Biological Resources Letter Report for the Shady Oak Project, 27522 Mirar De Valle Road, Valley Center, CA 92082, APN: 186-270-01-00; PDS2016-TM-5614; PDS2016-REZ-16-005; PDS2016-STP-16-019

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Dear Mr. Nestoroff:

REC Consultants, Inc. has prepared this letter report to address potential impacts of development to biological resources on an approximately 5-acre parcel located on the south side of Mirar De Valle Road in Valley Center, County of San Diego, California.

SUMMARY

The Shady Oak project (Project) proposes to develop a 5.20-acre parcel with 47 residences in Valley Center. REC Consultants, Inc. surveyed this parcel to document biological resources on the Shady Oak site (Site). The Site contains non-native grassland and disturbed areas resulting from the previous development onsite. The Project would result in significant impacts to 4.10 acres of non-native grassland, which will require mitigation. Mitigation for non-native grassland impacts is proposed to be achieved at an approved off-site mitigation bank.

INTRODUCTION, PROJECT DESCRIPTION, LOCATION, SETTING

Project description

The proposed Project is proposing the construction of 47 single-family, two-story, detached residences on a 5.2-acre (net 4.8-acre) parcel on Mirar De Valle Road in Valley Center. The average lot size would be approximately 2600 sq ft. and the project density would be 9.03 homes per acre. The applicant would be required to widen Mirar De Valle Road along the project frontage and add a sidewalk with landscaping. All project staging would occur on-site, with construction access provided from Valley Center Road, turning left onto Mirar De Valle, and left on to Old Mirar Del Valle. The project may also include minor improvements along a portion of Old Mirar De Valle Road, but this would be limited to thickening the asphalt to a width of 25 feet within the existing right-of-way

Project location and setting

The Site is located at APN 186-270-01-00 on the south side of Mirar De Valle Road approximately 0.1 mile east of Valley Center Road in the Valley Center Community Plan area, within unincorporated San Diego County, California (**Figures 1** and **2**). The Site is bordered by Mirar De Valle Road to the north, south and west, and agricultural land to the east (**Figure 3**).

Terrain onsite consists of small mounds and depressions on an otherwise flat, gradual slope running northeast to southwest from 1301 feet (397 meters) Above Mean Sea Level (AMSL) in the northeastern corner up to 1318 feet (402 meters) AMSL in the southwestern corner. According to the Web Soil Survey (USDA 2016), soil on the Site is comprised of clayey alluvial land on the eastern three-quarters of the Site and Las Posas fine sandy loam, 5-9% slopes, eroded (LpC2), on the western quarter of the Site. Clayey alluvial land consists of moderately well drained, very deep, neutral to mildly alkaline clay loams to clays. This land type occurs as nearly level areas in narrow swales and on foothill terraces. The subsoil is often stratified with lenses of clay to fine sandy loam and in a few place the soil is calcareous. Permeability is slow and the erosion hazard is slight. The Las Posas series consists of well-drained, moderately deep stony fine sandy loams that have a clay subsoil. These soils are on uplands and have slopes of 2-65%. They formed in material weathered from basic igneous rocks. LpC2 is not stony and is 26-40 inches over hard rock. Runoff is slow to medium and the erosion hazard is slight to moderate, but shallow rills form on this soil. (USDA 1973)

The Project's environmental setting was studied through a field survey and records review. Records review consisted of a search and review of CNDDB records of rare and special-status plant and animal species within the Project USGS 7.5' quadrangle (Valley Center) and surrounding quadrangles (Bonsall, Pala, Boucher Hill, San Marcos, Rodriguez Mountain, Rancho Santa Fe, Escondido, and San Pasqual), recent and historical aerial photographs of the Site and surrounding areas, and soil maps and descriptions from the Soil Survey (USDA 1973, USDA 2016). One field survey was conducted, as summarized in Table 1, below.

Table 1. Surveys conducted on the Project Site

Date	Time	Temp (°F)	Sky	Wind (MPH)	Survey Type	Personnel
7/1/15	0815-1000	64-75	Partly cloudy to clear	0-1 to 0-2	General	Lee BenVau

Biological resources were limited to two land cover categories onsite and two land cover categories offsite as well as common vegetation and wildlife, described in the following section. Vegetation communities and land cover classification in this report follow Holland (1986) as updated by Oberbauer et al. (2008). Plant taxonomy and nomenclature in this report follow the Jepson eFlora (Jepson 2017) and the Jepson Manual, second edition (Baldwin et al. 2012) for taxonomy and scientific names, and Rebman and Simpson (2014) for common names, with some rare plant common names from the California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2016). Wildlife taxonomy and nomenclature in this report follow *Mammal Species of the World* (Wilson and Reeder 2005) for mammals, Avibase (Lepage 2015) for birds, California Herps (Nafis 2015) for reptiles and amphibians, Butterflies of America (Warren et al. 2015) for butterflies, BugGuide (ISUDE 2015) for other insects and arachnids, and the Integrated Taxonomic Information System (ITIS 2015) for other invertebrates, as well as the San Diego Natural History Museum mammal, bird, reptile, amphibian, butterfly, and spider checklists for localized subspecies information (SDNHM 2005, 2002, and undated).

Plant occurrence data used in determining sensitive plant species' potential to occur onsite are sourced from the California Natural Diversity Data Base (CNDDB 2017), Jepson eFlora (Jepson 2017), and the San Diego County Plant Atlas (SDNHM 2017). Wildlife occurrence data are sourced from the CNDDB, Butterflies and Moths of North America (Lotts et al. 2017), along with the Amphibian and Reptile Atlas of Peninsular California (SDNHM 2017), San Diego County Bird Atlas (Unit 2004) and Google Earth Bird Atlas (SDNHM undated).

REGIONAL CONTEXT

The Valley Center Community Plan Area is comprised of approximately 94 square miles in the unincorporated area of northern San Diego County. The boundaries of the Valley Center Community Plan Area are contiguous to the Fallbrook and Bonsall Community Plan Areas as well as the Pala-Pauma Subregional and North County Metropolitan Subregional Planning Areas located to the northeast and southeast, respectively. The primary access into the community of Valley Center is via Valley Center Road (S-6), which serves as the main linkage between the City of Escondido and Valley

Center. Interstate 15 borders the western portion of the Plan Area; however, the freeway does not lie within its boundaries.

The Valley Center Community Plan Area is characterized by its unique topographic features, its agricultural activities and its predominance of estate residential development. The rural character of the community results from the low population density and the prevalence of large areas of open space provided by agriculture. (County of San Diego 2015)

The Site is within the proposed North County MSCP Subarea plan area but is outside of any Pre-Approved Mitigation Area (PAMA). The nearest PAMA is approximately 1600 feet to the north along Moosa Creek. While the Site is within the watershed of Moosa Creek, it does not support any jurisdictional waters or wetlands. The Site is not adjacent to any preserved lands, national forests, or BLM lands (**Figure 4**).

HABITATS / VEGETATION COMMUNITIES

During REC's site visit three land cover categories were observed onsite: developed land, disturbed land, and non-native grassland; and one land cover category found only offsite: field/pasture. These are shown in **Figure 5** and discussed below.

Developed land (County Habitat Code 12000) occupies approximately 0.35 acre onsite. According to the County of San Diego, urban and/or developed land consists of "Areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that require irrigation. Areas where no natural lands is evident due to a large amount of debris or other materials being placed upon it may also be considered urban/developed (e.g. car recycling plan, quarry)." (Oberbauer et al. 2008) Additional habitat identification information provided in the County's "Report Format and Content Requirements" (County of San Diego 2010a) includes "Land that has been constructed upon or otherwise covered with a permanent unnatural surface shall be considered Developed…"

Developed land within the survey area consists of paved areas such as Mirar De Valle Road and a residence north of the Site. No plant or animal species were detected on this land cover category.

Disturbed land (County Habitat Code 11300) occupies approximately 0.78 acre onsite. The County of San Diego describes disturbed habitat as "Areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association, but continues to retain a soil substrate. Typically vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of disturbed habitat include areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation (i.e. dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites." (Oberbauer et al. 2008) Additional habitat identification information

provided in the County's "Report Format and Content Requirements" (County of San Diego 2010a) specifies that "Disturbed land includes areas in which the vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction from previously legal human activity; or where the vegetative cover is greater than 10 percent, there is soil surface disturbance and compaction, and the presence of building foundations and debris…resulting from legal activities (as opposed to illegal dumping). Examples include recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites."

Disturbed land onsite consists of land where a residence and dirt parking area occupied the southeast corner of the Site as recently as April 2015. A dirt trail circuit resulting from off-road vehicle activity and other areas of the Site with bare ground were also mapped as disturbed. This habitat is not clearly dominated by any one species but includes non-native broadleaf species such as Cyclops acacia (*Acacia cyclops*), tumbling oracle (*Atriplex rosea*), Bermuda grass (*Cynodon dactylon*), flax-leaf fleabane (*Erigeron bonariensis*), short-pod mustard (*Hirschfeldia incana*), Australian tumbleweed (*Salsola australis*) and Chinese elm (*Ulmus parvifolia*). Native species observed on disturbed land consisted only of prostrate amaranth (*Amaranthus blitoides*) and doveweed (*Croton setiger*). No wildlife species were detected within this land cover category.

Field/Pasture (County Habitat Code 18310) only occurs offsite in adjacent parcels. This habitat "forms a dense habitat with nearly 100 percent cover. Planted fields are usually monoculture crops that are irrigated and usually artificially seeded and maintained." (Oberbauer et al. 2008)

Land adjacent to the Site mapped as field/pasture has been disked but does not currently support row crops or other agricultural activity. On the property to the west of the Site a large herd of domestic goats (*Capra hircus*) was observed. Evidence of agricultural activity on the surrounding parcels was not observed in a review of historical satellite imagery, except on the property to the northeast across Mirar De Valle Road from the Site. Satellite imagery from Google Earth dated August 23, 2010 shows the most recent occurrence of row crops on that property. Because the land appears to have been left fallow since then, it no longer meets the definition of row crops. Although this land does not currently match the above definition for field/pasture, as it is almost entirely bare ground, it was field/pasture in 2008 before being converted to row crops and thus is included in this habitat category.

Non-native grassland (County Habitat Code 42200) occupies approximately 4.08 acres onsite. According to the County of San Diego, non-native grassland is "A dense to sparse cover of annual grasses with flowering culms 0.2-0.5 (1.0) m high. Often associated with numerous species of showy-flowered, native annual forbs ("wildflowers"), especially in years of favorable rainfall. In San Diego County the presence of *Avena, Bromus, Erodium,* and *Brassica* are common indicators. In some areas, depending on past disturbance and annual rainfall, annual forbs may be the dominant species; however, it is presumed that grasses will soon dominate. Germination occurs with the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring. With a few exceptions, the plants are dead through the summer-fall dry, persisting as seeds. Remnant native species are variable. This can include grazed and even dry-farmed (i.e., disked) areas where irrigation is not present." (Oberbauer et al. 2008) Additional habitat identification information provided in the County's "Report Format and Content Requirements" (County of San Diego 2010a) specifies that "Non-native grasses typically comprise at least 30 percent of the vegetation […]. Usually, the annual grasses are less than 1 m (3 ft)

in height, and form a continuous or open cover. Emergent shrubs and trees may be present, but do not comprise more than 15 percent of the total vegetative cover. Characteristic non-native grassland species include foxtail chess (*Bromus madritensis* ssp. *rubens*), ripgut grass (*Bromus diandrus*), wild oats (*Avena* spp.), fescues (*Vulpia* spp.), red-stem filaree (*Erodium cicutarium*), mustards (*Brassica* spp.), lupines (*Lupinus* spp.) and goldfields (*Lasthenia* spp.), among others."

Non-native grassland occurs throughout the entire Site wherever the land is not disturbed. This habitat is dominated by ripgut grass (*Bromus diandrus*) and glaucus barley (*Hordeum murinum* subsp. *gussoneanum*) and includes other annual non-native grasses such as oats (*Avena* sp.), soft chess brome (*Bromus hordeaceus*), red brome (*B. madritensis* subsp. *rubens*), rat-tail fescue (*Festuca myuros*), perennial rye grass (*F. perennis*) and Mediterranean schismus (*Schismus barbatus*). Non-native broadleaf species such as tocalote (*Centaurea melitensis*), bull thistle (*Cirsium vulgare*) and prickly lettuce (*Lactuca serriola*) also occur in non-native grassland onsite. Native species observed in this habitat were Spanish-clover (*Acmispon americanus* var. *americanus*), deerweed (*A. glaber*), western ragweed (*Ambrosia psilostachya*), fiddleneck (*Amsinckia* sp.), pit-seed goosefoot (*Chenopodium berlandieri*), doveweed (*Croton setiger*), western jimson weed (*Datura wrightii*), fascicled tarweed (*Deinandra fasciculata*), salt heliotrope (*Heliotropium curassavicum* var. *oculatum*), and alkali mallow (*Malvella leprosa*). Animals observed in non-native grassland include invertebrates such as rough harvester ant (*Pogonomyrmex rugosus*) colonies, one reptile species: Great Basin fence lizard (*Sceloporus occidentalis longipes*), one bird species: red-tailed hawk, and one mammal species: California ground squirrel (*Otospermophilus beecheyi nudipes*).

Complete lists of plants and animals observed are provided in **Attachments A** and **B**, respectively.

SPECIAL-STATUS SPECIES

For the purposes of this report, a sensitive or special-status plant or animal is any taxon (species, subspecies, or variety) that is officially listed by California or the federal government as Endangered, Threatened, or Rare, or a candidate for one of those listings; classified as Fully Protected, Species of Special Concern, or Watch List animal species by the California Department of Fish and Wildlife (CDFW); included in California Rare Plant Ranks (CRPR) 1 through 4; or included in the County of San Diego Sensitive Plant Lists A through D or Sensitive Animals Groups A or B.

Lists of special-status plants and animals with the potential to occur on the Site were generated from the CNDDB RareFind5 database (CNDDB 2016) and the County's SanBIOS database. The resulting lists include any special-status species documented within the Project's USGS 7.5' quadrangle (Valley Center) or surrounding quadrangles (Bonsall, Pala, Boucher Hill, San Marcos, Rodriguez Mountain, Rancho Santa Fe, Escondido, and San Pasqual). **Attachment C** provides information on these special-status plant taxa and an evaluation of the potential for each to occur onsite, based on CNDDB and SanBIOS search results, the CNPS Inventory of Rare and Endangered Plants (on-line version, 2016), Reiser's *Rare Plants of San Diego County* (2001) and field observations. **Attachment D** provides information on these animal taxa and an evaluation of the potential for each to occur onsite, based on species requirements, CNDDB and SanBIOS search results, and field observations.

A number of sensitive plant species are associated with Las Posas (gabbroic) soils in San Diego County (Beauchamp, 1986). These include the following:

San Diego thornmint (*Acanthomintha ilicifolia*) is an annual herb that occurs in chaparral, coastal scrub, valley and foothill grassland and vernal pools, especially on clay soils. This species is federally threatened, State endangered, has a California Rare Plant Rank (CRPR) of 1B.1, and is included on County List A. The nearest documented location of this species is a now extirpated population 6.3 mi southwest of the Site.
Dunn's mariposa lily (*Calochortus dunnii*) is a bulbiferous perennial herb that occurs in closed-cone coniferous forest, chaparral, and valley and foothill grassland with rocky gabbroic or metavolcanic soils. This species is State rare, CRPR 1B.2, and is included on County List A. The nearest documented location of this species is a population in Julian, nearly 30 miles southeast from the Site.

Ramona horkelia (*Horkelia truncata*) is a perennial herb that occurs in mixed chaparral, cismontane woodland, vernal streams and disturbed areas with clay or gabbroic soils. This species is not federally or State listed, but is designated as CRPR 1B.3 and included on County List A. The nearest documented location of this species is an individual on Burnt Mountain, approximately 1.5 miles southwest of the Site.

Parry's tetracoccus (*Tetracoccus dioicus*) is a shrub that occurs in chaparral and coastal scrub with rocky, decomposed gabbroic soils. This species is not federally or State listed, but is designated as CRPR 1B.2 and is included on County List A. The nearest documented location of this species is 6.9 miles southwest of the Site.

Payson's jewelflower (*Caulanthus simulans*) is an annual herb that occurs in chaparral, coastal scrub, burned or disturbed areas, and steep, rocky slopes with sandy, granitic soils. This species is not federally or State listed, but is designated as CRPR 4.2 and is included on County List D. The nearest documented location of this species is from a 1938 collection near Pala, approximately 6 miles north-northwest of the Site.

Delicate clarkia (*Clarkia delicata*) is an annual herb that occurs in chaparral and cismontane woodland, often with gabbroic soils. This species is not federally or State listed, but is designated as CRPR 1B.2 and is included on County List A. The nearest documented location of this species is 8.2 miles southeast of the Site.

Cuyamaca larkspur (*Delphinium hesperium* subsp. *cuyamacae*) is a perennial herb that occurs in mesic areas of lower montane coniferous forest, and meadows and seeps between 1,220 and 1,630 meters AMSL. This species is State rare, CRPR 1B.2 and included on County List A. The nearest documented location of this species is 13.6 miles northwest of the Site from a 1924 collection.

Gander's butterweed (*Packera ganderi, = Senecio g.*) is a perennial herb that occurs in burned areas and gabbroic outcrops in chaparral. This species is State rare, CRPR 1B.2 and included on County List A. The nearest documented location of this species is 13.3 miles east-southeast of the Site.

Munz's sage (*Salvia munzii*) is a shrub that occurs in chaparral and coastal scrub on rocky hills and slopes. This species is not federally or State listed, but is designated as CRPR 2B.2 and is included on County List B. The nearest documented location of this species is 12.7 miles southwest of the Site. However, only one individual was observed and is presumed to have escaped from a nearby restoration

site (Jepson 2017). The majority of observations are located in southeastern San Diego County, approximately 40 miles from the Site.

All of the above species have low potential to occur onsite, either due to the Site being outside of their geographic range or because of lack of suitable habitat onsite. For those species that can occur in grassland, their potential to occur onsite is low because the Las Posas soils are mapped on only a fraction of the Site and the Site, and Valley Center region, have been subject to extensive disturbance. Thus it is considered unlikely that these species would occur onsite, are represented in the seedbank, or are in the immediately surrounding areas.

Special-status species observed on or adjacent to the Project Site
No special-status plants or animals were observed onsite.

Special-status species with moderate to high potential to occur on or adjacent to the Site
Based on CNDDB and SanBIOS records searches and evaluation of current Site conditions, no special-status species have moderate to high potential to occur on or adjacent to the Site.

Raptor foraging and migratory birds
Raptors are protected under California Fish and Game Code Section 3503.5, which specifically protects all birds in the orders Falconiformes or Strigiformes (raptors, including owls and turkey vultures). It is unlawful to take, possess or destroy any such raptors or their nests and eggs except as otherwise provided in the Fish and Game Code. The County of San Diego (2010) defines raptor foraging habitat as "Land that is a minimum of 5 acres (not limited to project boundaries) of fallow or open areas with any evidence of foraging potential (i.e., burrows, raptor nests, etc.)." Because the Site is larger than 5 acres, and California ground squirrel holes were observed onsite, the Site meets the County definition of raptor foraging habitat. Additionally, a red-tailed hawk (*Buteo jamaicensis*) was observed flying from the coast live oak (*Quercus agrifolia*) onsite. However, no nest was found. The Site is contiguous with other parcels supporting non-native grasslands and agricultural/pasture lands, and thus raptors (including smaller species such as kites and kestrels) would be expected to forage in this area. Native trees such as oaks and sycamores, as well as groves of non-native Eucalyptus trees nearby also provide nesting and roosting habitat for raptors and other passerines.

California Fish and Game Code Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game Code or any regulation made pursuant to the Code, and the federal Migratory Bird Treaty Act prohibits the killing or transport of native migratory birds, or any part, nest, or egg or any such bird unless allowed by another regulation (such as for "game" birds), Therefore, all native, non-game birds on the Site, and the nests and eggs of all native non-game birds, are protected during the nesting season even if these birds are not special-status or otherwise protected. No sign of bird nesting was observed onsite, but the coast live oak has potential to serve as nesting habitat.

Large mammal use
No evidence of use by large mammals including mule deer (*Odocoileus hemionus*), such as scat or deer laydown areas, was found onsite. The Site is surrounded by development, is disturbed and exposed, and has no connection to habitats that could support large mammals. Given the abundance of ground squirrels detected on-site, coyotes may utilize the area for hunting prey.

JURISDICTIONAL WETLANDS AND WATERWAYS

The non-native grassland includes a mesic area that contains western ragweed (*Ambrosia psilostachya*) and curly dock (*Rumex crispus*) and can be clearly seen in Google Earth images as a green band running northwest-southeast across the Site. However, no bed and bank, evidence of surface water or nexus to the intermittent/ephemeral blue line drainages east and west of the Site were found during the survey or in a review of historic aerials (NETR 2016) and USGS topographic maps (USGS 2015). Therefore, no jurisdictional wetlands or waterways occur onsite.

OTHER UNIQUE FEATURES/RESOURCES

The gently-sloping "valley" of Valley Center runs generally southeast-to-northwest, containing Moosa Creek and tributaries. The valley has been developed for many years, fractionating habitats. To the north of the project Site, the Moosa Creek corridor connects the Woods Valley HOA Open Space Preserve and the Woods Valley Golf Course Open Space Preserve to the east with the proposed Park Circle and approved Orchard Run flood control open space areas to the west. This connection continues further west to the Brook Forest Mitigation Bank (Affinis and REC, 2016)

According to the Web Soil Survey (USDA 2016), Las Posas fine sandy loam, 5-9% slopes, eroded (LpC2), occurs on the western quarter of the Site. As discussed in "Special-status Species," above, a number of sensitive plant species are associated with this gabbroic soil.

The Site's usage as a wildlife corridor or linkage is limited due to its open and exposed nature, and it is surrounded by developed land and agriculture. While the nearest PAMA is approximately 1600 feet to the north along Moosa Creek, the quality of the creek has been degraded by long-term agricultural uses (e.g., the former Konyn Dairy Farm which is currently in cultivation with row crops). Please see **Attachment E** for photographs of the Site.

SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

Impacts to biological resources can be categorized as direct, indirect, or cumulative. Direct impacts are an immediate result of Project implementation, and generally include loss of vegetation, special-status habitats, and plant and animal populations; activity-related wildlife mortality; loss of foraging, nesting, breeding, or burrowing habitat; and fragmentation of wildlife corridors. Indirect impacts occur secondarily and may be less noticeable. Examples include introduction of non-native species which may outcompete and displace native vegetation; damage from increased human encroachment into the natural environment; off-road vehicle use, which impacts special-status plant and animal species; harassment and/or collection of wildlife and plant species; wildlife predation by domestic animals that intrude into open space areas; and increased wildlife mortality along roads. Project direct and indirect impacts to biological resources are discussed in the following sections.

Direct impacts

The Project's direct impacts to biological resources are shown in **Figure 6**, and habitat impacts resulting from implementation of the Project are summarized in Table 2, below.

Table 2. Habitat/Vegetation Communities and Impacts

Vegetation Community	Existing Onsite (acres)	Impacts Onsite (acres)	Impacts Offsite (acres)	Total Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)
Developed land (County Habitat Code 12000)	0.35	0.13	0.05	0.17	0:1	0.00
Disturbed land (County Habitat Code 11300)	0.78	0.78	0.14	0.92	0:1	0.00
Field/Pasture (County Habitat Code 18310)	0.00.	0.00	0.03	0.03	0.5:1	0.02
Non-native grassland (County Habitat Code 42200)	4.08	4.08	0.02	4.10	0.5:1	2.05
TOTAL	**5.20**	**4.98**	**0.23**	**5.21**		**2.07**

*Numbers may not sum due to rounding, totals are correct.

Impacts to 4.10 acres of non-native grassland and 0.03 acres of field/pasture are considered significant and will require mitigation at a 0.5:1 ratio. Impacts to agriculture, developed and disturbed land are not considered significant and will not require mitigation.

Common wildlife such as California ground squirrels would be directly impacted by the Project; however, these impacts are generally not considered significant.

The Project will not directly result in significant impacts to any wildlife corridors, linkages, or wildlife nursery sites.

Project staging and off-site improvements are discussed above. With the exception of improvements to Mirar De Valle Road, no additional off-site impacts are proposed. The roadway improvements would be achieved within the existing disturbed or developed right-of-way, and no additional impacts to biological resources are anticipated.

Indirect impacts

Because the Site is located within an area developed with residential land use and is adjacent to a road, no indirect impacts to natural habitat, wildlife, special-status plants or animals, or any wildlife corridors, linkages, or wildlife nursery sites are anticipated. Potential indirect impacts to water quality and air quality in the Project area will be protected by design features such as onsite bio-retention basins, standard Best Management Practices, and Storm Water Pollution Prevention Plan requirements.

Proposed mitigation

The Project will result in significant impacts to non-native grassland. Mitigation is proposed to be achieved offsite using one of the following options:

1. Brook Forest Conservation/Mitigation Bank. This bank includes approximately 224 acres of conserved land in Valley Center, west of the proposed project. It has approximately 55.5 acres of non-native grassland credits which would allow the project to obtain the 2.06 acres of credits needed.

2. Mitigation Credit Services LLC. This group also has non-native grassland credits in North County which could be purchased for mitigating the project's impacts.
3. Mitigation Land Specialists. This organization has non-native grassland credits within the North County MSCP Boundary which could also accommodate the project's mitigation needs.

All of these options would include an endowment for the long-term management of conserved lands; one would be selected with the approval of the County of San Diego, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Proof of purchase of the necessary credits would be required to be submitted to the County prior to issuance of the project's grading permit.

Avoidance measures

In addition to the mitigation for Project-related impacts proposed above, the Project would incorporate avoidance measures to prevent additional impacts, such as:

- If native or naturalized habitat is present onsite at the time of grading, all clearing and grubbing of vegetation and/or grading will occur outside the avian breeding season (February 1 to September 15, or sooner if a qualified biologist demonstrates to the satisfaction of the Wildlife Agencies that all nesting is complete).
- If construction (other than vegetation clearing and grubbing) must occur during the avian breeding season, pre-construction surveys should be performed by a qualified biologist within 10 calendar days prior to the start of construction to determine the presence or absence of nesting birds onsite birds within 300 feet (500 feet for raptors) of the impact area. If nesting birds are detected, the County and Wildlife Agencies will be contacted to discuss the potential impact minimization measures to be implemented.
- Project-related landscaping shall not include exotic plant species that may be invasive to native habitats. Invasive exotic plant species not to be used include those listed on the California Invasive Plant Council's Invasive Plant Inventory.
- Best Management Practices and the Storm Water Pollution Prevention Plan will specifically include mandatory measures to prevent any movement of water, soils, or any material from the Site into offsite areas.

CUMULATIVE IMPACTS

Cumulative impacts occur as a result of ongoing direct and indirect impacts for unrelated projects within a geographic area, and are assessed on a regional basis to determine the overall effect of numerous activities on biological resources or a special-status resource over a larger area. When evaluating cumulative impacts, CEQA states that "lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used" (Sec. 15130(b)(3)). The geographic scope for the cumulative impact analysis includes past, present and future development projects (tentative tract maps, major use permits, etc.) within a geographic area sufficiently large to provide a reasonable basis for evaluating cumulative impacts. The geographic scope of the analysis is based on the nature of the geography surrounding the Project Site and the characteristics and properties of each resource and the region to which they apply.

In this case, the County of San Diego GIS Department provided a list of permits for cumulative analysis within a three mile radius around the Site, see Table 3 below and **Figure 7**. A radius of three

miles is sufficient to include comparable projects in Valley Center without including projects on the opposite side of Burnt Mountain in San Marcos and Escondido that would be beyond the geographic scope of the area affected by the cumulative loss of non-native grassland. The loss of approximately 4 acres of non-native grassland would not have cumulative impacts reaching further than three miles. Permits that would not have associated environmental documents were discarded (i.e. boundary adjustments, cell phone towers or other projects that did not require environmental analysis) and the refined list of permits (bold text in Table 3) was submitted to the County Planning and Development Services counter with the request that associated environmental documents be provided. Of this list of projects, environmental documents were only provided for the Live Oak Ranch project highlighted below.

Table 3. Cumulative Projects

Map ID	Permit	Project Name
1	PDS2014-LP-14-008	26384 Englemann Road Campos
2	PDS2015-MUP-74-036M1	A-1 PVS
3	PDS2014-IC-14-083	ARCO Valley Center and Cole Grade
4	PDS2016-IC-16-055	Autozone, Valley Center
5	PDS2015-IC-15-052	BBD TPM
6	PDS2013-IC-13-084	Brook Forest Conservation Bank
7	PDS2014-LP-14-038	BUTTERFIELD TRAILS
8	PDS2013-LDGRMN-00030	Campos Yard Extension
9	PDS2016-BC-16-0003	Certificate of Compliance APN 189-171-34, 35
10	PDS2014-IC-14-087	Cole Grade Rite Aid
11	PDS2016-LP-16-014	Colegrade Grade Storage
12	PDS2016-BC-16-0001	Country Trader
13	PDS2015-IC-15-051	Debs Subdivision
14	PDS2013-STP-02-006M1	DRISCOLL
15	PDS2015-AD-15-004	Enterprised Inc.
16	**PDS2013-STP-13-011**	**Hatfield Place**
17	PDS2013-IC-13-037	IC for VC Ranch
18	PDS2000-3200-20462	JARVIS / EARLY TPM
19	PDS2015-IC-15-006	Joregensen B/C TPM
20	PDS2014-LP-14-041	Landscape Plan for Sherwood Ridge
21	**PDS2015-GPA-15-003**	**Lilac Plaza**
22	**PDS1999-3300-99-005**	**LIVE OAK RANCH: MUP**
23	**PDS2016-LPRM-15-004**	**LP REVEGETATION PLAN**
24	PDS2016-LP-16-017	Majchrzak Landscape Plan
25	PDS1997-3710-97-0007	MANGRAM BA & CC
26	**PDS2015-STP-15-012**	**Mikhail Site Plan, ABC Permit**
27	PDS2015-LP-15-080	Miller Road
28	**PDS2016-REZ-16-005**	**Mirar De Valle**
29	PDS2015-BC-15-0070	Montys Maintenance Boundary Adjustment Certificate
30	PDS2016-LP-14-003W1	Nelson Mass Grading
31	PDS2016-MUP-13-019M1	NLP Valley Center Solar
32	PDS2014-ZAP-99-026M1	Nyemi Pass (SD06351A)
33	PDS2015-LP-15-035	Orchard Run
34	PDS1999-3710-99-0071	ORELL & PAYNE BA & CC
35	PDS2015-TM-5603	Park Circle
36	PDS2014-AD-14-010	PENNELL SECOND DWELLING
37	PDS2015-BC-15-0002	Polito Boundary Adjustment
38	PDS2016-AD-16-002	Rancho Descanso Valley Center
39	PDS2014-IC-14-075	Ridge Ranch

40	PDS2015-STP-15-022	Rite Aid-Cole Grade VC
41	PDS2016-TM-5614	Shady Oak
42	PDS2014-AD-14-039	Solar Energy Project - Valley Center
43	PDS2016-MUP-99-020M1	Solar Power
44	PDS2014-LDMJIP-00009	TM5551-1 Butterfield Trails
45	PDS2016-ZAP-99-019W1M1	T-Mobile L700-Project #827585
46	PDS2016-ZAP-99-026M3	T-Mobile L700-Project #827579
47	PDS2015-ZAP-99-026M2	T-Mobile SD06351 (Nyemi Pass-Pacific)
48	PDS2015-STP-15-005	Tractor Supply
49	PDS2016-BC-16-0069	Trego Boundary Adjustment/Certificate of Compliance
50	PDS2016-LDGRMN-20089	Valley Center Cemetery District Major Use Permit
51	**PDS2013-MUP-81-098W1**	**Valley Center Church Modification**
52	PDS2016-STP-03-023M1	VALLEY CENTER COLD BOX
53	**PDS2016-LDGRMJ-30070**	**Valley Center Community Church - 29010 Cole Grade R**
54	PDS2014-STP-78-028M2	Valley Center Fire Protection Dist #2
55	PDS2013-MUP-11-027M1	Valley Center Minor Deviation
56	PDS2014-BC-14-0071	Valley Center Parks and Rec
57	PDS2013-IC-13-008	VALLEY CENTER PROPANE
58	PDS2016-LP-16-010	Valley Center Solar
59	PDS2016-LDGRMJ-30061	Valley Center Solar Farm - Cole Grade Road
60	PDS2013-LDGRMJ-00010	Valley Center Solar Farm - Vesper Rd.
61	PDS2014-MUP-11-027M2	Valley Center Solar Minor Deviation
62	PDS2013-STP-08-005W1	VC Industrial LLC Site Plan Modification
63	PDS2016-LP-16-046	VCCC Rough Grading Plan
64	PDS2014-CC-14-0092	VCCD Expansion
65	PDS2015-STP-15-025	VCVP Site Plan
66	PDS2014-IC-14-065	Village Center Town Village Phase 2
67	PDS2013-STP-13-029	WESTON TOWNE CENTER
68	PDS2013-LP-13-050	Woods Valley Ranch
69	PDS2014-AD-14-005	Wright 2nd Dwelling Unit
70	PDS1998-3710-98-0089	
71	PDS2013-LP-13-073	
72	**PDS2015-MUP-15-010**	
73	**PDS2015-LDGRMJ-30035**	
74	PDS2015-LDGRMN-20027	
75	**PDS2015-REZ-15-005**	

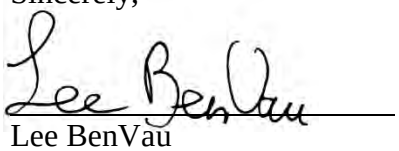
A review of the provided environmental documents indicates that the Live Oak Ranch project did not result in any impacts to biological resources, as the site was entirely disturbed. There is no evidence of cumulative loss of biological resources within the region based on the records provided by the County. Therefore, the implementation of the proposed Project, which would result in the loss of 4.10 acres of non-native grassland and 0.03 acres of field/pasture, would not be cumulatively significant within the region.

CONCLUSION

The proposed Shady Oak project would impact 4.10 acres of non-native grassland and 0.03 acres of field/pasture habitat which would require 2.07 acres of non-native grassland mitigation. Mitigation would be achieved offsite at an approved mitigation bank.

Please do not hesitate to contact REC with any questions.

Sincerely,



Lee BenVau
Field Biologist

PREPARERS

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Lee BenVau – Primary Author, Field Biologist
James Cooper – GIS Analyst

ATTACHMENTS

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Figure 2	Vicinity Map
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Attachment B	Animals Observed on the Shady Oak Project Site
Attachment C	Special-Status Plants with the Potential to Occur on the Shady Oak Project Site
Attachment D	Special-Status Animals with the Potential to Occur on the Shady Oak Project Site
Attachment E	Shady Oak Project Site Photographs, July 2016

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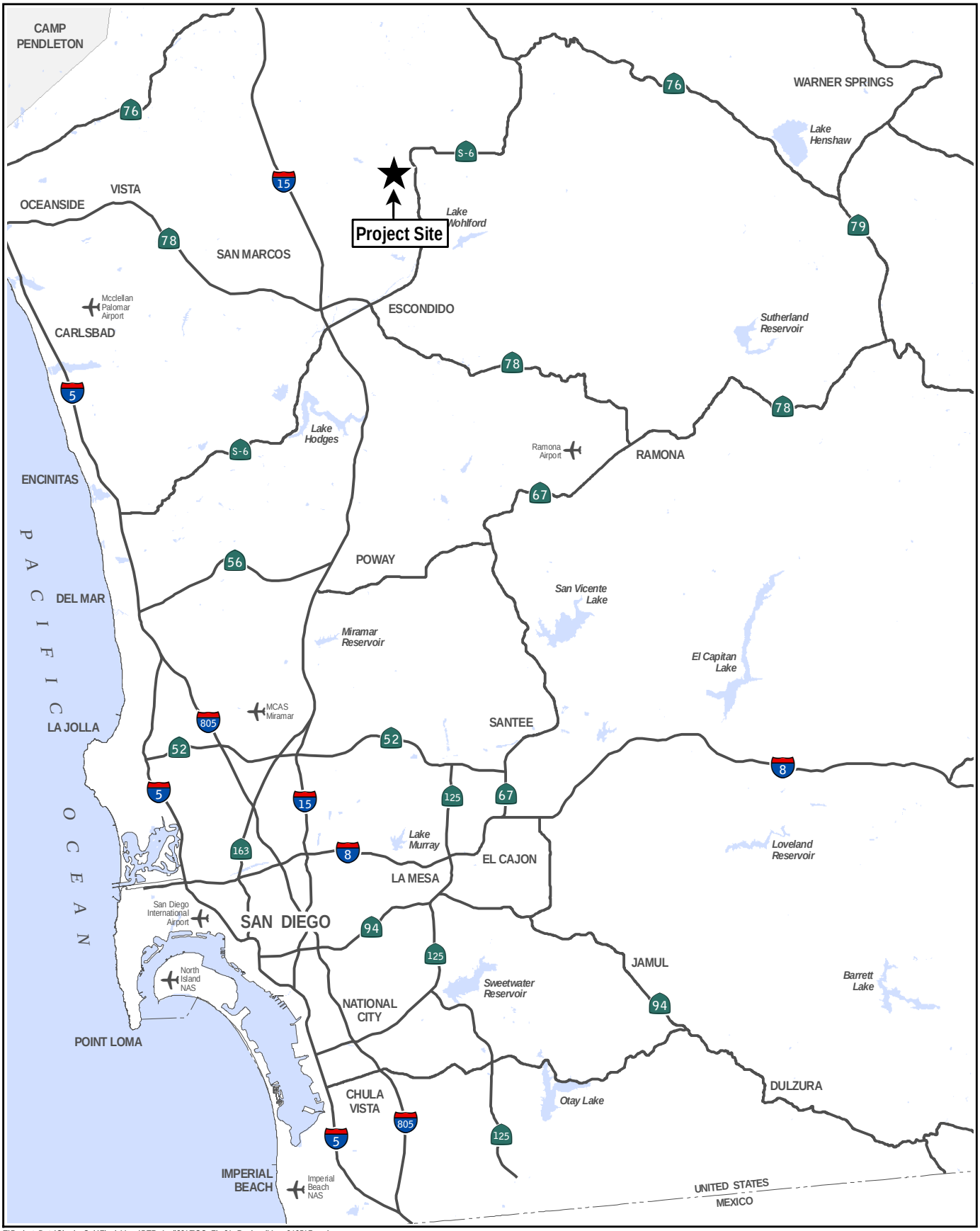
FIGURES



T:\Project_Data\Shady_Oak\Final_Maps\BTR_April2017\SO_Fig-01_RegionalMap_040517.mxd

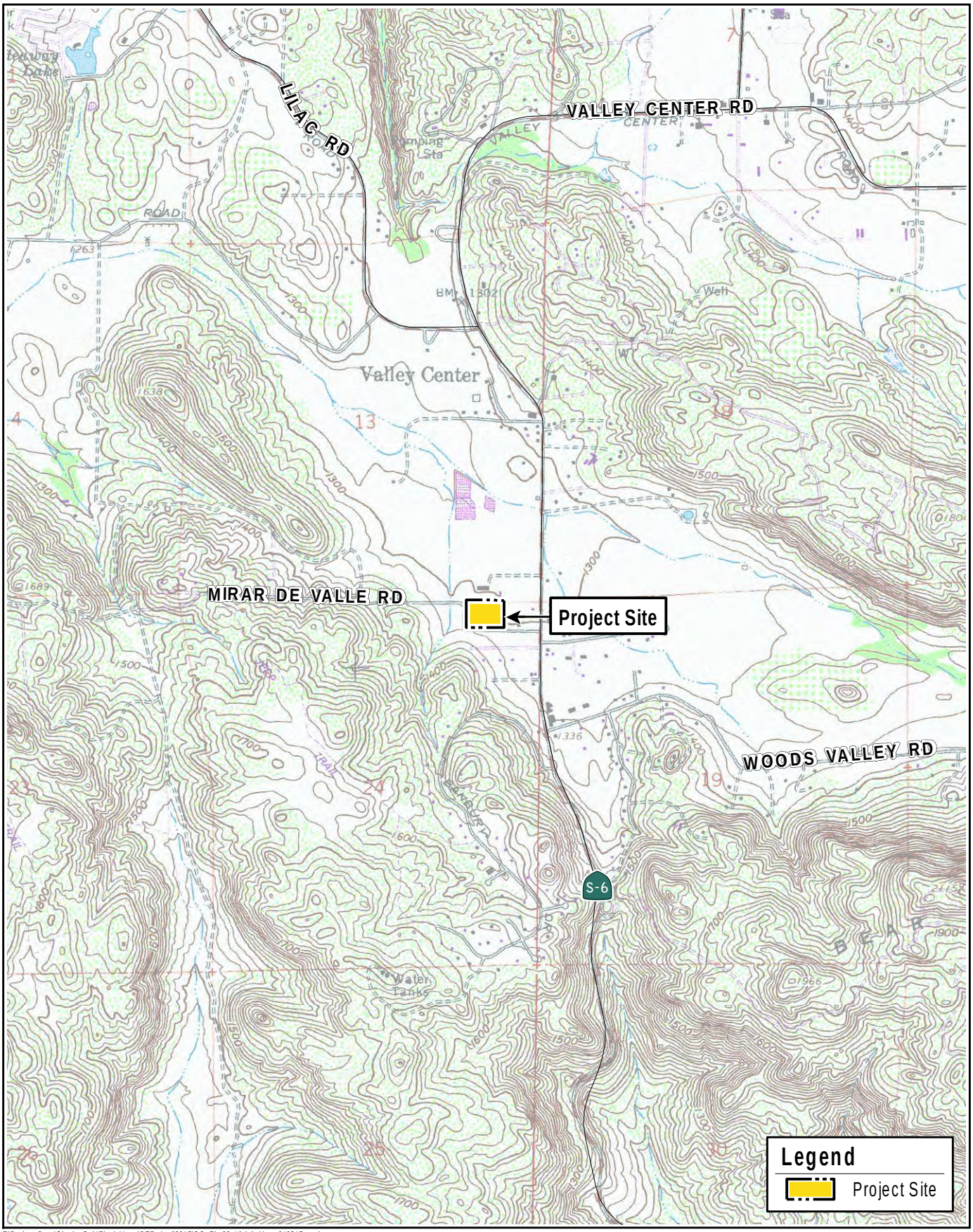
Regional Location

Miles
0 2.5 5

FIGURE 1

REC Consultants, Inc. | SHADY OAK PROJECT

Source: ESRI Basemap | April 2017



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REC Consultants, Inc.

Vicinity Map

SHADY OAK PROJECT

0 1,000 2,000 Feet

Source: ESRI Basemap

FIGURE 2

April 2017

Document Path: T:\Project_Data\Shady_Oak\Final_Maps\BTR_April2017\SO_Fig-03_Aerial_040517.mxd

R·E·C Consultants, Inc.

Aerial Photograph of Project Site

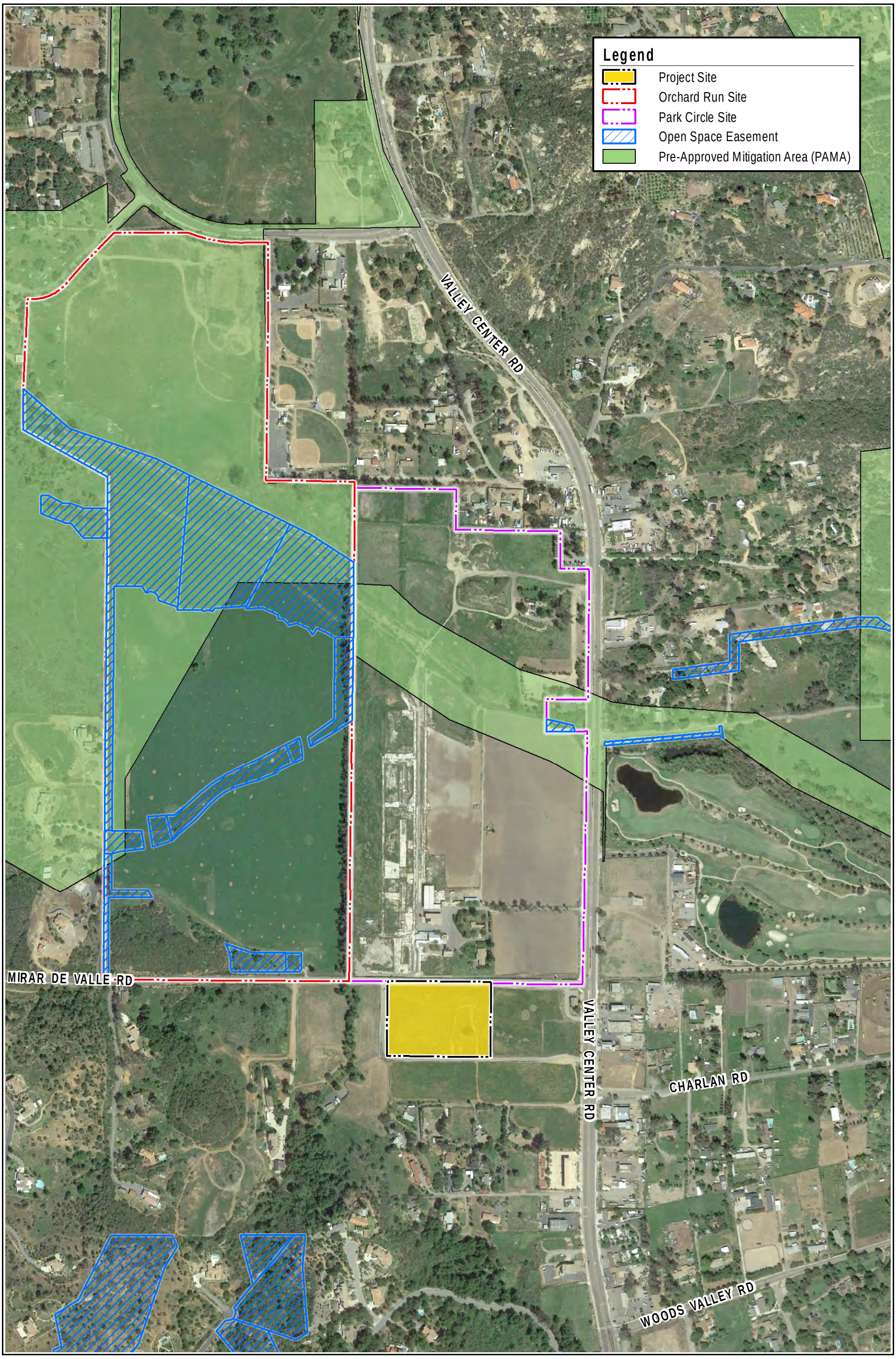
SHADY OAK PROJECT

0 50 100 Feet

Aerial Source: Google Earth, March 2016

April 2017

FIGURE 3



R·E·C Consultants, Inc.

Site Location relative to Conserved Areas

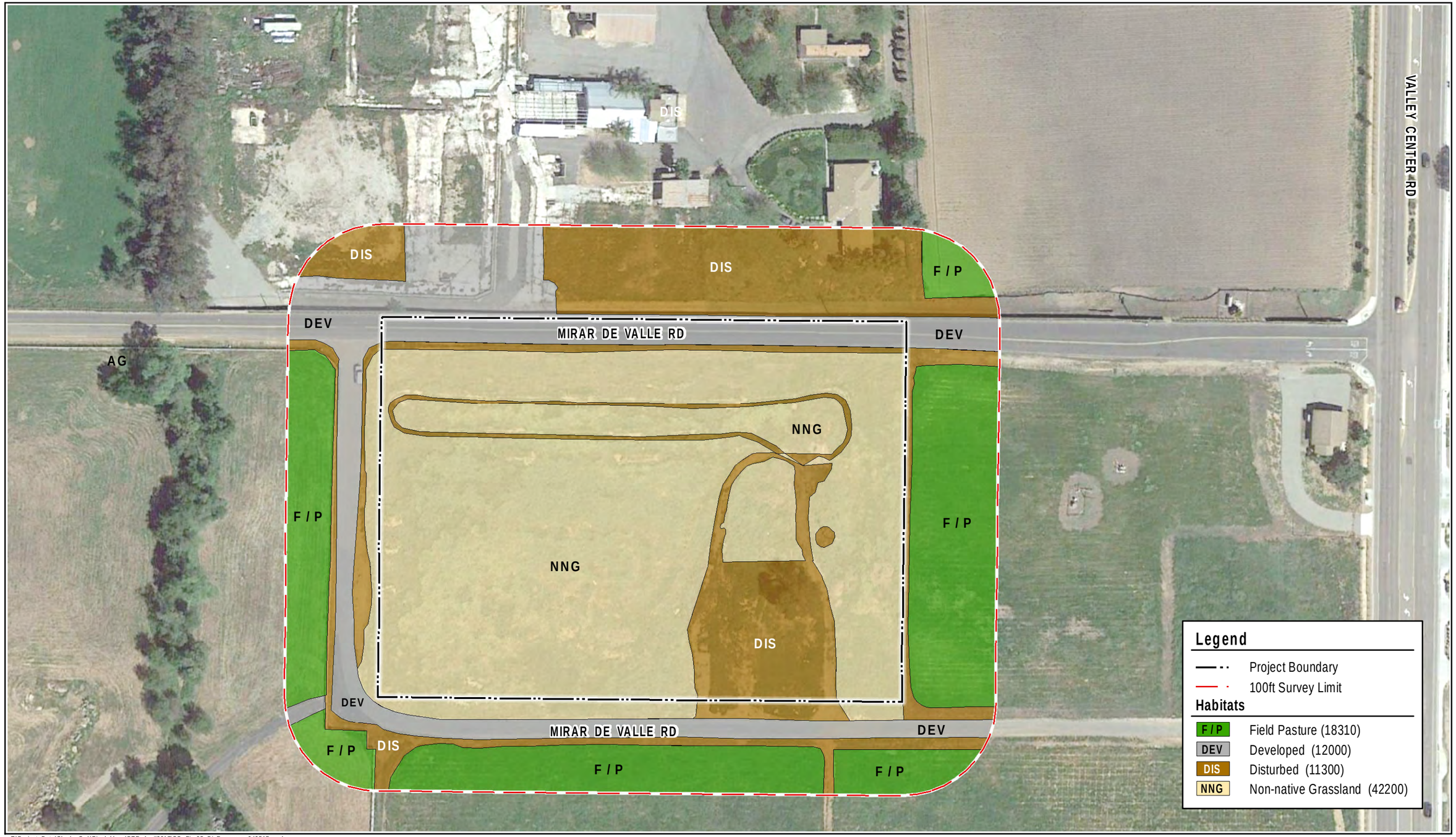
SHADY OAK PROJECT

0 250 500 Feet

Aerial Source: Google Earth, 2016. Data Source: SanGIS, 2016.

FIGURE 4

April 2017



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R·E·C Consultants, Inc.

Biological Resources

SHADY OAK PROJECT

0 50 100 Feet

Aerial Source: Google Earth, March 2016

FIGURE 5

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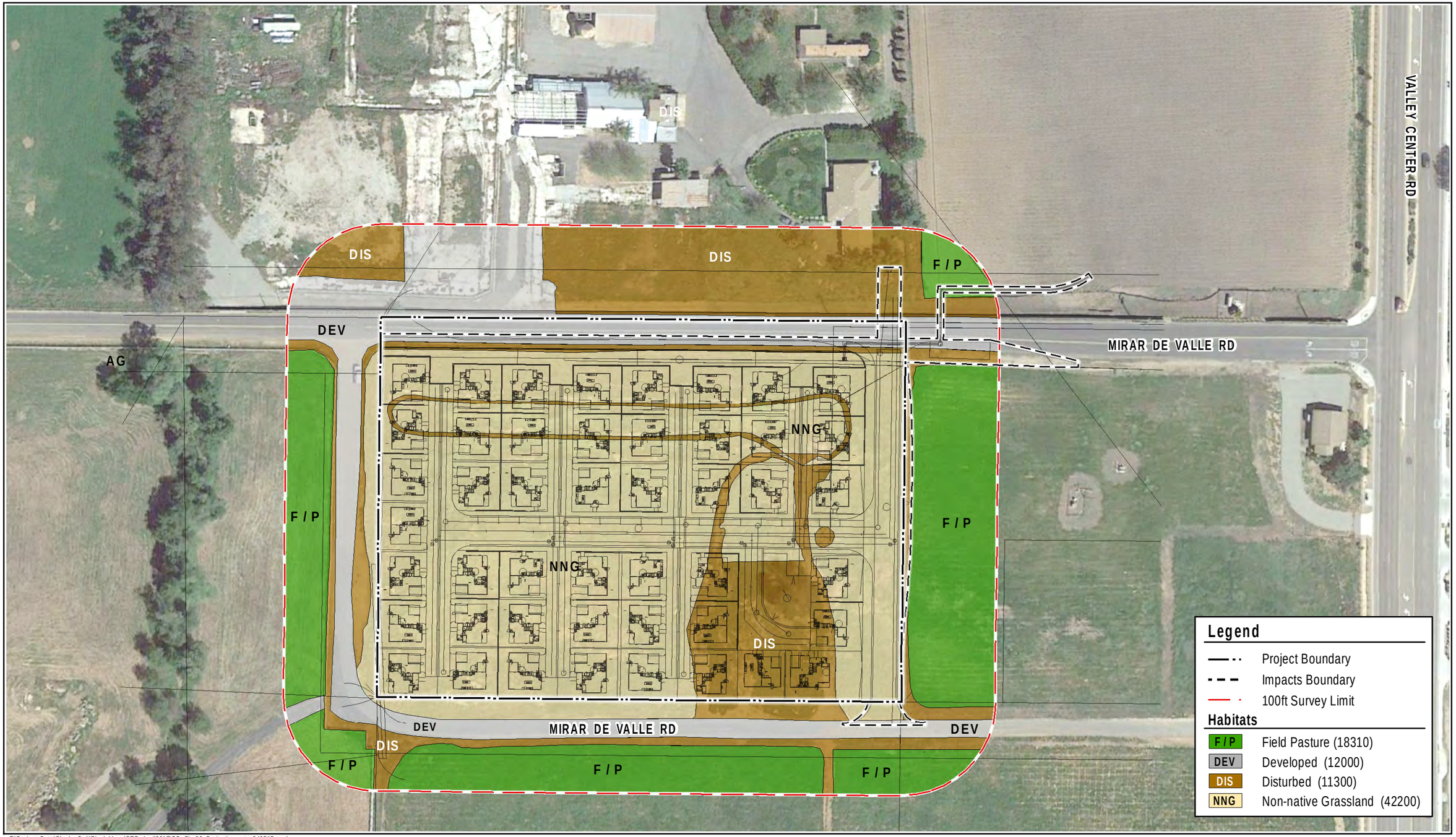

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R·E·C Consultants, Inc.

Project Impacts

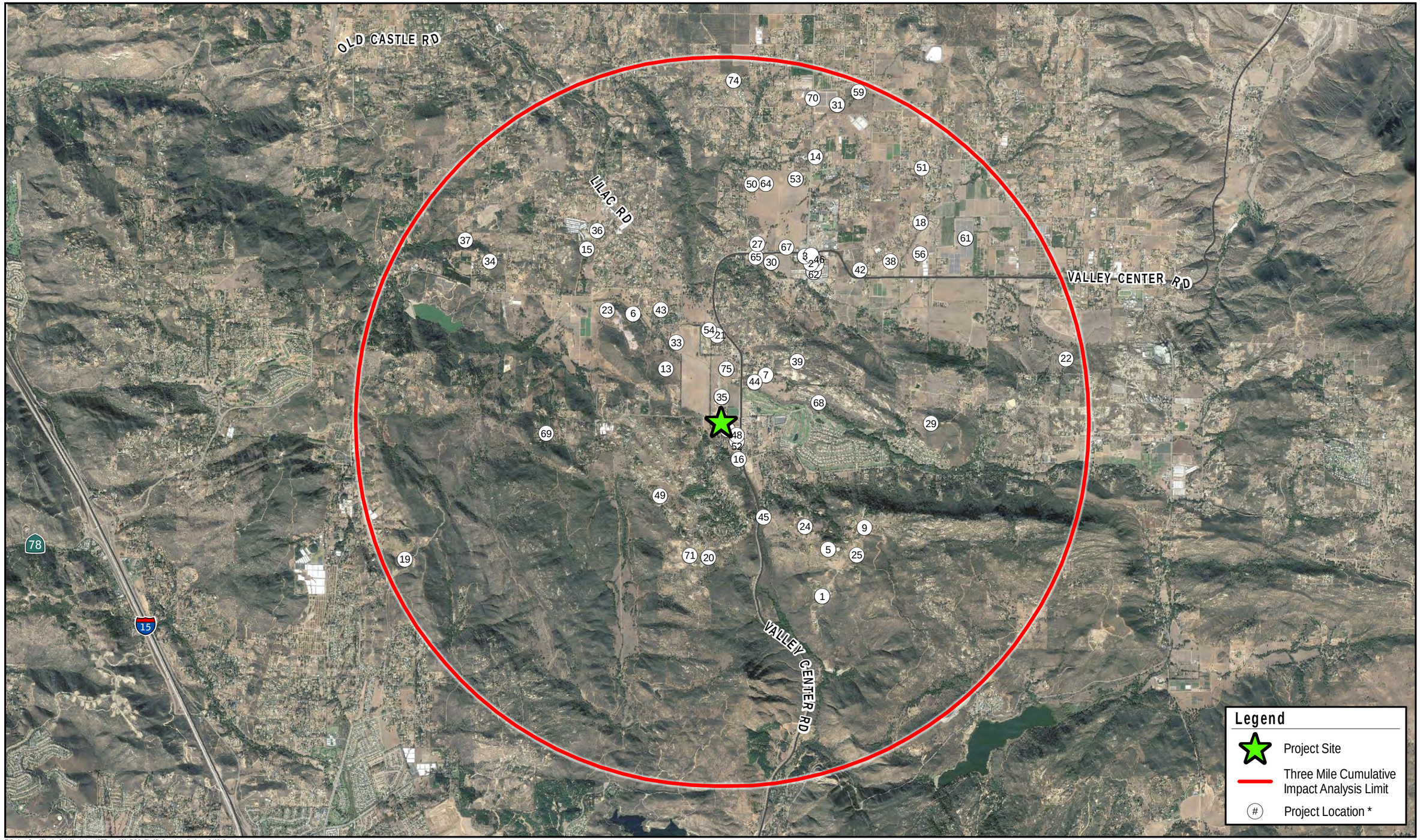
SHADY OAK PROJECT

0 50 100 Feet

FIGURE 6

Aerial Source: Google Earth, March 2016

April 2017



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Cumulative Analysis Projects

REC Consultants, Inc. | SHADY OAK PROJECT

0 2,000 4,000 Feet

Aerial Source: Google Earth, 2016. Data Source: SanGIS, 2017.

FIGURE 7

April 2017

ATTACHMENT A

PLANTS OBSERVED ON THE SHADY OAK PROJECT SITE			
Species Name	**Common Name**	**Family**	**Habitat**
*Acacia cyclops**	Cyclops acacia	Fabaceae	DIS
Acmispon americanus var. americanus	Spanish-clover	Fabaceae	NNG
Acmispon glaber	deerweed	Fabaceae	NNG
Amaranthus blitoides	prostrate amaranth	Amaranthaceae	DIS
Ambrosia psilostachya	western ragweed	Asteraceae	NNG
Amsinckia sp.	fiddleneck	Boraginaceae	NNG
*Atriplex rosea**	tumbling oracle	Chenopodiaceae	DIS
*Avena sp.**	oats	Poaceae	NNG
*Bougainvillea sp.**	bougainvillea	Nyctaginaceae	NNG
*Bromus diandrus**	ripgut grass	Poaceae	NNG
*Bromus hordeaceus**	soft chess brome	Poaceae	NNG
*Bromus madritensis subsp. rubens**	red brome, foxtail chess	Poaceae	NNG
*Centaurea melitensis**	tocalote	Asteraceae	NNG
Chenopodium berlandieri	pit-seed goosefoot	Chenopodiaceae	NNG
*Cirsium vulgare**	bull thistle	Asteraceae	NNG
Croton setiger	doveweed	Euphorbiaceae	DIS, NNG
*Cynodon dactylon**	Bermuda grass	Poaceae	DIS
Cyperus sp.(*)	flatsedge, nutsedge	Cyperaceae	DIS
Datura wrightii	western jimson weed	Solanaceae	NNG
Deinandra fasciculata	fascicled tarweed	Asteraceae	NNG
*Descurainia sophia**	fine-leaf tansy-mustard	Brassicaceae	DIS
*Erigeron bonariensis**	flax-leaf fleabane	Asteraceae	DIS, NNG
Erigeron sp.(*)	horseweed, fleabane	Asteraceae	NNG
*Erodium sp.**	filaree/storksbill	Geraniaceae	NNG
*Festuca myuros**	rat-tail fescue	Poaceae	NNG
*Festuca perennis**	perennial rye grass	Poaceae	NNG
Heliotropium curassavicum var. oculatum	salt heliotrope	Boraginaceae	NNG
*Hirschfeldia incana**	short-pod mustard	Brassicaceae	DIS, NNG
*Hordeum murinum subsp. glaucum**	glaucous barley	Poaceae	DIS, NNG
*Lactuca serriola**	prickly lettuce	Asteraceae	DIS, NNG
Malvella leprosa	alkali mallow	Malvaceae	NNG
*Melilotus sp.**	sweetclover	Fabaceae	NNG
*Oncosiphon piluliferum**	globe chamomile	Asteraceae	DIS
*Plantago lanceolata**	English plantain, rib-grass	Plantaginaceae	DIS, NNG
*Polygonum aviculare subsp. depressum**	common knotweed, doorweed	Polygonaceae	DIS
Quercus agrifolia var. agrifolia	coast live oak, encina	Fagaceae	DIS
*Rumex crispus**	curly dock	Polygonaceae	NNG
*Salsola australis**	Australian tumbleweed	Chenopodiaceae	DIS, NNG
*Schismus barbatus**	Mediterranean schismus	Poaceae	DIS, NNG
*Solanum sp.**	ornamental nightshade	Solanaceae	NNG
*Ulmus parvifolia**	Chinese elm	Ulmaceae	DIS
*Washingtonia robusta**	Mexican fan palm	Arecaceae	NNG

* non-native

! State or Federal special-status (State endangered, threatened, or rare; Federal endangered, threatened, or candidate for listing; CRPR 1-4)

Habitat Abbreviations

DIS - Disturbed

ATTACHMENT A

Species Name	Common Name	Family	Habitat
NNG - Non-native Grassland			

ATTACHMENT B

ANIMALS OBSERVED ON THE SHADY OAK PROJECT SITE			
Species Name	**Common Name**	**Habitat**	**Number**
Invertebrates			
Family Agelenidae	funnel weaver spider	NNG	webs
Family Bombyliidae	bee fly	NNG	2
Family Calliphoridae	blow fly	NNG	1
Family Formicidae	ant	NNG	many
Infraorder Bibionomorpha	gnat, gall midge, or march fly	NNG	many
Pogonomyrmex rugosus	rough harvester ant	NNG	many (colonies)
Subfamily Pierinae	white buttefly (unidentified)	NNG	1
Subfamily Vespinae	hornet or yellowjacket	NNG	1
Suborder Anisoptera	dragonfly	NNG	1
Suborder Caelifera	grasshopper	NNG	many
Reptiles			
Sceloporus occidentalis longipes	Great Basin fence lizard	NNG	4
Birds			
Buteo jamaicensis	red-tailed hawk	NNG	1
Mammals			
Spermophilus beecheyi nudipes	California ground squirrel	NNG	4
Thomomys bottae	Botta's pocket gopher	NNG	holes

* non-native

! State or federal special-status species (State endangered, threatened, endangered candidate, fully protected, watchlist, or CDF sensitive; or federal endangered, threatened, candidate for listing, or USFWS Bird of Conservation Concern)

Habitat Abbreviations

NNG - Non-native Grassland

ATTACHMENT C

SPECIAL-STATUS PLANTS WITH THE POTENTIAL TO OCCUR ON THE SHADY OAK PROJECT SITE
(USGS VALLEY CENTER QUAD, 397 - 402 METERS [1301 - 1318 FT])

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Acanthomintha ilicifolia	thornmint, San Diego thorn-mint	Lamiaceae	1B.1	SE/FT	X	X	A	Annual herb, Apr-Jun	Chaparral, coastal scrub, valley and foothill grassland, vernal pools. Endemic to active vertisol clay soils of mesas & valleys. Usually on clay lenses within grassland or chaparral communities. 10-960 m	Low; suitable habitat and soils do not occur onsite.
Adolphia californica	spineshrub, California adolphia	Rhamnaceae	2B.1	-/-	-	X	B	Shrub (deciduous), Dec-May	From sandy/gravelly to clay soils within grassland, coastal sage scrub, or chaparral; various exposures. 45-740 m.	Low; marginally suitable habitat occurs onsite but would have been detectable and was not observed.
Ambrosia pumila	San Diego ambrosia	Asteraceae	1B.1	-/FE	X	X	A	Perennial herb (rhizomatous), Apr-Oct	Sandy loam or clay soil, sometimes alkaline, in chaparral, coastal scrub, valley and foothill grassland. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m	Low; Project site is too disturbed; would have been detectable and was not observed.
Arctostaphylos glandulosa subsp. crassifolia	Del Mar manzanita, fe del mar manzanita	Ericaceae	1B.1	-/FE	-	X	A	Shrub (evergreen), Dec-Jun	Chaparral on sandy coastal mesas and ocean bluffs; 30-365 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Arctostaphylos otayensis	Otay manzanita	Ericaceae	1B.2	-/BLM-S	-	-	A	Shrub (evergreen), Jan-Apr	Metavolcanic soils in chaparral, cismontane woodland; 275-1700 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Arctostaphylos rainbowensis	Rainbow manzanita	Ericaceae	1B.1	-/BLM-S, USFS-S	-	X	A	Shrub (evergreen), Dec-Mar	Gabbro soils in chaparral; 270-790 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite; would have been detectable and was not observed.

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Artemisia palmeri	Palmer's sagewort, San Diego sagewort	Asteraceae	4.2	-/-	-	-	D	Biennial to perennial herb to subshrub, Feb-Sep	Drainages and riparian areas in sandy soil within chaparral, coastal scrub, riparian forest, riparian woodland and riparian scrub. 15-915 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Astragalus oocarpus	San Diego milkvetch	Fabaceae	1B.2	-/BLM-S, USFS-S	-	-	A	Perennial herb, May-Aug	Chaparral (openings), gravelly flats and slopes in thin oak woodland; 120-1795 m	Low; suitable habitat and soils do not occur onsite; would have been detectable and was not observed.
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	1B.2	-/-	-	X	A	Perennial herb, Mar-Oct	Alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, valley & foothill grassland, also ridgetops and alkaline low places. 2-460 m	Low; marginally suitable habitat occurs onsite but would have been detectable and was not observed.
Atriplex pacifica	south coast saltbush, south coast saltscale	Chenopodiaceae	1B.2	-/-	-	-	A	Annual herb, Mar-Oct	Alkali soils in coastal bluff scrub, coastal dunes, coastal scrub, playas. 1-400 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	1B.1	-/USFS-S	-	X	A	Annual herb, Jun-Oct	Alkaline soil in chenopod scrub, playas, vernal pools; 5-1420 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Baccharis vanessae	Encinitas baccharis	Asteraceae	1B.1	SE/FT	X	X	A	Shrub (deciduous), Aug-Nov	Steep, open, rocky areas with sandstone soils in maritime chaparral, cismontane woodland; 40-855 m	Low; suitable habitat and soils do not occur onsite; would have been detectable and was not observed.
Berberis nevinii	Nevin's barberry	Berberidaceae	1B.1	SE/FE	X	X	A	Shrub (evergreen), Mar-Jun	Chaparral, cismontane woodland, coastal scrub, riparian scrub; N-facing slopes or sandy washes; 290-1575 m	Low; suitable habitat and soils do not occur onsite; would have been detectable and was not observed.
Bloomeria clevelandii (Muilla c.)	San Diego goldenstar	Themidaceae	1B.1	-/BLM-S	-	X	A	Perennial herb (bulbiferous), Apr-May	Clay soil in chaparral, coastal scrub, valley & foothill grassland. Often on mounds between vernal pools in fine, sandy loam. 50-465 m	Low; marginally suitable habitat occurs onsite and would not have been detectable, but Site is likely too disturbed.

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Brodiaea filifolia	thread-leaf brodiaea	Themidaceae	1B.1	SE/FT	X	X	A	Perennial herb (bulbiferous), Mar-Jun	Dense Auld and Bosanko clay soils, most often associated with grassland but may occur within openings of other vegetation communities such as coastal sage scrub; 10-1020 m	Low; suitable soils do not occur onsite.
Brodiaea orcuttii	Orcutt's brodiaea	Themidaceae	1B.1	-/BLM-S, USFS-S	-	X	A	Perennial herb (deciduous, bulbiferous), May-Jul	Mesic, clay, sometimes serpentine soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows & seeps, valley & foothill grassland. Usually in vernal pools and small drainages. 30-1695 m	Moderate; Site is likely too disturbed, but nearest occurrence is only 2.1 mi S, suitable habitat occurs onsite, and would have been difficult to detect at time of survey.
California macrophylla (Erodium macrophyllum)	California large-leaf filaree/storksbill, round-leaved filaree	Geraniaceae	1B.2	-/BLM-S	-	-	B	Annual herb, Mar-May	Clay soils in cismontane woodland, valley & foothill grassland; 15-1200 m	Moderate; marginally suitable habitat occurs onsite and would not have been detectable at time of survey.
Calochortus dunnii	Dunn's mariposa lily	Liliaceae	1B.2	SR/-	X	-	A	Perennial herb (bulbiferous), Feb-Jun	Gabbroic or metavolcanic soil, rocky, in closed-cone coniferous forest, chaparral, valley & foothill grassland; 185-1830 m	Low; marginally suitable habitat occurs onsite but Site is likely too disturbed.
Caulanthus simulans	Payson's caulanthus, Payson's jewel-flower	Brassicaceae	4.2	-/USFS-S	-	-	D	Annual herb, Feb-Jun	Sandy, granitic soils in chaparral, coastal scrub, burned or disturbed areas; steep, rocky slopes; 90-2200 m	Low; suitable habitat does not occur onsite.
Ceanothus verrucosus	wart-stem-lilac, wart-stemmed ceanothus	Rhamnaceae	2B.2	-/-	-	X	B	Shrub (evergreen), Dec-May	Chaparral, rocky slopes; 1-380 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Centromadia parryi subsp. australis	southern tarplant	Asteraceae	1B.1	-/-	-	X	A	Annual herb, May-Nov	Marshes and swamps (margins), valley & foothill grassland (vernally mesic), vernal pools, disturbed areas; 0-975 m	Low; suitable habitat occurs onsite but only occurrence in Project quad is in CNDDB from 1916; would have been detectable and was not observed.
Centromadia pungens subsp. laevis	smooth tarplant	Asteraceae	1B.1	-/-	-	-	A	Annual herb, Apr-Sep	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley & foothill grassland, disturbed areas; 5-1170 m	Low; suitable habitat and soils occur onsite but would have been detectable and was not observed.
Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	Asteraceae	1B.1	-/BLM-S	-	-	A	Annual herb, Jan-Aug	Sandy coastal bluff scrub, coastal dunes; 0-100 m	Low; suitable habitat does not occur onsite, Site elevation too high; would have been detectable and was not observed.
Chaenactis parishii	Parish's pincushion, Parish's chaenactis	Asteraceae	1B.3	-/-	-	-	A	Perennial herb, May-Jul	Rocky chaparral; 1300-2500 m	Low; suitable habitat does not occur onsite and Site elevation is too low.
Chamaebatia australis	southern mountain misery	Rosaceae	4.2	-/-	-	-	D	Shrub (evergreen), Nov-May	Gabbroic or metavolcanic chaparral; 300-1020 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Chorizanthe leptotheca	Ramona spineflower	Polygonaceae	4.2	-/-	-	-	D	Annual herb, May-Aug	Alluvial fans and granitic soil in chaparral, coastal scrub, lower montane coniferous forest; 300-1900 m	Low; suitable habitat does not occur onsite.
Chorizanthe orcuttiana	Orcutt's spineflower	Polygonaceae	1B.1	SE/FE	-	X	A	Annual herb, Mar-May	Sandy openings in maritime chaparral, closed-cone coniferous forest, and coastal scrub; 3-125 m	Low; suitable habitat does not occur onsite, Site elevation too high.
Chorizanthe polygonoides var. longispina	knotweed spineflower, long-spined spineflower	Polygonaceae	1B.2	-/BLM-S	-	-	A	Annual herb, Apr-Jul	Gabbroic clay soils in chaparral, coastal scrub, meadows & seeps, valley & foothill grassland, near vernal pools. 30-1530 m	Low; marginally suitable habitat and soils occur onsite but nearest documented occurrences are ~15 mi N, NE, and S (Jepson eFlora).
Clarkia delicata	delicate clarkia, Campo clarkia	Onagraceae	1B.2	-/BLM-S	-	-	A	Annual herb, Apr-Jun	Often gabbroic soil in chaparral, cismontane woodland; 235-1000 m	Low; suitable habitat does not occur onsite.

ATTACHMENT C

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Comarostaphylis diversifolia subsp. diversifolia	summer-holly	Ericaceae	1B.2	-/BLM-S	-	X	A	Shrub (evergreen), Apr-Jun	Chaparral, cismontane woodland; 30-945 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite; would have been detectable and was not observed.
Corethrogyne filaginifolia var. linifolia (TJM2 recognizes no varieties and includes this in C. filaginifolia)	Del Mar sand-aster	Asteraceae	1B.1	-/-	-	-	A	Perennial herb, May-Sep	Sandy soils in coastal bluff scrub, openings in maritime chaparral, and sandy coastal scrub; 15-150 m	Low; suitable habitat does not occur onsite, Site elevation too high; would have been detectable and was not observed.
Deinandra floribunda (Hemizonia f.)	Tecate tarplant	Asteraceae	1B.2	-/BLM-S, USFS-S	-	-	A	Annual herb, Aug-Oct	Chaparral, coastal scrub; 70-1220 m	Low; suitable habitat does not occur onsite.
Delphinium hesperium subsp. cuyamacae	Cuyamaca larkspur	Ranunculaceae	1B.2	SR/BLM-S, USFS-S	-	-	A	Perennial herb, May -Jul	Lower montane coniferous forest, meadows & seeps / mesic; 1220-1630 m	Low; suitable habitat does not occur onsite, site elevation too low; would have been detectable and was not observed.
Dudleya variegata	variegated dudleya	Crassulaceae	1B.2	-/BLM-S	X	-	A	Perennial herb, Apr-Jun	Often rocky/gravelly or clay soils or on rock outcrops in grassland, openings in chaparral, cismontane woodland, coastal scrub, also near vernal pools or on mima mounds; 3-580 m	Low; very marginally suitable habitat occurs onsite but Site is likely too disturbed.
Dudleya viscida	sticky dudleya	Crassulaceae	1B.2	-/USFS-S	-	X	A	Perennial herb, May-Jun	Rocky coastal bluff scrub, chaparral, coastal scrub, cliffs and banks; 10-550 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Ericameria palmeri var. palmeri	Palmer's goldenbush	Asteraceae	1B.1	-/BLM-S	X	-	B	Shrub (evergreen), Jul-Nov	Steep hillsides, granitic soils in mesic chaparral, coastal scrub; 5-625 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Eriogonum evanidum (E. foliosum)	vanishing wild buckwheat	Polygonaceae	1B.1	-/USFS-S	-	-	A	Annual herb, Jul-Oct	Sandy or gravelly chaparral, cismontane woodland, lower montane coniferous forest, pinyon and juniper woodland; 1100-2225 m	Low; suitable habitat does not occur onsite and Site elevation is too low.
Eryngium aristulatum var. parishii	San Diego button-celery	Apiaceae	1B.1	SE/FE	-	X	A	Biennial to perennial herb, Apr-Jun	Mesic coastal scrub, valley & foothill grassland, vernal pools; 15-880 m	Low; marginally suitable habitat occurs onsite but Site is likely too disturbed.

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Ferocactus viridescens	coast barrel cactus, San Diego barrel cactus	Cactaceae	2B.1	-/-	-	X	B	Perennial (stem succulent), May-Jun	Chaparral, coastal scrub, valley & foothill grassland, near vernal pools; 3-490 m	Low; marginally suitable habitat occurs onsite but would have been detectable and was not observed.
Grindelia hallii (G. hirsutula var. hallii)	San Diego gumplant	Asteraceae	1B.2	-/BLM-S	-	-	A	Perennial herb, Jul-Oct	Chaparral, lower montane coniferous forest, meadows & seeps, valley & foothill grassland; 185-1745 m	Low; marginally suitable habitat occurs onsite but would have been detectable and was not observed.
Harpagonella palmeri	Palmer's grappling-hook	Boraginaceae	4.2	-/-	-	-	D	Annual herb, Mar-May	Clay soils in chaparral, coastal scrub, valley & foothill grassland; 20-955 m	Low; marginally suitable habitat occurs onsite but nearest documented occurrence is 9.8 miles east (Jepson eFlora).
Hazardia orcuttii	Orcutt's goldenbush, Orcutt's hazardia	Asteraceae	1B.1	ST/-	-	-	A	Shrub (evergreen), Aug-Oct	Grassy edges of maritime chaparral, coastal scrub, often clay soil; 80-85 m	Low; suitable habitat does not occur onsite, Site elevation too high; would have been detectable and was not observed.
Heterotheca sessiliflora subsp. sessiliflora	false goldenaster, beach goldenaster	Asteraceae	1B.1	-/-	-	-	D	Perennial herb, Mar-Dec	Sandy soils in coastal chaparral, coastal dunes, coastal scrub; 0-5 m	Low; suitable habitat does not occur onsite, Site elevation too high; would have been detectable and was not observed.
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	1B.1	-/-	-	-	A	Perennial herb, Feb-Sep	Sandy or gravelly chaparral, cismontane woodland, coastal scrub; 15-1645 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Horkelia truncata	Ramona horkelia	Rosaceae	1B.3	-/-	-	-	A	Perennial herb, May-Jun	Clay or gabbroic soils in mixed chaparral, cismontane woodland, vernal streams, disturbed areas; 400-1300 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Hulsea californica	San Diego hulsea, San Diego sunflower	Asteraceae	1B.3	-/-	-	-	A	Perennial herb, Apr-Jun	Openings and burned areas in chaparral, pine-oak woodland; 365-1860 m	Low; suitable habitat does not occur onsite.
Isocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	1B.2	-/-	-	-	A	Shrub, Apr-Nov	Sandy, often disturbed areas in chaparral, coastal scrub; 10-135 m	Low; suitable habitat does not occur onsite, Site elevation too high; would have been detectable and was not observed.
Iva hayesiana	San Diego marsh-elder	Asteraceae	2B.2	-/-	-	-	B	Perennial herb to subshrub, Apr-Oct	Marshes & swamps, playas, riverwashes; 10-500 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Juncus acutus subsp. leopoldii	southwestern spiny rush	Juncaceae	4.2	-/-	-	-	D	Perennial herb, Mar-Jun	Coastal dunes (mesic), meadows & seeps (alkaline seeps), marshes and swamps (coastal salt); 3-900 m	Low; suitable habitat does not occur onsite.
Lasthenia glabrata subsp. coulteri	Coulter's salt-marsh daisy, Coulter's goldfields	Asteraceae	1B.1	-/-	-	-	A	Annual herb, Feb-Jun	Alkaline soils in coastal salt marshes & swamps, playas, vernal pools; 1-1375 m	Low; suitable habitat does not occur onsite.

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Lepidium virginicum var. robinsonii (not recognized in TJM2)	Robinson's peppergrass	Brassicaceae	4.3	-/-	-	-	A	Annual herb, Jan-Jul	Dry chaparral, coastal scrub; 1-885 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Leptosyne maritima (Coreopsis m.)	San Diego sea-dahlia	Asteraceae	2B.2	-/-	-	-	B	Perennial herb, Mar-May	Coastal bluff scrub, coastal scrub; 5-185 m	Low; suitable habitat does not occur onsite, Site elevation too high.
Lilium parryi	lemon lily	Liliaceae	1B.2	-/-	-	-	A	Perennial herb (bulbiferous), Jul-Aug	Lower & upper montane coniferous forest, meadows & seeps, riparian forest, mesic; 1220-2745 m	Low; suitable habitat does not occur onsite, Site elevation too low.
Linanthus orcuttii	Laguna linanthus, Orcutt's linanthus	Polemoniaceae	1B.3	-/-	-	-	A	Annual herb, May-Jun	Disturbed areas or gravelly clearings in chaparral, lower montane coniferous forest, pinyon & juniper woodland; 915-2145 m	Low; suitable habitat does not occur onsite, Site elevation too low.
Monardella hypoleuca subsp. intermedia	intermediate monardella	Lamiaceae	1B.3	-/-	-	-	-	Perennial herb to subshrub (rhizomatous), Apr-Sep	Steep brushy areas in chaparral, cismontane woodland; 400-1250 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Monardella hypoleuca subsp. lanata	felt-leaf monardella	Lamiaceae	1B.2	-/-	-	X	A	Perennial herb to subshrub (rhizomatous), Jun-Aug	Sandy soil in understory of mixed chaparral, chamise chaparral, southern oak woodland; 300-1575 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Monardella macrantha subsp. hallii	Hall's monardella	Lamiaceae	1B.3	-/-	-	-	A	Perennial herb (rhizomatous), Jun-Oct	Dry slopes and ridges in openings of broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley & foothill grassland; 730-2195 m	Low; suitable habitat does not occur onsite, Site elevation too low.
Monardella nana subsp. leptosiphon (Not recognized in TJM2)	San Felipe monardella	Lamiaceae	1B.2	-/-	-	-	A	Perennial herb (rhizomatous), Jun-Jul	Openings or understory of chaparral, lower montane coniferous forest; 1200-1855 m	Low; suitable habitat does not occur onsite, Site elevation too low.
Myosurus minimus (includes M. m. subsp. apus)	little mousetail	Ranunculaceae	3.1	-/-	-	X	C	Annual herb, Mar-Jun	Valley & foothill grassland, vernal pools (alkaline); 20-640 m	Low; suitable habitat does not occur onsite.
Nasturtium gambelii (Rorippa g.)	Gambel's water cress	Brassicaceae	1B.1	ST/FE	-	-	A	Perennial herb (rhizomatous), Apr-Sep	Marshes and swamps (freshwater or brackish); 5-330 m	Low; suitable habitat does not occur onsite, Site elevation too high.
Navarretia fossalis	spreading navarretia	Polemoniaceae	1B.1	-/FT	-	X	A	Annual herb, Apr-Jun	Chenopod scrub, marshes & swamps (shallow freshwater), playas, vernal pools; 30-655 m	Low; suitable habitat does not occur onsite.

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite
Nolina cismontana	Peninsular bear-grass, chaparral nolina	Ruscaceae	1B.2	-/-	-	X	A	Shrub (evergreen), Mar-Jul	Sandstone, shale or gabbro soils in chaparral, coastal scrub; 140-1275 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Packera ganderi (Senecio g.)	Gander's butterweed, San Diego butterweed, Gander's ragwort	Asteraceae	1B.2	SR/-	-	X	A	Perennial herb, Apr-May	Burns and gabbroic outcrops in chaparral; 485-1070 m	Low; suitable habitat does not occur onsite.
Pentachaeta aurea subsp. aurea	golden-ray pentachaeta	Asteraceae	4.2	-/-	-	-	D	Annual herb, Mar-Jul	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, valley & foothill grassland; 80-1850 m	Low; marginally suitable habitat occurs onsite but nearest documented occurrence is 21 mi NW (SDNHM).
Quercus dumosa	Nuttall's scrub oak	Fagaceae	1B.1	-/-	-	X	A	Shrub (evergreen), Feb-Aug	Sandy soil near coast, clay loam soils in closed-cone coniferous forest, chaparral, coastal scrub; 15-400 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Quercus engelmannii	Engelmann/mesa blue oak	Fagaceae	4.2	-/-	-	X	D	Tree (deciduous), Mar-May	Chaparral, cismontane woodland, riparian woodland, valley & foothill grassland; 120-1300 m	Low; marginally suitable habitat occurs onsite but only oak onsite was identified as *Q. agrifolia* .
Salvia munzii	Munz's sage	Lamiaceae	2B.2	-/-	-	-	B	Shrub (evergreen), Feb-Apr	Rocky hills and slopes in chaparral, coastal scrub; 35-575 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Scutellaria bolanderi subsp. austromontana	southern skullcap	Lamiaceae	1B.2	-/-	-	-	A	Perennial herb (rhizomatous), Jun-Aug	Gravelly soil on streambanks, chaparral, oak or pine woodland (mesic); 425-2000 m	Low; suitable habitat and soils do not occur onsite.
Stemodia durantifolia	blue streamwort, purple stemodia	Plantaginaceae	2B.1	-/-	-	-	B	Perennial herb, Jan-Dec	Sandy soil in riparian habitats, on wet sand or rocks, drying streambeds, mesic Sonoran desert scrub; 35-795 m	Low; suitable habitat does not occur onsite.
Symphyotrichum defoliatum (Aster bernardinus)	San Bernardino aster	Asteraceae	1B.2	-/-	-	-	-	Perennial herb (rhizomatous), Jul-Nov	Near ditches, streams and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic valley & foothill grassland; 2-2040 m	Low; marginally suitable habitat occurs onsite but nearest occurrence is on Palomar Mtn. (Jepson eFlora); would have been detectable and was not observed.
Tetracoccus dioicus	Parry's tetracoccus	Picrodendraceae	1B.2	-/-	-	X	A	Shrub, Apr-May	Rocky, decomposed gabbro soil in chaparral, coastal scrub; 165-1000 m	Low; suitable habitat does not occur onsite; would have been detectable and was not observed.
Viola purpurea subsp. aurea (Viola aurea)	golden violet	Violaceae	2B.2	-/-	-	-	B	Perennial herb, Apr-Jun	Sandy soils in Great Basin scrub, pinyon & juniper woodland; 1000-2500 m	Low; suitable habitat does not occur onsite, Site elevation too low.

ATTACHMENT C

Species Name	Common Name	Family	CRPR	State/ Federal	Cnty NE	NCPC	Cnty List	Growth form, bloom time	Habitat	Potential to Occur Onsite

Listing Designations

CRPR - California Rare Plant Rank (from Rare Plant Status Review Group, jointly managed by California Department of Fish and Wildlife [CDFW] and California Native Plant Society [CNPS])

1A - Plants presumed extirpated in California and either rare or extinct
1B - Plants rare, threatened or endangered in California AND elsewhere
2A - Presumed extirpated or extinct in California, but more common elsewhere
2B - Plants rare, threatened or endangered in California, but more common elsewhere
3 - Plants about which more information is needed - a review list
4 - Plants of limited distribution - a watch list
CBR - Considered But Rejected

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 - Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 - Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

State of California species designations (CDFW April 2013)
SE - State-listed Endangered
ST - State-listed Threatened
SR - State-listed Rare

Federal species designations (CDFW April 2013, USFWS 2013)
FE - Federally-listed Endangered
FT - Federally-listed Threatened
FC - Federal candidate for listing

Cnty NE - an X in this column indicates the species is considered a Narrow Endemic by the County of San Diego (MSCP County of San Diego Subarea Plan 1997)

Cnty List - County Sensitive Plant List (County of San Diego 2010)
A - County List A: plants rare, threatened or endangered in California and elsewhere
B - County List B: plants rare, threatened or endangered in California but more common elsewhere
C - County List C: plants which may be rare, but need more information to determine their true rarity status
D - County List D: plants of limited distribution and are uncommon, but not presently rare or endangered

NCPC - an X in this column indicates the species is proposed covered under in-process North County Multiple Species Conservation Program

Other abbreviations:

TJM2 - The Jepson Manual, 2nd edition (2012) (taxonomic authority for this report except where it conflicts with special-status plant recognition)

(Common names are primarily from *The Checklist of Vascular Plants of San Diego County* [Rebman and Simpson 2006], and secondarily from CNPS's Inventory of Rare and Endangered Plants [CNPS 2010, 2013])

ATTACHMENT D

SPECIAL-STATUS ANIMALS WITH THE POTENTIAL TO OCCUR ON THE SHADY OAK PROJECT SITE
(USGS VALLEY CENTER QUAD, 397 - 402 METERS [1301 - 1318 FT])

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
INVERTEBRATES								
Apodemia virgulti peninsularis (A. mormo p.)	Peninsular metalmark	-/-	-	-	1	-	Host plant Eriogonum wrightii subsp. membranaceum	Low; host plant not observed onsite.
Callophrys thornei (Mitoura t.)	Thorne's hairstreak	-/BLM-S	X	-	1	-	Otay Mountain; host plant is Hesperocyparis forbesii.	Low; host plant not observed onsite.
Danaus plexippus pop. 1	monarch butterfly - California overwintering population	-/USFS-S	-	-	2	-	Land with larval host plant, milkweed (Asclepias spp.), or nectar plants. Overwintering habitats limited to coastal conifer or eucalyptus groves.	Moderate; adults could forage for nectar onsite, but host plant does not occur onsite.
Helminthoglypta coelata (H. traskii c.)	Peninsular Range shoulderband snail	-/-	-	-	2	-	Known from only a few locations in coastal SD County; in rock slides, beneath bark and rotten logs, and in coastal vegetation.	Low; suitable habitat does not occur onsite.
Papilio multicaudata	two-tailed swallowtail	-/-	-	-	1	-	Semi-arid canyonland, mid-level mountains, canyon bottoms; groves, parks, and roadsides. Host plants are in the genera Fraxinus and Prunus.	Moderate; adults could forage for nectar onsite, but host plants do not occur onsite.
Plebejus saepiolus hilda	Hilda greenish blue	-/-	-	-	1	-	Mountain meadows; host plants in genus Trifolium.	Low; suitable habitat does not occur onsite, host plants do not occur onsite.
Pyrgus ruralis lagunae	Laguna Mountains skipper	-/FE	-	-	1	-	Meadows in yellow pine forest near Mt. Laguna & Palomar Mtn; host plant is Horkelia clevelandii. 1,500-1,800 m.	Low; suitable habitat does not occur onsite, host plant does not occur onsite.
Streptocephalus woottoni	Riverside fairy shrimp	-/FE	X	X	1	X	Vernal pools in grassland and coastal sage scrub in western Riverside, Orange and San Diego Counties (Ramona area), and coastal SD County. Does not appear until later in the season; may require warmer water or longer inundation times than Branchinecta sandiegonensis	Low; suitable habitat does not occur onsite.
Tryonia imitator	mimic tryonia	-/-	-	-	2	-	Coastal lagoons, estuaries and salt marshes in permanently submerged areas, in a variety of sediment types, withstands wide range of salinity.	Low; suitable habitat does not occur onsite.
FISHES								
Oncorhynchus mykiss irideus	southern steelhead - southern California DPS	-/FE	-	-	1	-	In San Diego, restricted to San Mateo Creek along border with Riverside County.	Low; suitable habitat does not occur onsite.
AMPHIBIANS								
Anaxyrus californicus (Bufo microscaphus c.)	arroyo toad	SSC/FE	X	X	1	-	Washes, arroyos, sandy riverbanks, and riparian areas, especially with willows, cottonwoods and sycamores; needs exposed sandy streamsides with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding. 0-900 m	Low; suitable habitat does not occur onsite.

ATTACHMENT D

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Ensatina eschscholtzii klauberi (Ensatina klauberi)	large-blotched salamander	SSC/USFS-S	-	-	1	-	Deciduous and evergreen forest, well-shaded canyons, oak woodlands, mixed grassland, chaparral; during dry season, in rotted logs, rotted root channels, woodrat dens, and underground small mammal burrows. Only known in San Diego from Palomar Mtn.	Low; suitable habitat does not occur onsite.
Rana draytonii (R. aurora d.)	California red-legged frog	SSC/FT	X	-	1	-	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Only documented occurrence in San Diego was from San Felipe Creek in Anza-Borrego Desert and was extirpated.	Low; suitable habitat does not occur onsite, may be extirpated from County.
Rana muscosa	southern mountain yellow-legged frog	SE, SSC/ FE, USFS-S	-	-	1	-	Permanent water source with riparian vegetation and areas for basking. Extirpated on Palomar Mountain (only documented occurrence in San Diego) and in much of the former range elsewhere in southern California.	Low; suitable habitat does not occur onsite, may be extirpated from County.
Spea hammondii	western spadefoot	SSC/BLM-S	-	X	2	-	Grassland, also valley-foothill hardwood woodlands. Vernal pools essential for breeding and egg-laying. Activity limited to wet season, summer storms or during evenings with elevated substrate moisture levels; stays below ground in dry/cold weather. Nocturnal. Extirpated throughout much of lowland southern California.	Low; suitable habitat does not occur onsite.
Taricha torosa	Coast Range newt	SSC/-	-	X	2	-	Various upland habitats such as grassland, woodland, and forest. Can migrate over 1 km to breed in ponds, reservoirs, and streams. In San Diego, only known from northwestern County (De Luz) and isolated populations in Cedar Creek and Boulder Creek (near El Capitan Reservoir)	Low; suitable habitat does not occur onsite, Site is not near any documented occurrences (SDNHM).
REPTILES								
Acinemys pallida (Emys marmorata, Clemmys m. p.)	western pond turtle	SSC/BLM-S, USFS-S	X	X	1	-	Permanent waters with aquatic vegetation; can occur in urban conditions and brackish water. Nests in sand or grassy open fields up to 0.5 km from water. < 1850 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Aspidoscelis hyperythra (beldingi) (A. hyperythrus b.)	orange-throated whiptail (Belding's)	WL/USFS-S	-	X	2	-	Low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats; prefers sandy areas with perennial plants that support termites.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Aspidoscelis tigris stejnegeri	coastal whiptail	SSC/-	-	-	2	-	Found in hot, dry open areas with sparse vegetation; also woodland and riparian areas mostly west of the Peninsular Ranges; ground may be firm soil, sandy, or rocky.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Crotalus ruber	red-diamond rattlesnake	SSC/USFS-S	-	X	2	-	Coastal San Diego County to the eastern slopes of Peninsular Ranges in coastal sage scrub, mixed chaparral, open grassy areas and agricultural areas, chamise chaparral, pinon juniper and desert scrub. Most common in the western foothills of the Peninsular Ranges and in dry rocky inland valleys; associated with granite rock outcroppings, especially in winter. 0-1500 m (typically < 1200m)	Low; marginally suitable habitat occurs onsite and a SDNHM record is 0.6 mi N, but is from 1945; Site likely too disturbed.
Diadophis punctatus similis	San Diego ringneck snake	-/USFS-S	-	-	2	-	Moist habitats including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands, along coast into Peninsular Ranges. Prefer areas with surface litter or herbaceous vegetation. Often found near abandoned buildings and junk piles in wooded areas. Generally hidden during the day. May not be distinct from San Bernardino subspecies (D. p. modestus), which is also special-status.	Low; likely would not have been detectable during survey due to time of day, but Site lacks suitable cover and moisture.
Lampropeltis zonata (pulchra)	California mountain kingsnake (San Diego population)	SSC/BLM-S, USFS-S	-	-	2	-	Moist open coniferous forests, oak woodlands, riparian woodland, chaparral, and openly wooded areas with rocks or rotting logs. Laguna, Palomar, Volcan, and Hot Springs Mountains in SD County.	Low; suitable habitat does not occur onsite.
Phrynosoma blainvillii (P. coronatum b.)	coast horned lizard	SSC/BLM-S	-	X	2	-	Coastal scrub, chaparral, grassland, cismontane woodland, riparian scrub and woodland; most common in lowlands along sandy washes with scattered low shrubs. Prefers open areas for sunning with loose soil for burial and native harvester ant colonies (few or no Argentine ants)	Low; native harvester ant colonies occur onsite but Site is disturbed and the only relatively recent occurrence (1995, CNDDB) in Project quad is approx. 4.5 miles SW of site
Plestiodon skiltonianus interparietalis (Eumeces s. i.)	Coronado skink	SSC/BLM-S	-	-	2	-	Rocky areas and dry hillsides in coastal sage scrub, grassland, chaparral, pinyon-juniper woodland, open pine or oak woods, near streams; digs burrows in soil.	Moderate; marginally suitable habitat occurs onsite and likely would not have been detectable during survey; occurrence from 2008 2.5 mi NW (SDNHM).
Salvadora hexalepis virgultea	coast patch-nosed snake	SSC/-	-	-	2	-	Chaparral, coastal sage scrub, and other brushy vegetation west of desert, near rock outcrops with adjacent seasonal drainages; require small mammal burrows for refuge and overwintering.	Low; suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Sceloporus graciosus vandenburgianus	southern sagebrush lizard	-/-	-	-	2	-	Sagebrush and other shrublands (e.g., manzanita and ceanothus brushland), also pinyon-juniper woodland and openly wooded areas of ponderosa pine or Douglas-fir; occupied areas have open ground and some low bushes. In San Diego, found in isolated mountain top populations (Palomar Mtn, Laguna, Cuyamaca, and Hot Spring Mtns.)	Low; suitable habitat does not occur onsite.
Thamnophis hammondii	two-striped garter snake	SSC/BLM-S, USFS-S	-	-	1	-	In or near permanent fresh water, often along streams with rocky beds bordered by willows and other riparian vegetation, also desert oases and sometimes vernal pools. 0-2100 m.	Low; suitable habitat does not occur onsite.
BIRDS								
Accipiter cooperii	Cooper's hawk	WL/-	-	-	1	-	Open riparian cottonwood and sycamore, oak, and eucalyptus woodland and other open forested areas. Nests in second-growth conifer stands, live oaks or deciduous riparian areas. Forages in openings near forested areas. Similar winter habitat, but open woodlands and fields may be used more. 150-915 m.	Moderate; nesting habitat does not occur onsite but could be used for foraging.
Accipiter striatus (velox)	sharp-shinned hawk	WL/-	-	-	1	-	Widespread but uncommon winter visitor in SD County, especially coastal slope; variety of habitats, preferably with trees or tall shrubs; attracted to any place that concentrates small prey birds. Tend to use younger, shorter, and more dense woodlots than A. cooperii.	Moderate; Site could be used for foraging, although suitable prey birds were not observed during survey.
Agelaius tricolor	tricolored blackbird	SSC/BCC, BLM-S	-	X	1	-	Highly colonial; require open water, protected nesting substrate, and foraging area with insect prey within a few km of colony. Breed and nest in freshwater marshes with emergent vegetation but also in thickets of willow, blackberry, wild rose, tall herbs. In migration and winter inhabit open cultivated lands and pastures as well as marshes. 0-150 m and 300-915 m	Low; documented in Project quad by (CNDDB) but breeding habitat does not occur onsite and only marginally suitable foraging habitat occurs onsite.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	WL/-	-	X	1	-	Steep, moderately vegetated slopes of coastal sage scrub dominated by Artemisia californica but also coastal bluff scrub and chaparral. Nests on the ground at the base of rocks, grass tufts, or saplings, or slightly above ground in the branches of shrubs or trees. 0-915 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Ammodramus savannarum (perpallidus)	grasshopper sparrow	SSC/-	-	X	1	-	Grasslands of intermediate height containing clumped vegetation interspersed with patches of bare ground, moderately deep litter and sparse coverage of woody vegetation. Occasionally in cropland, such as corn and oats. Hard to identify except when singing (Mar-Jul).	Low; only marginally suitable habitat onsite.
Aquila chrysaetos (canadensis)	golden eagle	FP, WL, CDF-S/BLM-S, BCC	X	X	1	-	Rolling foothills, mountain areas, sage-juniper flats, desert with sufficient mammalian prey base and near suitable nesting sites. Nest on rock ledges of cliffs but sometimes in large trees (e.g., oak or eucalyptus), on steep hillsides, or on the ground. 0-915 m.	Low; only marginally suitable foraging habitat occurs onsite.
Artemisiospiza belli belli (Amphispiza b. b.)	Bell's sage sparrow	WL/BCC	-	X	1	-	Year-round resident in open chamise chaparral and sage scrub, especially recently burned areas or on gabbro substrate; most common in central southern SD County; very sensitive to habitat fragmentation.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite, Site too disturbed.
Athene cunicularia (hypugaea)	burrowing owl	SSC/BCC, BLM-S	X	X	1	-	Open, dry annual or perennial grasslands, deserts & scrublands with low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, especially California ground squirrel.	Low; marginally suitable habitat occurs onsite but only documented occurrence (CNDDB) in Project quad is from 1924 in Escondido.
Aythya americana	redhead	SSC/-	-	-	2	-	Large marshes, lakes, lagoons, rivers and bays, wintering mostly in brackish and marine lagoons and bays, less frequently in inland fresh-water situations. Nests in large freshwater marshes. Nests placed in dense bulrush or cattail stands with small areas of open water. Commonly deposits eggs in nests of other waterfowl species.	Low; suitable habitat does not occur onsite.
Buteo lineatus (elegans)	red-shouldered hawk	-/-	-	-	1	-	Widespread over coastal slope. Nests in well-forested areas with mature trees and well-developed canopy near water. Has expanded into various woodlands, including stands of palms and eucalyptus trees amid urban sprawl. Non-breeding habitat is less restricted; lowland areas near water, and level, open country with scattered large trees.	Moderate; Site could be used for foraging.
Buteo swainsoni	Swainson's hawk	ST/ BCC, BLM-S	-	-	1	-	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Relatively tolerant of human activity. 0-150 m.	Low; marginally suitable habitat occurs onsite but only documented occurrence in Project quad (CNDDB) is from 1923 in Escondido.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Cathartes aura (meridionalis)	turkey vulture	-/-	-	-	1	-	Dry open country or along roadsides; coastal sage scrub, mixed and chamise chaparral, grassland, riparian, mixed conifer and closed cone forest. Nests in caves or trees, on cliffs, on ground in dense shrubbery. 0 to over 3000 ft.	Moderate; widespread throughout County, Site could be used as foraging habitat (e.g. in the case of roadkill from Mirar De Valle Rd.)
Coccyzus americanus occidentalis	western yellow-billed cuckoo	SE/FT, BCC, BLM-S, USFS-S	X	-	1	-	Forests, woodland, and scrub. Breeds in deciduous riparian woodland, especially dense stands of cottonwood and willow, sometimes mesquite and tamarisk. Dense riparian understory foliage important for nesting (e.g. blackberry, nettles, wild grape), and cottonwood important for foraging habitat.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Contopus cooperi (cooperi) (C. borealis)	olive-sided flycatcher	SSC/BCC	-	-	2	-	Various forest and woodland habitats including those along rivers and lakes and forested wetlands. Most nesting sites contain dead standing trees, which are used as singing and feeding perches. Nests most often in conifers.	Low; suitable habitat does not occur onsite.
Empidonax traillii extimus	southwestern willow flycatcher	SE/FE	X	X	1	-	Riparian and wetland thickets of willow or tamarisk, does not need to be extensive. Nests in trees or shrubs with dense vegetation. Forages within and occasionally above dense riparian vegetation. Present in California from late April to September.	Low; suitable habitat does not occur onsite.
Eremophila alpestris actia	California horned lark	WL/-	-	-	2	-	Open patches of bare land alternating with low vegetation in grasslands, montane meadows, sagebrush and open coastal plains, fallow grain fields, and alkali flats. Tolerant of disturbance, but sensitive to habitat fragmentation.	Moderate; Site could be used for foraging.
Falco peregrinus anatum	American peregrine falcon	FP, CDF-S/BCC	X	-	1	-	Open areas along coast, mountains, forests, and human population centers with nearby cliffs for nesting. Often nests on ledge or hole on face of rocky cliff or crag but may use tall structures. When not breeding, occurs in open areas where prey concentrate, especially near water.	Low; suitable nesting or foraging habitat do not occur onsite.
Icteria virens (auricollis)	yellow-breasted chat	SSC/-	-	X	1	-	Summer visitor in dense riparian woodland. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground. Most common in coastal lowland, strongly concentrated in NW corner of County; usually return to SD second week in April and start to leave by early August.	Low; suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Ixobrychus exilis (exilis)	least bittern	SSC/BCC	-	-	2	-	Nest colonially in dense, tall growths of emergent vegetation (e.g. cattail, sedge, bulrush, or common reed) interspersed with some woody vegetation and open, fresh or brackish water.	Low; suitable habitat does not occur onsite.
Junco hyemalis caniceps	gray-headed junco	WL/-	-	-	2	-	Coniferous, mixed, and deciduous forest. Rare visitor along coast, rare to uncommon visitor in mountains. In migration and winter, occur in openly wooded, brushy and grassy habitats. Nests are in scrapes on the ground and usually are concealed by vegetation or rocks.	Low; suitable habitat does not occur onsite.
Larus californicus (californicus or albertaensis)	California gull	WL/-	-	-	2	-	In winter along coast and near bodies of water; also dumps, cities and agricultural lands. Uncommon to rare in summer. Nest inland on open sandy or gravelly areas on islands or along shores of lakes and ponds, generally with scattered grasses. Nests on ground in open areas with irregular terrain near shore of islands.	Low; suitable habitat does not occur onsite.
Laterallus jamaicensis coturniculus	California black rail	ST, FP/BCC, BLM-S	X	-	2	-	Freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Low; suitable habitat does not occur onsite.
Melanerpes lewis	Lewis's woodpecker	-/BCC	-	-	1	-	In late summer, move from valleys into mountains or from breeding habitat to orchards. In winter, uses oak woodlands, nut and fruit orchards. Availability of storage sites for grains or mast, such as tree bark (especially of mature cottonwood trees) or power poles with dessication cracks important for winter habitat selection. May use scrub oak, pecan orchards, and cottonwoods.	Low; suitable habitat does not occur onsite.
Oreortyx pictus eremophila	mountain quail	-/-	-	-	2	-	Brushy mountainsides, coniferous forest, forest and meadow edges, sagebrush, pinyon and juniper. Nests on the ground in a shallow scrape lined with plant material under vegetative cover near water. 1500-10000 ft	Low; suitable habitat does not occur onsite, Site elevation is too low.
Pandion haliaetus (carolinensis)	osprey	WL, CDF-S/-	-	-	1	-	Along rivers, lakes, reservoirs, and seacoasts. Often cross land between bodies of water. Typically build large stick nests on living or dead trees and also use man-made structures that occur near or above water.	Low; suitable habitat does not occur onsite.
Plegadis chihi	white-faced ibis	WL/-	-	X	1	-	Shallow freshwater marsh; nest in dense tule thickets with areas of shallow water for foraging.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Polioptila californica californica	coastal California gnatcatcher	SSC/FT	-	X	1	-	Obligate, permanent resident of coastal sage scrub especially where Artemisia californica dominates; up to 915 m but 90% at 305 m or lower.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Progne subis (subis)	purple martin	SSC/-	-	-	1	-	Herbaceous wetlands, riparian, croplands/hedgerows, deserts, grasslands, shrubland/chaparral, suburban/orchard, conifer and hardwood woodlands; frequently near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks. Forages over fields, water, or marshes. 0-1000 ft and over 3000 ft.	Low; suitable habitat does not occur onsite.
Rallus longirostris levipes	light-footed clapper rail	SE, FP/FE	X	X	1	-	Year-round resident in coastal salt marsh dominated by cordgrass and pickleweed, and also known at three freshwater sites in SD County.	Low; suitable habitat does not occur onsite.
Setophaga aestiva (Dendroica petechia brewsteri, S. p.)	yellow warbler	SSC/BCC	-	-	2	-	Riparian forest/scrub/woodlands in close proximity to water. Nest and forage in willow shrubs and thickets, and in other riparian plants including cottonwoods and sycamores. In migration and winter, often occur in open woodland, agicultural lands, brushy areas, and forest edges.	Low; suitable habitat does not occur onsite.
Sialia mexicana (occidentalis)	western bluebird	-/-	-	-	2	-	Various woodlands (open, burned, oak, and riparian), farmlands, orchards, also deserts in winter. Nests are in natural tree cavities, abandoned woodpecker holes, or bird nest boxes.	Moderate; marginally suitable habitat occurs onsite.
Sternula antillarum browni	California least tern	SE, FP/FE	X	-	1	-	Coastal; nest colonially up to 4 mi inland on bare or sparsely vegetated sand beaches, alkali flats, land fills, paved areas. Usually nest in same area in successive years; tend to return to natal site to nest.	Low; suitable habitat does not occur onsite.
Strix occidentalis occidentalis	California spotted owl	SSC/BCC, BLM-S, USFS-S	-	-	1	-	Dense, multi-layered evergreen forest with open areas under the canopy; most often on lower, north-facing slopes of canyons, usually near water. Over 3000 ft	Low; suitable habitat does not occur onsite.
Vireo bellii pusillus	least Bell's vireo	SE/FE	X	X	1	-	Summer resident in riparian vegetation along rivers and larger creeks, also dry river bottoms, with both riparian canopy and a somewhat dense or shrubby understory for nesting. 0-610 m	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Vireo vicinior	gray vireo	SSC/BLM-S, BCC, USFS-S	-	-	1	-	South-facing slopes in chamise or redshank chaparral; also associated with scrub oak, manzanita, Ceonothus, pinyon, and sagebrush. 3,000-5,000 ft.	Low; suitable habitat does not occur onsite.
MAMMALS								

ATTACHMENT D

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Antrozous pallidus (pacificus or pallidus)	pallid bat	SSC/BLM-S, USFS-S	-	X	2	-	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, desert wash and desert scrub; often near rocky outcrops and water. Roost in rock crevices or buildings, less often in caves, tree hollows, mines etc. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Bassariscus astutus (octavus)	ringtail	FP/-	-	-	2	-	Rocky areas with cliffs or crevices for daytime shelter; desert scrub, chaparral, pine-oak and conifer woodland. Usually within 0.5 miles of water. Dens usually in rock shelter; also in tree hollows, under tree roots, in burrows dug by other animals, in remote buildings, and under brush piles. Nocturnal.	Low; suitable habitat does not occur onsite, Site too disturbed and subject to anthropogenic activity.
Chaetodipus californicus femoralis	Dulzura pocket mouse	SSC/-	-	-	2	-	Coastal sage scrub, mixed chaparral, oak woodland, chamise chaparral, and mixed conifer habitats; attracted to grass-chaparral edges. 0 to over 915 m.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	SSC/-	-	-	2	-	Sandy, herbaceous areas, usually associated with rocks or coarse gravel, in coastal scrub, chaparral, grasslands, sagebrush in western San Diego County; nocturnal.	Low; suitable habitat does not occur onsite.
Corynorhinus townsendii (pallescens)	Townsend's big-eared bat	STC, SSC/BLM-S, USFS-S	-	X	2	-	Wide variety of habitats, but often mesic habitats characterized by coniferous and deciduous forests, also grass and shrubland. All six known maternity colonies in coastal California are in old buildings or in a cave-like feature of a bridge. Roosts in the open, hanging from walls and ceilings. Extremely sensitive to human disturbance.	Low; suitable habitat does not occur onsite; Site subject to human disturbance.
Euderma maculatum	spotted bat	SSC/BLM-S	-	-	2	-	Desert, montane coniferous stands, canyon bottoms, open pasture, and hayfields. Roosts in caves, cracks and crevices in cliffs and canyons. Very rare in SD County.	Low; suitable habitat does not occur onsite.
Eumops perotis californicus	western mastiff bat	SSC/BLM-S	-	-	2	-	Conifer and deciduous woodlands, coastal scrub, grasslands, palm oases, chaparral, desert scrub, and urban. Roost in crevices in cliff faces, high buildings, trees, and tunnels. 150-915 m.	Low; Site could serve as marginally suitable foraging habitat but the single oak onsite is unlikely sufficient for roosting.
Lasiurus blossevillii	western red bat	SSC/-	-	-	2	-	Riparian areas, habitat edges and mosaics with trees for roosting that are protected from above and open below with open areas for foraging. Migratory, most likely to be in western SD in winter.	Low; suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Lasiurus xanthinus	western yellow bat	SSC/-	-	-	-	-	Valley foothill riparian, desert riparian, desert wash, and palm oasis habitats; increasingly, year-round in urban areas in planted palms; roosts in hanging palm fronds; forages over water and among trees for insects.	Low; suitable habitat does not occur onsite.
Lepus californicus californicus (L. c. bennettii)	San Diego black-tailed jackrabbit	SSC/-	-	X	2	-	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, mixed conifer, and closed cone forest and open areas. Common in irrigated pastures and row crops. 0-915+ m.	Moderate; marginally suitable habitat occurs onsite.
Myotis ciliolabrum	western small-footed myotis	-/BLM-S	-	-	2	-	Desert, badland, semiarid and mesic habitats, open stands in forests and woodlands. Requires drinking water. In summer, roost in rock crevices, caves, tunnels, under boulders, beneath loose bark, or in buildings. Hibernate in caves or mines. Maternity colonies often are in abandoned houses, barns, or similar structures.	Low; suitable habitat does not occur onsite.
Myotis evotis (evotis)	long-eared myotis	-/BLM-S	-	-	2	-	Brush, woodland and forest habitats; prefers coniferous woodlands and forests. Roost in buildings, hollow trees, mines, caves and fissures. Feeds on insects over open water. 0-2750 m	Low; suitable habitat does not occur onsite.
Myotis thysanodes	fringed myotis	-/BLM-S, USFS-S	-	-	2	-	Desert, grassland, and woodland. Roost in caves, mines, rock crevices, buildings, and other protected sites. Not common in SD County. 1200-2150 m, but has been recorded at low elevations along Pacific Coast.	Low; suitable habitat does not occur onsite.
Myotis volans (interior)	long-legged myotis	-/-	-	-	2	-	Montane coniferous forests and riparian habitats. Hibernates in caves and mines, but winter habits are poorly known. Roost in abandoned buildings, rock crevices, and under bark. In summer, does not use caves as daytime roost site. In some areas hollow trees are the most common nursery sites, but buildings and rock crevices are also used. 2000-3000 m	Low; suitable habitat does not occur onsite.
Myotis yumanensis (saturatus)	Yuma myotis	-/BLM-S	-	-	2	-	Riparian, desert scrub, open woodlands and forests, but closely tied to bodies of water. Nursery colonies in buildings, caves and mines, and under bridges.	Low; suitable habitat does not occur onsite.
Neotoma lepida intermedia	San Diego desert woodrat	SSC/-	-	-	2	-	Coastal sage scrub, oak woodlands and chamise chaparral; moderate to dense canopies preferred. Particularly abundant in rock outcrops, rocky cliffs and slopes. Nocturnal. Associated with cacti. 150-915 m	Low; suitable habitat does not occur onsite.

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Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite
Nyctinomops femorosaccus	pocketed free-tailed bat	SSC/-	-	-	2	-	Pine-juniper woodlands, desert scrub, palm oases, desert wash, desert riparian; associated wth rugged canyons, high cliffs, and rock outcroppings. Roost in rock crevices and caves during the day; may also roost in buildings or under roof tiles. Winter habits poorly known.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Nyctinomops macrotis	big free-tailed bat	SSC/-	-	-	2	-	Arid, rocky areas in rugged country. Roost in rock crevices in cliffs; also in buildings, caves, and occasionally tree holes. Winter habits unknown. < 1800 m.	Low; documented in Project quad (CNDDB) but suitable habitat does not occur onsite.
Odocoileus hemionus (fuliginatus)	southern mule deer	-/-	-	-	2	-	Varied habitats in mountains and lowlands, including various forests and woodlands, forest edges, shrublands, grasslands with shrubs, and residential areas. Often associated with successional vegetation, especially near agricultural lands.	Moderate; Site could serve as marginal foraging habitat.
Perognathus longimembris pacificus	Pacific pocket mouse	SSC/FE	X	-	1	X	Coastal sage scrub and grasslands with fine-grain, sandy substrates; historically inhabited coastal dunes, river alluvium, and sage scrub habitats on marine terraces within approximately 4 km of the ocean; 0-150 m.	Low; marginally suitable habitat occurs onsite but Site is too far inland.
Puma concolor cougar (Felis concolor)	mountain lion	-/-	-	X	2	-	Forests, woodlands, broken country with good cover of brush or woodland; associated with mountainous or remote undisturbed areas. Habitat of at least 2,200 sq km is needed to ensure long-term population persistence. Young are born in secluded places among rocks or dense vegetation.	Low; suitable habitat does not occur onsite.
Taxidea taxus (berlandieri or jeffersonii)	American badger	SSC/-	-	X	2	-	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Perfers open areas and may also frequent brushlands with little groundcover. Fossorial; requires burrowing rodents as prey.	Low; marginally suitable habitat occurs onsite but only documented occurrence (CNDDB) in Project quad is an undated collection from Escondido.

Listing Designations

Federal Listing (USFWS 2015, CDFW 2015)
FE - Federal-listed Endangered
FT - Federal-listed Threatened
FC - Federal candidate for listing
BCC - US Fish and Wildlife Service Bird of Conservation Concern
BLM-S - Bureau of Land Management Sensitive
USFS-S - US Forest Service Sensitive

State Listing (CDFW 2015, 2015)
SE - State-listed Endangered
ST - State-listed Threatened
STC - State Threatened Candidate
SEC - State Endangered Candidate
FP - CA Dept. of Fish and Wildlife Fully Protected
SSC - State Species of Special Concern

ATTACHMENT D

Species Name	Common Name	State/Federal Status	Cnty NE	NCPC	Cnty Group	MHCP NE	Habitat	Potential to Occur Onsite

WL - CA Dept. of Fish and Wildlife Watch List

CDF-S - CA Dept. of Forestry Sensitive

Cnty NE - an X in this column indicates the species is considered a Narrow Endemic by the County of San Diego (MSCP County of San Diego Subarea Plan 1997)

Cnty Group - County of San Diego Sensitive Animal Group (County of San Diego 2010)
1 - County of SD Sensitive Animal List Group 1
2 - County of SD Sensitive Animal List Group 2

NCPC - an X in this column indicates the species is proposed covered under in-process North County Multiple Species Conservation Program

ATTACHMENT E
Shady Oak Project Site Photographs, July 2016

View south of western mesic area characterized by western ragweed and curly dock

View east of dirt trail resulting from off-road vehicle activity

ATTACHMENT E
Shady Oak Project Site Photographs, July 2016

View north of disturbed area previously occupied by residence

View south of characteristic non-native grassland