APPENDIX C

LITERATURE REVIEW AND CNDDB RECORDS SEARCH

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LITERATURE REVIEW AND RECORDS SEARCH

LSA Biologist Kelly McDonald conducted a literature review and records search on October 5, 2020, to identify the existence and potential for occurrence of sensitive or special-status plant and animal species[1] in the vicinity of the project site. Ms. McDonald also examined federal and State lists of sensitive species. Current electronic database records reviewed included the following:

- **California Natural Diversity Data Base information (CNDDB – RareFind 5)**, which is administered by the California Department of Fish and Wildlife (CDFW). This database covers sensitive plant and animal species as well as sensitive natural communities that occur in California. Records from seven United States Geological Survey (USGS) quadrangles surrounding the project site (*Anaheim, La Habra, Long Beach, Newport Beach (, Seal Beach, South Gate,* and *Whitter*) were obtained from this database to assist with the analysis.

- **California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants**, which uses four specific categories or "lists" of sensitive plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B are intended to meet the status definitions of "threatened" or "endangered" in CESA and the California Fish and Game Code, and are considered by CNPS to be eligible for State listing. At the discretion of the CEQA Lead Agency, impacts to these species may be analyzed as such, pursuant to *State CEQA Guidelines* Sections 15125(c) and 15380. Plants in Rank 3 (limited information), Rank 4 (limited records), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the seven USGS quadrangles surrounding the project site were obtained from this database to assist with the analysis.

- **United States Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) Online System**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all known critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC Trust Resource Report (USFWS 2020b) was generated for the project area.

- **The USFWS Critical Habitat Mapper** was reviewed to determine whether critical habitat has been designated within or in the vicinity of the project area (USFWS 2020a).

[1] For the purposes of this report, the term "special-status species" refers to those species that are listed or proposed for listing under the California and Federal Endangered Species Acts (CESA and/or FESA); California Fully Protected Species; plants with a California. Rare Plant Ran (CRPR) of 1, 2, or 3; California Species of Special Concern; and California Special Animals. It should be noted that "Species of Special Concern" and "California Special Animal" are administrative designations made by the CDFW and carry no formal legal protection status. However, Section 15380 of the *State CEQA Guidelines* indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

- **The USFWS National Wetlands Inventory** was reviewed to determine whether any wetlands or surface waters of the United States have been previously identified in the project area (USFWS 2020c).

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and regional habitat conservation plans and local land use policies related to biological resources were reviewed.

SPECIAL-STATUS NATURAL COMMUNITIES

The CNDDB search identified occurrences of five special-status natural (i.e., plant) communities within 5.0 miles of the project area (hereafter referred to as the "project vicinity"): California Walnut Woodland, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, and Southern Foredunes. No special-status natural communities are present at the project site.

WILDLIFE

Native wildlife habitat is largely absent on the project site. Furthermore, the lack of ground cover and suitable foraging habitat make the site undesirable for many native wildlife species. Suitable habitat for such species is absent from the proposed project disturbance limits. In addition, the project site does not function as a wildlife movement corridor.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
chaparral sand-verbena	*Abronia villosa* var. *aurita*	US: – CA: S2 CNPS: 1B.1	Annual/perennial herb. Sandy areas (generally flats and benches along washes) in chaparral and coastal sage scrub, and improbably in desert dunes or other sandy areas, below 1,600 meters (5,300 feet) elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura Counties. Believed extirpated from Orange County. Also reported from Arizona and Mexico (Baja California). Plants reported from desert communities are likely misidentified.	March - August	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
aphanisma	*Aphanisma blitoides*	US: – CA: S2 CNPS: 1B.2	Annual herb. Sandy or clay soils on slopes or bluffs near the ocean, usually in coastal bluff scrub, coastal dunes, or coastal scrub, below 305 meters (1,000 feet) elevation. Known in California from Ventura, Santa Barbara, Los Angeles, Orange, and San Diego Counties. Also occurs in Mexico.	March - June	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Horn's milk-vetch	*Astragalus hornii*	US: – CA: S1 CNPS: 1B.1	Annual herb. Occurs in lake margins, meadows and seeps, and playas from 60–850 meters in elevation.	May-October	**Not Expected.** While there is one occurrence within the vicinity of the project site, suitable habitat is absent from the project site.
Ventura marsh milk-vetch	*Astragalus pycnostachyus* var. *lanosissimus*	US: FE CA: CE CNPS: 1B.1	Perennial herb. Coastal salt marsh within reach of high tide or protected by barrier beaches, or more rarely near seeps on sandy bluffs, below 35 meters (120 feet) elevation. Known only from Santa Barbara and Ventura Counties. Believed extirpated from Los Angeles and Orange Counties.	June - October	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Coulter's saltbush	*Atriplex coulteri*	US: – CA: S1/S2 CNPS: 1B.2	Perennial herb. Alkaline or clay soils in ocean bluffs and ridge tops and alkaline low places in coastal bluff scrub, coastal dunes, coastal sage scrub, and valley and foothill grasslands below 460 meters (1,500 feet) elevation. In California, known only from Los Angeles, Orange, Santa Barbara, San Bernardino, San Luis Obispo, Ventura, and San Diego Counties. Also occurs in Mexico. Reports of this species from Riverside County are based on misidentification of *Atriplex serenana* ssp. *davidsonii* (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	March-October	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
south coast saltscale	*Atriplex pacifica*	US: – CA: S2 CNPS: 1B.2	Annual herb. Alkali soils in coastal sage scrub, playas, coastal bluff scrub, coastal dunes, and chenopod scrub below 200 meters (600 feet) elevation, and perhaps formerly up to about 430 meters (1,400 feet) in Los Angeles County. In California, known from the Channel Islands and mainland Los Angeles, San Diego and Orange Counties. Also occurs in Mexico. Believed extirpated from Ventura County. Reports of this species from Riverside County are based on misidentification of *Atriplex serenana* ssp. *davidsonii* (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004).	March-October	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Parish's brittlescale	*Atriplex parishii*	US: – CA: S1 CNPS: 1B.1	Annual herb. Alkali soils in meadows, vernal pools, chenopod scrub, and playas. Usually on drying alkali flats with fine soils. In California, known from Riverside and San Diego Counties. Also occurs in Mexico. Believed extirpated from Los Angeles, Orange, and San Bernardino Counties.	June-October	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Davidson's saltscale	*Atriplex serenana* var. *davidsonii*	US: – CA: S1 CNPS: 1B.2	Annual herb. Alkaline soils in scrub and herbaceous communities from 10 to 460 meters (30 to 1,500 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, San Diego, San Luis Obispo, and Ventura Counties. Believed extirpated from Santa Barbara and perhaps Los Angeles Counties. Also occurs in Mexico.	April-October	**Not Expected.** While there is one known occurrence in the vicinity of the project site, suitable habitat is absent on the project site.
intermediate mariposa lily	*Calochortus weedii* var. *intermedius*	US: – CA: S2 CNPS: 1B.2	Perennial herb. Dry, open rocky slopes and rock outcrops in chaparral, coastal sage scrub, and grassland, at 105 to 855 meters (340 to 2,800 feet) elevation. Known only from Los Angeles, Orange, Riverside, and San Bernardino Counties, California. In the western Riverside County area, this species is known from the hills and valleys west of Lake Skinner and Vail Lake (*The Vascular Plants of Western Riverside County, California*. F.M. Roberts et al., 2004). Appears to intergrade with *Calochortus plummerae*, which is mostly east and north of Santa Ana Mountains.	May- July	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
lucky morning-glory	*Calystegia felix*	US: – CA: S1 CNPS: 1B.1	Annual/perennial rhizomatous herb. Wetland and marshy areas, sometimes alkaline, sometimes artificially watered, from 30 to 215 meters (100 to 700 feet) elevation. All of the known extant occurrences are associated with well-watered landscaping on recently completed industrial, commercial, and residential developments in the City of Chino within a historical area of artesian springs. Older collections are from areas that are now heavily urbanized areas (including one from South Los Angeles and another from Pico Rivera in Los Angeles County). Known to occur only in western San Bernardino County. Presumed extirpated from Riverside and Los Angeles Counties.	March-September	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
southern tarplant	*Centromadia parryi* ssp. *australis*	US: – CA: S2 CNPS: 1B.1	Annual herb. In vernally wet areas such as edges of marshes and vernal pools, at edges of roads and trails, and in other areas of compacted, poorly drained, or alkaline soils where competition from other plants is limited, often due to disturbance, below 425 meters (1,400 feet) elevation. In California, known only from Santa Barbara, Ventura, Los Angeles, Orange and San Diego Counties. Also occurs in Mexico.	May-November	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable soils and habitat are absent from the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
salt marsh bird's beak	*Chloropyron maritimus* spp. *maritimus*	US: FE CA: CE CNPS: 1B.2	Annual herb. Coastal dunes and salt marshes. In California, known from Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura Counties. Historical collections referred to this taxon from alkaline meadow in vicinity of San Bernardino Valley and from interior San Diego County are intermediate to C. maritimus ssp. canescens. Also occurs in Mexico.	May-October	**Not Expected.** While there is one known occurrence in the vicinity of the project site, suitable habitat is absent on the project site.
many-stemmed dudleya	*Dudleya multicaulis*	US: – CA: S2 CNPS: 1B.2	Perennial herb. Heavy, often clay soils or around granitic outcrops in chaparral, coastal sage scrub, and grassland below 790 meters (2,600 feet) elevation. Known only from Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.	April- July	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Laguna Beach dudleya	*Dudleya stolonifera*	US: FT CA: CT CNPS: 1B.1	Perennial herb. Rocky areas (generally north-facing sandstone cliffs) at 10 to 260 meters (30 to 850 feet) elevation. Known only from Orange County, California near Laguna Beach, with most occurrences in Laguna Canyon west of SR-73.	May- July	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
San Diego button-celery	*Eryngium aristulatum* var. *parishii*	US: FE CA: CE CNPS: 1B.1	Annual/perennial herb. Vernal pools and similar mesic habitats in coastal scrub and grassland at 15 to 620 meters (50 to 2,000 feet) elevation. In California, known only from Los Angeles, Orange, Riverside and San Diego Counties. In Riverside County, this species is known only from the Santa Rosa Plateau. Also occurs in Mexico.	April- June	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Los Angeles sunflower	*Helianthus nuttallii* ssp. *parishii*	US: – CA: SH CNPS: 1A	Perennial herb. Marshes and swamps (coastal salt and freshwater) at 10 to 500 meters (30 to 1,600 feet) elevation. This species is historically known from Los Angeles, Orange and San Bernardino Counties, California. Last seen in 1937. Presumed extinct.	August-October	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
decumbent goldenbush	*Isocoma menziesii* var. *decumbens*	US: – CA: S2 CNPS: 1B.2	Perennial shrub. Sandy soils, often in disturbed areas, in coastal scrub and chaparral from 10 to 135 meters (30 to 440 feet) elevation. Known from mainland Orange and San Diego Counties and from San Clemente and Santa Catalina Islands in California. Also occurs in Baja California.	April-November	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Coulter's goldfields	*Lasthenia glabrata* ssp. *coulteri*	US: – CA: S2 CNPS: 1B.1	Annual herb. Vernal pools and alkaline soils in marshes, playas, and similar habitats below 1,220 meters (4,000 feet) elevation. Known from Colusa, Merced, Tulare, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, Tehama, Ventura, and Yolo Counties. Believed extirpated from Kern, Los Angeles, and San Bernardino Counties, and possibly also from Tulare County. Also occurs in Mexico.	February-June	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable soils and habitat are absent from the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
mud nama	*Nama stenocarpum*	US: – CA: S1/S2 CNPS: 2B.2	Annual/perennial herb. Lake shores, riverbanks, and similar intermittently wet areas at 5 to 500 meters (20 to 1,600 feet) elevation. Known in California from San Diego, Orange, and Riverside Counties and from San Clemente Island. Believed extirpated from Los Angeles and Imperial Counties. Known also from Baja California and Arizona.	January-July	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Gambel's watercress	*Nasturtium (Rorippa) gambelii*	US: FE CA: CT CNPS: 1B.1	Perennial rhizomatous herb. Marshes from 5 to 330 meters (20 to 1,100 feet) elevation. Currently believed to occur in California only in Santa Barbara and San Luis Obispo Counties. There are historical records from Los Angeles, Orange, and San Bernardino Counties. A historical report from San Diego County likely constitutes a misidentification. Also occurs in Baja California.	April-September	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
prostrate vernal pool navarretia	*Navarretia prostrata*	US: – CA: S2 CNPS: 1B.1	Annual herb. Vernal pools, usually alkaline, from 15 to 1,210 meters (50 to 4,000 feet) elevation. Known only from Alameda, Fresno, Los Angeles, Merced, Monterey, Orange, Riverside, San Benito, San Diego, and San Luis Obispo Counties. Presumed extirpated from San Bernardino County.	April- July	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
coast woolly-heads	*Nemacaulis denudata* var. *denudata*	US: – CA: S2 CNPS: 1B.2	Annual herb. Sandy places such as coastal dunes below 100 meters (300 feet) elevation. Known in California from Orange, Los Angeles, and San Diego Counties. Believed extirpated from Santa Catalina Island. Also occurs in Mexico.	April-September	**Not Expected.** While there is one known occurrence in the vicinity of the project site, suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
California Orcutt grass	*Orcuttia californica*	US: FE CA: CE CNPS: 1B.1	Annual herb. Vernal pools from 15 to 660 meters (50 to 2,200 feet) elevation. In California, known from Los Angeles, Ventura, Riverside, and San Diego Counties. Also occurs in Mexico.	April-August	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
Lyon's pentachaeta	*Pentachaeta lyonii*	US: FE CA: CE CNPS: 1B.1	Annual herb. Clay soils in edges of openings in fire-adapted coastal sage scrub and chaparral on saddles between hills, on the tops of small knolls, or in flat areas at the base of slopes, particularly where soil crust results in less competition from annual grasses, from 30 to 630 meters (100 to 2,100 feet) elevation. Occurs only in the Santa Monica Mountains in eastern Ventura and western Los Angeles Counties and in the western Simi Hills in Ventura County. Based on historical records, it once occurred on the Palos Verdes Peninsula and on Santa Catalina Island, but has not been seen at these locations since 1910 and 1855, respectively, and is assumed to be extirpated from those areas.	March-August	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Brand's star phacelia	*Phacelia stellaris*	US: – CA: S1 CNPS: 1B.1	Annual herb. Dunes and sandy openings in coastal scrub communities at 5 to 400 meters (20 to 1,300 feet) elevation. In western Riverside County, this species appears to be restricted to sandy washes and benches in alluvial floodplains. Known only from Los Angeles (believed extirpated), Riverside and San Diego Counties, California. The most recent record of this species from Los Angeles County was in 1943.	March-June	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
Parish's gooseberry	*Ribes divericatum* var. *parishii*	US: – CA: SX CNPS: 1A	Perennial deciduous shrub. Deciduous shrub of willow swales in riparian habitats at 60 to 300 meters (200 to 1,000 feet) elevation. Believed to be extinct. Historical collections from Los Angeles and San Bernardino Counties.	February-April	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Sanford's arrowhead	*Sagittaria sanfordii*	US: – CA: S3 CNPS: 1B.2	Perennial rhizomatous herb(emergent). Marshes and swamps below 650 meters (2,100 feet) elevation. Occurs in standing or slow-moving fresh water (ponds, marshes, and ditches). Known only from Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Placer, Sacramento, Shasta, San Joaquin, and Tehama Counties. Believed extirpated from Southern California.	May-October	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
salt spring checkerbloom	*Sidalcea neomexicana*	US: – CA: S2 CNPS: 2B.2	Perennial herb. Alkaline springs and brackish marshes below 1,530 meters (5,000 feet) elevation. In California, known only from Kern, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Believed extirpated from Los Angeles County. Also known from Arizona, New Mexico, Nevada, Utah, and Mexico.	March-June	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
estuary seablite	*Suaeda esteroa*	US: – CA: S2 CNPS: 1B.2	Perennial herb. Coastal salt marshes below 5 meters (15 feet) elevation. Occurs along immediate coast from Santa Barbara County to Baja California.	May-October (January)	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.

Table C-1: CNPS Special-Status Plant Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	General Habitat Description	Flowering Period	Likelihood of Occurrence on the Project Site and Rationale
San Bernardino aster	*Symphyotrichum defoliatum*	US: – CA: S2 CNPS: 1B.2	Perennial herb. Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 meters (6,700 feet) elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties.	July-November	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.

[1] Project vicinity = project site plus a 5-mile buffer

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Plant (CSP), California Special Animal (CSA), NCCP Identified Species (IS), NCCP Target Species (TS), NCCP Conditionally Covered Species (CCS), S1 = Critically Imperiled, S2 = Imperiled, S3 = Vulnerable, S4 = Apparently Secure, SH= Historical Records, SX= All California sites are extirpated

CNPS Designations:

1B = Rare threatened, or endangered in California and elsewhere
2B = Rare, threatened, or endangered in California, but not elsewhere
3 = Not very endangered in California
4 = Plants of Limited Distribution – Watch List

Abbreviation/Acronym Definitions:

CA = California
CNDDB = California Natural Diversity Database
CNPS = California Native Plant Society
US = United States

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
Invertebrates				
Crotch bumble bee	*Bombus crotchii*	US: – CA: SA	Nectars on *Antirrhinum* ssp., *Phacelia* ssp., *Clarkia* ssp., *Dendromecon* ssp., *Eschscholzia* ssp., and *Eriogonum* ssp. in coastal California east to the Sierra-Cascade crest and south into Mexico.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
San Diego fairy shrimp	*Branchinecta sandiegonensis*	US: FE CA: SA	Endemic to vernal pools in Orange and San Diego Counties. Usually appears in late fall, winter, and spring when rains fill the small, shallow, seasonal pools.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
monarch butterfly (California overwintering population)	*Danaus plexippus*	US: – CA: CSA	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind- protected tree groves (e.g., eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	**Not Expected.** There are known winter roosting occurrences in the vicinity of the project site, and suitable habitat is marginal.
Quino checkerspot butterfly	*Euphydryas editha quino*	US: FE CA: SA	Meadows or openings within coastal sage scrub or chaparral below about 5,000 feet where food plants (*Plantago erecta* and/or *Orthocarpus purpurascens*) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
Riverside fairy shrimp	*Streptocephals woottoni*	US: FE CA: SA	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) with low to moderate dissolved solids, in annual grassland areas interspersed through chaparral or coastal sage scrub vegetation. Suitable habitat includes some artificially created or enhanced pools, such as some stock ponds, that have vernal pool like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County and Baja California.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
Fish				
Southern steelhead - Southern California	*Oncorhynchus mykiss irideus*	US: FE CA: SA	Federal listing refers to runs in coastal basins from the Santa Maria River, south to the southern extent of the range (presently considered to be Malibu Creek. Proposed rulemaking December 19, 2000, to extend southern portion of the range to San Mateo.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
Amphibians				
western spadefoot	*Spea hammondii*	US: – CA: SSC	Occurs primarily in grassland and other relatively open habitats. Found in elevations ranging from sea level to 4,500 feet. Requires temporary pools for breeding.	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
Reptiles				
southern California legless lizard	*Anniella stebbinsi*	US: – CA:SSC	Found throughout Southern California into Baja California in beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces. Often found under surface objects such as rocks, driftwood, or leaf litter.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
orange-throated whiptail	*Aspidoscelis hyperythra*	US: – CA: SSC	Inhabits low-elevation coastal scrub, chaparral, and valley hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food, termites.	**Not Expected.** There are no known occurrences in the vicinity of the project site, and suitable habitat is absent on the project site.
coastal whiptail	*Aspidoscelis tigris stejnegeri*	US: – CA: CSA	Occurs in deserts and semiarid areas with sparse vegetation. Often found in woodland and riparian areas.	**Not Expected.** There are no known occurrences in the vicinity of the project site, and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
green turtle	*Chelonia mydas*	US: FT CA: –	Marine. Completely herbivorous; needs adequate supply of seagrasses and algae.	**Not Expected.** There are no known occurrences in the vicinity of the project site, and suitable habitat is absent on the project site.
western pond turtle	*Emys marmorata*	US: – CA: SSC	Occurs in woodland, forest, and grassland. Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with vegetation and rocky or muddy bottoms.	**Not Expected.** While there are known occurrences within the vicinity of the project site, suitable habitat is absent on the project site.
coast horned lizard	*Phrynosoma blainvillii*	US: – CA: SSC	Occurs in Coastal Sage Scrub (CSS), open chaparral, riparian woodland, and annual grassland habitats that support adequate prey species.	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
Birds				
tricolored blackbird (nesting colony)	*Agelaius tricolor*	US: – CA: SSC	Highly colonial nester largely endemic to California. Most numerous in the Central Valley and vicinity. Requires open water, protected nesting substrate, and a foraging area with insect prey within a few kilometers of the colony.	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	US: – CA: CSA	Resident in Southern California CSS and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
grasshopper sparrow (nesting)	*Ammodramus savannarum*	US: – CA: SSC	Occurs in dense grasslands, preferring native grasslands with a mixture of forbs and shrubs.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
burrowing owl (burrow sites and some wintering sites)	*Athene cunicularia*	US: – CA: SSC	Burrows in open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
ferruginous hawk (wintering)	*Buteo regalis*	US: – CA: CSA	Found in open country in western North America; migrates north to Canada in summer and south to Mexico in winter.	**Not Expected.** There are known occurrences in the general vicinity of the project site; however, suitable habitat is absent on the project site.
Swainson's hawk	*Buteo swainsoni*	US: – CA: CT	Found in open habitats (e.g. grasslands, sage flats and prairies) in western North America; migrates south to Argentina during the winter.	**Not Expected.** While there are known occurrences in the general vicinity of the project site, suitable habitat is absent on the project site.
coastal cactus wren (San Diego and Orange Counties only)	*Campylorhynchus brunneicapillus sandiegensis*	US: – CA: SSC	Occurs in CSS habitats. Requires tall *Opuntia* cactus for nesting and roosting.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
western snowy plover	*Charadrius alexandrines nivosus*	US: FT CA: –	Occurs on dry sand beaches along coast; salt pans or alkaline flats in interior. Usually in places with very little vegetation, not around marshes. Sometimes forages on open mudflats.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
western yellow-billed cuckoo (nesting)	*Coccyzus americanus occidentalis*	US: FT CA: CE	Nests in riparian forests along the broad lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods with understory of blackberry, nettle, or grape.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
yellow rail	*Coturnicops noveboracensis*	US: – CA: SSC	Occur in shallow marshes with fairly short vegetation. Often nests among sedges of the genus *Carex.*	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
white-tailed kite	*Elanus leucurus*	US: – CA: FP	Breeds in riparian trees such as oaks, willows, and cottonwoods in lower-elevation areas, particularly coastal valleys and plains. Forages in open areas and grasslands.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
southwestern Willow Flycatcher	*Empidonax traillii extimus*	US: FE CA: CE	Occurs in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands including lakes and reservoirs.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
yellow-breasted chat	*Icteria virens*	US: – CA: SSC	Summer breeding resident usually found in dense riparian thickets, bramble bushes, clearcuts, powerline corridors, and shrubs along streams.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
California black rail	*Laterallus jamaicensis coturniculus*	US: – CA: CT	Nest in marshes and wet meadows, including riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. Habitats have stable shallow water.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
osprey	*Pandion haliaetus*	US: – CA: CSA	Found near saltmarshes, rivers, ponds, reservoirs, estuaries, and coral reefs. Nests are placed on poles, channel markers, and dead trees.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
Belding's savannah sparrow	*Passerculus sandwichensis beldingii*	US: – CA: CE	Found in open areas with low vegetation, including most of northern North America from tundra to grassland, marsh, and farmland.	**Not Expected.** While there are known occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
California brown pelican	*Pelecanus occidentalis californicus*	US: – CA: FP	Live year-round in estuaries and coastal marine habitats. Breed mostly on barrier islands, natural islands in estuaries, and islands made of refuse from dredging.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
coastal California gnatcatcher	*Polioptila californica californica*	US: FT CA: SSC	Obligate, permanent resident of coastal sage scrub habitats below 2,500 feet in elevation in Southern California.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
light-footed Ridgway's rail	*Rallus obsoletus levipes*	US: FE CA: CE	Live in saltmarsh swamps with extensive vegetation, which they use as refuges. Live in low portions of coastal saltmarshes dominated by cordgrass and pickleweed, or in mangroves.	**Not Expected.** While there is one known occurrence in the vicinity of the project site, suitable habitat is absent on the project site.
bank swallow	*Riparia riparia*	US: – CA: CT	Live in low areas along rivers, streams, ocean coasts, and reservoirs. Territories usually include vertical cliffs or banks where they nest in colonies of 10 to 2,000 nests.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
black skimmer	*Rynchops niger*	US: – CA: SSC	Typically occur around sandy beaches and islands, although a few colonies can be found in inland locations with large lakes. Nests on open sandy areas, gravel or shell bars with sparse vegetation, or broad mats of wrack in saltmarsh.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
yellow warbler	*Setophaga petechia*	US: – CA: SSC	Requires habitats with riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests. Frequently found nesting and foraging in willow shrubs and thickets and in other riparian plants, including cottonwoods.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
California least tern	*Sternula antillarum browni*	US: FE CA: CE	Occur on seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers. Breeds on sandy or gravelly beaches and banks of rivers or lakes, rarely on flat rooftops of buildings.	**Not Expected.** While there is one known occurrence in the vicinity of the project site, suitable habitat is absent on the project site.
least Bell's vireo (nesting)	*Vireo bellii pusillus*	US: FE CA: CE	Occurs in moist thickets and riparian areas that are predominantly composed of willow and mule fat.	**Not Expected.** While there are historical records of occurrences in the vicinity of the project site, suitable habitat is absent on the project site.
Mammals				
western mastiff bat	*Eumops perotis californicus*	US: – CA: SSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral communities. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
silver-haired bat	*Lasionycteris noctivagans*	US: – CA: CSA	Occurs in primarily coastal and montane forest habitats. Forages over streams, ponds, and open brushy areas. Roosts in hollow trees beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
hoary bat	*Lasiurus cinereus*	US: – CA: CSA	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Table C-2: Special-Status Animal Species Identified as Potentially Occurring or Known to Occur in the Project Vicinity

Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
western yellow bat	*Lasiurus xanthinus*	US: – CA: SSC	Occurs in Southern California in palm oases and in residential areas with untrimmed palm trees. Roosts primarily in trees, especially the dead fronds of palm trees. Forages over water and among trees.	**Not Expected.** While there is one occurrence within the vicinity of the project site, suitable roosting and foraging habitat is absent on the project site.
south coast marsh vole	*Microtus californicus stephensi*	US: – CA: SSC	Found in coastal marshes in Orange, Los Angeles, and Ventura Counties.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
pocketed free-tailed bat	*Nyctinomops femorasacca*	US: – CA: SSC	Spotty distribution in California, ranging from Southern California south to the Baja Peninsula, and through southwestern Arizona to at least central Mexico. In California, typically found in rocky, desert areas with relatively high cliffs.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
big free-tailed bat	*Nyctinomops macrotis*	US: – CA: SSC	Low-lying arid areas in Southern California. Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
pacific pocket mouse	*Perognathus longimembris pacificus*	US: FE CA: CE	Inhabits friable soils along the narrow coastal plains from the northern Mexican border to Los Angeles County.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.
southern California saltmarsh shrew	*Sorex ornatus salicornicus*	US: – CA: SSC	Confined to coastal salt marshes in Los Angeles, Orange, and Ventura Counties. Typically occur in salt marsh dominated by *Salicornia pacifica*.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

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Common Name	Scientific Name	Status	Habitat and Comments	Likelihood of Occurrence
American badger	*Taxidea taxus*	US: – CA: SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected.** There are no known occurrences in the vicinity of the project site and suitable habitat is absent on the project site.

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Candidate (FC), Federal Proposed (FP, FPE, FPT), Federal Delisted (FD), California Endangered (CE), California Candidate Endangered (CCE), California Threatened (CT), California Species of Special Concern (SSC), California Fully Protected Species (CFP), California Special Plant (CSP), California Special Animal (CSA)

Abbreviation/Acronym Definitions:

CA = California
CSS = coastal
sage scrub
US = United States

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