



Appendix C

Biological Resources Report

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10773

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Subject: *Biological Resources Letter Report and MSHCP Consistency for the Vineyard III Retail Development Project, City of Murrieta, California*

Dear Mr. Davis:

This biological resources habitat assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis letter report describes the existing biological conditions of the proposed Vineyard III Retail Development Project (project) site, and provides an assessment of potential biological impacts. The proposed project and potential impacts to special-status biological resources are analyzed in the context of the California Environmental Quality Act (CEQA) and in the context of the MSHCP. This report describes the project site, the general biological reconnaissance survey conducted, any special-status biological resources present or potentially present on site, any potential constraints to development that may be posed by biological resources on the project site, and recommended mitigation. This report also covers an MSHCP consistency determination for the following requirements (relevant MSHCP sections are provided in parentheses):

- Riparian/Riverine, Vernal Pool, and Fairy Shrimp Requirements (Section 6.1.2)
- Species Survey Requirements (Sections 6.1.3 and 6.3.2)
- Urban/Wildlife interface Guidelines (Section 6.1.4)

1 Project Location

The 6.7-acre project site is located at the northeast corner of the Interstate 215 (I-215) and Clinton Keith Road, within the City of Murrieta in Riverside County (Figure 1, Project Location; all figures can be found in Attachment A). The project site occurs within the U.S. Geological Survey (USGS) 7.5-minute Murrieta quadrangle map, with the approximate center of the property at longitude 117° 10'21.02"W and latitude 33° 35'57.53"N.

The proposed project would involve construction of a retail development center with associated surface parking. Four retention basins, two at the northwest corners and two at the southwest corners of the project site, are included in the project design.

2 Methods

2.1 Literature Review

Special-status biological resources potentially present on the project site were identified through a literature search using the following sources: U.S. Fish and Wildlife Service's (USFWS) Critical Habitat and Occurrence Data (USFWS 2018); California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CDFW 2018); the California Native Plant Society's (CNPS) online Inventory of Rare, Threatened, and Endangered Plants

(CNPS 2018); and the Calflora database, which compiles observation and plant data from both private and public institutions, including the Consortium of California herbaria (Calflora 2018). Searches were completed for the following U.S. Geological Survey quadrangles: Lake Elsinore, Romoland, Winchester, Wildomar, Murrieta, Bachelor Mountain, Fallbrook, Temecula, and Pechanga.

For this report, “special-status” species are those that are (1) listed, proposed for listing, or candidates for listing under the federal Endangered Species Act as threatened or endangered (“listed species”); (2) listed or candidates for listing under the California Endangered Species Act as threatened or endangered (“listed species”); (3) a state fully protected species; (4) a CDFW Species of Special Concern (“non-listed special status species”); or (5) a species listed on the CNPS Inventory of Rare and Endangered Plants with a California Rare Plant Rank of 1B or 2B (“non-listed special status species”).

Special-status vegetation communities are those communities identified as high priority for inventory in the List of Vegetation Alliances and Associations (CDFW 2019) by a state rarity ranking of S1, S2, or S3.

2.2 Field Reconnaissance

Dudek biologist Anna Cassady conducted a general biological survey of the study area (project site and natural habitat within an associated 500-foot buffer) on January 4, 2018. The survey was conducted from 8:15 a.m. to 10:20 a.m. Weather conditions were favorable, with clear skies, wind speeds from 1 to 2 miles per hour, and temperature ranging from 53°F–64°F. All native and naturalized plant species encountered within the study area were identified and recorded. The potential for special-status plant and wildlife species to occur within the study area was evaluated based on the vegetation communities and soils present. Vegetation communities and land covers on site were mapped directly in the field. In addition, an investigation of presence and distribution of jurisdictional waters of the United States regulated by the U.S. Army Corps of Engineers (ACOE), jurisdictional waters of the state regulated by the Regional Water Quality Control Board (RWQCB), and jurisdictional streambed and associated riparian habitat regulated by CDFW was conducted.

Latin and common names for plant species with a California Rare Plant Rank follow the CNPS Inventory of Rare and Endangered Plants (CNPS 2018). For plant species without a California Rare Plant Rank, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2018) and common names follow the United States Department of Agriculture’s Natural Resources Conservation Service Plants Database (USDA 2018a). Natural vegetation communities were mapped in the field using Vegetation Alliances of Western Riverside County (Klein and Evens 2006) with modifications to accommodate the lack of conformity of the observed communities to those included in these references. Latin and common names of animals follow Crother (2012) for reptiles and amphibians, and the American Ornithologists’ Union for birds (AOU 2015).

To meet requirements in the MSHCP, a habitat assessment was conducted to identify suitable habitat for burrowing owl (*Athene cunicularia*) within the project site and a 500-foot buffer. While the 500-foot buffer includes land west of I-215, this area was not included in the study area habitat assessment due to lack of direct or indirect impacts to land across the freeway. This assessment was conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (RCA 2006). In addition, a habitat assessment was conducted to identify suitable habitat for Narrow Endemic Plant Species

Survey Area (NEPSSA) species. The project site is within Survey Area 4. These species include San Diego ambrosia (*Ambrosia pumila*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), California orcutt grass (*Orcuttia californica*) and munz's onion (*Allium munzii*).

The results of the reconnaissance survey were digitized using ArcGIS software.

3 Results

3.1 Site Description

The project site is characterized as a westward sloping, vacant site. Elevations range from approximately 1,530 to 1,560 feet above mean sea level. The surrounding area includes a former sand and gravel mass grading operation to the east and I-215 to the west and north. To the south is a residential subdivision and a school, south of which lies open space associated with the Hogback Hills. Representative photographs of the project site are included in Attachment B.

3.2 Soils

Four soil types are mapped on the project site: Cajalco fine sandy loam, Las Posas loam, Las Posas rocky loam, and Cieneba sandy loam (Figure 2, Soils).

- **Cajalco Series** consists of well drained, moderately permeable soils formed in alluvium from igneous rock. These soils are typically found in foothills and interior valleys (USDA 2020b). Within the study area, this soils series makes up the northern and western side.
- **Las Posas Series** consists of well drained, moderately deep soils formed from igneous rocks. These soils are typically found within mountainous uplands and foothills (USDA 2020b). Within the study area, this soil series makes up the southern and eastern side.
- **Cieneba Series** consists of excessively drained, very shallow and shallow soils formed from granitic rock. These soils are typically found on hills and mountains (USDA 2020b). Within the study area, this soil series makes up a small portion of the southern tip.

3.3 Vegetation Communities and Land Covers

Five vegetation communities and two non-natural land cover types were classified for the project site: chamise-black sage, chamise-California buckwheat, disturbed California buckwheat, non-native grassland, disturbed land, and developed land. Figure 3, Biological Resources Map, illustrates the distribution of vegetation communities and land covers and Table 1 provides a summary of each land cover's extent within the study area.

Table 1 Vegetation Communities and Land Covers within the Project Site and Natural Habitat within Associated 500-foot buffer (Study Area)

| Vegetation Community/Land Cover | Acreage |
|--|--------------|
| Chamise – Black Sage | 0.32 |
| Chamise – California Buckwheat Association | 0.94 |
| Disturbed California Buckwheat | 0.87 |
| California Buckwheat | 3.74 |
| Non-Native Grassland | 3.45 |
| Disturbed Land | 17.13 |
| Developed Land | 16.36 |
| Total | 42.81 |

* 42.81 acres represents the project parcel and natural habitat within a 500-foot buffer (i.e., the associated study area.) The proposed project includes the 6.7-acre project site.

3.3.1 Chamise – Black Sage

The chamise – black sage vegetation community is co-dominated by chamise (*Adenostoma fasciculatum*) and black sage (*Salvia mellifera*) with an intermittent to continuous canopy within the shrub layer. The shrub layer may occur in two separate strata: low shrubs at 0.5-2 meters tall and taller shrubs 1-5 meters tall (Klein and Evens 2006).

Within the study area, this vegetation community is located within the southern portion of the project site. It is comprised primarily of chamise and black sage, but also contains some California buckwheat (*Eriogonum fasciculatum*), as well as a sparse understory of non-native grasses.

3.3.2 Chamise–California Buckwheat Association

The chamise–California buckwheat vegetation association is either dominated or co-dominated by chamise and California buckwheat with a shrub layer of open to continuous canopy. The shrub layer may occur in two separate strata: low shrubs at 0–2 meters tall and taller shrubs 0.5–5 meters tall. Trees may occur at trace cover and the herbaceous layer typically remains open to intermittent cover (Klein and Evens 2006).

Within the study area, this association occurs within the northern portion of the project site and the very southern end of the project site. It is comprised primarily of chamise, but is also co-dominated by a continuous presence of California buckwheat. The herbaceous layer is comprised of non-native grasses.

3.3.3 California Buckwheat

The California buckwheat vegetation association is an open to continuous shrub layer where California buckwheat typically dominates. The shrub layer often occurs in two separate strata: low shrubs at 0–2 meters tall and tall shrubs at 1–5 meters tall. A variety of native or non-native species may make up the herb layer and emergent trees only infrequently occur (Klein and Evens 2006).

Within the study area, California buckwheat scrub is located in the northeastern portion of the study area on the eastern side of Antelope Road outside of the project site.

Within the study area and project site, a disturbed form of this association occurs on steep slopes on the west side of Antelope Road. Additionally, disturbed California buckwheat occurs along the southern slope of the project site north of Clinton Keith Road. The community on the west side of the road and southern boundary of the project site is also heavily incised and disturbed, likely due to the grading of Antelope Road. Scattered California buckwheat occurs along the slopes in addition to intermittent black sage. The herbaceous layer contains some non-native grasses, but is mostly comprised of bare ground.

3.3.4 Non-Native Grassland

As defined by Klein and Evens (2006), California annual grassland is usually dominated by annual grasses and herbs of various assortments that are in upland habitats. Specifically, red brome (*Bromus madritensis* ssp. *rubens*) or ripgut brome (*B. diandrus*) are abundant with other non-native and native species.

The majority of the site is non-native grassland comprised primarily of weedy species including, but not limited to, Brome species (*Bromus* sp.), short-podded mustard (*Hirschfeldia incana*), common Mediterranean grass (*Schismus barbatus*), dove weed (*Croton setiger*), prickly wild lettuce (*Lactuca serriola*), and common cryptantha (*Cryptantha intermedia*). A single blue elderberry (*Sambucus nigra* ssp. *caerulea*) is located on the southwestern side of the project site and several Peruvian peppertrees (*Schinus molle*) are clustered at the northwestern edge of the project site; however, neither of these trees warranted their own vegetation community due to the small scale of their cover.

3.3.5 Developed Land

Although not recognized by the Natural Communities List (CDFG 2010), “developed land” refers to areas that have been constructed on or disturbed so severely that native vegetation is no longer supported. Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials.

The portions of the study area mapped as developed include the associated roads, freeway, and surrounding residential development.

3.3.6 Disturbed Land

The classification of disturbed land is due to the predominance of bare ground and compacted soils with a sparse covering of non-native plant species, and other disturbance-tolerant plant species. Oberbauer et al. (2008) describes disturbed habitat as areas that have been physically disturbed by previous human activity and are no longer recognizable as a native or naturalized vegetation association but that continue to retain a soil substrate.

Within the study area, disturbed habitat lies on the eastern side of the project site in the form of a dirt access road. Within the study area, disturbed habitat lies west of the project site in the area between I-215 and Antelope Road. Disturbed habitat also lies in the eastern portion of the study area where mass grading operations previously occurred.

3.4 Floral Diversity

A total of 16 species of native or naturalized plants—10 native (63%) and 6 non-native (38%)—were recorded within the study area. This low plant diversity reflects the study area's disturbed environment and its proximity to adjacent developed areas. Plant species observed within the study area are listed in Attachment C.

3.5 Wildlife

A total of four bird species were detected within the study area: house finch (*Haemorhous mexicanus*), Anna's hummingbird (*Calypte anna*), Say's phoebe (*Sayornis saya*), and California towhee (*Melospiza crissalis*). No active bird nests were observed within the study area during the reconnaissance survey; however, the vegetation throughout the project site could support nesting birds. No amphibian species were observed and none are expected to occur due to the lack of aquatic habitat. One reptile species was observed during the survey: western fence lizard (*Sceloporus occidentalis*). Scat from one mammal species was observed during the survey: coyote (*Canis latrans*). The low wildlife diversity reflects the relatively disturbed nature of the study area, as well as the lack of contiguous habitat. Wildlife species observed within the study area are listed in Attachment D.

3.6 Special-Status Plant Species

No plant species listed or proposed for listing as rare, threatened, or endangered by either CDFW or the USFWS were detected within the study area. No plant species considered sensitive by the CNPS were observed. The study area is not within Critical Habitat for any special-status plant species (USFWS 2020).

Based on the results of the literature review and database searches, 59 special-status plant species have been documented within the region. All of these species were evaluated for potential to occur within the study area. Criteria used include soils, current disturbance levels, vegetation communities present, elevation ranges, and previous known locations based on the CNDDDB, CNPS, and CalFlora records. One species, intermediate mariposa lily (*Calochortus weedii* var. *intermedius*) was determined to have high potential to occur and is described further below. Two species, smooth tarplant (*Centromadia pungens* ssp. *laevis*) and Parry's spineflower (*Chorizanthe parryi* var. *parryi*) were determined to have moderate potential to occur and are described further below. The remaining species were determined to either have low potential to occur or were not expected within the study area. A list and determination of potential to occur for these species can be found in Attachment E.

3.6.1 Intermediate Mariposa Lily

Intermediate mariposa lily is a CRPR 1B.2 species, indicating that it is a rare, threatened, or endangered species within California with a moderate degree/immediacy of threat. It is a covered species under the MSHCP.

This species is a perennial, bulbiferous herb that typically occurs in rocky and/or calcareous soils at elevations between 340 and 2,805 feet above mean sea level. Characteristic vegetation associations include chaparral, coastal scrub, and valley and foothill grasslands.

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Within the project site, there is high potential for this species to occur. The project site is within the appropriate elevation range, has rocky loam substrate, and contains chaparral and grassland vegetation communities. This species has been documented as occurring directly west of the project site and the I-215 interchange with Clinton Keith Road (CDFW 2018). This plant species was not observed within the study area; however, the reconnaissance survey was conducted outside of its blooming period.

3.6.2 Smooth Tarplant

Smooth tarplant is a CRPR 1B.1 species, indicating that it is a rare, threatened, or endangered species within California with a high degree/immediacy of threat. It is a covered species under the MSHCP.

This species is an annual herb that typically occurs in alkaline soils at elevations between 0 and 2,100 feet above mean sea level. Characteristic vegetation associations include chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland.

Within the project site, there is moderate potential for this species to occur. The project site contains suitable grassland habitat for this species and is within the appropriate elevation range. Additionally, smooth tarplant is known to occur in disturbed habitat. According to Calflora, numerous collections of smooth tarplant have been made around Murrieta and near the study area (Calflora 2018). This plant species was not observed within the study area; however, the reconnaissance survey was conducted outside of its blooming period.

3.6.3 Parry's Spineflower

Parry's spineflower is a CRPR 1B.1 species, indicating that it is a rare, threatened, or endangered species within California with a high degree/immediacy of threat. Parry's spineflower was conditionally covered under the MSHCP; however, as of 2018 MSHCP Annual Report, this species has had its conservation objectives met, as listed in Table 9-2 of the MSHCP. Parry's spineflower is now considered a fully covered species under the MSHCP (RCA 2018).

This species is an annual herb that typically occurs in sandy or rocky soils at elevations between 900 and 4,005 feet above mean sea level. Characteristic vegetation associations include chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.

Within the project site, there is moderate potential for this species to occur. The project site is within the appropriate elevation range and supports chaparral and grassland vegetation communities. The survey area also consists of the appropriate sandy soils. This species withstands disturbance like that seen within the study area. According to Calflora, Parry's spineflower is most likely to occur in western Riverside County and populations are documented near the study area (Calflora 2018). This plant species was not observed within the study area; however, the reconnaissance survey was conducted outside of its blooming period.

3.7 Special-Status Wildlife Species

No wildlife species listed or proposed for listing as rare, threatened, or endangered by either CDFW or the USFWS were detected within the study area. The study area is not within Critical Habitat for any special-status plant species (USFWS 2018)

Attachment F lists 43 special-status wildlife species that are known to occur in the USGS 7.5-minute Murrieta quadrangle and the eight surrounding quadrangles (CDFW 2018). For each species listed, a determination was made regarding potential use of the study area by the species based on information gathered during the field reconnaissance, known habitat preferences, and knowledge of the species' relative distributions in the area.

Four special-status wildlife species, red diamond rattlesnake (*Crotalus ruber*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), loggerhead shrike (*Lanius ludovicianus*) and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) were determined to have moderate potential to occur within the study area. The remainder of the species were determined to either have low potential to occur or were not expected at the study area. None of these species were observed within the study area during the reconnaissance survey.

3.7.1 Burrowing Owl Habitat Assessment

The proposed project is located within the MSHCP Burrowing Owl Habitat Assessment Area. In accordance with the MSHCP, a habitat assessment must be conducted for this species and focused surveys completed if suitable habitat is present.

The burrowing owl is a California Species of Special Concern. With a relatively wide-ranging distribution throughout the west, burrowing owl is considered to be a habitat generalist (Lantz et al. 2004). In California, burrowing owl is a yearlong resident of open, dry grassland and desert habitats, and in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats (Zeiner et al. 1990). Preferred habitat is generally typified by short, sparse vegetation with few shrubs; level to gently sloping topography; and well-drained soils (Haug et al. 1993).

The presence of burrows is the most essential component of burrowing owl habitat, as they are required for nesting, roosting, cover, and caching prey. In California, western burrowing owl most commonly lives in burrows created by California ground squirrels (*Spermophilus (Otospermophilus) beecheyi*). Burrowing owl may occur in human-altered landscapes such as agricultural areas, ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable (i.e., open and sparse), useable burrows are available, and foraging habitat is close (Gervais et al. 2008). Debris piles, riprap, culverts, and pipes can also be used for nesting and roosting.

The nearest documented occurrence of burrowing owl is approximately 2.7 miles southeast of the study area. This occurrence was documented in 2003 (CDFW 2018).

The project site contains chaparral and annual grassland throughout; however, no California ground squirrels or burrows 4 inches or greater in diameter were observed within the study area. One rock pile with marginal interstitial space was located on the northwestern side of the project site that could be used as a perching site for burrowing owl; however, no burrowing owl sign or burrows were observed within these features. This, in combination with the developed nature of the surrounding environment, makes the potential low for this species occurring.

3.8 Nesting Birds

The project site provides potential nesting habitat for commonly occurring birds such as Anna’s hummingbird (*Calypte anna*) or house finches (*Haemorhous mexicanus*). The project site did not contain large trees suitable for raptor nesting. No nests were observed within the study area during the survey; however, the reconnaissance survey was conducted outside the nesting season for most species.

3.9 Jurisdictional Waters and Significant Drainage Courses

A concrete, roadside ditch is located along the northwestern boundary of the project site. This feature lies in a topographic low-point and appears to convey freeway runoff from the south which then sheetflows into an area just north of the project site. There is no further evidence of ponding or surface flows and runoff conveyed by this ditch is assumed to percolate or evaporate. This feature would not be considered jurisdictional by the ACOE, RWQCB or CDFW. Figure 3 illustrates the location of this roadside ditch.

No other potential jurisdictional features were observed within the study area.

3.10 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as stepping stones for wildlife dispersal. Wildlife movement through the project site is unlikely due to the developed nature of the surrounding area. A former sand and gravel operation existed to the east, I-215 lies to the west and north, and a small subdivision and school exists to the south. Therefore, the study area has limited to no value as a potential wildlife corridor or habitat linkage.

4 Western Riverside County MSHCP Consistency Analysis

The project site is located in the MSHCP Southwest Area Plan and is not within an MSHCP Criteria Cell (Figure 4, Western Riverside County MSHCP). Therefore, no Reserve Assembly requirements would apply to the project site. The project’s compliance with the relevant sections of the MSHCP is discussed below.

4.1 MSHCP Section 6.1.2 Riparian/Riverine Resources

The MSHCP defines riparian/riverine areas as “lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.” The MSHCP further clarifies those areas “demonstrating characteristics as described above which are artificially created are not included in these definitions” (County of Riverside 2003).

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The study area contains an un-vegetated roadside ditch on the northwestern side of the project site that appears to be used to manage road runoff associated with I-215. The majority of the ditch is concrete lined and runoff conveyed by the ditch sheetflows and dissipates into undeveloped areas within the study area. This feature is artificially created, does not rely on a fresh water source, and does not convey flows to downstream riverine resources; therefore, it is not a riverine resource as defined by the MSHCP.

A storm drain inlet is located at the southern end of the project site at the southern terminus of Antelope Road. This storm drain appears to drain runoff from the associated roadways into underground pipes that travel east into residential development on the other east side of the former mass grading area (Smith 2019). The project site does not contain riparian or riverine features that lead to the storm drain.

The project site does not contain riparian vegetation and therefore does not contain habitat for riparian bird species.

4.1.1 Vernal Pool and Fairy Shrimp Habitat

No indicators of ponding were observed during the site visit. No topographic low points or indicators of ponding were observed within the study area and are not present on historic aerials or topographic maps. The project site does not contain clay soils, bedrock, or other poorly drained soils typically associated with vernal pools. Furthermore, upon surveying, there are no areas that would likely hold water for an extended amount of time, and therefore the site does not support any vernal pools or other potential fairy shrimp habitat.

4.2 MSHCP Section 6.1.3 Narrow Endemic Plant Species Survey Area

The proposed project is located within the Narrow Endemic Plant Species Survey Area 4. In accordance with the MSHCP, a habitat assessment must be conducted for these species and focused surveys completed if suitable habitat is present. The target narrow endemic plants are San Diego ambrosia, many-stemmed dudleya, spreading navarretia, Wright's trichocoronis, California orcutt grass and munz's onion. Details regarding the habitat requirements for each of these is provided in Attachment E.

San Diego ambrosia, spreading navarretia, California orcutt grass, and Wright's trichocoronis are not expected to occur within the study area. These species are commonly found in association with vernal pools and an evaluation of the study area did not yield conditions suitable for vernal pools (see further discussion on vernal pools below in Section 4.1.1).

Munz's onion and many-stemmed dudleya are also not expected to occur within the study area as the study area lacks clay soils with which these species are associated. Because the habitat assessment for narrow endemic plant species did not identify habitat characteristics associated with these species, focused rare plant surveys are not required

4.3 MSHCP Section 6.3.2 Criteria Area Species Survey Area

The MSHCP establishes habitat assessment requirements for certain species of plants, birds, mammals, and amphibians. The project site is in a required habitat assessment area for burrowing owl. As discussed in Section

3.7, Special-Status Wildlife Species, of this report, the habitat assessment did not identify potential burrowing owl habitat or suitable burrows features; therefore, focused surveys are not required.

4.4 MSHCP Section 6.1.4 Urban/Wildlife Interface Guidelines

According to the MSHCP, the Urban/Wildlands Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area (MSHCP, p. 6-42). The project site is not within or adjacent to any conserved areas (Figure 4) and the Urban/Wildlife Interface Guidelines are not applicable.

5 Impacts Analysis and Recommendations

This section addresses potential impacts to special-status biological resources that could result from implementation of the proposed project. This section follows the CEQA checklist for biological resources. For the purposes of this biological analysis, it is assumed that the entire project site would be permanently impacted (Figure 5, Impacts Map).

5.1 Sensitive Natural Communities

No sensitive natural communities occur on the project site; therefore, no potential impacts to sensitive natural communities would occur with project implementation. The following Table 2 lists impacts to the vegetation communities and land covers found on the Project site.

Table 2 Impacts to Vegetation Communities and Land Covers within the Project Site

| Vegetation Community/Land Cover | Acreage |
|--|-------------|
| Non-Natural Land Covers | |
| Chamise – Black Sage | 0.32 |
| Chamise – California Buckwheat Association | 0.94 |
| Disturbed California Buckwheat | 0.60 |
| Non-Native Grassland | 2.17 |
| Disturbed Land | 0.67 |
| Developed Land | 1.96 |
| Total | 6.65 |

5.2 Special-Status Plants

One special-status plant, intermediate mariposa lily, has high potential to occur on the project site and two special-status plants, smooth tarplant and Parry’s spineflower, have moderate potential to occur within the project site. These species were not observed within the study area; however, the reconnaissance survey was conducted outside of its blooming period. Intermediate mariposa lily and smooth tarplant are both fully covered under the MSHCP. Parry’s spineflower was conditionally covered under the MSHCP; however, as of 2018 MSHCP

Annual Report, this species has had its conservation objectives met, as listed in Table 9-2 of the MSHCP. Parry's spineflower is now considered a fully covered species under the MSHCP (RCA 2018). Given that all three species are fully covered under the MSHCP; therefore, with compliance with the MSHCP including payment of the MSHCP development mitigation fee, there would be no significant impacts to these species.

5.3 Special-Status Wildlife

Three special-status wildlife species, red diamondback rattlesnake, loggerhead shrike, and San Diego black-tailed jackrabbit, have moderate potential to occur on the project site and are covered under the MSHCP. Therefore, with compliance with the MSHCP including payment of the MSHCP development mitigation fee, there would be no significant impacts to these species.

One species, coast patch-nosed snake, has moderate potential to occur on the project site and is not covered under the MSHCP. This species was not observed within the study area. Although this species is not covered by the MSHCP, the MSHCP conserves habitat also suitable for this species. The removal of 1.86 acres of potentially suitable habitat for this species would be less than significant in the context of higher quality habitat conserved within the region. Individuals of this species, if present, would be able to move away during construction activities within the site. If some individuals were directly impacted during construction, this would be less than significant in the context of the regional population of this species.

5.3.1 Burrowing Owl

The burrowing owl habitat assessment did not yield suitable habitat, burrowing owl, or burrowing owl sign within the study area; therefore, focused surveys were not conducted. However, project site conditions could change between the time of the reconnaissance survey and the time of project implementation. If burrowing owl should occupy the site prior to initiation of construction activities, direct impacts to burrowing owl would be significant. Additionally, if burrowing owl occupy surrounding habitat within 500 feet of construction activities, indirect impacts could be significant. To avoid potential for significant impacts to burrowing owl during construction activities, a pre-construction burrowing owl survey should be conducted and avoidance measures implemented if burrowing owl are present (MM-BIO-1).

5.3.2 Nesting Birds

Project construction could result in direct and indirect impacts to nesting birds, including the loss of nests, eggs, and fledglings if vegetation clearing and ground-disturbing activities occur during the avian nesting season (typically March 1 through August 31). If the nesting bird season cannot be avoided, a nesting bird survey should be conducted and avoidance measures implemented if nests are documented within the impact footprint or within 300 feet of the impact footprint (MM-BIO-2).

5.4 Jurisdictional Waters

The proposed project site does not contain jurisdictional waters; therefore, the proposed project would not result in impacts to this resource.

5.5 Wildlife Corridors and Nursery Sites

The project site does not function as a wildlife corridor and does not support any wildlife nursery sites. As a result, implementation of the proposed project would not result in impacts to these resources.

5.6 Habitat Conservation Plans

The project site is within the MSHCP Plan Area. As described in Section 4, the project site does not support riparian/riverine resources, vernal pools or fairy shrimp habitat, narrow endemic plant habitat, or criteria area species habitat; therefore, there are no requirements under the MSHCP for these resources. The project is also not adjacent to conservation areas. The project does not support burrowing owl habitat; however, burrowing owl have the potential to occupy the site in the future. With implementation of the burrowing owl pre-construction surveys and implementation of avoidance and minimization measures if applicable, the project would be consistent with the MSHCP burrowing owl requirements. With implementation of mitigation measure MM-BIO-1, Burrowing Owl Pre-construction Surveys and payment of the MSHCP Development Mitigation Fee, the proposed project would be consistent with the MSHCP.

The project site is within the Stephens' Kangaroo Rat Habitat Conservation Plan boundary. With payment of the Stephens' Kangaroo Rat Habitat Conservation Plan Development Mitigation Fee, the proposed project would be consistent with the Stephens' Kangaroo Rat Habitat Conservation Plan.

5.7 Other Local Ordinances

The City of Murrieta Development Code, Article III, Section 16.42, Tree Preservation, identifies the following as protected trees:

- Mature Native Oak Tree;
- Mature Native Tree;
- Mature Tree;
- Historically Significant Trees;
- Any tree required to be planted or preserved as environmental mitigation, or condition of approval for a discretionary permit.

There are no resources on the project site that meet the above criteria; therefore, a tree removal permit in accordance with the City of Murrieta Development Code is not required. There are no other local ordinances applicable to the project.

6 Avoidance, Minimization and Mitigation Measures

The following measures are recommended to avoid, minimize and/or mitigate for impacts to special-status resources.

MM-BIO-1: Prior to initiation of construction activities, a burrowing owl pre-construction survey shall be conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside*

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Multiple Species Habitat Conservation Plan Area (RCA 2006). In accordance with these instructions, this survey would occur within 30 days prior to ground-disturbance activities. A minimum of one survey site visit within the described time frame prior to disturbance is required to confirm presence or absence of owls on the site. Pre-construction surveys shall be conducted by a qualified biologist.

If surveys confirm occupied burrowing owl habitat is located within the impact footprint or within 500 feet of the impact footprint, avoidance measures shall be implemented consistent with the requirements of the MSHCP.

MM-BIO-2: To maintain compliance with the Migratory Bird Treaty Act and Fish and Game Code, if ground disturbance and/or vegetation clearance activities are scheduled to occur during the avian nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist within the project footprint and a 300-foot buffer around the project footprint. Surveys shall be conducted within 3 days prior to initiation of activity and will be conducted between dawn and noon.

If an active nest is detected during the nesting bird survey, avoidance buffers shall be implemented as determined by a qualified biologist. The buffer will be of a distance to ensure avoidance of adverse effects to the nesting bird by accounting for topography, ambient conditions, species, nest location, and activity type. All nests will be monitored as determined by the qualified biologist until nestlings have fledged and dispersed or it is confirmed that the nest has been unsuccessful or abandoned.

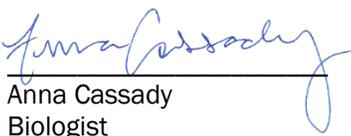
6.1 Other Recommendations

In addition, Dudek recommends implementing the following measure to avoid and minimize potential environmental impacts resulting from the commercial construction:

- Avoid the use of any invasive, non-native plant species rated as “high” or “moderate” by the California Invasive Plant Council’s Invasive Plant Inventory (Cal-IPC 2020) for future landscaping of the site.

If you have any questions regarding the contents of this report, please either email acassady@dudek.com or call at 951.300.1088.

Sincerely,


Anna Cassady
Biologist

Att.: *Attachment A – Figures 1–5*
Attachment B – Site Photographs
Attachment C – Vascular Plant Species
Attachment D – Wildlife Species
Attachment E – Special-Status Plant Species Detected or Potentially Occurring in the Study Area
Attachment F – Special-Status Wildlife Species Detected or Potentially Occurring in the Study Area

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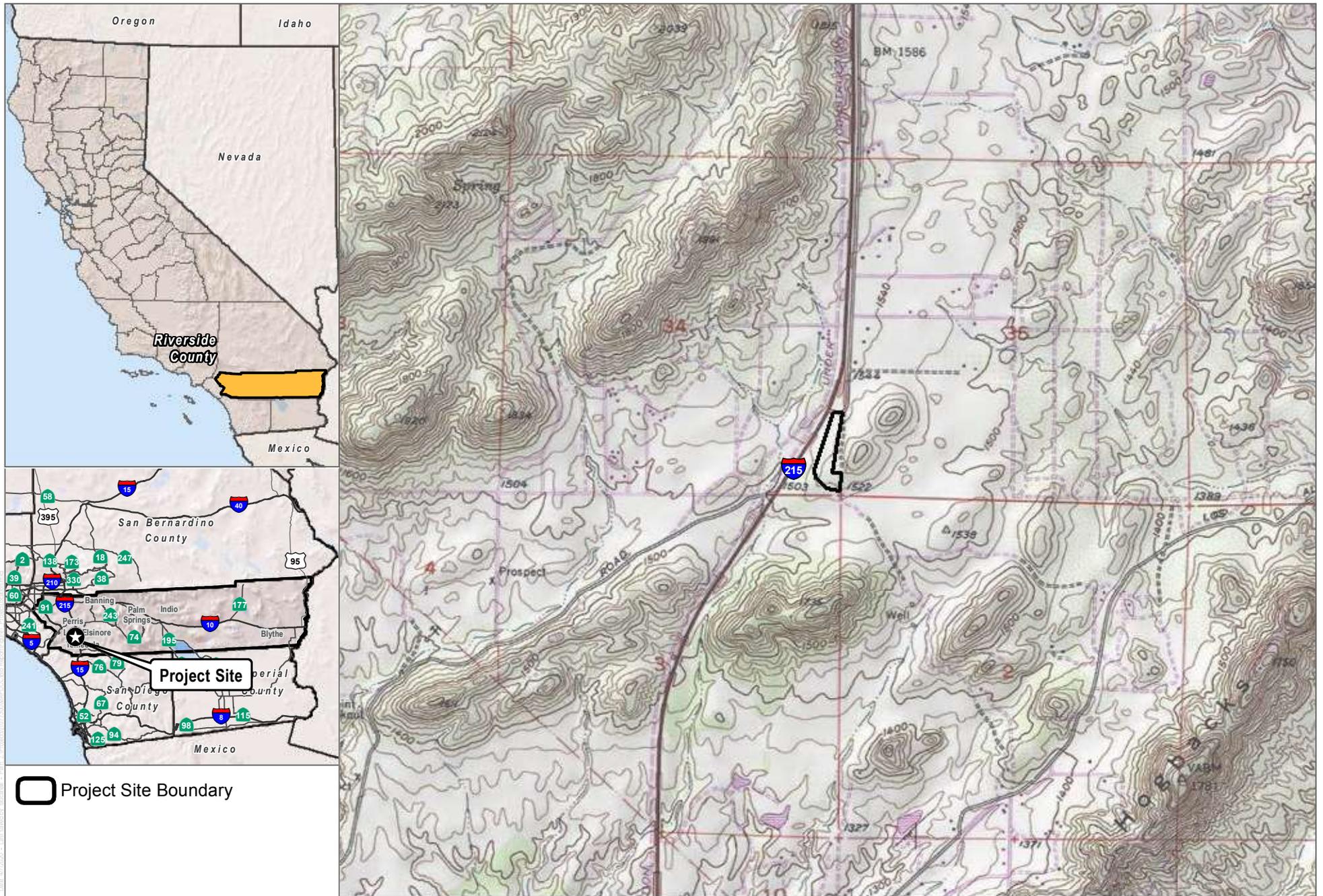
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Attachment A

Figures 1–5

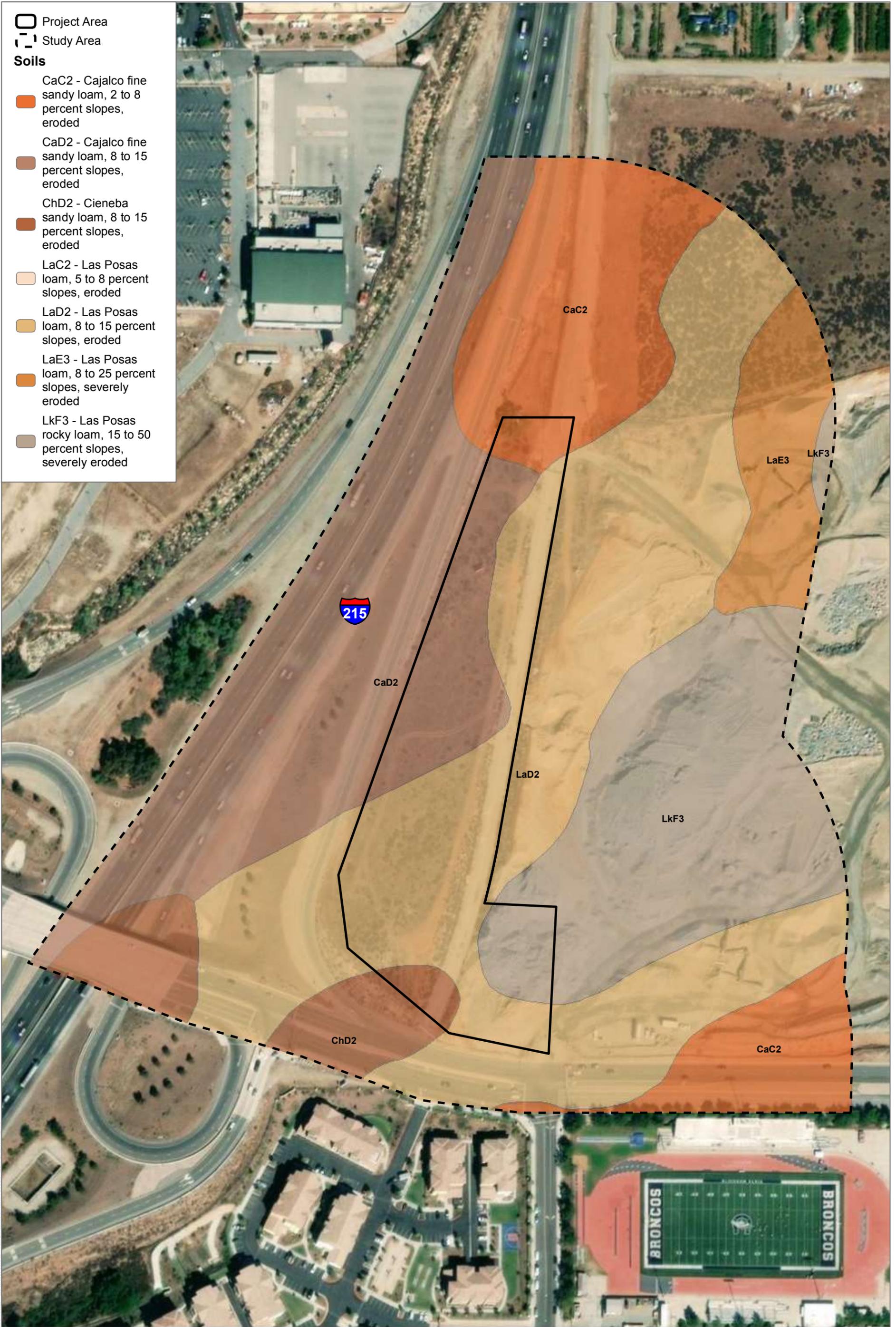


SOURCE: USGS 7.5-Minute Series Murrieta Quadrangle



FIGURE 1

Project Location



SOURCE: DigitalGlobe 2018, USGS Soils



FIGURE 2
Soils Map

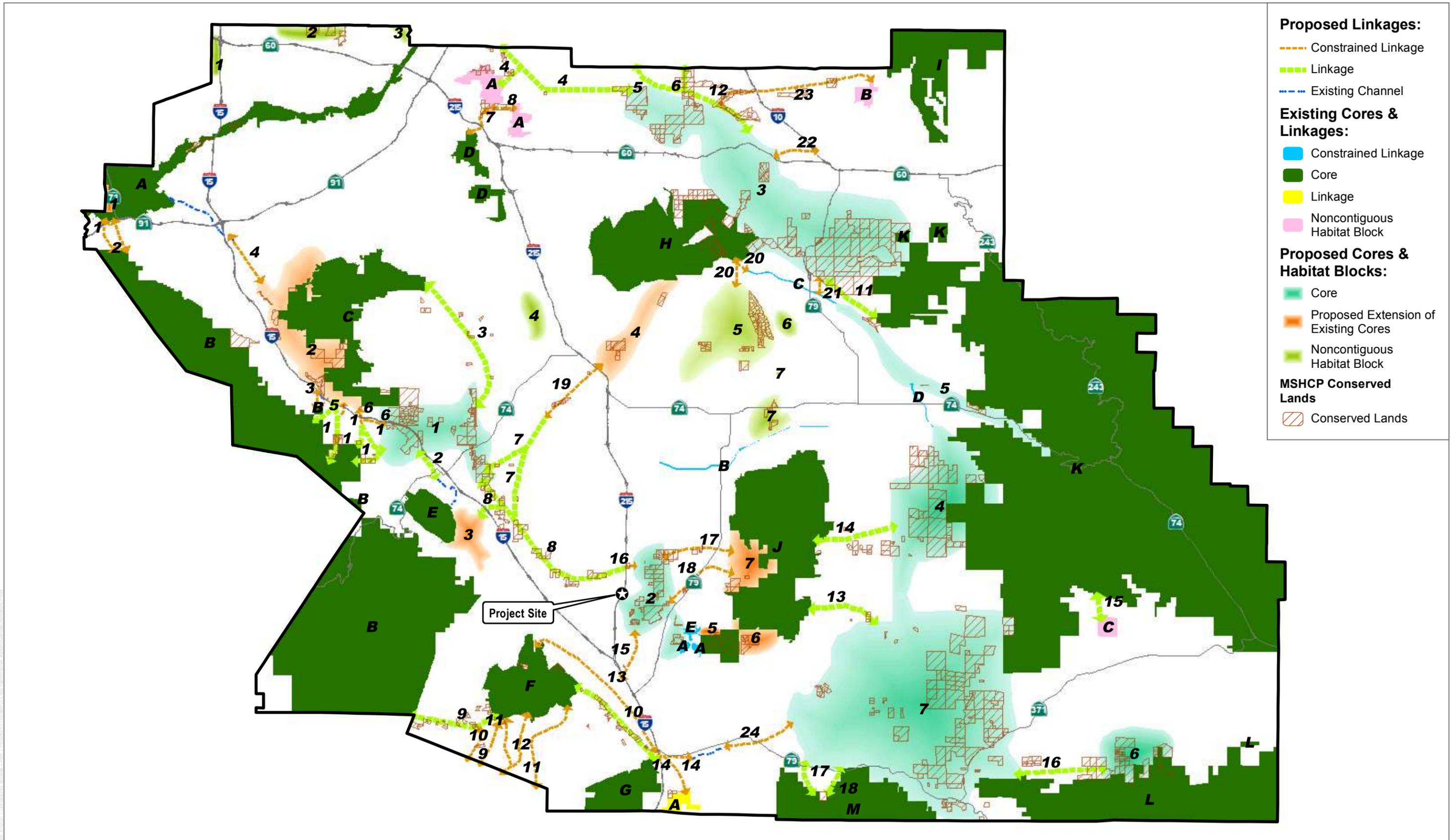


SOURCE: DigitalGlobe 2018



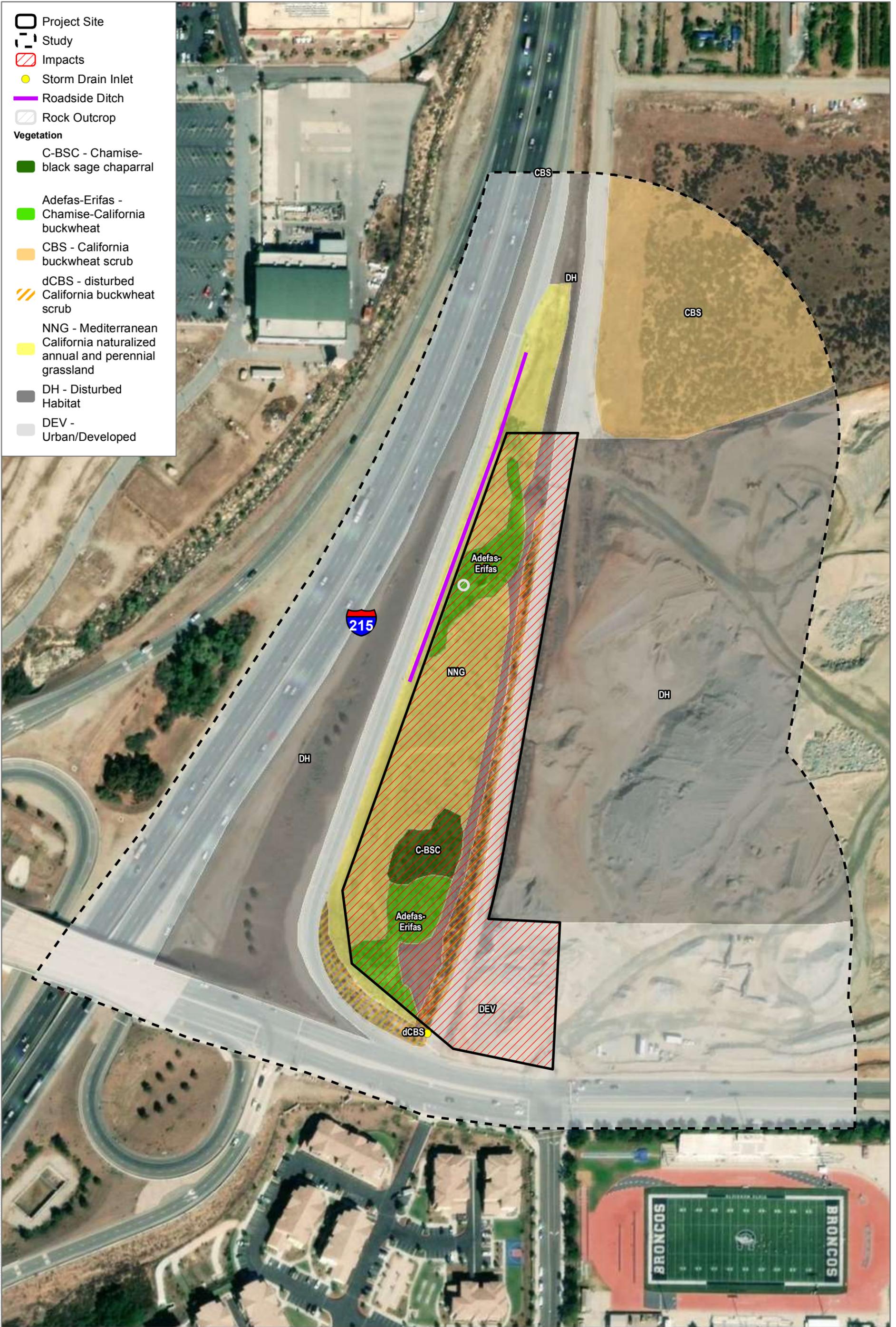
FIGURE 3

Biological Resources Map



SOURCE: SOURCE: Western Riverside County Regional Conservation Authority 2015; County of Riverside 2015

FIGURE 4



SOURCE: DigitalGlobe 2018



FIGURE 5

Impacts Map



Attachment B

Site Photographs

ATTACHMENT B
SITE PHOTOGRAPHS



Location 1: Non-native grasses with occasional scattered California buckwheat at northern end of project site, facing north.



Location 2: Non-native grasses with Chamise vegetation community and roadside ditch in background. Located along western edge of project site, facing south.



Location 3: Rock pile on northwestern side of project site.



Location 4: Chamise vegetation community on southern side of project site. Facing southwest.

ATTACHMENT B
SITE PHOTOGRAPHS



Location 5: Chamise – California buckwheat association in center of project site with Highway 215 in the background. Facing northwest.



Location 6: Disturbed California buckwheat on southern slope of project site with Highway 215 on-ramp in background. Facing west.



Location 7: Antelope Road and disturbed California buckwheat scrub on slopes. Facing northeast.



Location 8: Natural basin north of the project site that captures runoff associated with Highway 215. Facing northwest.



Attachment C

Vascular Plant Species

VASCULAR SPECIES

MONOCOTS

POACEAE—GRASS FAMILY

- * *Avena fatua*—wild oat
- * *Bromus diandrus*—ripgut brome
- * *Bromus madritensis*—compact brome
- * *Schismus barbatus*—common Mediterranean grass

EUDICOTS

ADOXACEAE—MUSKROOT FAMILY

Sambucus nigra ssp. *caerulea*—blue elderberry

ANACARDIACEAE—SUMAC OR CASHEW FAMILY

- * *Schinus molle*—Peruvian peppertree

ASTERACEAE—SUNFLOWER FAMILY

- Acourtia microcephala*—sacapellote
- * *Centaurea melitensis*—Maltese star-thistle
- Corethrogyne filaginifolia*—common sandaster
- Deinandra paniculata*—paniculate tarplant
- Gutierrezia californica*—California match weed
- Helianthus gracilentus*—slender sunflower
- * *Oncosiphon piluliferum*—stinknet
- * *Lactuca serriola*—prickly lettuce
- Encelia farinosa*—brittle bush
- Baccharis pilularis*—coyote brush

BORAGINACEAE—BORAGE FAMILY

Amsinckia menziesii—Menzies' fiddleneck
Cryptantha intermedia—Clearwater cryptantha

BRASSICACEAE—MUSTARD FAMILY

- * *Hirschfeldia incana*—shortpod mustard

EUPHORBIACEAE—SPURGE FAMILY

Croton setiger—dove weed

ATTACHMENT C
VASCULAR PLANT SPECIES

FABACEAE—LEGUME FAMILY

Acmispon americanus—Spanish clover

Acmispon glaber—deer weed

GERANIACEAE— GERANIUM FAMILY

* *Erodium cicutarium*—redstem stork's bill

LAMIACEAE—MINT FAMILY

Salvia mellifera—black sage

PLANTAGINACEAE—PLANTAIN FAMILY

Keckiella antirrhinoides—bush penstemon

POLYGONACEAE—BUCKWHEAT FAMILY

Eriogonum gracile—slender woolly buckwheat

Eriogonum fasciculatum—California buckwheat

ROSACEAE—ROSE FAMILY

Adenostoma fasciculatum—chamise

* signifies introduced (non-native) species



Attachment D

Wildlife Species

BIRD

EMBERIZINES

EMBERIZIDAE—EMBERIZIDS

Melospiza crissalis—California towhee

FINCHES

FRINGILLIDAE—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

Haemorhous mexicanus—house finch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis saya—Say's phoebe

HUMMINGBIRDS

TROCHILIDAE—HUMMINGBIRDS

Calypte anna—Anna's hummingbird

MAMMAL

CANIDS

CANIDAE—WOLVES AND FOXES

Canis latrans—coyote

REPTILE

LIZARDS

PHRYNOSOMATIDAE—IGUANID LIZARDS

Sceloporus occidentalis—western fence lizard



Attachment E

Special-Status Plant Species Detected
or Potentially Occurring in the Study Area

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|---|------------------------|-----------------------------|--|--|
| <i>Abronia villosa</i> var. <i>aurita</i> | chaparral sand-verbena | None/None/1B.1 | Chaparral, Coastal scrub, Desert dunes; sandy/annual herb/(Jan)Mar-Sep/245-5250 | Low potential to occur. The project site contains suitable chaparral vegetation and is within the appropriate elevation range; however, the site consists of disturbed topsoil and numerous non-native weed species. |
| <i>Allium munzii</i> | Munz's onion | FE/ST/1B.1/ MSHCP NEPS | Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; mesic, clay/perennial bulbiferous herb/Mar-May/970-3510 | Not expected to occur. The project site contains suitable chaparral vegetation and is within the appropriate elevation range; however, there are no clay soils. |
| <i>Almutaster pauciflorus</i> | alkali marsh aster | None/None/2B.2 | Meadows and seeps; alkaline/perennial herb/June-Oct/785-2625 | Not expected to occur. Although the project site is within the appropriate elevation range, there is no meadow and seep habitat that could support this species. |
| <i>Ambrosia pumila</i> | San Diego ambrosia | FE/None/1B.1/ MSHCP NEPS | Chaparral, Coastal scrub, Valley and foothill grassland, Vernal pools; sandy loam or clay, often in disturbed areas, sometimes alkaline/perennial rhizomatous herb/Apr-Oct/65-1360 | Not expected to occur. Although the project site contains chaparral and grassland vegetation communities, it does not support vernal pool habitat. Additionally, the project site is outside of the known elevation range for this species. According to CalFlora, populations of San Diego ambrosia occur east of the 79 interstate and north of Lake Elsinore. |
| <i>Arctostaphylos rainbowensis</i> | Rainbow manzanita | None/None/1B.1 | Chaparral/perennial evergreen shrub/Dec-Mar/670-2200 | Not expected to occur. The reconnaissance survey was conducted during this species' blooming period and this perennial shrub would have likely been detected during the survey. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|---|-------------------------------|-----------------------------|---|---|
| <i>Astragalus pachypus</i> var. <i>jaegeri</i> | Jaeger's bush milk-vetch | None/None/1B.1 | Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky/perennial shrub/Dec-June/1195-3200 | Not expected to occur. The reconnaissance survey was conducted during this species' blooming period and this perennial shrub would have likely been detected during the survey. |
| <i>Atriplex coronata</i> var. <i>notatior</i> | San Jacinto Valley crownscale | FE/None/1B.1 | Playas, Valley and foothill grassland (mesic), Vernal pools; alkaline/annual herb/Apr-Aug/455-1640 | Not expected to occur. The project site does not contain alkaline soils or support vernal pool habitat. |
| <i>Atriplex pacifica</i> | South Coast saltscale | None/None/1B.2 | Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar-Oct/0-460 | Not expected to occur. The project site is outside of the appropriate elevation range for this species and there is no coastal dune, coastal scrub, or playa habitat. |
| <i>Atriplex parishii</i> | Parish's brittlescale | None/None/1B.1 | Chenopod scrub, Playas, Vernal pools; alkaline/annual herb/June-Oct/80-6235 | Not expected to occur. The project site does not contain alkaline soils or support chenopod scrub, playa, or vernal pool habitat. |
| <i>Atriplex serenana</i> var. <i> davidsonii</i> | Davidson's saltscale | None/None/1B.2 | Coastal bluff scrub, Coastal scrub; alkaline/annual herb/Apr-Oct/30-655 | Not expected to occur. The project site is outside of the appropriate elevation range for this species, there are no alkaline soils, and there is no coastal dune, coastal scrub, or playa habitat. |
| <i>Ayenia compacta</i> | California ayenia | None/None/2B.3 | Mojavean desert scrub, Sonoran desert scrub; rocky/perennial herb/Mar-Apr/490-3595 | Not expected to occur. The project site does not contain desert scrub. The survey area contains disturbed topsoils and numerous non-native species. In addition, the project site is outside of the known geographic range of this species. According to CalFlora, populations of Californian ayenia generally occur east of Mt. San Jacinto. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|-------------------------------|----------------------------|-----------------------------|--|--|
| <i>Berberis nevinii</i> | Nevin's barberry | FE/SE/1B.1 | Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub/(Feb)Mar-June/225-2705 | Not expected to occur. Nevin's barberry is a perennial evergreen shrub that would have been detected during the reconnaissance survey. According to Calflora, Nevin's barberry generally occurs east of Temecula and north of the city of Riverside. |
| <i>Brodiaea filifolia</i> | thread-leaved brodiaea | FT/SE/1B.1 | Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools; often clay/perennial bulbiferous herb/Mar-June/80-3675 | Not expected to occur. The project site is within the appropriate elevation range and contains chaparral and grassland vegetation communities; however, there are no clay soils and the site is highly disturbed (disturbed topsoils and numerous non-native species). |
| <i>Brodiaea orcuttii</i> | Orcutt's brodiaea | None/None/1B.1 | Closed-cone coniferous forest, Chaparral, Cismontane woodland, Meadows and seeps, Valley and foothill grassland, Vernal pools; mesic, clay/perennial bulbiferous herb/May-July/95-5550 | Not expected to occur. The project site is within the appropriate elevation range and supports chaparral and grassland vegetation communities; however, there are no clay soils or vernal pool habitat. |
| <i>Brodiaea santarosae</i> | Santa Rosa Basalt brodiaea | None/None/1B.2 | Valley and foothill grassland; basaltic/perennial bulbiferous herb/May-June/1850-3430 | Not expected to occur. The project site is within the appropriate elevation range and supports a grassland vegetation community; however, Santa Rosa Basalt Brodiaea occurs in the Santa Ana Mountains in undisturbed areas. . |
| <i>California macrophylla</i> | round-leaved filaree | None/None/1B.2 | Cismontane woodland, Valley and foothill grassland; clay/annual herb/Mar-May/45-3935 | Not expected to occur. The project site is within the appropriate elevation range and supports a grassland vegetation community; however, there are no clay soils. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|----------------------------|-----------------------------|--|--|
| <i>Calochortus weedii</i> var. <i>intermedius</i> | intermediate mariposa lily | None/None/1B.2 | Chaparral, Coastal scrub, Valley and foothill grassland; rocky, calcareous/perennial bulbiferous herb/May–July/340–2805 | High potential to occur. The project site is within the appropriate elevation range, has rocky loam substrate, and contains chaparral and grassland vegetation communities. The species has been documented as occurring directly west of the project site at the Highway 215 interchange with Clinton Keith Road (CDFW 2018). This species was not observed within the study area; however, the reconnaissance survey was not conducted during the appropriate blooming period. |
| <i>Ceanothus cyaneus</i> | Lakeside ceanothus | None/None/1B.2 | Closed-cone coniferous forest, Chaparral/perennial evergreen shrub/Apr–June/770–2475 | Not expected to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community; however, this perennial evergreen shrub would have been detected during the reconnaissance survey. According to Calflora, the closest documented location of Lakeside ceanothus is on Mt. Palomar. |
| <i>Ceanothus ophiophilus</i> | Vail Lake ceanothus | FT/SE/1B.1 | Chaparral (gabbroic or pyroxenite-rich outcrops)/perennial evergreen shrub/Feb–Mar/1900–3495 | Not expected to occur. The project site is not within the appropriate elevation range for this species. |
| <i>Centromadia pungens</i> ssp. <i>laevis</i> | smooth tarplant | None/None/1B.1 | Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2100 | Moderate potential to occur. Smooth tarplant thrives on disturbance like most tarplants. The project site contains suitable grassland habitat for this species. According to Calflora, numerous collections of smooth tarplant have been collected around Murrieta and near the survey area. This species was not observed within the study area; however, the reconnaissance survey was not conducted during the appropriate blooming period. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|-------------------------|-----------------------------|--|--|
| <i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i> | Orcutt's pincushion | None/None/1B.1 | Coastal bluff scrub (sandy), Coastal dunes/annual herb/Jan–Aug/0–330 | Not expected to occur. The project site is not within the appropriate elevation range and does not contain suitable coastal bluff scrub or dunes. |
| <i>Chorizanthe parryi</i> var. <i>parryi</i> | Parry's spineflower | None/None/1B.1 | Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky, openings/annual herb/Apr–June/900–4005 | Moderate potential to occur. The project site is within the appropriate elevation range and supports chaparral and grassland vegetation communities; The survey area consists of the appropriate sandy soils. This species withstands disturbance like that seen within the survey area. According to Calflora, Parry's spineflower is most likely to occur in western Riverside county and populations are documented near the survey area. This species was not observed within the study area; however, the reconnaissance survey was not conducted during the appropriate blooming period. |
| <i>Chorizanthe polygonoides</i> var. <i>longispina</i> | long-spined spineflower | None/None/1B.2 | Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools; often clay/annual herb/Apr–July/95–5020 | Not expected to occur. The project site is within the appropriate elevation range and supports chaparral and grassland vegetation communities; however, there are no clay soils. |
| <i>Clarkia delicata</i> | delicate clarkia | None/None/1B.2 | Chaparral, Cismontane woodland; often gabbroic/annual herb/Apr–June/770–3280 | Low potential to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community; however, there are no gabbroid type soils or cismontane woodlands. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|------------------------------|----------------------------|-----------------------------|--|--|
| <i>Clinopodium chandleri</i> | San Miguel savory | None/None/1B.2 | Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, Valley and foothill grassland; Rocky, gabbroic or metavolcanic/perennial shrub/Mar-July/390-3525 | Not expected to occur. The project site does not contain suitable rocky soils and this perennial evergreen shrub would have been detected during the reconnaissance survey. |
| <i>Cryptantha wigginsii</i> | Wiggins' cryptantha | None/None/1B.2 | Coastal scrub; often clay/annual herb/Feb-June/65-900 | Not expected to occur. The project site is not within the appropriate elevation range, does not contain clay soils, and does not support suitable coastal bluff scrub. |
| <i>Dodecahema leptoceras</i> | slender-horned spineflower | FE/SE/1B.1 | Chaparral, Cismontane woodland, Coastal scrub (alluvial fan); sandy/annual herb/Apr-June/655-2495 | Not expected to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community; however, there are no alluvial fan formations. |
| <i>Dudleya multicaulis</i> | many-stemmed dudleya | None/None/1B.2/MSHCP NEPS | Chaparral, Coastal scrub, Valley and foothill grassland; often clay/perennial herb/Apr-July/45-2590 | Not expected to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community. However, there are no clay soils and this perennial species would have been detected during the reconnaissance survey if present. |
| <i>Dudleya viscida</i> | sticky dudleya | None/None/1B.2 | Coastal bluff scrub, Chaparral, Cismontane woodland, Coastal scrub; rocky/perennial herb/May-June/30-1805 | Not expected to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community. However, sticky dudleya is more likely to be found on coastal rocky cliff faces like those found on Camp Pendleton. This perennial species would have been detected during the reconnaissance survey if present but no rocky cliff habitat was present. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|-------------------------|-----------------------------|--|--|
| <i>Eryngium aristulatum</i> var. <i>parishii</i> | San Diego button-celery | FE/SE/1B.1 | Coastal scrub, Valley and foothill grassland, Vernal pools; mesic/annual / perennial herb/Apr-June/65-2035 | Not expected to occur. The project site is within the appropriate elevation range and supports a grassland vegetation community. However, the project site does not support vernal pool habitat and this perennial species would have been detected during the reconnaissance survey if present. |
| <i>Geothallus tuberosus</i> | Campbell's liverwort | None/None/1B.1 | Coastal scrub (mesic), Vernal pools; soil/ephemeral liverwort//30-1970 | Not expected to occur. The project site does not support mesic coastal scrub or vernal pool vegetation communities. |
| <i>Hesperocyparis forbesii</i> | Tecate cypress | None/None/1B.1 | Closed-cone coniferous forest, Chaparral; clay, gabbroic or metavolcanic/perennial evergreen tree//260-4920 | Not expected to occur. While the project site contains chaparral vegetation communities and is within the appropriate elevation range, there are no clay soils and this evergreen tree would have been detected during the reconnaissance survey. |
| <i>Horkelia cuneata</i> var. <i>puberula</i> | mesa horkelia | None/None/1B.1 | Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb-July(Sep)/225-2655 | Not expected to occur. Although the project site is within the appropriate elevation range, this perennial species would have been detected during the reconnaissance survey if present. According to Calflora, mesa horkelia has a generally coastal distribution. |
| <i>Horkelia truncata</i> | Ramona horkelia | None/None/1B.3 | Chaparral, Cismontane woodland; clay, gabbroic/perennial herb/May-June/1310-4265 | Not expected to occur. Although the project site is within the appropriate elevation range, there are no gabbroic soils and marginally suitable habitat (chaparral). This perennial species would have been detected during the reconnaissance survey if present. |
| <i>Juncus luciensis</i> | Santa Lucia dwarf rush | None/None/1B.2 | Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr-July/980-6695 | Not expected to occur. Although the project site is within the appropriate elevation range, there is no suitable semi-aquatic habitat (meadows, seeps, vernal pools). |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|---|---------------------------|-----------------------------|---|---|
| <i>Lasthenia glabrata</i> <i>ssp. coulteri</i> | Coulter's goldfields | None/None/1B.1 | Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb-June/0-4005 | Not expected to occur. While the project site is within the appropriate elevation range, there is no playa or vernal pool habitats to support this species. |
| <i>Lepechinia cardiophylla</i> | heart-leaved pitcher sage | None/None/1B.2 | Closed-cone coniferous forest, Chaparral, Cismontane woodland/perennial shrub/Apr-July/1705-4495 | Not expected to occur. While the project site contains chaparral vegetation, it is outside of the appropriate elevation range for this species and heart-leaved pitcher sage would have been detected during reconnaissance surveys. |
| <i>Lilium parryi</i> | lemon lily | None/None/1B.2 | Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; mesic/perennial bulbiferous herb/July-Aug/4000-9005 | Not expected to occur. The project site is outside of the appropriate elevation range and does not contain riparian or coniferous forest habitat. |
| <i>Limnanthes alba</i> <i>ssp. parishii</i> | Parish's meadowfoam | None/SE/1B.2 | Lower montane coniferous forest, Meadows and seeps, Vernal pools; vernal mesic/annual herb/Apr-June/1965-6560 | Not expected to occur. The project site is outside of the appropriate elevation range and does not contain riparian or coniferous forest habitat. |
| <i>Mielichhoferia shevockii</i> | Shevock's copper moss | None/None/1B.2 | Cismontane woodland (metamorphic, rock, mesic)/moss//2460-4595 | Not expected to occur. The project site is outside of the appropriate elevation range and does not support cismontane forest. |
| <i>Monardella hypoleuca</i> ssp. <i>intermedia</i> | intermediate monardella | None/None/1B.3 | Chaparral, Cismontane woodland, Lower montane coniferous forest (sometimes); Usually understory/perennial rhizomatous herb/Apr-Sep/1310-4100 | Not expected to occur. The project site supports marginally suitable habitat (chaparral), but lacks woodland overstory to support this species. This perennial species would likely have been detected during the reconnaissance survey if present. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|----------------------------------|-----------------------------|---|---|
| <i>Monardella hypoleuca</i> ssp. <i>lanata</i> | felt-leaved monardella | None/None/1B.2 | Chaparral, Cismontane woodland/perennial rhizomatous herb/June–Aug/980–5165 | Not expected to occur. The project site supports marginally suitable habitat (chaparral), but lacks woodland overstory to support this species. This perennial species would likely have been detected during the reconnaissance survey if present. |
| <i>Monardella macrantha</i> ssp. <i>hallii</i> | Hall's monardella | None/None/1B.3 | Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/June–Oct/2395–7200 | Not expected to occur. The project site supports marginally suitable habitat (chaparral), but lacks woodland overstory to support this species. This perennial species would likely have been detected during the reconnaissance survey if present. |
| <i>Navarretia fossalis</i> | spreading navarretia | FT/None/1B.1/ MSHCP NEPS | Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/95–2150 | Not expected to occur. Although the project site is within the appropriate elevation range, it does not support chenopod scrub or vernal pool habitat. |
| <i>Navarretia prostrata</i> | prostrate vernal pool navarretia | None/None/1B.1 | Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/5–3970 | Not expected to occur. Although the project site is within the appropriate elevation range, it does not contain alkaline soils nor support meadows, mesic seeps, or vernal pool habitat. |
| <i>Nolina cismontana</i> | chaparral nolina | None/None/1B.2 | Chaparral, Coastal scrub; sandstone or gabbro/perennial evergreen shrub/(Mar)May–July/455–4185 | Not expected to occur. The project site does not contain sandstone or gabbro soils and this conspicuous, evergreen shrub would have likely been detected during the reconnaissance survey. According to Calflora, chaparral nolina populations occur south of Temecula. |
| <i>Orcuttia californica</i> | California Orcutt grass | FE/SE/1B.1/ MSHCP NEPS | Vernal pools/annual herb/Apr–Aug/45–2165 | Not expected to occur. While the project site is within the appropriate elevation range, it does not support vernal pool habitat. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|-----------------------------|-----------------------------|--|--|
| <i>Packera ganderi</i> | Gander's ragwort | None/SR/1B.2 | Chaparral (burns, gabbroic outcrops)/perennial herb/Apr-June/1310-3935 | Not expected to occur. While the project site is within the appropriate elevation range and contains chaparral, it is located outside of the known geographic range of this species. According to Calflora, Gander's ragwort occurs almost entirely within San Diego county. |
| <i>Pseudognaphalium leucocephalum</i> | white rabbit-tobacco | None/None/2B.2 | Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug-Nov(Dec)/0-6890 | Low potential to occur. The project site is within the appropriate elevation range and contains chaparral vegetation. However, the survey area is highly disturbed. According to Calflora, white rabbit tobacco occurs south of Temecula and west of Murrieta. |
| <i>Saltugilia latimeri</i> | Latimer's woodland-gilia | None/None/1B.2 | Chaparral, Mojavean desert scrub, Pinyon and juniper woodland; rocky or sandy, often granitic, sometimes washes/annual herb/Mar-June/1310-6235 | Not expected to occur. The project site is not located in Mojavean desert scrub or a wash environment. According to Calflora, Latimer's woodland gilia occurs on Mt. San Jacinto and east of Mt. San Jacinto. |
| <i>Scutellaria bolanderi</i> ssp. <i>austromontana</i> | southern mountains skullcap | None/None/1B.2 | Chaparral, Cismontane woodland, Lower montane coniferous forest; mesic/perennial rhizomatous herb/June-Aug/1390-6560 | Low potential to occur. The project site does not support a mesic, woodlands and only marginally suitable chaparral habitat. |
| <i>Senecio aphanactis</i> | chaparral ragwort | None/None/2B.2 | Chaparral, Cismontane woodland, Coastal scrub; sometimes alkaline/annual herb/Jan-Apr(May)/45-2625 | Low potential to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community, but it does not contain alkaline soils. |
| <i>Sibaropsis hammittii</i> | Hammitt's clay-cress | None/None/1B.2 | Chaparral (openings), Valley and foothill grassland; clay/annual herb/Mar-Apr/2360-3495 | Low potential to occur. The project site is within the appropriate elevation range and supports chaparral and grassland vegetation communities, but does not contain clay soils. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|--|--------------------------|-----------------------------|---|---|
| <i>Sidalcea neomexicana</i> | salt spring checkerbloom | None/None/2B.2 | Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar-June/45-5020 | Low potential to occur. The project site is within the appropriate elevation range and supports a chaparral vegetation community, but it does not contain alkaline soils. |
| <i>Sphaerocarpos drewei</i> | bottle liverwort | None/None/1B.1 | Chaparral, Coastal scrub; openings, soil/ephemeral liverwort//295-1970 | Low potential to occur. The project site is within the appropriate elevation range, but supports marginally suitable habitat (chaparral). |
| <i>Symphotrichum defoliatum</i> | San Bernardino aster | None/None/1B.2 | Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July-Nov/5-6695 | Not expected to occur. The project site is within the appropriate elevation range, but does not contain vernally mesic grassland or other mesic environments. |
| <i>Trichocoronis wrightii</i> var. <i>wrightii</i> | Wright's trichocoronis | None/None/2B.1/ MSHCP NEPS | Meadows and seeps, Marshes and swamps, Riparian forest, Vernal pools; alkaline/annual herb/May-Sep/15-1425 | Not expected to occur. The project site is within the appropriate elevation range, but does not support vernal pools, riparian, or other mesic environments. Additionally, there are no alkaline soils within the project site. |
| <i>Tetracoccus dioicus</i> | Parry's tetracoccus | None/None/1B.2 | Chaparral, Coastal scrub/perennial deciduous shrub/Apr-May/540-3280 | Not expected to occur. Although the project site is within the appropriate elevation range and supports a chaparral vegetation community, this conspicuous perennial shrub would have likely been detected during the reconnaissance survey. According to Calflora, Parry's tetracoccus generally occurs within San Diego county. |

ATTACHMENT E

SPECIAL-STATUS PLANT SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State/CRPR) | Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet) | Potential to Occur |
|----------------------------|-----------------------|--------------------------------|--|---|
| <i>Tortula californica</i> | California screw-moss | None/None/1B.2 | Chenopod scrub, Valley and foothill grassland; sandy, soil/moss//30-4790 | Low potential to occur. While the project site contains grassland and is within the appropriate elevation range, the survey area is highly disturbed. |



Attachment F

Special-Status Wildlife Species Detected
or Potentially Occurring in the Study Area

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|----------------------------|------------------------|--|---|
| Amphibians | | | | |
| <i>Anaxyrus californicus</i> | arroyo toad | FE/SSC | Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering | Not expected to occur. The project site does not support suitable aquatic or upland habitat for this species. |
| <i>Rana draytonii</i> | California red-legged frog | FT/SSC | Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands | Not expected to occur. The project site does not support suitable aquatic or upland habitat for this species. |
| <i>Spea hammondi</i> | western spadefoot | None/SSC | Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley-foothill woodlands, pastures, and other agriculture | Not expected to occur. The project site does not support suitable aquatic or upland habitat for this species. |
| <i>Taricha torosa</i> (Monterey Co. south only) | California newt | None/SSC | Wet forests, oak forests, chaparral, and rolling grassland | Not expected to occur. The project site does not support suitable aquatic or upland habitat for this species. |
| Reptiles | | | | |
| <i>Actinemys marmorata</i> | western pond turtle | None/SSC | Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter | Not expected to occur. The project site does not support suitable aquatic or upland habitat for this species. |
| <i>Arizona elegans occidentalis</i> | California glossy snake | None/SSC | Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas. | Not expected to occur. The project site does not contain open, sandy habitat that could support this species. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|---|-----------------------------|------------------------|---|---|
| <i>Aspidoscelis tigris stejnegeri</i> | San Diegan tiger whiptail | None/SSC | Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas. | Low potential to occur. The project site supports marginally suitable habitat (chaparral) that could support this species. |
| <i>Coleonyx variegatus abbotti</i> | San Diego banded gecko | None/SSC | Rocky areas within coastal scrub and chaparral | Low potential to occur. The project site supports marginally suitable habitat (chaparral) that could support this species. |
| <i>Crotalus ruber</i> | red diamondback rattlesnake | None/SSC | Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats | Moderate potential to occur. The project site supports suitable chaparral and grassland habitat that could support this species. This species was not observed within the study area. |
| <i>Phrynosoma blainvillii</i> | Blainville's horned lizard | None/SSC | Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats | Low potential to occur. The project site supports marginally suitable habitat (chaparral and grasslands that lack sandy soils) that could support this species. |
| <i>Salvadora hexalepis virgulata</i> | coast patch-nosed snake | None/SSC | Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites | Moderate potential to occur. The project site supports suitable chaparral habitat with small mammal burrows that could support this species. This species was not observed within the study area. |
| <i>Thamnophis hammondi</i> | two-striped gartersnake | None/SSC | Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools | Not expected to occur. The project site does not support suitable aquatic or upland habitat for this species. |
| Birds | | | | |
| <i>Agelaius tricolor</i> (nesting colony) | tricolored blackbird | None/SSC, WL | Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture | Not expected to occur. The project site does not support freshwater or emergent wetland habitat that would support nesting for this species. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|----------------------|------------------------|---|---|
| <i>Aquila chrysaetos</i> (nesting & wintering) | golden eagle | None/FP, WL | Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats | Not expected to occur. The project site is surrounded by development and does not contain open areas suitable for nesting or wintering. In addition, there are no cliff-sides or large trees to provide nesting habitat. |
| <i>Athene cunicularia</i> (burrow sites & some wintering sites) | burrowing owl | None/SSC | Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows | Low potential to occur. The project site supports grassland and chaparral vegetation communities suitable for this species. However, no California ground squirrels or their burrows were observed on the project site. One rock pile with marginal interstitial space was located within the project site. |
| <i>Buteo swainsoni</i> (nesting) | Swainson's hawk | None/ST | Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture | Not expected to occur. The project site is surrounded by development and does not support woodlands or open areas suitable for nesting or foraging. |
| <i>Campylorhynchus brunneicapillus sandiegensis</i> (San Diego & Orange Counties only) | coastal cactus wren | None/SSC | Southern cactus scrub patches | Not expected to occur. The project site does not contain cactus scrub to support this species. |
| <i>Charadrius alexandrinus nivosus</i> (nesting) | western snowy plover | FT, BCC/SSC, WL | On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds | Not expected to occur. The project site does not support aquatic habitat suitable for this species. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|--|------------------------------|------------------------|--|---|
| <i>Circus cyaneus</i> (nesting) | northern harrier | None/SSC | Nests in open wetlands (marshy meadows, wet lightly-grazed pastures, old fields, freshwater and brackish marshes); also in drier habitats (grassland and grain fields); forages in grassland, scrubs, rangelands, emergent wetlands, and other open habitats | Not expected to nest, low potential to forage. The project site does not contain wetland habitat that would support the nesting of this species; however, the project site contains grassland that could support foraging, but it is an isolated stand surrounded by development. |
| <i>Coccyzus americanus occidentalis</i> (nesting) | western yellow-billed cuckoo | FT, BCC/SE, WL | Nests in dense, wide riparian woodlands and forest with well-developed understories | Not expected to occur. The project site does not support riparian vegetation for this species. |
| <i>Elanus leucurus</i> (nesting) | white-tailed kite | None/FP | Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands | Not expected to occur. The project site does not support woodlands or riparian areas near open lands for this species to nest. However, the project site contains grassland that could support foraging, but it is an isolated stand surrounded by development. |
| <i>Haliaeetus leucocephalus</i> (nesting & wintering) | bald eagle | FDL, BCC/SE, FP | Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains | Not expected to occur. The project site does not support forested areas near aquatic habitat for this species to nest and/or winter. |
| <i>Icteria virens</i> (nesting) | yellow-breasted chat | None/SSC | Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush | Not expected to nest or forage. The project site does not support riparian vegetation for this species to nest. |
| <i>Lanius ludovicianus</i> (nesting) | loggerhead shrike | None/SSC | Nests and forages in open habitats with scattered shrubs, trees, or other perches | Moderate potential to occur. The project site supports some suitable habitat (chaparral with open habitat) for this species to nest; however, it is an isolated stand because it is surrounded by development. This species was not observed within the study area. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|---|--------------------------------|------------------------|--|---|
| <i>Polioptila californica californica</i> | coastal California gnatcatcher | FT/SSC, WL | Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level | Low potential to occur. The project site lacks suitable sage scrub habitat, but supports chaparral that contains scattered buckwheat suitable for foraging. This marginally suitable habitat is isolated and surrounded by development. The species has been documented as occurring approximately 0.25 mile west of the project site near McElwain Road (CDFW 2018). |
| <i>Vireo bellii pusillus</i> (nesting) | least Bell's vireo | FE/SE, WL | Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season | Not expected to occur. The project site does not support riparian vegetation for this species to nest. |
| Fishes | | | | |
| <i>Gila orcuttii</i> | arroyo chub | None/SSC | Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths >40 centimeters (16 inches); substrates of sand or mud | Not expected to occur. The project site does not support aquatic habitat for this species. |
| Mammals | | | | |
| <i>Antrozous pallidus</i> | pallid bat | None/SSC | Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees | Low potential to occur. The project site supports a grassland vegetation community suitable for foraging; however, the stand is isolated and surrounded by development. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|---|-------------------------------------|------------------------|---|--|
| <i>Chaetodipus californicus femoralis</i> | Dulzura pocket mouse | None/SSC | Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level | Low potential to occur. The project site is within the elevation range for this species and supports marginally suitable habitat (chamise chaparral, but completely surrounded by development) for this species. The species has been documented as occurring approximately 3.5 miles south of the project site near Jackson Avenue (CDFW 2018). |
| <i>Chaetodipus fallax fallax</i> | northwestern San Diego pocket mouse | None/SSC | Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland | Low potential to occur. The project site is within the elevation range for this species and supports limited chaparral and annual grassland habitat suitable for this species (isolated by surrounding development). The species has been documented as occurring approximately 0.75 mile south of the project site (CDFW 2018). |
| <i>Dipodomys stephensi</i> | Stephens' kangaroo rat | FE/ST | Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas | Low potential to occur. The project site is within the elevation range for this species and supports limited annual grassland habitat suitable for this species (isolated and surrounded by development). The species has been documented as occurring approximately 0.6 mile southeast of the project site (CDFW 2018). However, this historic occurrence (1987) is unlikely to have persisted. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|-------------------------------------|-----------------------------------|------------------------|--|---|
| <i>Eumops perotis californicus</i> | western mastiff bat | None/SSC | Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels | Not expected to occur. The project site lacks supports marginally suitable foraging habitat and lacks suitable roosting habitat. |
| <i>Lasiurus xanthinus</i> | western yellow bat | None/SSC | Valley-foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms | Not expected to roost or forage. The project site does not support riparian or palms suitable for this species. |
| <i>Lepus californicus bennettii</i> | San Diego black-tailed jackrabbit | None/SSC | Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands | Moderate potential to occur. The project site contains both agriculture and disturbed landscapes suitable for this species. This species was not observed within the study area. |
| <i>Neotoma lepida intermedia</i> | San Diego desert woodrat | None/SSC | Coastal scrub, desert scrub, chaparral, cacti, rocky areas | Low potential to occur. The project site supports marginally suitable chaparral habitat for this species. The project site lacks rocky areas and is completely surrounded by development. |
| <i>Nyctinomops femorosaccus</i> | pocketed free-tailed bat | None/SSC | Pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with dropoffs, caverns, and buildings | Not expected to occur. The project site does not support riparian or desert wash habitats suitable for this species. |
| <i>Onychomys torridus ramona</i> | southern grasshopper mouse | None/SSC | Grassland and sparse coastal scrub | Low potential to occur. The project site supports marginally suitable grassland habitat for this species. The project site is completely surrounded by development. |

ATTACHMENT F

SPECIAL-STATUS WILDLIFE SPECIES DETECTED OR POTENTIALLY OCCURRING IN THE STUDY AREA

| Scientific Name | Common Name | Status (Federal/State) | Habitat | Potential to Occur |
|---|-----------------------------|------------------------|---|--|
| <i>Perognathus longimembris brevinasus</i> | Los Angeles pocket mouse | None/SSC | Lower-elevation grassland, alluvial sage scrub, and coastal scrub | Low potential to occur. The project site supports marginally suitable grassland habitat for this species. The project site is surrounded by development. The species has been documented as occurring approximately 4.3 miles southeast of the project site (CDFW 2018). |
| <i>Perognathus longimembris internationalis</i> | Jacumba pocket mouse | None/SSC | Desert scrub and sparse sage scrub in areas with fine sandy soils | Not expected to occur. The project site does not support suitable desert scrub or sparse sage scrub habitat with fine sandy soils. |
| Invertebrates | | | | |
| <i>Branchinecta lynchi</i> | vernal pool fairy shrimp | FT/None | Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats | Not expected to occur. The project site does not support vernal pools or seasonal depressions suitable for this species. |
| <i>Branchinecta sandiegonensis</i> | San Diego fairy shrimp | FE/None | Vernal pools, non-vegetated ephemeral pools | Not expected to occur. The project site does not support vernal pools or seasonal depressions suitable for this species. |
| <i>Euphydryas editha quino</i> | quino checkerspot butterfly | FE/None | Annual forblands, grassland, open coastal scrub and chaparral; often soils with cryptogamic crusts and fine-textured clay; host plants include <i>Plantago erecta</i> , <i>Antirrhinum coulterianum</i> , and <i>Plantago patagonica</i> (Silverado Occurrence Complex) | Low potential to occur. The project site supports marginally suitable habitat (chaparral that lacks cryptogamic crusts or clay soils). Additionally, no known host plants are present on the project site. |
| <i>Streptocephalus woottoni</i> | Riverside fairy shrimp | FE/None | Vernal pools, non-vegetated ephemeral pools | Not expected to occur. The project site does not support vernal pools or seasonal depressions suitable for this species. |