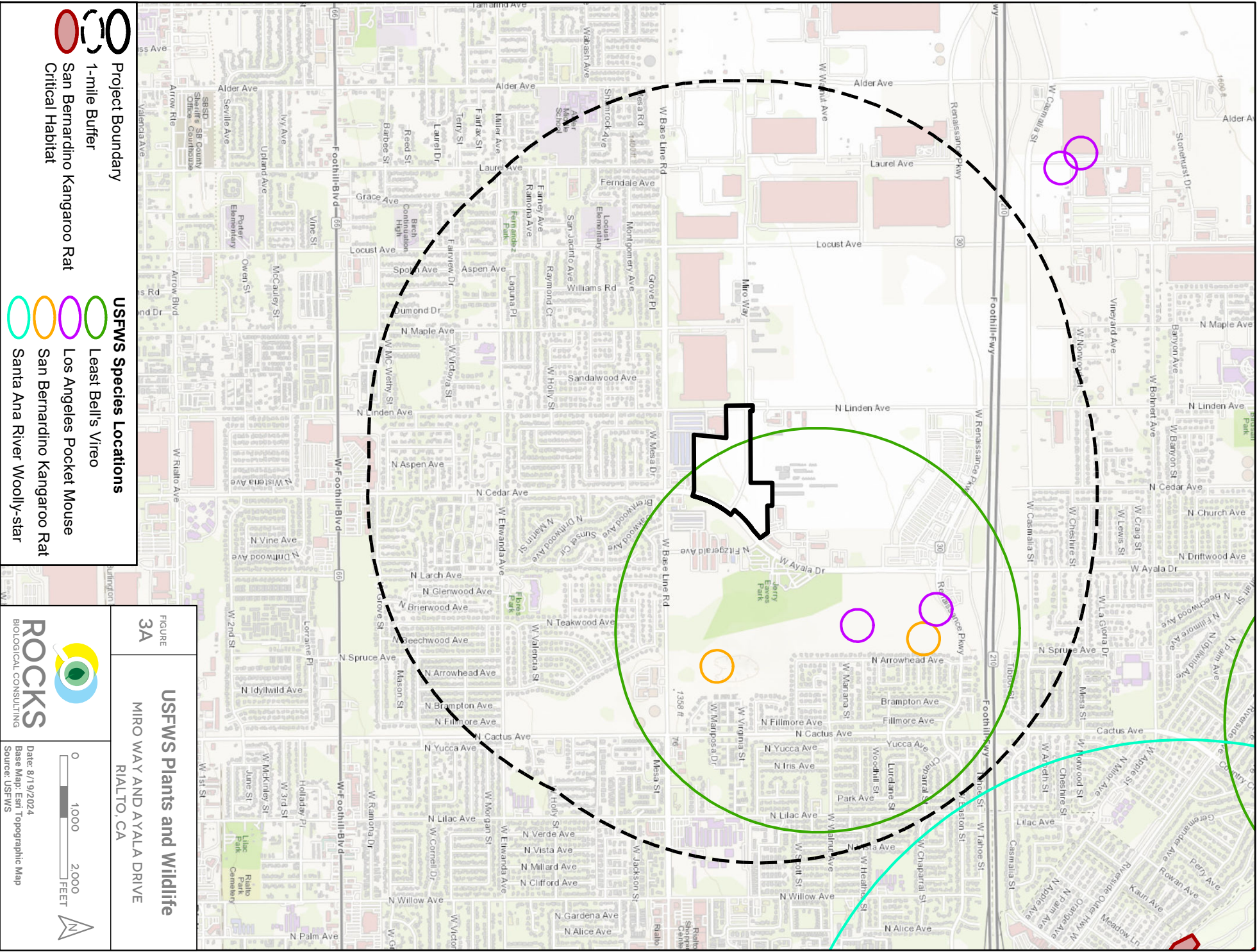
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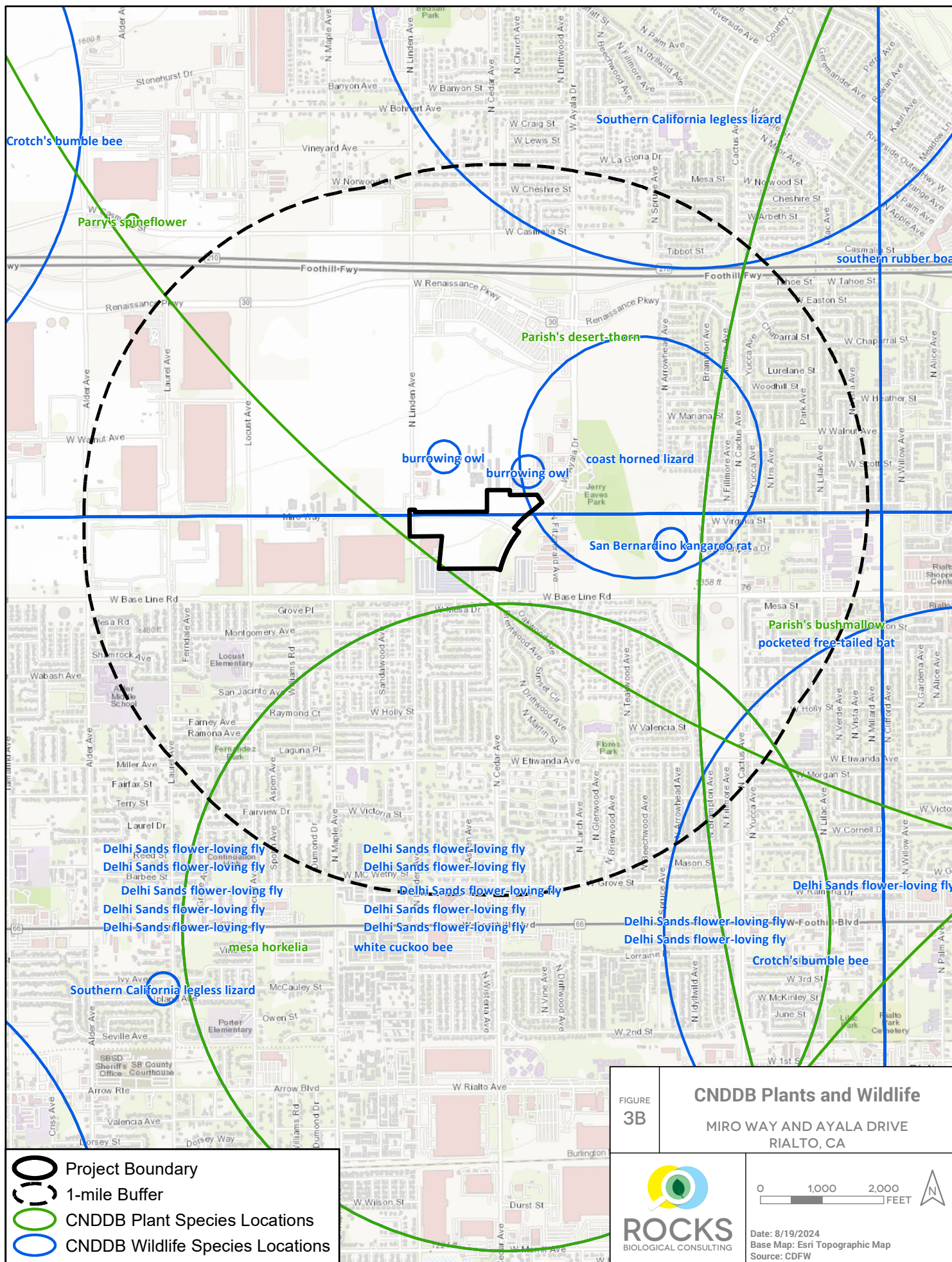
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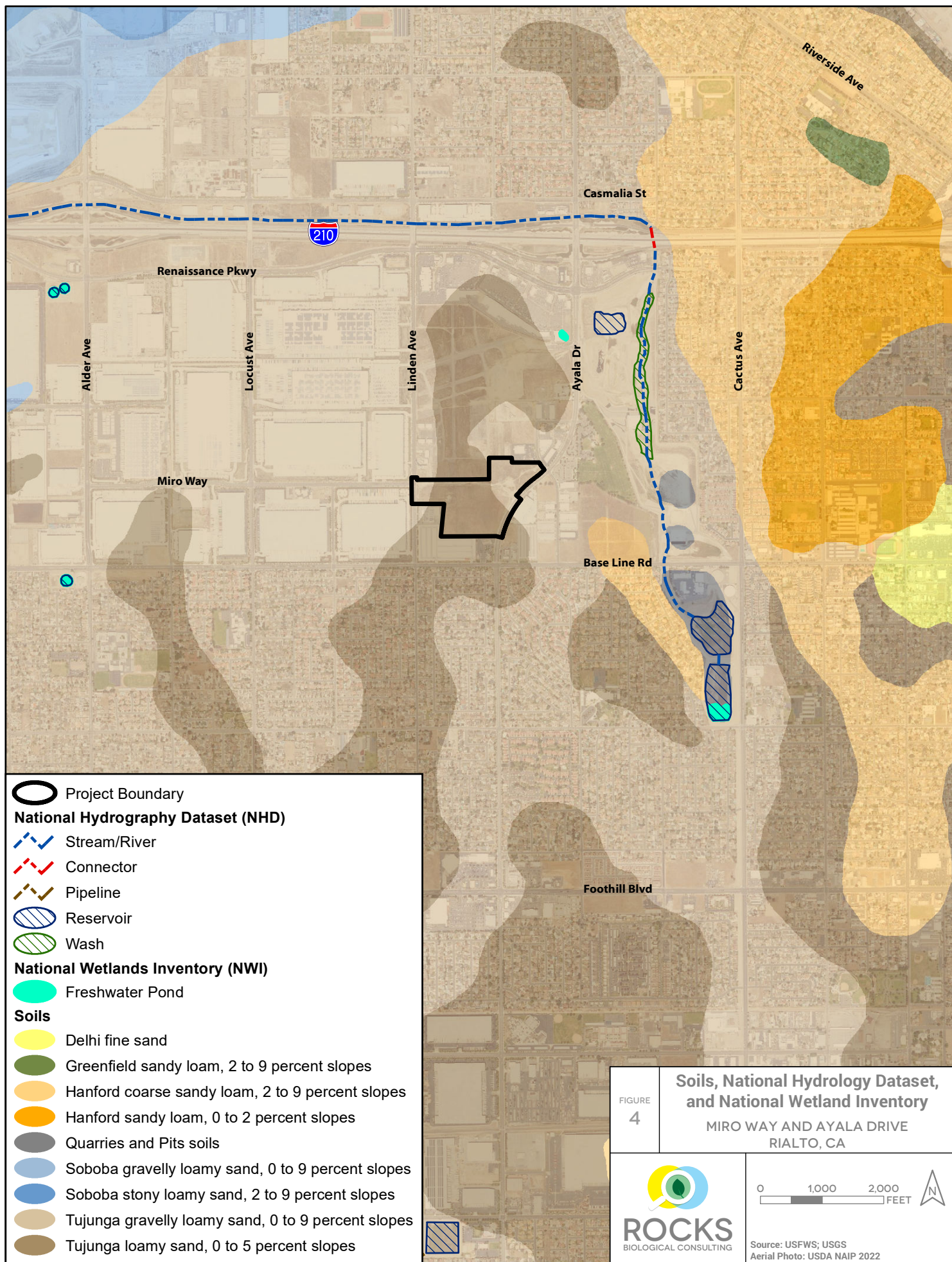
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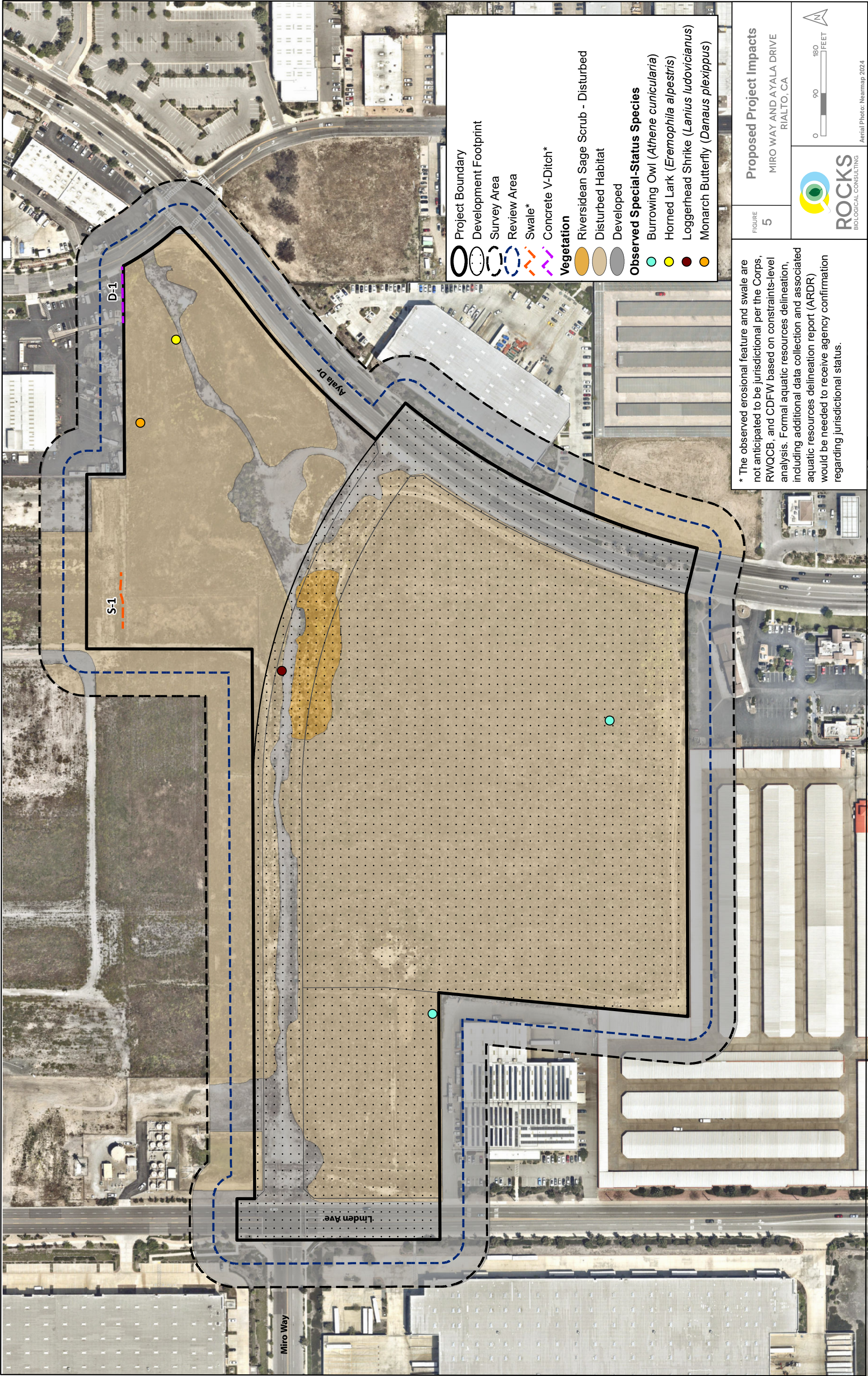












APPENDIX A

SITE PHOTOGRAPHS

Appendix A
Site Photographs



Photo 1. Overview of project site from the northern portion of the site, showing disturbed habitat (left) and disturbed Riversidean sage scrub (right), facing east. October 11, 2022.



Photo 2. View of disturbed habitat in the southern portion of the project site, with disturbed soils supporting sparse vegetation, facing west. October 11, 2022.



Photo 3. View of disturbed habitat in the western portion of the project site, showing remnants of a vineyard and small mammal burrows, facing west. October 11, 2022.



Photo 4. View of disturbed habitat and small area of Riversidean sage scrub along the southwestern portion of the project site, facing south. October 11, 2022.



Photo 5. View of open water associated with off-site water treatment facilities northwest of the project site, facing north. October 11, 2022.



Photo 6. View of disturbed habitat in the southeastern portion of the buffer, facing southeast. February 16, 2023.



Photo 7. View of disturbed habitat (foreground) and the developed habitat (background) in the western portion of the project site and buffer, facing southwest. February 16, 2023.



Photo 8. View of disturbed habitat (left) and developed land (right) along the eastern portion of the project site and buffer of the project site, facing northeast. February 16, 2023.



Photo 9. View of disturbed habitat from the center of the project site facing south. July 11, 2024.



Photo 10. View of disturbed habitat (left) and developed land (right) along the eastern portion of the project site and buffer of the project site, facing north. July 11, 2024.



Photo 11. View of concrete v-ditch (D-1) adjacent to development along the boundary of the project site, facing west. This feature has been constructed in an otherwise upland area to manage stormwater and irrigation runoff associated with development. October 11, 2022.



Photo 12. View of swale (S-1) located within the northeastern portion of the project site, facing north. Note that this feature is not expected to be jurisdictional by the Corps, RWQCB, or CDFW. October 11, 2022.

APPENDIX B

PLANT AND WILDLIFE SPECIES OBSERVED

Appendix B
Plant and Wildlife Species Observed

Family	Common Name	Scientific Name
Plants		
Asteraceae	annual bursage	<i>Ambrosia acanthicarpa</i>
Asteraceae	brittlebush	<i>Encelia farinosa</i>
Asteraceae	common sunflower	<i>Helianthus annuus</i>
Asteraceae	golden crownbeard*	<i>Verbesina encelioides</i>
Asteraceae	mule fat	<i>Baccharis salicifolia</i>
Asteraceae	scalebroom	<i>Lepidospartum squamatum</i>
Asteraceae	stinknet*	<i>Oncosiphon pilulifer</i>
Asteraceae	stinkwort*	<i>Dittrichia graveolens</i>
Asteraceae	telegraphweed	<i>Heterotheca grandiflora</i>
Asteraceae	valley lessingia	<i>Lessingia glandulifera</i>
Asteraceae	willow lettuce*	<i>Lactuca saligna</i>
Aquifoliaceae	holly*	<i>Ilex</i> sp.
Boraginaceae	Menzies' fiddleneck	<i>Amsinckia menziesii</i>
Brassicaceae	Saharan mustard*	<i>Brassica tournefortii</i>
Brassicaceae	short pod mustard*	<i>Hirschfeldia incana</i>
Chenopodiaceae	Russian thistle*	<i>Salsola</i> sp.
Chenopodiaceae	white goosefoot*	<i>Chenopodium album</i>
Cucurbitaceae	coyote melon	<i>Cucurbita palmata</i>
Cupressaceae	Chinese juniper*	<i>Juniperus chinensis</i>
Euphorbiaceae	California croton	<i>Croton californicus</i>
Euphorbiaceae	castor bean*	<i>Ricinus communis</i>
Euphorbiaceae	turkey-mullein	<i>Croton setiger</i>
Fabaceae	Mexican palo verde*	<i>Parkinsonia aculeata</i>
Fabaceae	short winged deerweed	<i>Acmispon glaber</i> var. <i>brevialatus</i>
Fabaceae	Spanish lotus	<i>Acmispon americanus</i>
Geraniaceae	red stemmed filaree*	<i>Erodium cicutarium</i>
Lamiaceae	white horehound*	<i>Marrubium vulgare</i>

Family	Common Name	Scientific Name
Myrtaceae	bottlebrush tree*	<i>Callistemon</i> sp.
Myrtaceae	gum tree*	<i>Eucalyptus</i> sp.
Plantanaceae	London plane tree*	<i>Platanus x hispanica</i>
Poaceae	bermudagrass*	<i>Cynodon dactylon</i>
Poaceae	red brome*	<i>Bromus rubens</i>
Poaceae	rip gut brome*	<i>Bromus diandrus</i>
Poaceae	slender oat*	<i>Avena barbata</i>
Polygonaceae	California buckwheat	<i>Eriogonum fasciculatum</i>
Polygonaceae	slender buckwheat	<i>Eriogonum gracile</i>
Solanaceae	jimsonweed	<i>Datura wrightii</i>
Solanaceae	tree tobacco*	<i>Nicotiana glauca</i>
Vitaceae	cultivated grape*	<i>Vitis vinifera</i>
Zygophyllaceae	puncture vine*	<i>Tribulus terrestris</i>
Invertebrates		
Formicidae	harvester ant	<i>Veromessor</i> sp.
Lycaenidae	western pygmy blue	<i>Brephidium exilis</i>
Nymphalidae	monarch butterfly (CFE)	<i>Danaus plexippus plexippus</i>
Tenebrionidae	darkling beetle	<i>Eleodes</i> sp.
Reptiles		
Phrynosomatidae	western side-blotched lizard	<i>Uta stansburiana elegans</i>
Birds		
Accipitridae	golden eagle (FP; WL)	<i>Aquila chrysaetos</i>
Accipitridae	red-tailed hawk	<i>Buteo jamaicensis</i>
Alaudidae	horned lark (WL)	<i>Eremophila alpestris actia</i>
Anatidae	Canada goose	<i>Branta canadensis</i>
Charadriidae	killdeer	<i>Charadrius vociferus</i>
Columbidae	mourning dove	<i>Zenaida macroura</i>
Columbidae	rock pigeon*	<i>Columba livia</i>
Corvidae	American crow	<i>Corvus brachyrhynchos</i>
Corvidae	common raven	<i>Corvus corax</i>

Family	Common Name	Scientific Name
Falconidae	American kestrel	<i>Falco sparverius</i>
Falconidae	merlin (WL)	<i>Falco columbarius</i>
Falconidae	American peregrine falcon	<i>Falco peregrinus anatum</i>
Falconidae	prairie falcon (WL)	<i>Falco mexicanus</i>
Fringillidae	house finch	<i>Haemorhous mexicanus</i>
Fringillidae	lesser goldfinch	<i>Spinus psaltria</i>
Hirundinidae	cliff swallow	<i>Petrochelidon pyrrhonota</i>
Hirundinidae	northern rough-winged swallow	<i>Stelgidopteryx serripennis</i>
Icteridae	Bullock's oriole	<i>Icterus bullockii</i>
Icteridae	hooded oriole	<i>Icterus cucullatus</i>
Icteridae	western meadowlark	<i>Sturnella neglecta</i>
Laniidae	loggerhead shrike (SSC)	<i>Lanius ludovicianus</i>
Laridae	California gull (WL)	<i>Larus californicus</i>
Mimidae	northern mockingbird	<i>Mimus polyglottos</i>
Parulidae	yellow-rumped warbler	<i>Setophaga coronata</i>
Passerellidae	California towhee	<i>Melospiza crissalis</i>
Passerellidae	savannah sparrow	<i>Passerculus sandwichensis</i>
Passerellidae	white-crowned sparrow	<i>Zonotrichia leucophrys</i>
Passeridae	house sparrow*	<i>Passer domesticus</i>
Strigidae	burrowing owl (CSE)	<i>Athene cunicularia</i>
Sturnidae	European starling*	<i>Sturnus vulgaris</i>
Trochilidae	Anna's hummingbird	<i>Calypte anna</i>
Tyrannidae	black phoebe	<i>Sayornis nigricans</i>
Tyrannidae	Cassin's kingbird	<i>Tyrannus vociferans</i>
Tyrannidae	Say's phoebe	<i>Sayornis saya</i>
Tyrannidae	western kingbird	<i>Tyrannus verticalis</i>
Mammals		
Canidae	coyote	<i>Canis latrans</i>
Leporidae	desert cottontail	<i>Sylvilagus audubonii</i>
Sciuridae	California ground squirrel	<i>Otospermophilus beecheyi</i>

Family	Common Name	Scientific Name
Invertebrates		
Anisoptera (Suborder)	dragonfly	N/A
Apidae	European honeybee*	<i>Apis mellifera</i>
Araneidae	orb weaver	<i>Neoscona</i> sp.
Asilidae	bee killer	<i>Mallophora faultrix</i>
Asilidae	robber fly	<i>Efferia</i> sp.
Asilidae	robber fly	<i>Saropogon</i> sp.
Bombyliidae	beefly	N/A
Caelifera (Suborder)	grasshopper	N/A
Coenagrionidae	familiar bluet	<i>Enallagma civile</i>
Crabronidae	sand wasp	<i>Bembix</i> sp.
Formicidae	harvester ant	<i>Pogonomyrmex</i> sp.
Halictidae	sweat bee	<i>Lasioglossum</i> sp.
Libellulidae	flame skimmer	<i>Libellula saturata</i>
Lycaenidae	Clemence's blue	<i>Icaricia monticola</i>
Lycaenidae	gray hairstreak	<i>Strymon melinus</i>
Megachilidae	resin bee	<i>Anthidiellum</i> sp.
Megachilidae	woodborer bee	<i>Lithurgopsis</i> sp.
Mutillidae	velvet ant	<i>Dasymutilla</i> sp.
Nymphalidae	common buckeye	<i>Junonia coenia</i>
Nymphalidae	painted Lady	<i>Vanessa cardui</i>
Papilionidae	swallowtail	<i>Papilio</i> sp,
Pentatomidae	Say's stink bug	<i>Chlorochroa sayi</i>
Pieridae	cabbage white	<i>Pieris rapae</i>
Pieridae	checkered white	<i>Pontia protodice</i>
Pieridae	sulfur	<i>Colias</i> sp.
Pompilidae	spider wasp	N/A
Pompilidae	tarantula hawk	<i>Pepsis</i> sp.
Reduviidae	assassin bug	<i>Zelus</i> sp.

Family	Common Name	Scientific Name
Reduviidae	California bee assassin	<i>Apiomerus californicus</i>
Scarabaeidae	figeater beetle	<i>Cotinis mutabilis</i>
Sphecidae	grasshopper wasp	<i>Prionyx</i> sp.
Sphecidae	thread-waisted wasp	<i>Ammophila</i> sp.
Syrphidae	hoverfly	N/A
Tenebrionidae	darkling beetle	<i>Eleodes</i> sp.
Vespidae	golden paper wasp	<i>Polistes aurifer</i>
<p>* Non-Native Species</p> <p>CFE: Candidate for listing under U.S. Fish and Wildlife Service (USFWS) Endangered Species Act</p> <p>CSE: Candidate for listing under California Fish and Game Commission (CFGC) California Endangered Species Act</p> <p>FP: California Department of Fish and Wildlife (CDFW) Fully Protected Species</p> <p>SSC: CDFW Species of Special Concern</p> <p>WL: CDFW Watch List Species</p>		

APPENDIX C

MIRO WAY AND AYALA DRIVE DEVELOPMENT PROJECT PROTOCOL PRESENCE/ABSENCE 2023 SURVEY REPORT FOR BURROWING OWL (*ATHENE CUNICULARIA*)



MIRO WAY AND AYALA DRIVE DEVELOPMENT PROJECT

PROTOCOL PRESENCE/ABSENCE 2023 SURVEY REPORT FOR BURROWING OWL (*Athene cunicularia*)

San Bernardino County, California

August 15, 2023

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Appendix B – Bird Species Observed

Appendix C – California Natural Diversity Database Online Field Survey Form Reports

Appendix D – Surveyor Field Notes

1 SUMMARY

This report is a summary of the focused burrowing owl (*Athene cunicularia*; BUOW) surveys conducted by Rocks Biological Consulting (RBC) for the Miro Way and Ayala Drive Development Project (project) in Rialto, California. The project is located within the San Bernardino County Burrowing Owl Overlay Zone and based on the presence of suitable habitat, RBC conducted focused breeding season BUOW surveys between February 16, 2023, and July 3, 2023, in accordance with the California Department of Fish and Wildlife (CDFW) *Staff Report on Burrowing Owl Mitigation* (Guidelines; CDFW 2012).

Two individual BUOW and several burrows with BUOW sign were observed on the site during the first survey on February 16, 2023. No BUOW, active burrows, or BUOW sign were documented within the project site during the subsequent three BUOW surveys conducted between April 26, 2023, and July 3, 2023.

2 INTRODUCTION

2.1 PROJECT LOCATION

The project site is located north of W Baseline Road, west of N Ayala Drive, east of N Linden Avenue, and south of the former Rialto Airport located south of W Renaissance Parkway (Figure 1). The project site is surrounded by commercial developments and small vacant lots to the west, south, and east, with non-native grassland and disturbed Riversidean sage scrub to the north among the remnants of the Rialto Municipal Airport.

The project proposes the development of six industrial buildings and associated surface parking and landscaping. The project includes a Specific Plan Amendment (SPA) that would allow for a land use category (i.e., zone) change from Medium Density Residential, Private Recreation Center, School, Public Park, and Employment to Business Center on the project site. The project would allow for the development of six industrial buildings ranging from approximately 57,770 sf to 184,470 sf including 688,423 sf of warehouse space and 39,000 sf of ancillary office space. Each building would be one level and would not exceed the maximum allowed building height of 75 feet. Development start time will be dependent on processing time.

2.2 BURROWING OWL NATURAL HISTORY

The CDFW lists the BUOW as a Species of Special Concern. In California, suitable habitat for BUOW is generally characterized by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils, such as naturally occurring grassland, shrub steppe, and desert habitats (Haug et al. 1993). In addition, BUOW may also occur in agricultural areas, ruderal grassy fields, vacant lots, and pastures containing suitable vegetation structure and useable burrows with foraging habitat in proximity (Gervais et al. 2008). Typically, BUOW use burrows dug by California ground squirrel (*Otospermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*) and dens or holes dug by other fossorial species including badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (e.g., San Joaquin kit fox [*Vulpes macrotis mutica*]) (Ronan 2002).

Additionally, BUOW frequently use natural rock cavities, debris piles, culverts, and pipes for nesting and roosting (Rosenberg et al. 1998) and have been documented using artificial burrows for nesting and cover (Smith and Belthoff 2001). Occupancy of BUOW habitat is confirmed at a site when at least one BUOW, or its sign at or near a burrow entrance, is observed within the last three years (Rich 1984).

3 METHODS

RBC biologists Alec Goodman, Hannah Swarthout, and Shannon Mindeman conducted the breeding season BUOW surveys for the project. Alec Goodman is an associate biologist and has nearly seven years of experience in environmental consulting with a focus in Mojave Desert biology. Hannah Swarthout is a staff biologist with over three years of experience in environmental consulting, with a focus on BUOW for the recent field season. Shannon Mindeman is a senior biologist with over nine years of professional experience. Collectively, RBC surveyors have extensive experience surveying for BUOW and associated sign. Each biologist has experience performing BUOW surveys and is familiar with BUOW natural history and identification.

Four BUOW surveys were conducted during the breeding season (February 1 – August 31). In accordance with CDFW recommendations (CDFW 2012), three of the surveys occurred during the peak of breeding season (April 15 – July 15) at least three weeks apart. The survey area included the project site, as well as all suitable habitat within a 500-foot buffer per CDFW guidance (Figure 1).

During each survey, RBC biologists walked through suitable BUOW habitat within the survey area via straight-line transects spaced 10 meters (m) to 30 m apart, adjusting for vegetation height and density, and used binoculars to scan the survey area at least every 100 m for BUOW, active burrows, and/or sign of BUOW. No calls were used. All observed burrows were examined for sign, including feathers, pellets, whitewash, and prey remains. Burrows were considered active if a BUOW was observed at or near the entrance or if recent sign was present. Any BUOW, active burrows, and BUOW sign were mapped in the geographic information system (GIS) program ArcGIS Collector.

4 RESULTS

4.1 EXISTING CONDITIONS & HABITAT ASSESSMENT

The project site is primarily composed of undeveloped, disturbed habitat, a portion of which was included in the former Rialto Airport and a portion of which was historically used as agricultural land. Several small areas of disturbed Riversidean sage scrub are also present in the center and southeastern portions of the project site. The 500-foot buffer surrounding the project site to the west, south, and east is mainly composed of developed commercial lots, with some small vacant areas that support non-native grassland. The 500-foot buffer to the north of the project site supports non-native grassland and disturbed Riversidean sage scrub.

The vegetation in the survey area was variable, resulting in disparate degrees of habitat suitability throughout the duration of surveys. On the first visit, when two BUOW were observed, most plants

were in their early growth form and suitable habitat was present throughout the site. Habitat was dominated by non-native grasses (e.g., slender wild oat [*Avena barbata*] and ripgut grass [*Bromus diandrus*]), small flowered fiddleneck (*Amsinckia menziesii*), and short-pod mustard (*Hirschfeldia incana*), all still below 1 m in height, with shrubs making up a low percentage of total cover, predominately California buckwheat (*Eriogonum fasciculatum*) and deerweed (*Acmisbon glaber*). On the second survey, the vegetation composition remained unchanged; however, the grasses and short-pod mustard had grown densely to nearly 2 m in height causing the previously occupied burrows to be overgrown with vegetation. On the third and fourth surveys, the vegetation had been mowed and the survey area returned to a more suitable state for BUOW. Photographs of the survey area are presented in Appendix A.

4.2 BURROWING OWL SURVEY RESULTS

RBC conducted four focused BUOW surveys during the breeding season between February 16, 2023, and July 3, 2023. Survey dates, times, and weather conditions are presented in Table 1, below.

Table 1. Burrowing Owl Survey Dates and Conditions

Survey Number	Date	Surveyor(s)	Time (Start- End)	Temp. (F) (Start-End)	Cloud Cover (%) (Start-End)	Wind Range (mph) (Start; End)	Precip. (Lo, Med, High) (Start- End)	Visibility (Lo, Med, High) (Start; End)
1	2/16/2023	AG, HS	0700-1030	45-54	5-25	8-12; 12-18	None; None	High; High
2	4/26/23	AG	0700-0945	53-65	0-0	1-3; 1-3	None; None	High; High
3	6/12/23	HS, SM	0745-1115	55-62	100-98	3-5; 4-6	None; None	High; High
4	7/3/2023	AG, HS	0915-1200	80-91	0-1	1-3; 1-3	None; None	High; High
AG=Alec Goodman, HS=Hannah Swarthout, SM=Shannon Mindeman								

Two individual BUOW were observed during the first survey, with one near the southern and the second near the southeastern project boundary. Additionally, there were several active burrows observed in the southern portion of the project site, as determined by the presence of BUOW and/or whitewash and pellets. No BUOW, sign, or active burrows were observed during the subsequent three focused surveys.

No evidence of owl predation was observed; however, coyote and an active coyote den were recorded within the survey area. A total of 25 bird species were observed during surveys as listed in Appendix B. Observations of special-status species, including BUOW, were submitted to the California Natural Diversity Database (Appendix C). Surveyor field notes are included as Appendix D.

5 BURROWING OWL MITIGATION

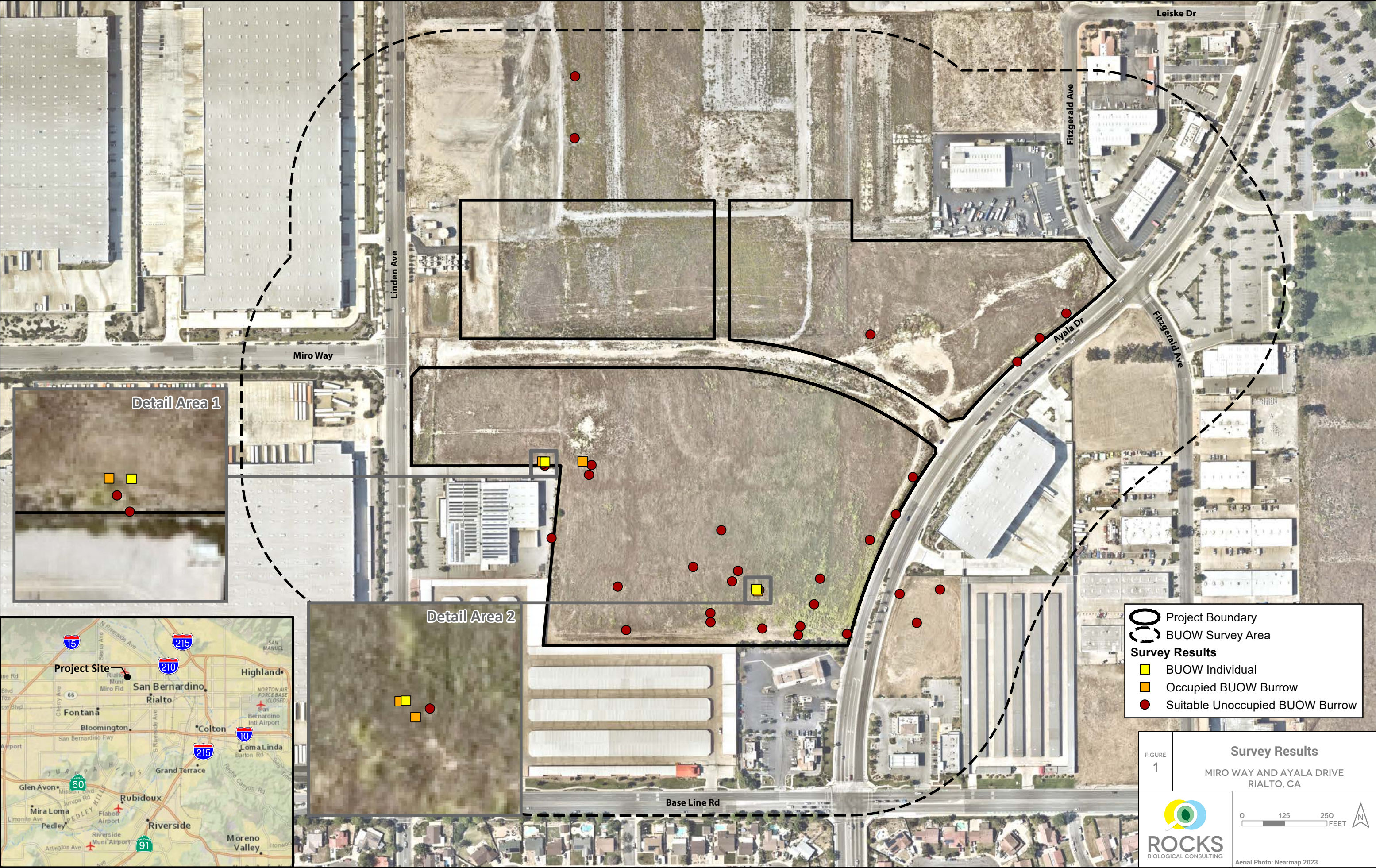
Due the presence of BUOW during the survey, the project's location within the San Bernardino County Burrowing Owl Overlay Zone, and the presence of suitable habitat, pre-construction take avoidance surveys should be conducted in accordance with the CDFW guidelines at least 14 days and 24 hours prior to ground disturbing activities.

6 CONCLUSIONS

During the BUOW breeding season surveys, two individual BUOW and several burrows with sign were observed within the project site on February 16, 2023. No BUOW, active burrows, or BUOW sign were documented within the project site during the subsequent BUOW surveys conducted between April 26, 2023, and July 3, 2023. The absence of BUOW during the peak breeding season suggests that the project site is not currently used by BUOW for nesting. The site appears be used by BUOW for refuge and/or foraging outside of the nesting season. Pre-construction surveys will be required to avoid potential direct impacts on BUOW resulting from the project.

7 REFERENCES

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Project Boundary
BUOW Survey Area

Survey Results

- BUOW Individual
- Occupied BUOW Burrow
- Suitable Unoccupied BUOW Burrow

FIGURE 1

Survey Results

MIRO WAY AND AYALA DRIVE
RIALTO, CA



Aerial Photo: Nearmap 2023

APPENDIX A

SITE PHOTOGRAPHS

Appendix A
Site Photographs



Photo 1. Representative view of non-native grassland dominated by ripgut brome (*Bromus diandrus*) and common fiddleneck (*Amsinckia menziesii*) within the project site, facing east. February 16, 2023.



Photo 2. Representative view of disturbed habitat within the project site, facing east. February 16, 2023.



Photo 3. View of occupied burrowing owl (*Athene cunicularia*, BUOW) burrow, where live BUOW was observed on the project site immediately northeast of the warehouse building on N Linden Avenue. February 16, 2023.



Photo 4. Representative view of a previously occupied BUOW burrow with overgrown vegetation and no new BUOW sign. Located on the project site northeast of the warehouse building on N Linden Avenue, adjacent to the burrow shown in Photo 3. April 26, 2023.



Photo 5. Representative view of vegetation growth. View of the short-pod mustard (*Hirschfeldia incana*) along the eastern edge of the project site, facing north. April 26, 2023.



Photo 6. View of mowed vegetation in the southern portion of the project area, facing northwest. June 12, 2023.



Photo 7. View of non-native grassland in the northern portion of the project site. July 3, 2023.



Photo 8. View of previously occupied BUOW burrow on the project site, immediately northeast of the warehouse building on N Linden Avenue, showing cleared vegetation and no new BUOW sign.
July 3, 2023.

APPENDIX B

BIRD SPECIES OBSERVED

Appendix B
Bird Species Observed

Family	Scientific Name	Common Name
Accipitridae	<i>Buteo jamaicensis</i>	red-tailed hawk
Alaudidae	<i>Eremophila alpestris</i>	California horned lark (WL) [†]
Charadriiformes	<i>Larus californicus</i>	California gull (WL) [†]
Columbidae	<i>Columba livia</i>	rock pigeon*
Columbidae	<i>Zenaida macroura</i>	mourning dove
Corvidae	<i>Corvus brachyrhynchos</i>	American crow
Corvidae	<i>Corvus corax</i>	common raven
Falconidae	<i>Falco columbarius</i>	merlin (WL) [†]
Falconidae	<i>Falco mexicanus</i>	prairie falcon (WL) [†]
Falconidae	<i>Falco sparverius</i>	American kestrel
Fringillidae	<i>Haemorhous mexicanus</i>	house finch
Fringillidae	<i>Spinus psaltria</i>	lesser goldfinch
Hirundinidae	<i>Petrochelidon pyrrhonota</i>	cliff swallow
Hirundinidae	<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
Icteridae	<i>Icterus bullockii</i>	Bullock's oriole
Icteridae	<i>Icterus cucullatus</i>	hooded oriole
Icteridae	<i>Sturnella neglecta</i>	western meadowlark
Passerellidae	<i>Melospiza crissalis</i>	California towhee
Passerellidae	<i>Tyrannus vociferans</i>	Cassin's kingbird
Passeridae	<i>Passer domesticus</i>	house sparrow*
Strigidae	<i>Athene cunicularia</i>	burrowing owl (SSC) [†]
Sturnidae	<i>Sturnus vulgaris</i>	Eurasian starling*
Trochilidae	<i>Calypte anna</i>	Anna's hummingbird
Tyrannidae	<i>Sayornis saya</i>	Say's phoebe
Tyrannidae	<i>Tyrannus verticalis</i>	western kingbird
<p>*Introduced species [†]No nesting or wintering behavior observed SSC: CDFW Species of Special Concern WL: CDFW Watch List Species</p>		

APPENDIX C

CALIFORNIA NATURAL DIVERSITY DATABASE ONLINE FIELD SURVEY FORM REPORTS

CNDDDB Online Field Survey Form Report



California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/



Source code G0023F0008
Quad code 3411714
Occ. no. _____
EO index no. _____
Map index no. _____

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Eremophila alpestris actia*

Common name: California horned lark

Date of field work (mm-dd-yyyy): 07-03-2023

Comment about field work date(s): Also observed during survey on 12 June 2023

OBSERVER INFORMATION

Observer: Alec G. Goodman

Affiliation: Rocks Biological Consulting

Address: 5606 Meade Ave

Email: Alec@rocksbio.com

Phone: (619) 701-6798

Other observers: Hannah Swarthout

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Heard, then seen

Identification explanation:

Identification confidence: Very confident

Species found: Yes If not found, why not?

Level of survey effort: Incidentally observed during breeding season BUOW surveys.

Total number of individuals: 5

Collection? No

Collection number:

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Heard singing then seen

Number detected in each age class:

5

adults

juveniles

larvae

egg mass

unknown

Age class comment:

Bird site use:

- ☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek
☐ Non-breeding (over-wintering) ☐ Communal roost ☒ Other

Site use description: [No signs of nesting observed, likely foraging ground.](#)

What was the observed behavior? [Flushed from ground, then landed to forage.](#)

Describe any evidence of reproduction: [None.](#)

SITE INFORMATION

Habitat description:

Slope:

Land owner/manager:

Aspect:

Site condition + population viability:

Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Fontana	1397	34.12408	-117.39673	463415	3775985	11
1	Public Land Survey	Feature Comment						
	S T01N R05W 34							

The mapped feature is accurate within: 20 m

Source of mapped feature: [ArcGIS Field Maps](#)

Mapping notes:

Location/directions comments:

Attachment(s):

CNDDDB Online Field Survey Form Report



California Natural Diversity Database
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Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/



Source code GOO23F0009
Quad code 3411714
Occ. no. _____
EO index no. _____
Map index no. _____

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Larus californicus*

Common name: California gull

Date of field work (mm-dd-yyyy): 02-16-2023

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Alec Goodman

Affiliation: Rocks Biological Consulting

Address: 5606 Meade Ave, San Diego, CA 92115

Email: Alec@rocksbio.com

Phone: (619) 701-6798

Other observers: Hannah Swarthout

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Seen

Identification explanation:

Identification confidence: Confident

Species found: Yes If not found, why not?

Level of survey effort: Incidental observation during breeding BUOW survey

Total number of individuals: 1

Collection? No

Collection number:

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

1

adults

juveniles

larvae

egg mass

unknown

Age class comment:

Bird site use:

- ☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek
☐ Non-breeding (over-wintering) ☐ Communal roost ☒ Other

Site use description: [Fly over. No Evidence of site use.](#)

What was the observed behavior? [In flight](#)

Describe any evidence of reproduction: [None](#)

SITE INFORMATION

Habitat description:

Slope:

Land owner/manager:

Aspect:

Site condition + population viability:

Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Fontana	1405	34.12496	-117.39768	463329	3776083	11
1	Public Land Survey	Feature Comment						
	S T01N R05W 34							

The mapped feature is accurate within: [500 m](#)

Source of mapped feature: [ArcGIS Field Maps](#)

Mapping notes:

Location/directions comments:

Attachment(s):

CNDDDB Online Field Survey Form Report



California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/



Source code G0023F0010
Quad code 3411714
Occ. no. _____
EO index no. _____
Map index no. _____

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Falco columbarius*

Common name: merlin

Date of field work (mm-dd-yyyy): 02-16-2023

Comment about field work date(s): _____

OBSERVER INFORMATION

Observer: Alec Goodman

Affiliation: Rocks Biological Consulting

Address: 5606 Meade Ave, San Diego, CA 92115

Email: Alec@rocksbio.com

Phone: (619) 701-6798

Other observers: Hannah Swarthout

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Seen

Identification explanation: Larger than kestrel, streaky markings on underside and striped tail

Identification confidence: Very confident

Species found: Yes If not found, why not?

Level of survey effort: Incidental observation during nesting season BUOW survey.

Total number of individuals: 1

Collection? No

Collection number:

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

1

adults

juveniles

larvae

egg mass

unknown

Age class comment:

Bird site use:

- ☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek
☐ Non-breeding (over-wintering) ☐ Communal roost ☒ Other

Site use description: [Observed flying low to the ground through the site. Site possibly used as hunting ground.](#)

What was the observed behavior? [In flight](#)

Describe any evidence of reproduction: [None](#)

SITE INFORMATION

Habitat description:

Slope:

Land owner/manager:

Aspect:

Site condition + population viability:

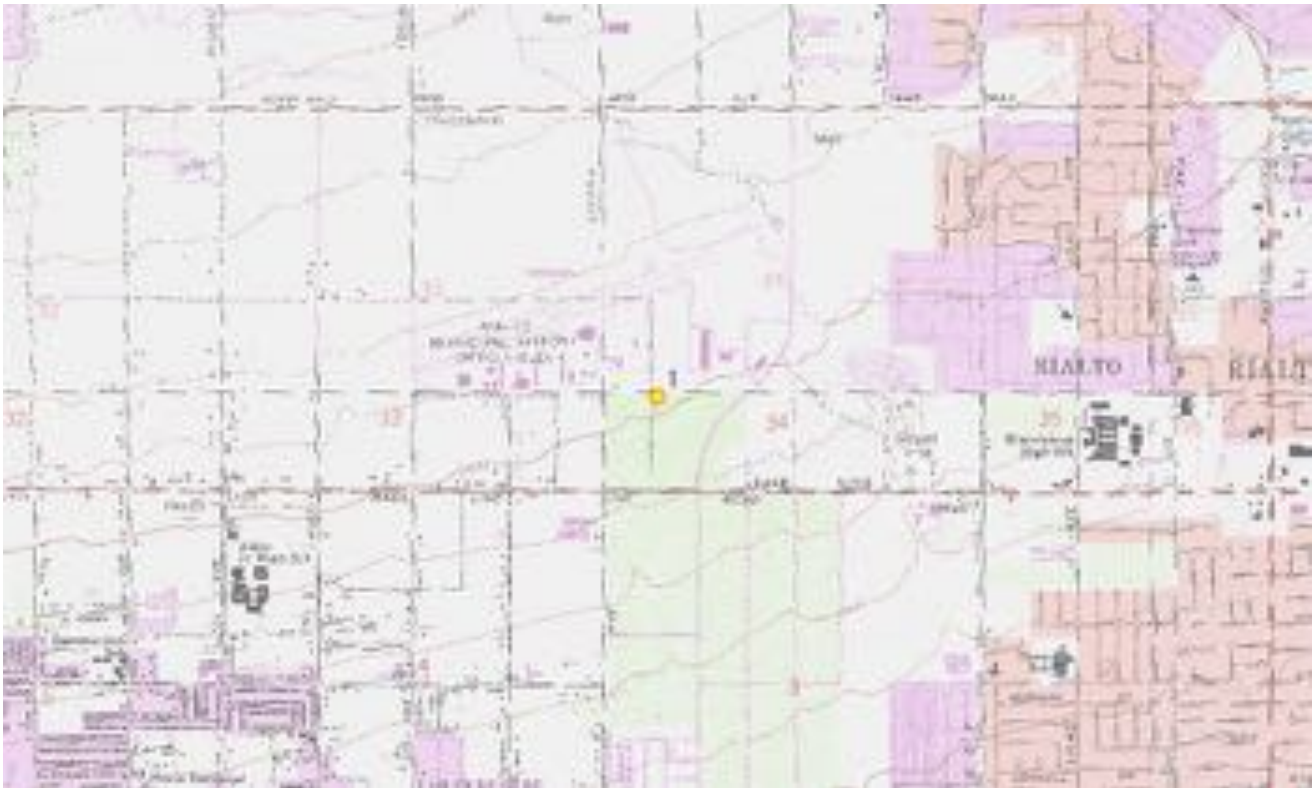
Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Fontana	-9999	34.12491	-117.39856	463247	3776078	11
1	Public Land Survey	Feature Comment						
	S T01N R05W 34							

The mapped feature is accurate within: [20 m](#)

Source of mapped feature: [ArcGIS Field Maps](#)

Mapping notes:

Location/directions comments:

Attachment(s):

CNDDDB Online Field Survey Form Report



California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/



Source code GOO23F0011
Quad code 3411724
Occ. no. _____
EO index no. _____
Map index no. _____

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Falco mexicanus*

Common name: *prairie falcon*

Date of field work (mm-dd-yyyy): *07-03-2023*

Comment about field work date(s):

OBSERVER INFORMATION

Observer: *Alec Goodman*

Affiliation: *Rocks Biological Consulting*

Address: *5606 Meade Ave, San Diego, CA 92115*

Email: *alec@rocksbio.com*

Phone: *(619) 701-6798*

Other observers: *Hannah Swarthout*

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: *Observed*

Identification explanation:

Identification confidence: *Very confident*

Species found: *Yes* If not found, why not?

Level of survey effort: *Incidental observation during breeding season BUOW survey*

Total number of individuals: *1*

Collection? *No*

Collection number:

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? *Seen*

Number detected in each age class:

1

adults

juveniles

larvae

egg mass

unknown

Age class comment:

Bird site use:

- ☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek
☐ Non-breeding (over-wintering) ☐ Communal roost ☒ Other

Site use description: [Observed flying overhead](#)

What was the observed behavior? [In flight](#)

Describe any evidence of reproduction: [None](#)

SITE INFORMATION

Habitat description:

Slope:

Land owner/manager:

Aspect:

Site condition + population viability:

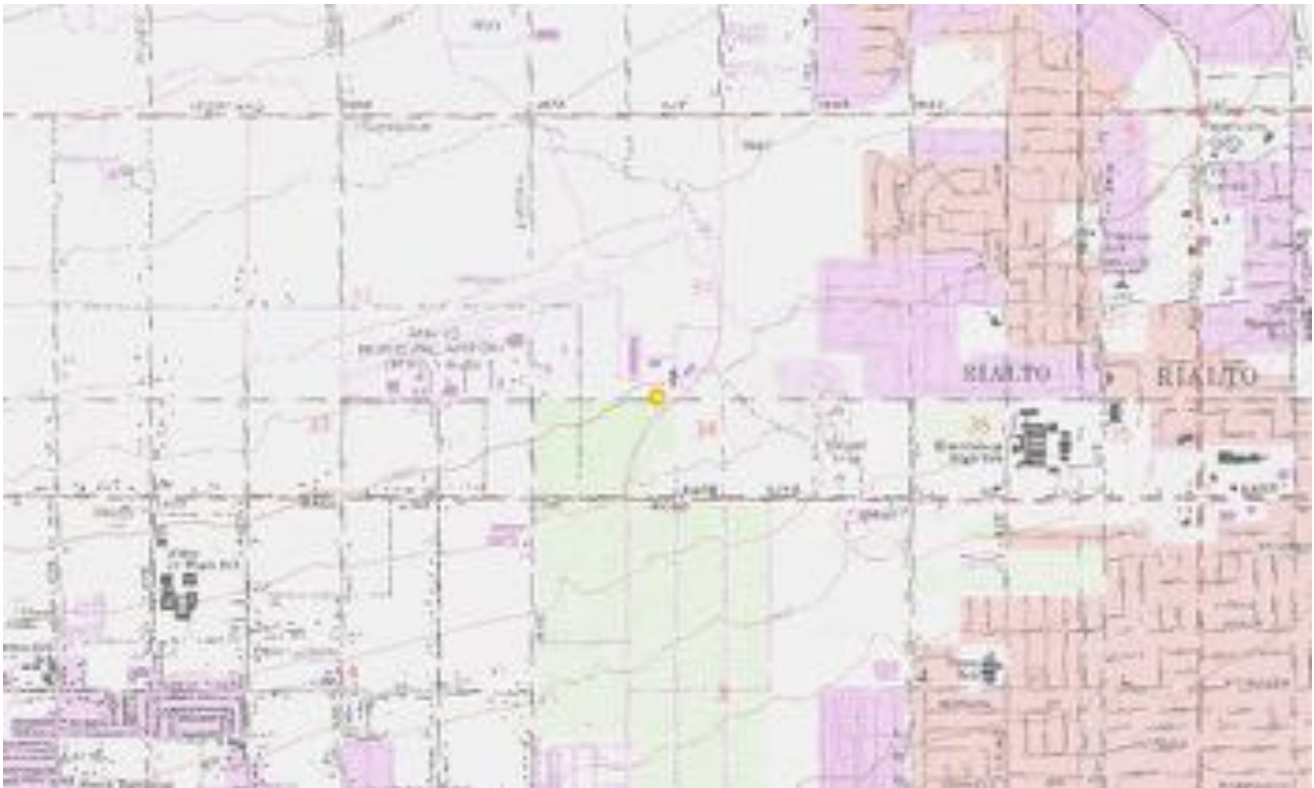
Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Devore	1399	34.12516	-117.39530	463548	3776105	11
1	Public Land Survey	Feature Comment						
	S T01N R05W 34							

The mapped feature is accurate within: [20 m](#)

Source of mapped feature: [ArcGIS Field Maps](#)

Mapping notes:

Location/directions comments:

Attachment(s):

CNDDDB Online Field Survey Form Report



California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/



Source code G0023F0012
Quad code 3411714
Occ. no. _____
EO index no. _____
Map index no. _____

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Athene cunicularia*

Common name: *burrowing owl*

Date of field work (mm-dd-yyyy): *02-16-2023*

Comment about field work date(s):

OBSERVER INFORMATION

Observer: *Alec Goodman*

Affiliation: *Rocks Biological Consulting*

Address: *5606 Meade Ave, San Diego, CA 92115*

Email: *alec@rocksbio.com*

Phone: *(619) 701-6798*

Other observers: *Hannah Swarthout*

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: *Seen*

Identification explanation:

Identification confidence: *Very confident*

Species found: *Yes* If not found, why not?

Level of survey effort: *Observed during breeding season BUOW surveys*

Total number of individuals: *1*

Collection? *No*

Collection number:

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? *Seen*

Number detected in each age class:

1

adults

juveniles

larvae

egg mass

unknown

Age class comment:

Bird site use:

- ☐ Nesting ☐ Rookery ☐ Nesting colony ☒ Burrow site ☐ Lek
☒ Non-breeding (over-wintering) ☐ Communal roost ☐ Other

Site use description: [The site appears be used by BUOW for refuge and/or foraging outside of the nesting season.](#)

What was the observed behavior? [In burrow apron, flushed to nearby auxiliary burrow.](#)

Describe any evidence of reproduction: [None.](#)

SITE INFORMATION

Habitat description:

Slope:

Land owner/manager:

Aspect:

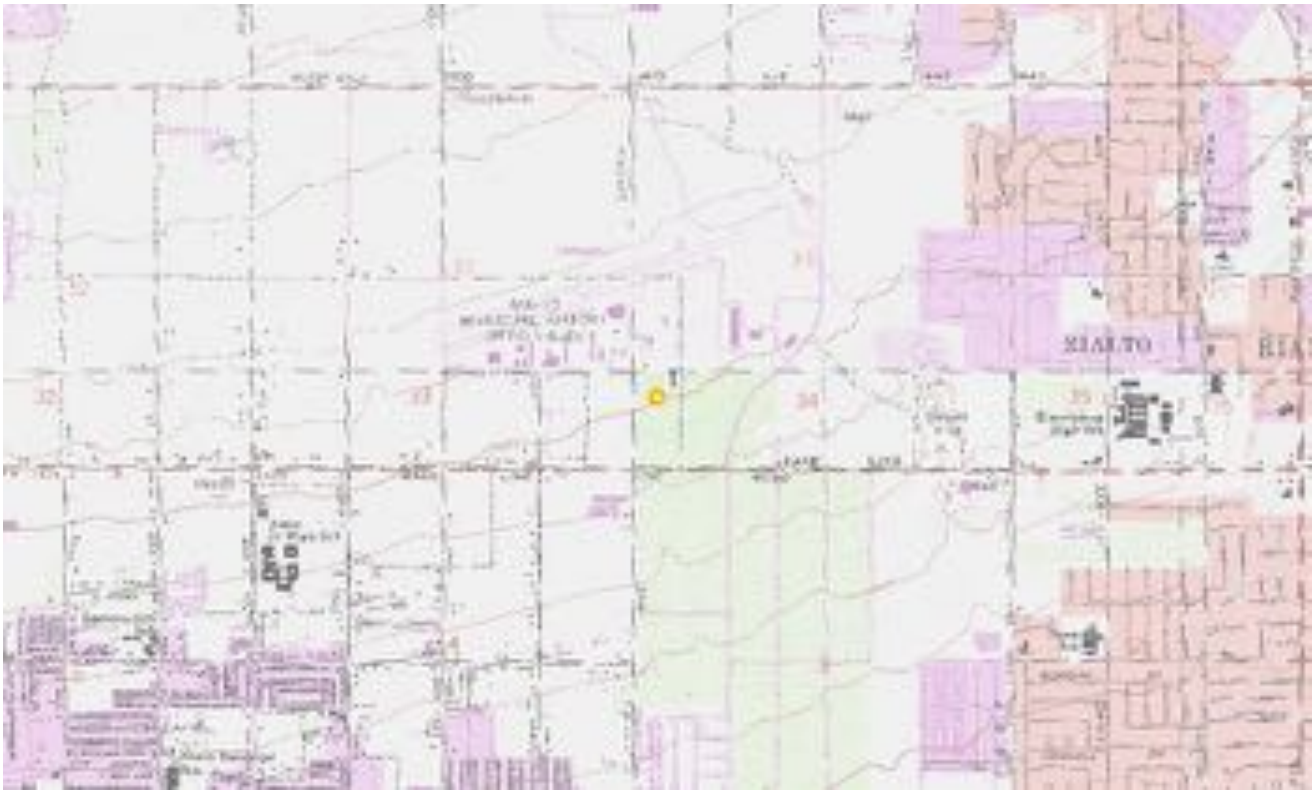
Site condition + population viability:

Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION

ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Fontana	-9999	34.12407	-117.39994	463120	3775986	11
1	Public Land Survey	Feature Comment						
	S T01N R05W 34							

The mapped feature is accurate within: [5 m](#)

Source of mapped feature: [ArcGIS Field Maps](#)

Mapping notes:

Location/directions comments:

Attachment(s):

CNDDDB Online Field Survey Form Report



California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/



Source code G0023F0013
Quad code 3411714
Occ. no. _____
EO index no. _____
Map index no. _____

This data has been reported to the CNDDDB, but may not have been evaluated by the CNDDDB staff

Scientific name: *Athene cunicularia*

Common name: *burrowing owl*

Date of field work (mm-dd-yyyy): *02-16-2023*

Comment about field work date(s):

OBSERVER INFORMATION

Observer: *Alec Goodman*

Affiliation: *Rocks Biological Consulting*

Address: *5606 Meade Ave, San Diego, CA 92115*

Email: *info@rocksbio.com*

Phone: *(619) 701-6798*

Other observers: *Hannah Swarthout*

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: *Seen*

Identification explanation:

Identification confidence: *Very confident*

Species found: *Yes* If not found, why not?

Level of survey effort: *Observed during breeding season BUOW survey*

Total number of individuals: *1*

Collection? *No*

Collection number:

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? *Seen*

Number detected in each age class:

1

adults

juveniles

larvae

egg mass

unknown

Age class comment:

Bird site use:

- ☐ Nesting ☐ Rookery ☐ Nesting colony ☒ Burrow site ☐ Lek
☒ Non-breeding (over-wintering) ☐ Communal roost ☐ Other

Site use description: The site appears be used by BUOW for refuge and/or foraging outside of the nesting season.

What was the observed behavior? Flushed from burrow to nearby auxiliary burrow. Confirmed 2nd individual observed on this day/survey.

Describe any evidence of reproduction: None.

SITE INFORMATION

Habitat description:

Slope:

Land owner/manager:

Aspect:

Site condition + population viability:

Immediate & surrounding land use:

Visible disturbances:

Threats:

General comments:

MAP INFORMATION

ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	San Bernardino	Fontana	1393	34.12289	-117.39798	463300	3775854	11
1	Public Land Survey	Feature Comment						
	S T01N R05W 34							

The mapped feature is accurate within: 5 m

Source of mapped feature: ArcGIS Field Maps

Mapping notes:

Location/directions comments:

Attachment(s):

APPENDIX D

SURVEYOR FIELD NOTES

Mind Way: Ayala Dr Buw 1 2/16 15

AG-HS	s	0700	45	8-12	5%
	e	1030	54	12-18	25%

CORA CAGU ROPE HOFF AM(R ANHU
MERL* BUW* CHKS WEWE LEGO AMKE

↓
2 individuals

CAGS Burrow; Coyote

-Vegetation overgrown where previous
sitable burrows were

0800 - Buw flushed from burrow

near east side. flew to oak lands

*MANY CAGS Burrows in SE water
field

0905 - 2nd ind flushed from burrow

@ SE side. 2 burrows w sign

-Homeless activity.

2/16 MIRO WAY & AYALA BUOW ¹⁸³

0445-1530

#1

2.6 miles TIME TEMP WIND CL

START 0700 45 5-10 S

END 1030 54 8-16 25
12-18

WILDLIFE:

CORA, ROP1, CAGU, HOF1,
AMCK, ANHV, MERL*, BUOW*,
CAH1, WEME, LEGO, COYOTE,
CAGS, AMKE,

TRANSIENT ACTIVITY

* BUOW FLUSHED AT 0800 TO
AUX BURROW. NOT A LOT OF
SIGN AT EITHER BURROW.

* SECOND BUOW FLUSHED FROM
"4TH" BURROW AT 0902.

* 75% CERTAIN ON ID.

LARGER THAN KESTREL,
SMALLER THAN PEREGRINE
BROWNISH OVERALL.
POWERFUL FLAPPING.
NOT TOO FAST

Min Way Burrow #2

9/26/23 55

0700 53 1-3 0% (Hazy)

0945 65 1-3 0%

MADO EUST LEGO CALT CORA HOPI

BOOR ROPI HOSE ANTH RTTH SAPH

RUS

- Vly is overgrown, AVEBAR: HIRING >3ft.

Cope, WFL, CAGS, SBLI

Burrow complex A: overgrown, poor condition
no sign.

Burrow complex B: moderate area surrounding
burrow still low height veg. anything
else over 4ft.

* Some areas were excluded
due to tall, dense vegetation
- all CAGS burrows were visited.

Mito way Ayala Dr. BUOW #3

	time	temp	wind	cloud
start	0745	55°	3-5	100%
end	1115	62°	4-6	98%

HOFI	WEKI	EUST	RTHA	CAGIS
MODD	CLSW	HOLA	LEGO	coyote
WETA	ROPI	HOOK	ANHU	scat,
CORA	AMKE	CAKI		den,
AMCR	AVCO	SAPH		individual
CATO	KILL	BLPH		

chuckered white
 clemence's Blue
 marine blue

No BUOW or sign

mapped coyote den

6/12 MIRO @ AYALA BUOW #3
0515-1430 + 27 MILES
TIME TEMP WIND CL
START 0745 55° 3-5 100% ^WDRIZZLE
END 1115 62° 4-6 90%

WILDLIFE:

HOFI, MOBO, WEKI, CLSW, CAES,
BOPI, EUST, HOLA, HOOK,
CORA, AMCP, CARI, ~~AMCP~~,
COYOTE SCAT, AUBOKON CT,
JAPH, CLEMENCE BLUE?
CHECKERED WHITE, CALT,
KIL, BUPA, MARINE BLUE,
~~BUTTER~~ RTHA, LEGO, ANHU,

NO BUOW / SIGN

Coleogyne ramossima ♂
Chinacaps engelmanni
Murahe's lures *Gutierrezia monographa* ♀
Scholz in sp. *Rhynchos ilicifolia* ♀
Pinus monophylla *Hesperoyucca whipplei* ♀
Quercus cornelius-milleri ♂
Lawsonia maritima ♀

- Oppenauke, CATS
 - fields recently mowed, suitable habitat throughout

102

M. to Wm Ryan	80	1-3	0%	7/3
W. to	1200	91	1-3	1%
HS				
0700 →				
RTTA	ANKLE	COLE	LEGO	HOFF
WAKE	AWAY	IRF	SADT	MOOD

7/3 MIROD AYALA BUOW#4
0715-1430

	TIME	TEMP	WIND	CL
START	0915	80	1-3	0%
END	1200	91	3-6	1%

WILDLIFE:

AMKE, RTHA, LEGO, HOPI,
WEE, GORHEE, FNAKE, HOLÁ,
PRFA, MODO, KOPI, SAPH,

APPENDIX D

MIRO WAY AND AYALA DRIVE DEVELOPMENT PROJECT FOCUSED CROTCH'S BUMBLE BEE SURVEY REPORT



MIRO WAY AND AYALA DRIVE DEVELOPMENT PROJECT – FOCUSED CROTCH'S BUMBLEBEE SURVEY REPORT

Hesperia, California

September 16, 2024

Prepared for:
Kimley-Horn and Associates, Inc.
1100 W. Town and Country Road, Suite 700
Orange, CA 92868
(714) 786-6128

Prepared by:
Rocks Biological Consulting
4312 Rialto Street
San Diego, CA 92107
(619) 701-6798

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TABLES

Table 1.	Crotch’s Bumble Bee Survey Dates/Conditions	3
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FIGURES

Figure 1 – Project Location

Figure 2 – Survey Area

APPENDICES

Appendix A – Site Photographs

Appendix B – Potential Nectar Sources Observed

Appendix C – Invertebrates Observed

Appendix D – Surveyor Field Notes

1 SUMMARY

This report is a summary of the results of focused surveys for Crotch's bumble bee (*Bombus crotchii*, CBB) that Rocks Biological Consulting (RBC) conducted for the Miro Way and Ayala Drive Development Project (project) in Rialto, San Bernardino County, California. No CBB or any other *Bombus* species were documented within the survey area during focused surveys.

2 INTRODUCTION

2.1 PROJECT LOCATION & PROPOSED ACTIVITY

The approximately 35-acre project site is in the City of Rialto, San Bernardino County, California (Figure 1). The project is located north of W Baseline Road, west of N Ayala Drive, east of N Linden Avenue, and south of Miro Way. The project proposes the development of two industrial warehouses. The project would also include the rezone of Planning Area 123 from School to General Commercial with a Residential Overlay, which is not included in the current project's approximately 20.8-acre impact footprint. The project occurs within Township 01N, Range 05W, Sections 33 and 34 on the U.S. Geological Survey (USGS) 7.5-minute Fontana, Devore quadrangle map (Figure 1).

2.2 CROTCH'S BUMBLE BEE STATUS & NATURAL HISTORY

CBB has experienced sharp population declines over the past decade and is currently a candidate for listing under the California Endangered Species Act (CESA) based on a 2018 petition submitted by the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety (California Department of Fish and Wildlife [CDFW] 2022). Historically, CBB occurred from northern California south to Baja Mexico and from the coast to the central valley and southwestern desert, with some records as far east as Nevada. However, since the early 2000s a change in extent has been observed, with current range size estimated to be approximately of 75% of historic range and the northern populations now extinct. In addition, the species persistence within its extant range is estimated to be approximately 20% of historic occupancy (Hatfield 2015). Though CBB is relatively tolerant of fragmented and/or semi-urban environments, habitat loss, climate change, and pesticide use are considered imminent threats to populations (Williams et al. 2014; CDFW 2022).

Suitable habitat for this species includes a variety of open shrub and grassland vegetation communities that support significant stands of nectar sources, mostly in the form of flowering annuals. CBB's primary nectar sources include *Medicago*, *Lupinus*, *Chaenactis*, *Asclepias*, *Phacelia*, and *Salvia*, which have an easily accessible nectar that accommodates CBB's relatively short tongue (Williams et al. 2014). The project site and surrounding area support scrub habitat and nectar sources appropriate for CBB; therefore, the potential for this species to occur is moderate.

3 METHODS

3.1 SURVEY METHODS

Based on the presence of suitable habitat within the survey area (e.g., the project site), RBC biologists Alec Goodman, Hannah Swarthout, and Kelsey Woldt conducted focused surveys in accordance with the CDFW's *Survey Considerations for CESA Candidate Bumble Bee Species* (CDFW 2023). Surveys were performed two to four weeks apart in July and August within the time period when detection of CBB is greatest (i.e., April through August). Surveys were conducted by walking transects through the survey area focusing on areas where ample nectar sources were present, with a minimum of one person-hour of searching per three acres of suitable habitat. All observed insects and potential nectar sources were identified and recorded during the survey. Surveyors were prepared to record the location of any observed CBB, along with population size and nesting status, and to collect non-lethal photo vouchers captured at various angles to confirm accurate identification.

3.2 SURVEYOR QUALIFICATIONS

Mr. Goodman is a wildlife biologist with over seven years of professional experience and a Bachelor of Science degree in environmental science. Ms. Swarthout is a wildlife biologist with over four years of professional experience and a Bachelor of Arts degree in environmental studies. Ms. Woldt is a wildlife biologist with five years of professional experience and holds a Master of Science degree in biology and a Bachelor of Science degree in ecology, animal behavior, and evolutionary biology. All surveyors are experienced at conducting CBB surveys and are familiar with the identifying characteristics, behavior, and nectar sources for CBB. Additionally, the biologists have taken courses that include bumblebee identification.

4 RESULTS

4.1 EXISTING CONDITIONS & HABITAT ASSESSMENT

The survey area is composed primarily of disturbed habitat, with disturbed Riversidean sage scrub and developed land also present. During the surveys, the disturbed habitat was mostly denuded of vegetation from recent mowing, but remnant foxtail brome (*Bromus madritensis*), slender oat (*Avena barbata*), golden crownbeard (*Verbesina encelioides*), and doveweed (*Croton setiger*) were sparsely present. The disturbed Riversidean sage scrub (<1 acre) was dominated by California buckwheat (*Eriogonum fasciculatum*), short-pod mustard (*Hirschfeldia incanina*), deerweed (*Acmispon glaber*), and doveweed.

At the time of the survey, the disturbed habitat and developed land provided only marginally suitable habitat for CBB in the form of sparse, patchy, nectar sources and potential nesting and/or overwintering resources. Areas of disturbed habitat and developed land without resources for CBB were not surveyed. The on-site disturbed Riversidean sage scrub is suitable for CBB and contained an abundance of nectar sources as well as potential nesting and overwintering resources. The site is surrounded on three sides by developed land (to the west, south, and east),

which may provide nectar sources through ornamental vegetation. To the north, the site borders disturbed habitat with similar vegetation composition as the site. Representative site photographs are presented in Appendix A.

Potential nectar sources for CBB were present on site, including California buckwheat, telegraphweed (*Heterotheca grandiflora*), short-pod mustard, and Spanish lotus (*Acmispon americanus*). A complete list of observed potential nectar sources is presented in Appendix B.

4.2 FOCUSED CROTCH'S BUMBLE BEE SURVEY RESULTS

RBC conducted three focused CBB surveys during the nesting season between July 11 and August 15, 2024. Survey dates, conditions, and personnel are presented in Table 1, below.

No CBB or other *Bombus* species were observed within the survey area. However, many other invertebrates were observed during the surveys. A complete list of invertebrates observed is presented as Appendix C, and field notes are provided in Appendix D.

Table 1. Crotch's Bumble Bee Survey Dates/Conditions

Survey Round	Date	Surveyor(s)	Time (Start-End)	Temperature (F) (Start-End)	Cloud Cover (%) (Start-End)	Wind Speed (mph) (Start; End)
1	7/11/24	AG	0700–1115	71-89	10-15	1–2; 1–3
2	7/31/24	AG, KW	0830–1100	72-84	0-0	0–3; 1–3
3	8/15/24	AG, HS	0830-1130	75-88	0-0	1–3; 1–3
Surveyors: AG=Alec Goodman; HS=Hannah Swarthout; KW=Kelsey Woldt						

5 CROTCH'S BUMBLE BEE AVOIDANCE & MINIMIZATION

Pursuant to the CDFW *Survey Considerations for CESA Candidate Bumble Bee Species*, all project sites that support suitable habitat within the range of CBB should conduct pre-construction surveys, regardless of CBB presence/absence during previous focused surveys. The pre-construction surveys will be conducted in accordance with CDFW recommendations. As such, the following avoidance and minimization measure is required to avoid potential direct impacts on CBB:

Within one year of any ground disturbance or vegetation clearing, a focused species survey for CBB shall be conducted by a qualified biologist. Survey methodology shall follow CDFW's 2023 *Survey Considerations for CESA Candidate Bumble Bee Species*. Surveys shall take place when detection of the focal species is greatest (April through August), when feasible. CBB surveys shall be conducted for a minimum of one person-hour of searching (excluding time spent capturing, photographing, identifying, and releasing specimen) per three acres of suitable habitat. Surveillance shall be focused where ample nectar sources are present, and non-lethal photo vouchers of

focal species shall be captured at various angles to confirm accurate identification (CDFW 2023).

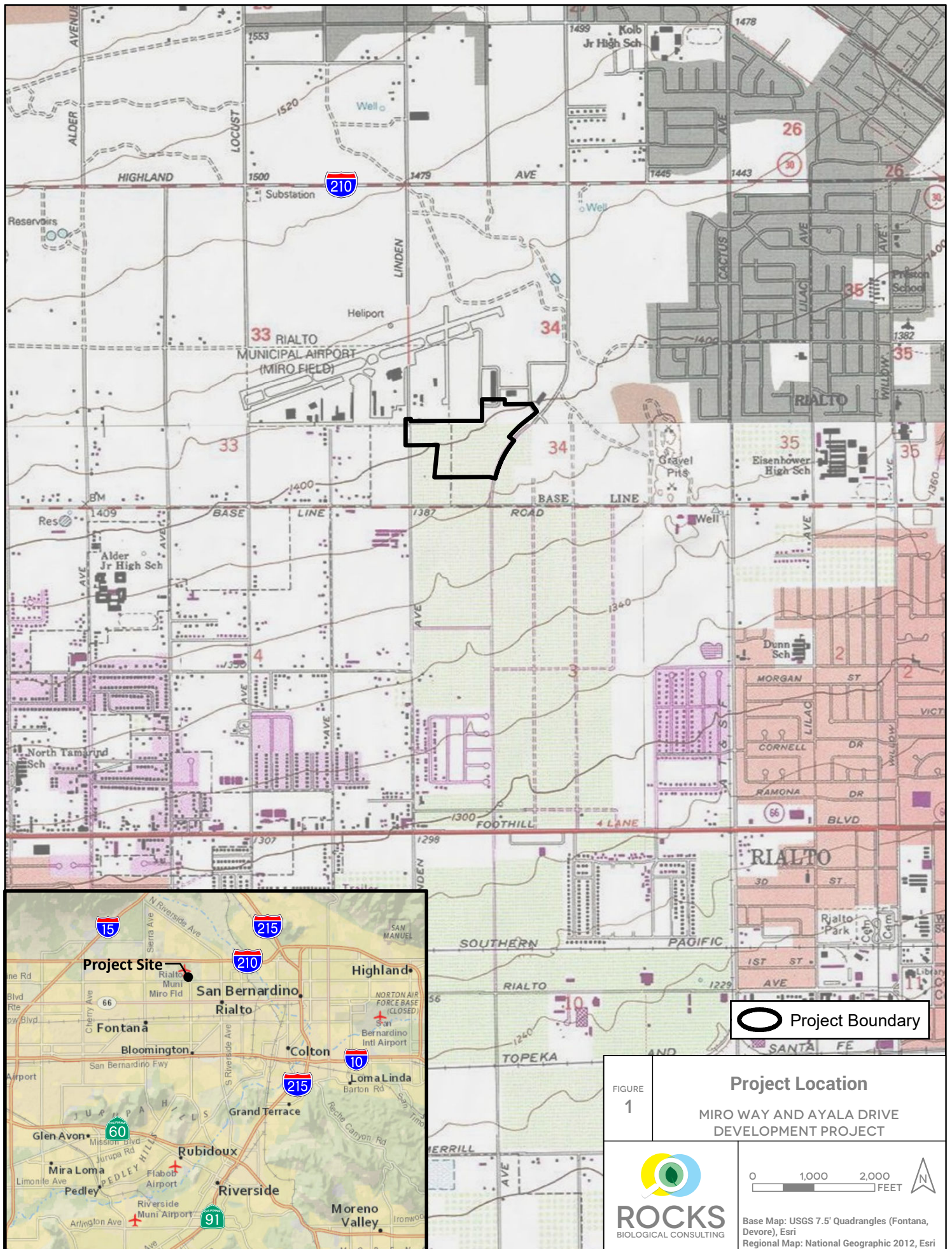
If CBB is documented on the project site, the project proponent shall notify CDFW within five working days of the observation. If necessary, site-specific avoidance and minimization measures shall be implemented to avoid take of CBB. If take avoidance is not feasible, an ITP shall be obtained from CDFW.

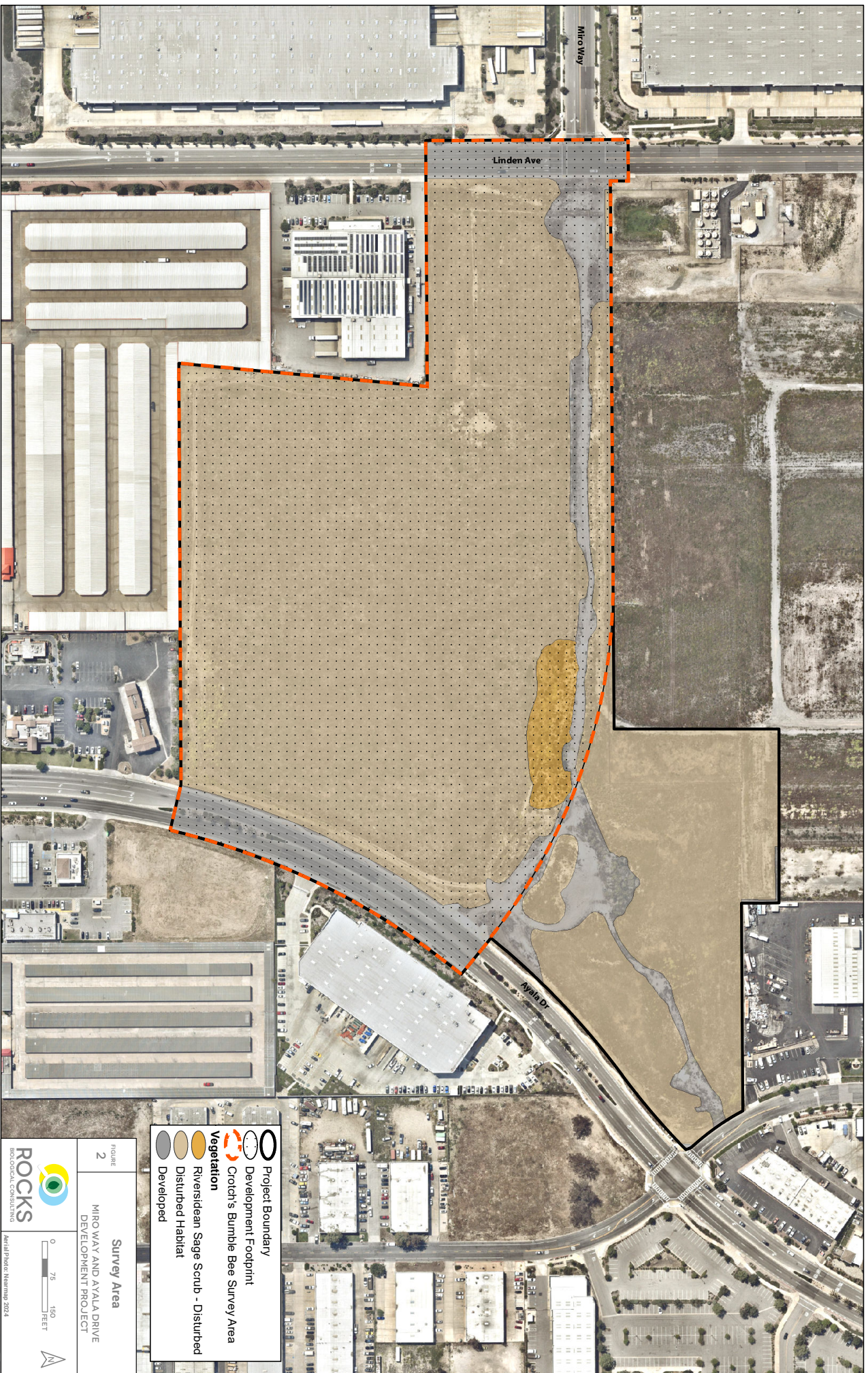
6 CONCLUSIONS

No CBB were documented within the survey area for the Miro Way and Ayala Drive Development Project during focused surveys conducted between July 11 and August 15, 2024. The focused survey results reported herein are valid for one year. Due to habitat suitability and site location, CBB pre-construction surveys are required within one year of construction activity initiation in order to confirm species absence and ensure impact avoidance.

7 REFERENCES

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APPENDIX A

SITE PHOTOGRAPHS

Appendix A
Site Photographs



Photo 1. View of survey area from the northern boundary, facing south, showing various nectar sources including California buckwheat (*Eriogonum fasciculatum*) and deerweed (*Acemispom glaber*). July 11, 2024.



Photo 2. View of the survey area from the center of the project, facing west, showing various nectar sources including golden crownbeard (*Verbesina encelioides*) and doveweed (*Croton setiger*). July 15, 2024.



Photo 3. View from the central portion of the survey area, facing north. August 15, 2024.



Photo 4. View from the central portion of the survey area, facing east. August 15, 2024.

APPENDIX B

POTENTIAL NECTAR SOURCES

Appendix B
Potential Nectar Sources Observed

Family	Scientific Name	Common Name
Asteraceae	<i>Centaurea melitensis</i>	Tocalote
Asteraceae	<i>Verbesina encelioides</i>	Golden crownbeard
Brassicaceae	<i>Hirschfeldia incana</i>	Short-pod mustard
Euphorbiaceae	<i>Croton setiger</i>	Doveweed
Euphorbiaceae	<i>Euphorbia albomarginata</i>	Rattlesnake sandmat
Fabaceae	<i>Acemisson americanus</i>	Spanish lotus
Polygonaceae	<i>Eriogonum fasciculatum</i>	California buckwheat
Solanaceae	<i>Datura wrightii</i>	Jimsonweed
Solanaceae	<i>Heterotheca grandiflora</i>	Telegraphweed
Zygophyllaceae	<i>Tribulus terrestris</i>	Puncture vine

APPENDIX C

INVERTEBRATES OBSERVED

Appendix C
Invertebrates Observed

Family	Scientific Name	Common Name
Anisoptera (Suborder)	n/a	Dragonfly
Apidae	<i>Apis mellifera</i>	European honey bee
Apidae	<i>Anthophora californica</i>	California digger bee
Araneidae	<i>Argiope trifasciata</i>	Banded garden spider
Asilidae	<i>Efferia</i> sp.	Robber fly
Asilidae	<i>Mallophora fauix</i>	Bee killer
Asilidae	<i>Saropogon</i> sp.	Robber fly
Bombyliidae	n/a	Bee fly
Caelifera (Suborder)	n/a	Grasshopper
Coenagrionidae	<i>Enallagma civile</i>	Familiar bluet
Conopidae	<i>Physocephala texana</i>	Thick-headed fly
Crabronidae	<i>Bembix comatus</i>	Bembix wasp
Crabronidae	n/a	Square-headed wasp
Crabronidae	<i>Philanthus</i> sp.	Beewolf
Formicidae	<i>Pogonomyrmex</i> sp.	Harvester ant
Formicidae	<i>Veromessor</i> sp.	Smooth harvester ant
Halictidae	<i>Lasioglossum</i> sp.	Sweat bee
Hesperiidae	<i>Pyrgus</i> sp.	Checkered skipper
Libellulidae	<i>Libellula saturata</i>	Flame skimmer
Libellulidae	<i>Tamea lacerata</i>	Black saddlebags
Lycaenidae	<i>Brephidium exilis</i>	Western pygmy blue
Lycaenidae	<i>Icaricia monticola</i>	Clemence's blue
Lycaenidae	<i>Strymon melinus</i>	Gray hairstreak
Megachilinae	<i>Anthidiellum</i> sp.	Rotund Resin bee
Megachilinae	<i>Lithurgopsis</i> sp	Woodborer bee
Mutillidae	<i>Dasymutilla aureola</i>	Pacific velvet ant
Nymphalidae	<i>Junonia coenia</i>	Common buckeye
Nymphalidae	<i>Vanessa cardui</i>	Painted lady
Papilionidae	<i>Papilio rutulus</i>	Western tiger swallowtail
Pentatomidae	<i>Chlorochroa sayi</i>	Say's stink bug
Pieridae	<i>Colias</i> sp.	Sulphur
Pieridae	<i>Pieris rapae</i>	Cabbage white
Pieridae	<i>Pontia protodice</i>	Checkered white

Pompilidae	<i>Pepsis</i> sp.	Tarantula hawk
Reduviidae	<i>Apiomerus californicus</i>	California bee assassin
Reduviidae	<i>Zelus</i> sp.	Assassin bug
Scarabaeidae	<i>Cotinis mutabilis</i>	Figeater beetle
Sphecidae	<i>Ammophila</i> sp.	Thread-waisted wasp
Sphecidae	<i>Sceliphron caementarium</i>	Yellow-legged mud-dauber
Sphecidae	<i>Sphex pensylvanicus</i>	Great black wasp
Sphecidae	<i>Prionyx parkeri</i>	Prionyx wasp
Syrphidae	n/a	Hoverfly
Tenebrionidae	<i>Eleodes</i> sp.	Darkling beetle
Vespidae	<i>Polistes exclamans</i>	Guinea paper wasp

APPENDIX D

SURVEYOR FIELD NOTES

AL	Ayala Dr. Photo W	7/11
	CBS song	
	0700	71 1-3 10%
	1115	89 1-3 15%
MODO	ROPE	HOMO NRWS AMKE HOFI
CAGS	SBLI	RTHA COYOTE CORA

* site has been recently mowed.
 Most vegetation is only a few
 inches tall and dry. see photos
 * 5 kestrels hanging in field

Checkered white	Mallotricha faurix
Honey bee	Flower fly
Dragonfly sp.	Colias sp.
Buckeye	Swallowtail sp.
Orange paper wasp	Bombix sp.
Polistes sp.	Repsis sp.
tiny sweet bee	Asynbraea wasp
Green stink bug	Robber fly
grasshopper	Orb weaver
Ammophila	-1
↓ thread waist	wasp & other
Flower fly sp.	Painted lady
Grey hair streak	Clematis blue
all black spider wasp	California bee assassin
Small dark ground	
darkling beetle	

Plants; N = never seen

ERIFAS - N

Croton setiger - N

HIRINC - N

Verbesina encelioides (N)

TRITER - N

Euphorbia sp. N

CENMEL N

HETGRA

DALWRD

ACMAMIA

Dry ↓ Not Awn

HIRINC

ACMGLA

CENMEL

Non native grasses

BROMAD

AVEBAR

~~HETGRA (Not seen)~~

RILCOM

SALTRA

AMBALIA

AMARANTHUS ALBUS

CROCAL

~~ACMAMIA~~

ONL PIL

* Bombs available and
nesting substrate, thick
debris, etc.

- No Bombs sp.

MIRO WAY CBB #2 7/31/24

0830 72 1-3 0₂ 0

1100 84 1-3 0₂ 0

* No Bombus sp. observed
(limited nectar sources)

(Pg 1/2)

Assess PTO for: BUOW,
Coast horned lizard, coastal
whiptail, rare plants requiring
CSS ✓

veg map confirmation ✓

No AR confirmation ✓

BUOW → Burrows graded/damaged
beyond accessibility (PTO = Present)

Reptiles → PTO changed to low,
majority of RSS has been
mowed (see new polygon on
AGOL)

RARE PLANTS → PTO changed to very low
→ see above + remaining
RSS is on a pile of rubble (likely where
it was mowed)

Scale: 1 square =

Rite in the Rain

7/31/24

- *Dasymutilla aureola*
- *Apis mellifera*
- *Anthidiellum* sp.
- Saps stink bug
- *Bombilidae*
- Familiar bluet (*Enallagma cyathigerum*)
- Fig eater beetle
- *Polistes aurifer*
- *Sarcophaga* sp.
- *Prionyx parkeri*

(pg 2/2)

BLOOMING ANGIOSPERMS

ERIFAS ~~HELIA~~ GROSET
 VERENC TRITER DATWR
 HETGLA ACNAME

INSECTS / ARACHNIDS CONT'

- Dragon fly
- checkered white
- grass hopper
- Cabbage white
- Flame skimmer
- Common gray hairstreak

AG	Miro WAY	AYALA DR	7/31
KW	CB3	#2	
	0830	72	0-3 0%
	Inverts 1100	84	1-3 0% Nectar ↓
<i>Dasyneutilla aureola</i>			ERT FAS
<i>Apis mellifera</i>			HEC FAS
<i>Anthidicellum</i> sp			CRO SET
↳ (resin bee)			VER ENC
<i>Pepos</i> sp.			TRITE
<i>Chlorochrysa sayi</i>			DAR WRE
(suis stink bug)			HERDNL
<i>Bombilidae</i> sp.			ITETGLA
<i>Enallagma civile</i>			ALM AME
(Familiar blue)			
Fig needle			END DATA ↓
<i>Polistes aurifer</i>	1100	84	1-3 0%
<i>Lithurgopsis</i> sp			
(Woolbarer bees)			NO BOMBUS
<i>Sceloporus</i> sp.			Nest substrate available
<i>Prionyx parkeri</i>			small mound seen
Grasshopper sp			Bloom not at peak
CABBAGE WART			
Harvest ant			
FLAME SKINNER			
Common grey hinch			

6A6 Mid Way CBB #3 8/15

HS 0830 175 1-3 OK

1130 88 1-3 OK

INVERTS

Apis mellifera

Black saddlebags

Gossyphus

Say's stinkbug

Polistes sp.

Black & yellow mud

dauber

Pygmy Blue

Fig eater

Black harvest ant

Cabbage white

Pepsis sp

Megachile sp.

Crabronidae

Spirex pensylvanicus

Philaenus sp.

Polistes sp.

Familiar bluet

Physocephala texana

NECTAR

ERIFAS

VER TEUC

CRO SET

DAT WRD

HER INC

TRITER

HET GRA

Invited
Anthophora cylindrica
LasioGLOSSUM sp.
unk checked

Dist.
nest substrate available
No Bombyx

Not in flower
NUG. AMBROSIA, Salix sp.
DPTWRT, HTT GRAY, CROCM

8/15 MIROGAYALA

CROTCH'S #3

6:00AM - 2:15PM

TIME TEMP WIND

START 8:30AM 75° 2-5 O.

END 11:30AM 88° 1-3 O.

WILDLIFE:

TRAMEA SP., ELEOBES,

SCULPTOR CAEMENTARIUM,

POLISTINAE (PAPER WASP)

APIS MELLIFERA, JAYS

STINKBUG, POLISTES SP.,

GRAY HAIRSTREAK,

PYGMY BLUE, COTINIS

MUTABILIS, BLACK HARVEST

ANT, CARBAGE WHITE,

PEPSIS SP., MEGACHILE

SP., CRABRONIDAE,

SPHEX PENNSYLVANICUS,

PHILANTHUS SP., ERYLLA GMA

CIVILE, ANTHOPHORA CALIFORNICA

SKIPPER, ^{NORTHERN} ~~WHITE~~ PTERODROMA

TEXANA, LASIOGLOSSUM SP.,

NO BOMBUS

FLOWERING PLANTS:

ERIOGONUM FASCICULATUM

CROTON SETIGER

VERBENA ENCLADES

DATURA WRIGHTII

HIBISCUS FELDIA INCANA

TRIBULUS TERRESTRIS

HETEROTHECA GRANDIFLORA