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**BIOLOGICAL RESOURCES REPORT**

**ON**  
**APN 3204-008-048**

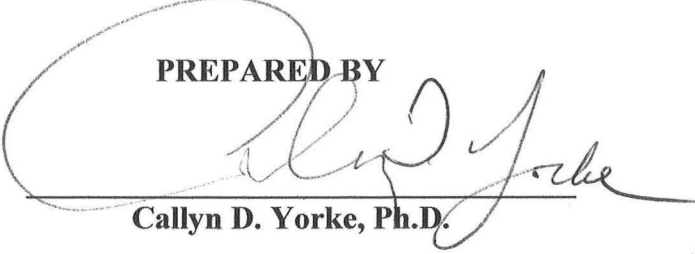
**19 Acres**

**60<sup>th</sup> Street West, North of Avenue L**  
**Lancaster, CA**

**PREPARED FOR**

**Andrew Park**  
**3453 West 8<sup>th</sup> Street**  
**Los Angeles, CA 90005**  
**Tel. (323) 376-3642**

**PREPARED BY**

  
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**September, 2018**

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Figure 2 Assessor's Parcel Map showing Project Site.

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- Floral Compendium
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- Resume of Project Biologist

## **INTRODUCTION**

An updated biological resources study and report was made on a ca. 19-acre parcel (hereafter referred to as the "study area," "project site," or "site.") in Lancaster, CA, following the request of Mr. Andrew Park. This report summarizes the biotic resources found on the site in comparison with our September, 2005 biological resources report on the same site (Yorke, Callyn D. 2005).

## **DESCRIPTION OF THE PROJECT SITE**

The project site, at an elevation of about 2,400 ft., consists of approximately twenty acres of disturbed desert scrub, located on the west side of 60<sup>th</sup> Street West, approximately in alignment with Avenue K-11, Lancaster, CA, APN 3204-008-048 (Figures 1 & 2). The land is part of a gentle north sloping alluvial plain with coarse sandy-clay soils.

As described in our September, 2005 report, the subject property has been cleared and nearly everywhere disturbed by grading, fire, trash disposal, OHV and foot traffic (Figures 3 & 4). Much of the vegetation is in various stages of second-growth and includes numerous species of exotic weeds. Scattered patches of native vegetation, e.g. Four-winged Saltbush and Rabbitbrush remain on the site. A well-developed stand of exotic locust trees forms part of the western property boundary.

There are no Joshua Trees or California Juniper on the property. A small drainage runs along 60<sup>th</sup> Street West; this feature supports mostly exotic herbaceous vegetation (Figure 3). No other surface water is found on the site. Presently, there is no established desert riparian community on the property.

Adjacent land east of the site is similar but with patches of Joshua Tree. The land immediately south and west of the site is largely ruderal pastureland. The only significant change to land in this vicinity since 2005, has been the addition of a suburban housing tract adjoining the northern boundary of the property (Figure 2).

## MATERIALS AND METHODS

Field surveys of the site were made on September 19 & 20, 2018 by Callyn D. Yorke, Principal Biologist. The entire site was covered on foot, first along the perimeter, then through the center sections. A binocular (10 x 40), camera and field notebook were used. Surveys were made between 0800- 1330 hrs. with clear skies. Air temperatures during the surveys ranged from 59F to 91F; winds were light out of the NW. Ground-level images of the site were obtained at this time (Figures 3-5).

Attention was given to detection of sensitive plant and animal species known to occur in this region. A focused study was made for signs of occupation by Long-eared Owl, Cooper's Hawk, LeConte's Thrasher, Loggerhead Shrike, Mojave Ground Squirrel and Silvery Legless Lizard.

A **CDFG-UCSC Phase I Burrowing Owl Survey** was completed by walking north-south transects spaced about 10 m apart across the entire site and adjacent property. Habitat potential for the Coast Horned Lizard and sensitive plants (e.g. Alkali Mariposa Lily) was evaluated. Due to a regional drought, only the unidentifiable remains of annual plants were present on the site. The California Department of Fish & Wildlife (CDFW) Natural Diversity Data Base (CNDDDB Rare Find) was reviewed for locations of sensitive species in the Lancaster-Palmdale region.

## RESULTS

### Flora

A total of 48 species of plant was found on the site (see Floral Compendium). Although some native desert annuals probably occur on the site seasonally, there is significant competitive coverage by invasive exotic herbs (e.g. *Salsola iberica*).

The results of this plant survey were essentially the same as the September, 2005 study and report. With exception of variation in species abundance, and disappearance of adventitious riparian elements due to drought, there has been no significant vegetation change on the property. No State or Federally listed endangered, rare or sensitive plant species was found on the site (see *Impacts to Sensitive Plants*). Native flora on the site is relatively impoverished due to brush clearance, grading and soil compaction.



## **Fauna**

Four Side-blotched lizards (*Uta stansburiana*) were found on the site. No butterflies, amphibians were found on or adjacent to the site. In addition to the same bird species found in 2005, several new species of bird were found during the present surveys. Those species were, **Cooper's Hawk** (see *Impacts to Sensitive Species*), Barn Owl, **Burrowing Owl** (sign—see *Impacts to Sensitive Species*), Anna's Hummingbird, American Kestrel, Barn Swallow, House Wren, and Lincoln's Sparrow. Significantly, most of the newly documented bird species found on the site were in or near the trees on the western boundary of the property. Mammals found on the site (primarily by their sign) were similar in abundance and type to those found in 2005.

## **Corridors of Dispersal**

The subject property is near the western end of what once was an east-west corridor of dispersal in this region. There remain large, open tracts of land to the west, and to a lesser extent, southward of the site. Thus, the site may attract dispersing animals from adjacent open land and foothills.

However, significant barriers to animal dispersal occur immediately to the north (a housing subdivision) and east (60<sup>th</sup> Street West). It appears unlikely that regular movement and colonization of animals occurs on the subject property. Most likely, wildlife would have difficulty becoming established on the site and/or may experience a sudden impact on 60<sup>th</sup> Street West.

Non-native trees on the site appear to be attractive to several species of bird. These trees may provide nesting opportunities and encourage local wildlife dispersal. For that reason, we recommend saving the trees on the western boundary of the property (see *Mitigation Measures*).

## Impacts to Sensitive Species - Overview

### KEY TO ABBREVIATIONS

CDFW (CDFG) = California Department of Fish & Wildlife

USFWS = United States Fish & Wildlife Service

CNPS = California Native Plant Society

SSC = CDFW Species of Special Concern

FSC = USFWS Species of Special Concern

### Special Status Species

Special status species include plants and animals that are either listed as endangered or threatened under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), listed as rare under the California Native Plant Protection Act (Lists 1 & 2), or considered to be rare but not formally listed by resource agencies, professional organizations (e.g. California Native Plant Society [CNPS], and the scientific community. For the purposes of this Biological Resources Report, the term *sensitive species* refers to any of the following:

- Species listed as Endangered or Threatened under the Federal ESA (Title 50, Code of Federal Regulations [CFR] Parts 17.11 and 17.12);
- Species listed as Endangered, Threatened or Rare under the CESA (Sections 670.2 and 670.5, Title 14, California Code of Regulations [CCR]);
- Species without a formal listing status that meet definitions of *Endangered* or *Rare* under CEQA Guidelines, Section 15380, including CDFW *Species of Special Concern, Candidate, or Proposed* species for listing under the Federal Endangered Species Act;
- CDFW *Species of Special Concern* or *Fully Protected* by CDFW; or
- CNPS rare plant ranks:
  - List 1A: Species presumed extinct in California;
  - List 1B: Species considered rare or endangered in California and elsewhere;
  - List 2: Species considered rare or endangered in California but are more common elsewhere.

## Literature Review

A literature review was conducted to determine the potential for occurrence of special status plant and wildlife species in the Antelope Valley region. An online California Natural Diversity Database (CNDDDB) was consulted for locations of sensitive species. USGS 7.5- minute quadrangles: Lancaster West, Ritter Ridge, Palmdale and adjacent quadrangles were reviewed. Additionally, the following sources used:

- United States Fish and Wildlife Service (USFWS) list of endangered, threatened and proposed species.
- California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Plants of California.
- Special Animals List (CDFW )
- Field Guides and other publications relevant to the distribution of plants and animals in the region.
- My field notes from hundreds of biological resources reports and field surveys conducted in this region (Yorke, C. 1984-2018: <http://avconline.avc.edu/cyorke/fieldnotes/>).

## Impacts to Sensitive Species - Discussion

### FLORA

No CNPS, State or Federal listed plant was found on the site. Several listed species are known to occur in this region and are detectable in spring through early summer. Potential impacts to these species are considered below.

**Kern County Evening Primrose** (*Camissonia kernensis*) is listed as a rare species by the CNPS, but unlisted by State and Federal agencies. This plant is found in desert washes and canyons from 2500 to 6000 feet in elevation, and in Joshua Tree woodland. Flowering occurs in May. No individuals or remains of this species were found. Habitat on the site is largely inappropriate; adverse impacts are unlikely.

**Alkali Mariposa Lily** (*Calochortus striatus*) is listed a Category 1B (locally endangered) species by the CNPS and as a Level 2 Candidate species by the USFWS. This attractive, relatively rare annual plant is found locally in this vicinity (Yorke, pers. observation) in alkali depressions supporting chenopod scrub vegetation (CNDDDB; Yorke pers. observ.). Flowering occurs from April to June, depending on adequate seasonal rainfall. Soils on the site are coarse and largely inappropriate for Alkali Mariposa Lily; project impacts are unlikely.

**Desert Cymopterus** (*Cymopterus deserticola*) is listed as a rare and highly restricted species by the CNPS and Level 2 Candidate species by USFWS. This plant occurs on Edwards AFB in creosote scrub. Flowering occurs in April. No evidence of this species was found in the surveyed areas. Potential for this species occurring on the site is moderate at the appropriate season. A spring-time survey is recommended.

**Sagebrush loeflingia** (*Loeflingia squarrosa* var. *artemisiarum*) is CDFW SSC and CNPS Category 2.2 (rare) species found in Great Basin scrub in sand dunes with clay slicks. No individuals of this plant were found on the site. Habitat on the site appears inappropriate; project impacts are unlikely.

**Short-joint beavertail cactus** (*Opuntia basilaris brachyclada*) is a FSC and CNPS Category 1B plant occurring in Joshua tree woodland and upland desert-chaparral. No individuals of this conspicuous species were found on the site; project impacts are unlikely.

**Peirson's morning-glory** (*Calystegia peirsonii*) is a CNPS Category 4 plant species found in chenopod scrub and foothill chaparral. This is a rhizomatous perennial with conspicuous white flowers that has been found in the foothills immediately south of the site. Habitat on the site appears largely inappropriate; project impacts are unlikely.

**Peirson's lupine** (*Lupinus peirsonii*) is a CNPS Category 4 plant that occurs in Joshua tree woodland and pinyon-juniper woodland. No individuals of this plant were found on the site. Habitat on the site is inappropriate. Project impacts are unlikely.

**Pigmy poppy** (*Canbya candida*) is a CNPS Category 1B plant found in Joshua tree woodland and desert scrub, in sandy places. No individuals of this plant were found on the site. Potential habitat occurs for this species; a spring-time survey is recommended.

**Parry's spineflower** (*Chorizanthe parryi* var. *parryi*) is a CNPS Category 4 species found in chenopod scrub and creosote desert scrub. Flowering occurs from April to July. No individuals of this plant were found on the site. Habitat on the site appears appropriate; a spring-time survey is recommended.

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**Clokey's cryptantha** (*Cryptantha clokeyi*) is a CNPS Category 1B annual found in upland desert scrub on rocky soils. Habitat on the site appears inappropriate for this species; project impacts are unlikely.

**Crowned Muilla** (*Muilla coronata*) is listed by the CNPS as a rare species that is endangered in part of its range, but as a taxonomically invalid species by USFWS. This plant is found in heavy soils in Joshua Tree woodland, between 3,000 and 5,000 feet in elevation. Flowering occurs from March through April. No sign of this plant was found on the site. Habitat for this species is largely inappropriate; project impacts are unlikely.

**Barstow woolly sunflower** (*Eriophyllum mohavense*) is a Federal Special Concern Species (FSC) and California Native Plant Society (CNPS) category 1B (rare, threatened or endangered throughout their range) species. It occurs in rises between sinks in xerophytic saltbush scrub. No evidence of this plant was found on the site. Habitat is largely inappropriate; project impacts are unlikely.

**Mason's neststraw** (*Stylocline masonii*) is a FSC and CNPS 1B species that occurs in chenopod (e.g. saltbush) scrub. No sign of this plant was found on the site. Habitat is largely inappropriate; project impacts are unlikely.

**Palmer's grappling hook** (*Harpagonella palmeri*) is a FSC and CNPS category 2 species (rare, threatened, or endangered in California, but more common in other states). It occurs in sage scrub and clay soils below 2,500 feet. No sign of this plant was found in the study area. Habitat on the site is inappropriate. Project impacts are unlikely.

**Pale-yellow layia** (*Layia heterotricha*) is a CNPS Category 1B annual herb found in valley grassland and riparian habitat, from 0-5,000 ft. in elevation. Habitat on the site appears inappropriate; project impacts to this species are unlikely.

**Lancaster milkvetch** (*Astragalus preussi* var. *laxiflorus*) is a CNPS 1B species that occurs in chenopod scrub, alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. No sign of this conspicuous plant species was found in the surveyed area; habitat appears inappropriate and project impacts are unlikely.

**Parish's alkali grass** (*Puccinellia parishii*) is a CNPS Category 1B and CDFG S1.1 plant found in alkali springs and seeps in deserts. Habitat on the site is inappropriate. Impacts to this species are unlikely.

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**Lemmon's syntrichopappus** (*Syntrichopappus lemmonii*) is a FSC and CNPS Category 4 species (species of limited distribution in California but whose existence does not appear to be susceptible to threat). This plant occurs in Joshua tree woodland with sandy or gravelly soil. No sign of this plant was found on the site. The habitat on the site is largely unsuitable; impacts are unlikely.

**Red rock poppy** (*Eschscholzia minutiflora* ssp. *twisselmannii*) is a CDFW S2.2 and CNPS Category 1B.2 species found in Mojavean desert scrub, especially on volcanic tuff soils. Nearby records of this plant are from Edwards Air Force Base. No individuals of this plant were found on the site. Habitat on the site is inappropriate and project impacts are unlikely.

## FAUNA

Evidence of two sensitive species were found on the subject property, Burrowing owl Cooper's hawk. Several sensitive animal species are known to occur in this region; potential impacts to these are addressed below.

**Mojave Desert Tortoise** (*Gopherus agassizii*) is a CDFW and USFWS Endangered Species known to occur in this region, principally east of Highway 14. Absolutely no sign (e.g. burrows, scat, shell fragments) of desert tortoise was found on the subject property or adjacent parcels during our surveys. Nor was there any evidence found of historical occupation by tortoises. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT on the Mojave desert tortoise.

**Coast horned lizard** (*Phrynosoma coronatum*) is a CDFW Species of Special Concern (SSC) known to occur on Avenue M-12, near 45<sup>th</sup> Street West in Quartz Hill (CNDDDB; Yorke, pers. observation). These lizards prefer loose sandy to gravelly soils around the perimeter of the western Antelope Valley (Yorke, pers. observ.). Habitat on the site is marginally appropriate; a spring-time survey is recommended (see *Mitigation Measures*).

**Silvery Legless Lizard** (*Aniella pulchra*) is a CDFW SSC that occurs in sandy to loamy soil in the vicinity of ground moisture and leaf-litter. Fallen branches, leaf-litter and other debris was overturned in search of these lizards. No legless lizards were found. Habitat on the property is marginally appropriate; a spring-time survey is recommended (see *Mitigation Measures*).

**Burrowing owl** (*Athene cunicularia*) is a CDFW “Species of Special Concern” (SSC) in California. Several family groups of burrowing owls were evidently displaced by solar farm installations in fields of the western Antelope Valley (e.g. along 110<sup>th</sup> Street West near Avenue I) Other small groups of Burrowing owl have been recorded historically near 40<sup>th</sup> Street West and Avenue K; Avenue I to Avenue K, east of Challenger Way).

The population of Burrowing owl in the Antelope Valley today is only a small fraction of its size fifteen years ago (Yorke, unpublished field notes). Abandoned farmland in the eastern Antelope Valley (i.e. between 60<sup>th</sup> Street East and 30<sup>th</sup> Street East, Avenues H-K) may still support burrowing owls (Yorke, pers. observation). Burrowing owls are declining for a number of reasons, e.g., habitat loss (e.g. solar farms), human encroachment, pesticides, and illegal hunting.

A Phase I (clearance) survey protocol for Burrowing owl was completed on the site during the September 2018 surveys. Several regurgitated pellets of Burrowing owl were found on a concrete cylinder along the southern property line (Figure 5). No other sign of this species was found on the property during the most recent two surveys (September 2018). A pre-construction survey (Phase I & II) for Burrowing owl is recommended (see *Mitigation Measures*).

**Long-eared owl** (*Asio otus*) is a CDFW SSC occasionally found in fall and winter months, in small groups. These owls prefer relatively isolated clusters of trees and shrubs in this vicinity (Yorke, pers. observ.). The number of sightings of this species has decreased over the past 20 years in the Antelope Valley. Reasons for the apparent decline of long-eared owls in this region may include habitat loss and encroachment. These owls are extremely shy and tend to avoid areas with human activity. No sign of long-eared owl was found on the site; the trees on the western boundary of the site may attract this species during winter and migration; otherwise, project impacts are unlikely (see *Mitigation Measures*).

**Short-eared owl** (*Asio flammeus*) is a CDFW and USFWS SSC occasionally found during migration in fall and spring in the Antelope Valley; there are no documented nesting records of this species in this area (Yorke, pers. observation). Berms on the southern boundary of the site may occasionally attract this species during migration. Otherwise, project impacts are unlikely.



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**Prairie falcon** (*Falco mexicanus*) is another CDFW SSC that appears to be declining in portions of its range. No individuals of this species were seen on the project site during the surveys. This is a wide ranging species that usually nests in remote canyons and forages throughout the region. It may be declining in response to cumulative impacts from loss of open fields for foraging. Direct project impacts to nesting prairie falcons are unlikely; relatively insignificant project impacts to wintering falcons may result from a small, incremental loss of foraging opportunities.

**Golden eagle** (*Aquila chrysaetos*) is a CDFW SSC that may also nest in the mountains and foothills bordering the Antelope Valley, foraging widely elsewhere. In winter months (November-February) the local population of golden eagles is augmented by migrants from other regions. At such times, individuals, particularly immature birds, commonly perch on power poles along roadways and may be struck by cars when they attempt to feed on roadkill. No eagles were found on or near the subject property; impacts to nesting eagles are unlikely. Direct project impacts on wintering golden eagles are also unlikely.

**Ferruginous hawk** (*Buteo regalis*) is a CDFW SSC that winters in the Antelope Valley in relatively high numbers. Birds forage in open fields, often using power poles for lookouts. They rarely take roadkill and thus are seldom hit by automobiles. The cumulative loss of foraging habitat in the large open spaces of the western Antelope Valley may be the greatest threat to this species in the region. Direct project impacts on wintering ferruginous hawks in the vicinity of the subject property are unlikely.

**Swainson's hawk** (*Buteo swainsoni*) is a State Threatened species known to have nested in the eastern Antelope Valley. A CNDDDB record indicates a pair of Swainson's hawks nested in a locust tree surrounded by agricultural fields near Avenue I and 50<sup>th</sup> Street East, in 1996 and 1999. Similar nesting sites have been more recently found in the western Antelope Valley, north of Avenue I (Yorke, pers. Observ.). A row of locust trees along the western border of the site may provide nesting opportunities for Swainson hawk. A spring-time survey is recommended (see *Mitigation Measures*).

**Cooper's hawk** (*Accipiter cooperii*) is a CDFW SSC that nests locally in the Antelope Valley and is a passage migrant and winter visitor. One individual of this species was flushed from trees on the western border of the project site. Habitat on the site is appropriate for nesting Cooper's hawk; a spring-time survey is recommended (see *Mitigation Measures*).

**LeConte's thrasher** (*Toxostoma lecontei*) is a Federal Candidate for listing, and has been found at several scattered localities in the Antelope Valley (e.g. east Palmdale and Edwards AFB). A small population possibly occurs in Jawbone Canyon north of Mojave and also (though not in recent years) in east Palmdale, near 40<sup>th</sup> Street East and Avenue No thrashers were found during the surveys of the study site; habitat on the site is largely inappropriate and project impacts are unlikely.



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**Loggerhead shrike** (*Lanius ludovicianus*) is another Federal Candidate for listing and a CDFW SSC. Habitat loss and pesticide poisoning are blamed for the decline of this bird. No individuals of this species were found on the subject property during the two most recent surveys (September 2018). Habitat on the site is appropriate; a spring-time survey is recommended (see *Mitigation Measures*).

**Horned lark** (*Eremophila alpestris actia*) is a CDFW SSC. No horned larks were found on the site during the survey. Horned larks nest in the western Antelope Valley and appear to have a relatively large, viable population (Yorke, unpublished field notes). Presently it is not known if this species nests on or adjacent to the study site. Since this subspecies is probably not the form currently considered by CDFW as a SSC, implementation of the proposed project will have no significant impacts on the "California" horned lark (*Eremophila alpestris actia*).

**Bell's Sparrow** (*Artemisiospiza belli belli*) is a CDFW SSC resident in Big Sage and alkaline sink areas of the Antelope Valley. No sign of this subspecies species was found on the site. Habitat on the site is marginal; project impacts are unlikely.

Virtually all **Bats** in California are CDFW SSC. Consequently, any loss of foraging, roosting or breeding habitat caused by this project could have impacts on these nocturnal insectivores. If bats are using the subject property for feeding, implementation of the proposed development will result in minimal loss of foraging habitat; nearby open land should also provide adequate foraging opportunities, in addition to increased insect availability in adjacent, well-watered developments with outdoor lighting.

**Mojave ground squirrel** (*Xerospermophilus mohavensis*) is a CDFW threatened species that occurs at scattered localities in the Mojave Desert, principally east of Highway 14, including nearby Edwards AFB. There are also records of MGS from east Palmdale. No sign of this species was found (or expected to be found without a trapping study) on the subject property. Habitat on the site is inappropriate. We recommend a DECLARATION OF NO SIGNIFICANT IMPACT ON MGS.

**American badger** (*Taxidea taxus*) is a CDFW SCC that may occasionally be attracted to resources on the subject property. However, no sign of badger was found during the surveys. Badgers have occurred in this area, as one was reportedly seen crossing Highway 14 near Rosamond in 1993 (L. Uhazy, pers. communication). Another road-killed badger was found in western Leona Valley on Elizabeth Lake Road in '01 (Yorke, pers. observ.) A badger's territory is seldom less than 100 acres, indicating that the present site contains inadequate spatial resources for one breeding pair. Project impacts to badgers are unlikely.

### **General Cumulative Impacts**

Whenever wilderness is taken for development few native organisms benefit. This is because in the complex web of life everything is interconnected and dependent. Removing vegetation destroys habitat for countless microscopic organisms with larger species dependent on them for food. For example, the tiny moth *Tegeticula paradoxa* is the only known pollinator of the Joshua Tree; disappearance of either species results in extinction of both. And the overall result of loss of Joshua Trees, an ecological keystone species, is simplification of the food web to include a new assemblage of relatively few, hardy species. Consequently, exotic pests like Russian thistle, tumble mustard, stork's bill, brome grasses, Argentine fire ants, aphids, snails, Asian rock doves and European starlings become established.

### **Mitigation Measures**

The following mitigation measures are recommended if and when further developments are proposed for the subject property that involve modifications, e.g. grading, vegetation removal, paving, construction or alteration of the existing community of plants and animals in any way.

- 1) A Spring-time survey (April-May) for sensitive plants and animals (see Impacts to Sensitive Plants and Animals).
- 2) A pre-construction, clearance survey for Burrowing owl shall be completed. If Burrowing owl is found using the site, development shall be halted until the owls can be safely evicted by a qualified biologist.
- 3) All fencing shall include openings for the movement of wildlife across the site.
- 4) Outdoor lighting on the site shall be kept to a minimum.
- 5) All pets shall be kept indoors or in fenced enclosures.
- 6) Native vegetation and established trees shall be protected from disturbance outside the development footprint(s) of the site.

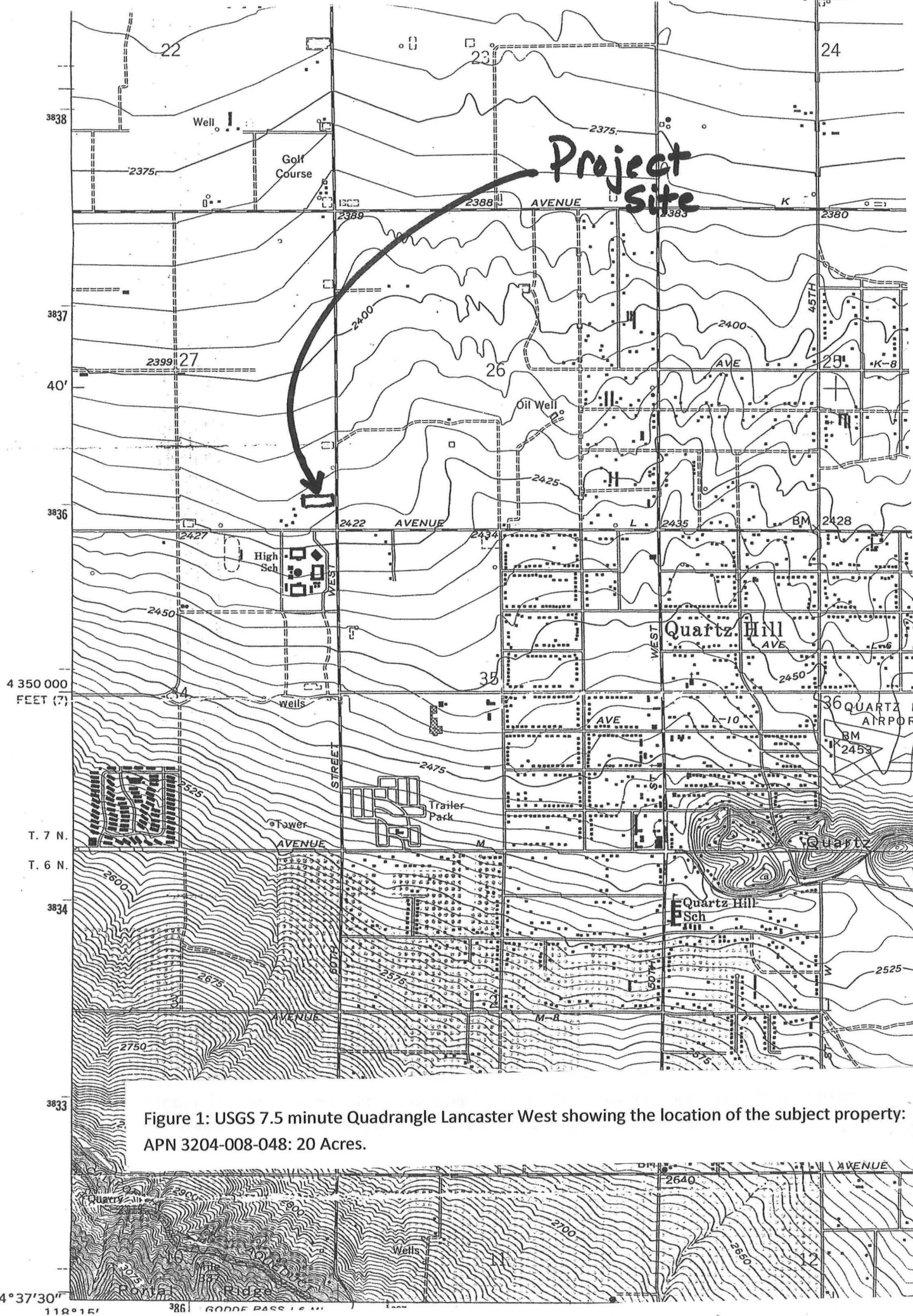


Figure 1: USGS 7.5 minute Quadrangle Lancaster West showing the location of the subject property: APN 3204-008-048: 20 Acres.

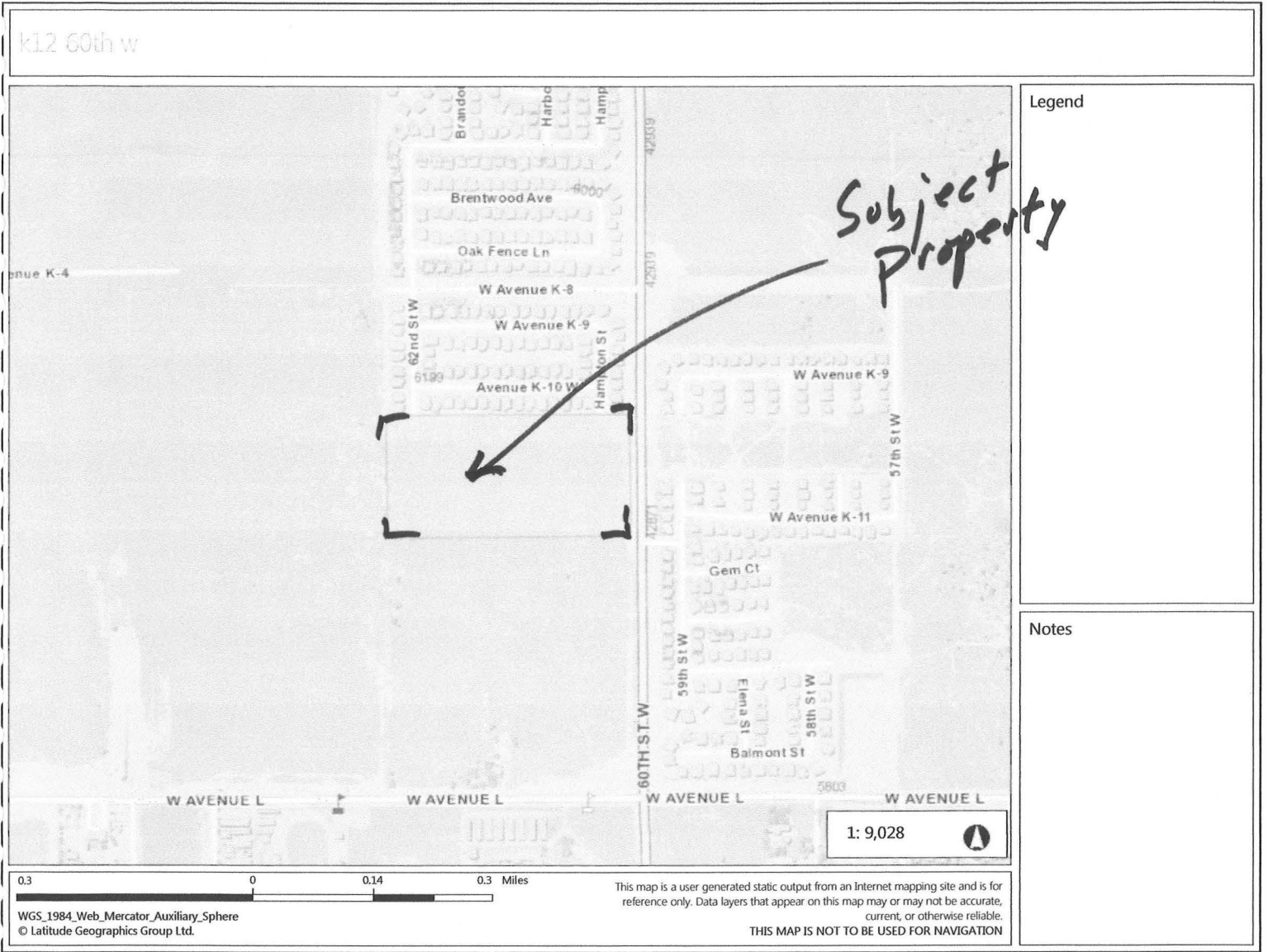


Figure 2: Los Angeles County Assessor's Parcel Map showing the location of the subject property:  
APN 3204-008-048: 20 Acres.





Figure 4: From NEC, Viewing SW across subject property  
APN 3204-008-048 Sept. 19, 2018



Figure 3: From NEC, Viewing S along 60th Street West  
APN 3204-008-048 Sept. 19, 2018





Figure 5: Burrowing Owl Pellets Recovered  
from the subject property.  
APN 3204-008-048  
Sept. 19, 2018

## REFERENCES

### ONLINE

#### Calflora

**California Natural Diversity Data Base**

**Birds of North America Online**

**Birds of Southern California**

---

Abrams, L. 1923. Illustrated Flora of the Pacific States, Vols. 1,2. Stanford: Stanford University Press.

Abrams, L. and R.S. Ferris 1951. Illustrated Flora of the Pacific States, Vol. III. Stanford University Press.

\_\_\_\_\_. 1960. Illustrated Flora of the Pacific States, Vol. IV. Stanford University Press.

Adest, G.A. 1972. Intraspecific and interspecific behavior of *Ammospermophilus leucurus* and *Citellus mohavensis*. Unpubl. M.S. Thesis. California State University, Los Angeles. 83 pp.

American Ornithologist's Union 1983. Checklist of North American Birds Including latest supplements (2014). American Ornithologists Union, Washington D.C.

Baldwin, Bruce G. et. al (editors), 2002. *The Jepson Desert Manual. Vascular Plants of Southeastern California*. University of California Press, Berkeley. 624 pp.

Baldwin, B.G., D.H. Goldman, et. Al. 2012. *The Jepson Manual: Vascular plants of California, second edition*. University of California Press, Berkeley, California.

Bartholomew, G. A. and J.W. Hudson 1960. Aestivation in the Mojave ground squirrel *Citellus mohavensis*. Bull. Mus. Comp. Zool. 129:193-208.

Belthoff, James R. and B.W. Smith , 2003. Patterns of artificial burrow occupancy and reuse by burrowing owls in Idaho. Wildlife Soc. Bull. 31 (1): 138-145.

Bent, A.C. 1937. Life histories of North American Birds of Prey (Parts 1&2). Dover, New York. 891 pp.

\_\_\_\_ 1942. Life Histories of North American Flycatchers, Larks, Swallows and their Allies. (PP. 364-371). Dover, New York. 555 pp.

\_\_\_\_ 1948. Life Histories of North American Nuthatches, Wrens, thrashers, and their Allies. (pp. 411-419). Dover, New York. 475 pp.

\_\_\_\_ 1950. Life Histories of North American Wagtails, Shrikes, Vireos, and their Allies(pp. 131-180). Dover, New York. 411 pp.

Brooks, M.L. and J.R. Matchett, 2002. Sampling methods and trapping success trends for the Mojave ground squirrel *Spermophilus mohavensis*. California Department of Fish & Game 88(4) 165-177.

Brittingham, Steve and L.W. Walker. '00. Facilitation of *Yucca brevifolia* recruitment by Mojave Desert shrubs. Western North American Naturalist 60(4): 374-383.



Bureau of Land Management (BLM) 1989. Desert Tortoise Habitat: Interim Map. U.S. Department of the Interior, Bureau of Land Management, Desert District. Riverside, California.

Burt, W.H. 1936. Notes on the habits of the Mohave ground squirrel. *Journal of Mammalogy* 17: 221-224.

California Department of Fish & Wildlife, Natural Diversity Data Base, (CNDDDB RARE FIND): 2018. Printouts for Lancaster West, Palmdale and adjacent quadrangles.

\_\_\_\_\_'04 State and Federally Listed Endangered, Threatened, and Rare Plants of California. CDFG: CNNDDB.

\_\_\_\_\_'04. Additions to standard exceptions on scientific collecting permits. CDFG, Sacramento, CA.

\_\_\_\_\_'04. Bird Species of Special Concern. the Resources Agency CDFG Wildlife and Habitat Data Anaylis Branch. Special Animals.

\_\_\_\_\_'04. Mammal Species of Special Concern. The Resources Agency CDFG Wildlife and Habitat Data Analysis Branch. Special Animals.

\_\_\_\_\_'1992. Designated areas of crucial Desert Tortoise Habitat. Three maps published in: Third Annual Desert Tortoise Survey Techniques, Report Writing, and Handling Procedures Workshop. Presented by the Desert Tortoise Council, June, 1992.

\_\_\_\_\_'1987. Five year status report for Mohave ground squirrel. CDFG Nongame Bird & Mammal Section, Sacramento, CA. 6 pp.

Butts, K.O. 1973. Life history and habitat requirements of burrowing owls in western Oklahoma. M.S. Thesis, Oklahoma State University, Stillwater. 188 pp.

California Burrowing Owl Consortium 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. 13 pp.

California Environmental Quality Act (CEQA) 1986; 1992 ed. Office of Planning and Research, State of California. 336 pp.

California Native Plant Society, 2001. Inventory of Rare and Endangered Plants of California. California Native Plant Society, Special Publication #1 6th edition. 387 pp.

Carlson, J. and C. D. Yorke, 2004. Suburban water retention basins as significant habitat for migratory waterbirds in the Antelope Valley, Ca. ms. in prep.

Cheesemore, D.L. and D. Caroll 1976. First record of the Mohave ground squirrel (*Citellus mohavensis*) in Kern County, California. CDFG 62(2) 158-59.

Clements, R. F. & C. R. Feldmeth 1989. Joshua Tree Preservation Plan: The distribution and condition of Joshua trees (*Yucca brevifolia*) on a 5-acre parcel (TT Map No. 48156) in the City of Palmdale, Los Angeles County, CA. Ecological Research Services. 12 pp.

Columbe, H.N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia* in the Imperial Valley of California. Condor: 73: 162-176.

Desmond, M.J. 199. Ecological aspects of burrowing owl nesting strategies. M.S. Thesis, university of Nebraska, Lincoln. 114 pp.

\_\_\_\_ J.A. Savidge and T.E. Seibert, 1995. Spatial patterns of burrowing owls (*Speotyto cunicularia*) nests in black-tailed prairie dog (*Cynomys ludovicianus*) towns. Canadian Journal of Zoology 73: 1375-1379.

Dunn, Jon L. and J. Alderfer, 2017. Field Guide to the Birds of North America. National Geographic, Washington D.C. 7<sup>th</sup> ed. 591 pp.

Elton, C. 1927. Animal Ecology (pp. 146-161). Sidgwick & Jackson, Ltd. London, 209 pp.

Emmel, T.C. and J.F. Emmel 1973. The Butterflies of Southern California. Natural History Museum of Los Angeles County.

Fishman, R.H. 1989. Biota Survey and Impact Assessment for Tentative Tract #48032, City of Palmdale, Los Angeles County, California. 26 pp.

Garrett, K. and J. Dunn 1981. Birds of Southern California, Status and Distribution. Los Angeles Audubon Society. 408 pp.

Garth, J.S. and J.W. Tilden 1986. California Butterflies. University of California Press, Berkeley, 246 pp.

Grinnell, J. and J. Dixon 1918. Natural history of the ground squirrels of California. The Monthly Bulletin. California State Commission of Horticulture &: 666-68.

Hafner, D.J. and T.L. Yates 1983. Systematic status of the Mohave ground squirrel *Spermophilus mohavensis* (Subgenus *Xerospermophilus*). Journal of Mammalogy 64: 397-404.

Hall, E.R. 1981. the Mammals of North America. John Wiley & Sons, N.Y. (2 vols.) 1181 pp.

Henry, C. J. and L.J. Blus, 1981. Artificial burrows provide new insights into burrowing owl nesting biology. Raptor Research 15: 82-85.

Hohman, J.P., R.D. Ohmart, and J. Schwartzmann 1980. An annotated bibliography of the Desert Tortoise (*Gopherus agassizi*). Desert Tortoise Council Special Publication No. 1, Long Beach, CA.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. CDFG, 156 pp.

\_\_\_\_\_ and D.J. Keil 1990. California Vegetation (4th Ed.) Biological Sciences Department, California Polytechnic State University San Luis Obispo, 318 pp.

Hoyt, D.F. 1972. Mohave ground squirrel survey. CDFG Special Wildlife Investigation Project #W-54-R-4, 10 pp.

Jameson, E.W. Jr. and H.J. Peeters, 1988. California Mammals. Calif. Natural History Guides, 52, University of California Press, 402 pp.

Jennings, M.R. and M.P. Hayes, 1994. Amphibian and Reptile Species of Special Concern in California. Final report submitted to the Dept. of Fish & Game Inland Fisheries Division under contract No. 8023. 255 pp.

Leitner, P. and B.M. Leitner 1991. Third year (MGS) Baseline Report, Coso grazing exclosure monitoring study, Inyo County, California. Unpubl. Biota Report Prepared for McClenahan & Hopkins Assoc. 5010 Hapden Lane, Bethesda, MD 20814.

Lightner, J. 2011. San Diego County Native Plants. San Diego Flora, San Diego, CA 428 pp.

Long, C.A. and C.A. Killingley 1983. The Badgers of the World. C. Thomas Publ. Springfield, Illinois. (pp. 84-170).

Los Angeles County Department of Regional Planning 1992. Workshop proceedings on Significant Ecological Areas and environmentally sensitive resources in Los Angeles County. Impact Analysis Section: (6-18-92). 10 pp.

\_\_\_\_\_, 2000 Biological Resources Assessment of the Proposed Antelope Valley Significant Ecological Area. PCR Services et. al. 35 pp.

MacKay, P. 2003. Mojave Desert Wildflowers. Globe Pequot Press, Guilford, Conn. 338 pp.

Martin, D.J., 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75: 446-456.

Munz, P.A. 1974. A Flora of Southern California. University of California Press. 1086 pp.

Pengelley, E.T. 1969. Influence of light on hibernation in the Mohave ground squirrel *Citellus mohavensis*. pp. 11-16 IN: Physiological systems in semiarid environments. (C.C. Hoff and M.C. Riesdesel eds.) University of New Mexico Press. Albuquerque, N.M. 42 pp.

Phillips, Edwin A., K.K. Page, and S.D. Knapp, 1980. Vegetational characteristics of two stands of Joshua Tree Woodland. *Madrono* 27(1): 43-47.

Rasmuson, Kaylie E., J.E. Anderson and N. Huntly, 1994. Coordination of branch orientation and photosynthetic physiology in the Joshua Tree (*Yucca brevifolia*). *Great Basin Naturalist* 54(3): 204-211.

Recht, M.A. 1977. The Biology of the Mohave Ground Squirrel, *Spermophilus mohavensis*; home range, daily activity, foraging and weight gain, and thermoregulatory behavior. University of California, Los Angeles, Ph.D. Dissertation. 117 pp.

Rich, T. 1984. Monitoring Burrowing Owl populations; Implications of burrow reuse. *Wildlife Society Bulletin* 12: 178-180.

Riley, C.V. 1892. The yucca moth and yucca pollination. *Missouri Botanical Garden Annual Report*: pp. 99-158.

Rowlands, Peter G. 1978. The vegetation dynamics of the Joshua Tree (*Yucca brevifolia* Engelm.) in the Southwestern United States of America. Ph.D. Dissertation, University of California, Riverside. 190 pp.

Sawyer, J.O. and T. Keeler-Wolf, 1995. *A Manual of California Vegetation*. California Native Plant Society. 471 pp.

Smith, J.P. Jr. and K. Berg 1988. Inventory of rare and endangered vascular plants of California. *Calif. Native Plant Society Special Publication No. 1* (4th ed.) 168 pp.

Smith, Stanley B., T.L. Hartsock, and P.S. Nobel, 1983. Ecophysiology of *Yucca brevifolia*, an arborescent monocot of the Mojave Desert. *Oecologia* 60: 10-17.

Stall, Chris 1990. Animal tracks of Southern California. The Mountaineer's Press, Seattle. 124 pp.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians (Third Edition). Houghton Mifflin Co. 533 pp.

Thompson, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. *Condor* 73: 177-192.

U.S. Fish & Wildlife Service 2017. Federal Register of Endangered and Threatened Wildlife and Plants. Dept. of the Interior. 50 CFR Part 17. Washington, D.C.

\_\_\_\_\_. 1991. Set of maps of categorized Desert Tortoise Habitat for the Mojave Desert.

\_\_\_\_\_. 1992. Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise. USDI and USFWS Region 1,2,6. October, 1992.

Went, F. W. 1948. Ecology of desert plants. I. Observations on germination in the Joshua Tree National Monument. *Ecology* 29(3): 242-253.

Wessman, E.V. 1977. The distribution and habitat preference of the Mojave Ground Squirrel in the southeastern portion of its range. Administrative Report for the Wildlife Management Branch, U.S. Bureau of Land Management, 77-5: 11-15.

Whitson, Tom D. (editor), 2001. Weeds of the West. University of Wyoming. 9<sup>th</sup> edition. 627 pp.

Williams, D.F. 1986. Mammalian Species of Special Concern in California. California Dept. of Fish & Game, Wildlife Management Division. Administrative Report No. 86-1, 112 pp.

Zemal, R. and C. Gall 1980. Observations on Mohave ground squirrels, *Spermophilus mohavensis*, in Inyo County, California. *Journal of Mammalogy* 61:347-350.

## Appendices

### Floral Compendium

The following is a list of vascular plants found in the study area during the surveys. Relative abundances were estimated visually. Nomenclature generally follows Baldwin et. al. (2012) and Calflora (2013).

#### LEGEND

##### **Frequency**

**A** = more than 50 individuals

**B** = 25-50 individuals

**C** = 10-20 individuals

**D** = 1-10 individuals

Latin binomial names are italicized, followed by common names and frequencies.

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#### ASTERACEAE

- Ambrosia dumosa* Burro-weed D
- Ambrosia acanthocarpa* Annual Bursage A
- Ericameria nauseosa* Rabbitbush A
- Acroptilon repens* Russian Knapweed (exotic) D
- Lessingia lemmoni* Autumn Vinegar Weed A
- Corethrogyne filaginifolia* Cudweed Aster C
- Heterotheca grandifolia* Telegraph Weed A
- Centaurea sp.* Knapweed (exotic) C
- Conzya bonariensis* Hairy Fleabane (exotic) D

*Conzya canadensis* Horseweed C  
*Hymenoclea salsola* Cheesebush D  
*Teraxacum* sp. Dandelion D  
*Helianthus annus* Common Sunflower A  
*Iva axillaris* Poverty Sumpweed C

#### BETULACEAE

*Alnus rhombifolia* White Alder D

#### BORAGINACEAE

*Amsinckia tessellata* Fiddleneck B

#### BRASSICACEAE

*Sisymbrium altissimum* Tumble Mustard A (exotic)  
*Alyssum* sp. D (exotic)  
*Brassica nigra* Black Mustard D (exotic)  
*Lepidium latifolium* Pepperweed D (exotic)

#### CHENOPODIACEAE

*Salsola iberica* Russian Thistle A (exotic)  
*Atriplex canescens* Four-winged Saltbush B  
*Atriplex spinifera* Spiny Saltbush D  
*Krascheninnikovia lanata* Winterfat D

#### EUPHORBIACEAE

*Eremocarpus setigerus* Dove weed A  
*Euphorbia albomarginata* Rattlesnake Weed B

#### GERANIACEAE

*Erodium cicutarium* Red-stemmed Filaree A (exotic)



FABACEAE

*Robinia pseudo-acacia* Locust C (exotic)

GERANIACEAE

*Erodium cicutarium* Red-stemmed Filaree A (exotic)

HYDROPHYLLACEAE

*Phacelia* sp. C

LAMIACEAE

*Trichostemma lanceolata* Vinegar Weed A

PLANTAGINACEAE

*Plantago major* Broadleaf Plantain D (exotic)

POACEAE

*Bromus madritensis* ssp. *rubens* Foxtail Chess A (exotic)

*Bromus tectorum* Cheat Brome A (exotic)

*Bromus rubens* Foxtail Chess A (exotic)

*Bromus carinatus* Carinate Brome B

*Bromus mollis* Soft Chess A (exotic)

*Bromus secalinus* Rye Brome A (exotic)

*Agrostis stolonifera* Creeping Bentgrass D (exotic)

*Oryzopsis hymenoides* Indian Rice Grass D

*Polypogon monspeliensis* Rabbitfoot Polypogon C

*Festuca octoflora* Six Weeks Fescue D (exotic)

*Schismus barbatus* Mediterranean Schismus A (exotic)

*Avena fatua* Wild Oat B (exotic)

POLYGONACEAE

*Eriogonum deflexum* Skeleton Weed D

SOLANACEA

*Datura meteloides* Jimson Weed C

TAMARICACEAE

*Tamarix ramosissima* Salt Cedar D (exotic)

ZYGOPHYLLACEAE

*Tribulus terrestris* Puncture Weed D (exotic)

## Appendices

### FAUNAL COMPENDIUM

#### Explanation of Symbols

##### Relative Frequency and Abundance

- c** -- common: observed or expected throughout the site in high numbers.
- f** -- fairly common: observed or expected in moderate numbers.
- u** -- uncommon: observed or expected in low numbers.
- o** -- occasional: observed or expected with low frequency.
- s** -- scarce: rarely observed or expected on the site.

##### Local Status

\* Presence noted visually, vocally, or other sign. (1,2, etc. = maximum number of individuals found during a survey).

Museum/University Record: One or more records of this species in institutional collections from this region.

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**Note:** This faunal species list includes animals observed or expected to occur on or in the immediate vicinity of the study site.

## Butterflies

### DANIDAE

- Monarch (*Danaus plexippus*) s
- Striated Queen (*D. gilippus strigosus*) u

### NYMPHALIDAE

- Neumogen's Checkerspot (*Chlosyne acastus*) u
- Leanira Checkerspot (*Chlosyne leanira cerrita*) s
- Mylitta Crescent (*Phycoides mylitta*) s
- Painted Lady (*Vanessa cardui*) o

### PIERIDAE

- Becker's White (*Pontia beckerii*) s
- California White (*P. sisymbrii*) u
- Checkered White (*P. protodice*) u
- Southern Dogface (*Zerene cesonia*) o
- Nicippe Yellow (*Eurema nicippe*) s
- Dainty Sulphur (*Nathalis iole*) s
- Desert Orange-tip (*Anthocharis cethura cethura*) u
- Grinnell's Marble (*Anthocharis lanceolata australis*) u
- Desert Marble (*Euchloe hyantis lotta*) u

### LIBYTHEIDAE

- Snout Butterfly (*Libythea bachmanii larvata*) s

### RIODINIDAE

- Mormon Metalmark (*Apodemia mormo mormo*) u
- Cythera Metalmark (*A. mormo cythera*) u
- Behr's Metalmark (*A. virgulti*) u

## LYCAENIDAE

- Grey hairstreak (*Strymon melinus*) s
- Marine Blue (*Leptotes marina*) s
- Pygmy Blue (*Brephidium exilis*) s
- Acmon Blue (*Plebejus acmon acmon*) u
- Bernardino Blue (*Euphilotes battoides bernardino*) u
- Elvira's Blue (*E. pallescens elvira*) u
- Mojave Blue (*E. mojave*) u
- Small Blue (*Philotiella speciosa*) s

## MEGATHYMIDAE

- Martin's Giant Skipper (*Megathymus coloradensis martini*) u

## HESPERIIDAE

- Saltgrass Skipper (*Polites sabuleti*) s
- Juba Skipper (*Hesperia juba*) u
- Sootywing (*Pholisora catullus*) o

## **Amphibians and Reptiles**

### BUFONIDAE

Western Toad (*Anaxyrus boreas halophilus*) s

### HYLIDAE

Pacific Chorus Frog (*Hyla regilla*) u

### GEKKONIDAE

Western Banded Gecko (*Coleonyx variegatus*) s

### PHRYNOSOMATIDAE

Zebra-tailed Lizard (*Callisaurus draconoides*) s

Long-nosed Leopard Lizard (*Gambelia wislizenii*) o

Coast Horned Lizard (*Phrynosoma blainvillii*) o (see text)

Desert Horned Lizard (*Phrynosoma platyrhinos*) s

Desert Spiny Lizard (*Sceloporus magister*) c

Western Fence Lizard (*Sceloporus occidentalis*) u

Common Side-blotched Lizard (*Uta stansburiana*) 4

### XANTUSIDAE

Desert Night Lizard (*Xantusia vigilis*) u

### TEIIDAE

Western Whiptail (*Aspidoscelis tigris*) c

### LEPTOTYPHLOPIDAE

Western Blind Snake (*Leptotyphlops humilis*) s

## COLUBRIDAE

- Glossy Snake (*Arizona elegans*) u
- Western Shovel-nosed Snake (*Chionactis occipitalis*) s
- Night Snake (*Hypsiglena torquata*) u
- Common Kingsnake (*Lampropeltus getulus*) u
- Coachwhip (*Masticophis flagellum*) c
- Gopher Snake (*Pituophis melanoleucus*) u
- Long-nosed Snake (*Rhinccheilus lecontei*) u
- California Black-headed Snake (*Tantilla planiceps*) s
- Lyre Snake (*Trimorphodon biscutatus*) s

## ANNIELLIDAE

- Silvery Legless Lizard (*Aniella pulchra*) s (see text)

## VIPERIDAE

- Mojave Rattlesnake (*Crotalus scutulatus*) o

## TESTUDINIDAE

- Desert Tortoise (*Gopherus agassizii*) (see text)

## Birds

### Note

Numbers in parentheses following a species indicate the maximum number of individuals seen or heard during a survey. Taxonomy follows the 2013 AOU Checklist of Birds of North America, including the 54<sup>th</sup> Supplement.

### ODONTOPHORIDAE

California Quail (*Callipepla californica*) f

### CATHARTIDAE

Turkey Vulture (*Cathartes aura*) 1

### ACCIPITRIDAE

Northern Harrier (*Circus cyaneus*) u  
Ferruginous Hawk (*Buteo regalis*) u (see text)  
Red-tailed Hawk (*Buteo jamaicensis*) c  
Swainson's Hawk (*Buteo swainsoni*) u (see text)  
Golden Eagle (*Aquila chrysaetos*) u (see text)  
Cooper's Hawk (*Accipiter cooperi*) 1 (see text)

### CHARADRIIDAE

Killdeer (*Charadrius vociferus*) u

### COLUMBIDAE



Feral Rock Dove (*Columba livia*) c (adjacent developments)  
Mourning Dove (*Zenaida macroura*) 8  
Eurasian Collared Dove (*Streptopelia decaocto*) 3 (adjacent property).

#### CUCULIDAE

Greater Roadrunner (*Geococcyx californianus*) o

#### TYTONIDAE

Common Barn Owl (*Tyto alba*) 1

#### STRIGIDAE

Great horned Owl (*Bubo virginianus*) o  
Burrowing Owl (*Athene cunicularia*) sign (see text)  
Long-eared Owl (*Asio otus*) s

#### CAPRIMULGIDAE

Lesser Nighthawk (*Chordeiles acutipennis*) u  
Common Poorwill (*Phalaenoptilus nuttallii*) s

#### APODIDAE

Vaux's Swift (*Chaetura vauxi*) s

#### TROCHILIDAE

Anna's Hummingbird (*Calypte anna*) 1  
Costa's Hummingbird (*C. costae*) u  
Black-chinned Hummingbird (*Archilochus alexandri*) u  
Rufous Hummingbird (*Selasphorus rufus*) s

PICIDAE

Ladder-backed Woodpecker (*Picoides scalaris*) s  
Northern Flicker (*Colaptes auratus*) u

FALCONIDAE

American Kestrel (*Falco sparverius*) 2  
Prairie Falcon (*Falco mexicanus*) u (see text)

TYRANNIDAE

Black phoebe (*Sayornis nigricans*) u  
Say's phoebe (*Sayornis saya*) c (adjacent property)  
Ash-throated flycatcher (*Myiarchus cinerascens*) u  
Western Kingbird (*Tyrannus verticalis*) f

LANIIDAE

Loggerhead Shrike (*Lanius ludovicianus*) s (see text)

CORVIDAE

Western Scrub-jay (*Aphelocoma californica*) u  
Common Raven (*Corvus corax*) 2

ALAUDIDAE

Horned Lark (*Eremophila alpestris*) c (see text)

HIRUNDINIDAE

Cliff swallow (*Petrochelidon pyrrhonota*) u  
Violet green swallow (*Tachycineta thalassina*) s  
Tree swallow (*Tachycineta bicolor*) s  
Barn swallow (*Hirundo rustica*) 1  
Rough-winged swallow (*Stelgidopteryx ruficollis*) s

REMIZIDAE

Verdin (*Auriparus flaviceps*) u

AEGITHALIDAE

Bushtit (*Psaltriparus minimus*) s

TROGLODYTIDAE

Cactus Wren (*Campylorhynchus brunneicapillus*) u

Rock Wren (*Salpinctes obsoletus*) u

Bewick's Wren (*Thryomanes bewickii*) f

House Wren (*Troglodytes aedon*) 1

REGULIDAE

Ruby-crowned Kinglet (*Regulus calendula*) u

TURDIDAE

Hermit Thrush (*Catharus guttatus*) s

Swainson's Thrush (*C. swainsoni*) s

American Robin (*Turdus migratorius*) u

MIMIDAE

Northern Mockingbird (*Mimus polyglottos*) 1

Le Conte's Thrasher (*Toxostoma lecontei*) s (see text)

California Thrasher (*Toxostoma redivivum*) u

## STURNIDAE

European Starling (*Sturnus vulgaris*) c (adjacent property)

## PARULIDAE

Orange-crowned Warbler (*Oreothlypis celata*) f  
Nashville Warbler (*Oreothlypis ruficapilla*) s  
Common Yellowthroat (*Geothlypis trichas*) u  
MacGillivray's Warbler (*Geothlypis tolmiei*) s  
Wilson's Warbler (*Cardellina pusilla*) s  
Yellow-rumped Warbler (*Setophaga coronata*) c

## ICTERIDAE

Western Meadowlark (*Sturnella neglecta*) s  
Scott's Oriole (*Icterus parisorum*) s  
Bullock's Oriole (*Icterus bullockii*) u  
Black-throated Sparrow (*Amphispiza bilineata*) u  
White-crowned Sparrow (*Zonotrichia leucophrys*) c  
Bell's Sparrow (*Artemisospiza belli*) u  
Lark Sparrow (*Chondestes grammacus*) u  
Savannah Sparrow (*Passerculus sandwichensis*) u  
Vesper Sparrow (*Pooecetes gramineus*) u  
Golden-crowned Sparrow (*Zonotrichia atricapilla*) s  
Song Sparrow (*Melospiza melodia*) s  
Lincoln's Sparrow (*Melospiza lincolni*) 1

## FRINGILLIDAE

House finch (*Carpodacus mexicanus*) 4  
American Goldfinch (*Spinus tristis*) s  
Lesser Goldfinch (*Spinus psaltria*) 2

## PASSERIDAE

House sparrow (*Passer domesticus*) c (adjacent site)

## Mammals

### Note

This is a largely hypothetical list of species based on very broad range boundaries which may include the present site. No attempt is made here to assess relative abundance.

### GEOMYIDAE

Botta's Pocket Gopher (*Thomomys bottae*) sign

### SORICIDAE

Crawford's Shrew (*Notiosorex crawfordi*)

### PHYLLOSTOMIDAE

California Leaf-nosed Bat (*Macrotus californicus*)

### VESPERTILIONIDAE

Little Brown Myotis (*Myotis lucifugus*)

Yuma Myotis (*M. yumanensis*)

Long-eared Myotis (*M. evotis*)

Fringed Myotis (*M. thysanodes*)

Long-legged Myotis (*M. volans*)

California Myotis (*M. californicus*)

Western Small-footed Myotis (*M. ciliolabrum*)

Western Pipistrelle (*Parastrellus hesperus*)

Big Brown Bat (*Eptesicus fuscus*)

Western Red Bat (*Lasiurus blossevillii*)

Hoary Bat (*Lasiurus cinereus*)

Townsend's Big-eared Bat (*Corynorhinus townsendii*)

Pallid bat (*Antrozous pallidus*)

## MOLOSSIDAE

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)  
Pocketed Free-tailed Bat (*Nyctinomops femorosacca*)  
Western Mastiff Bat (*Eumops perotis*)

## LEPORIDAE

Desert Cottontail (*Sylvilagus audubonii*) sign  
Black-tailed Jack Rabbit (*Lepus californicus*)

## SCIURIDAE

White-tailed Antelope Squirrel (*Ammospermophilus leucurus*)  
California Ground Squirrel (*Otospermophilus beecheyi*) 1

## HETEROMYIDAE

Agile Kangaroo Rat (*Dipodomys agilis*)  
Merriam's Kangaroo Rat (*Dipodomys merriami*) sign  
Panamint Kangaroo Rat (*D. panamintinus mohavensis*)

## CRICETIDAE

Deer Mouse (*Peromyscus maniculatus*) sign  
Desert Woodrat (*Neotoma lepida*) sign

## CANIDAE

Coyote (*Canis latrans*) sign  
Feral Domestic Dog (*Canis familiaris*) sign  
Desert Kit Fox (*Vulpes macrotis*)

PROCYONIDAE

Ringtail (*Bassariscus astutus*)  
Raccoon (*Procyon lotor*)

MUSTELIDAE

Badger (*Taxidea taxus*) (see text)  
Western Spotted Skunk (*Spilogale gracilis*)  
Striped Skunk (*Mephitis mephitis*)

FELIDAE

Mountain Lion (*Puma concolor*)  
Bobcat (*Lynx rufus*)  
Domestic Cat (*Felis catus*)

CERVIDAE

Black-tailed Deer (*Odocoileus hemionus*)

EQUIDAE

Domestic Horse (*Equus caballus*)

HOMINIDAE

Human (*Homo sapiens*) sign

## **Callyn D. Yorke**

### **Project Manager/Principal Biologist**

Dr. Callyn Yorke is a zoologist with international field research and teaching experience in Ornithology, Herpetology and Ecology. In addition to having completed several research projects overseas, he has been active in the study of the distribution of birds in Southern California for thirty-one years. Dr. Yorke has authored over 125 scientific professional biological resources reports and several peer-reviewed scientific journal articles. He holds a full-time, tenured position as Professor of Zoology at Antelope Valley College, Lancaster, California, and a part-time position as an instructor at UCLA Extension, Dept. of Social and Biological Sciences.

### **EDUCATION**

B.Sc. 1975. Biological Science. California State University, Hayward.

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Research Associate, Vertebrate Paleontology 1987- present Los Angeles County Museum of Natural History, CA.

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## THESES AND PUBLICATIONS

Yorke, C.D. 1976. Reproductive strategies in the Hylidae (New World treefrogs). Biology Dept., California State University, Hayward. 45 pp.

Yorke, C.D. 1978. Reptiles of Pulau Tenggol (Malaysia): A new record of the Green Mangrove Snake (*Boiga cyanea*) and two new geckoes (*Gymnodactylus* spp.). *Nature Malaysiana* 3: 45-50.

Yorke, C.D. 1979. The Biology of the Frog *Polypedates leucomystax* (Anura: Rhacophoridae) in Peninsular Malaysia. *Nature Malaysiana* 4: 22-25.

Smits, A.W. and C.D. Yorke 1980. Winter activity and mortality in juvenile chuckwallas ( *Sauromalus obesus* ) *Journal of Herpetology* 14: 100-101.

Yorke, C.D. 1983a. Survival of embryos and larvae of the frog *Polypedates leucomystax* (Anura: Rhacophoridae) in Malaysia. *Journal of Herpetology* 17: 235-41.

Yorke, C.D. 1983b. Avian ecology in a Malaysian rubber tree plantation.  
Ph.D. Dissertation. Dept. of Zoology, University of Arkansas, Fayetteville. 213 pp.

Yorke, C.D. 1984. Avian Community Structure in Two Modified Malaysian Habitats.  
*Biological Conservation* 29: 345-362.

Yorke, C.D. 2016 Unpublished field notes, Tropical Biology Scouting Reports.  
etc. Website: <http://avconline.avc.edu/cyorke/>

*Callyn D. Yorke, Ph.D. Biological Resources Reports*  
**Professional Work Experience**  
**A Partial List of**  
**Biological Resources Reports completed in the Antelope Valley Region**  
**1989 - 2018**

- 1) APN 3029-12-08: 80 Acres, L.A. County.
- 2) APN 3209-14-21: 10 Acres, L.A. County.
- 3) APN 3010 -002-003-8: 23 Acres, Palmdale.
- 4) APN 3022-25-10: 5 Acres, Palmdale.
- 5) APN 3056-12-31: 20 Acres, Palmdale.
- 6) APN 3053-009-004: 35 Acres, Palmdale.
- 7) APN 3053-009-007: 20 Acres, Palmdale.
- 8) APN 302-26-9;57: California City, Kern County.
- 9) APN 3114-13-001: 80 Acres, Lancaster.
- 10) APN 3126-19-024: 4 Acres, Lancaster.
- 11) APN 3176-002-021: 10 Acres, Lancaster.
- 12) APN 3128-003-036: 9.6 Acres, Lancaster.
- 13) APN 3001-001-035: 10 Acres, Palmdale.
- 14) APN 3109-002-099: 2.5 Acres, Lancaster.
- 15) APN 3109-001-36,37,38,39: 10 Acres, Lancaster
- 16) APN 3053-06-05;20: 20 Acres, Palmdale.
- 17) APN 3114-13-29: 3 Acres, Lancaster.
- 18) APN 3004-15-42,43: 12 Acres, Palmdale.
- 19) Sections 2,3,25,26,27, 35: 1500 Acres, Palmdale.
- 20) APN 359-03-002: 20 Acres: Kern County (Rasmussen: default)

- 21) APN 3064-16-10,22: 240 Acres, Llano, Los Angeles County.
- 22) APN 0419-091-10;12: 319 Acres, San Bernardino County.
- 23) APN 345-100-02-00-9: 100 Acres, Willow Springs, Kern County.
- 24) Proposed Fairmont and Antelope Buttes Reservoir, 1600 acres, Los Angeles County.
- 25) APN 3003-003-025,28,29: 15 acres, Palmdale, CA.
- 26) SE corner of L-8 and 45<sup>th</sup> Street West, 6 acres, Quartz Hill, Los Angeles County.
- 27) APN 3114-013-087,88,89: 35 acres, Lancaster, Los Angeles County.
- 28) 45<sup>th</sup> Street W and L-8: 6 acres, Quartz Hill, CA
- 29) MB 31-13, TR 2916, L 16: 20 Acres, Palmdale, CA
- 30) Fort Tejon Road and Union Pacific Railway: 59 Acres, Palmdale, CA
- 31) APN 3114-103-087,88,89: Avenue H-8 and 20<sup>th</sup> street West, 35 Acres, Lancaster, CA
- 32) APN 3150-014-006: 47 Acres, Avenue K and 30<sup>th</sup> Street East, Lancaster, CA
- 33) APN 3109-013-079,031 & 032, 8.2 Acres, 25<sup>th</sup> Street West & Ave M, Lancaster, CA
- 34) TTM 53869, 30 Acres, 55<sup>th</sup> Street West and California Aqueduct, Palmdale, CA
- 35) 80<sup>th</sup> Street West, between Ave. L and M, 800 Acres, Lancaster, CA
- 36) APN 3147-002-046, 10 Acres, NWC Lancaster Blvd. and 20<sup>th</sup> St. E. Lancaster, CA
- 37) APN 251-120-06, 32 Acres, SEC Orange St. and 25<sup>th</sup> St. W, Rosamond, CA
- 38) APN 3001-090-001 & 002, 9 Acres, SWC Entrar Drive and Ave. N-8, Palmdale, CA
- 39) TTM 61490, 80 Acres, NEC Ave J-8 and 50<sup>th</sup> Street West, Lancaster, CA
- 40) 12 Acres, Ave I and 20<sup>th</sup> Street West, Lancaster, CA
- 41) APN 3150-022-009, 5 Acres, Lancaster Blvd. and 30<sup>th</sup> Street East, Lancaster, CA

- 42) APN 386-100-034-9, 72 Acres, Grandview Drive, Lake Elsinore, Riverside Co. CA
- 43) APN 3203-018-086 & 087, 10 Acres, Avenue K and 65<sup>th</sup> Street West, Lancaster, CA
- 44) APN 3154-001-021 & 022, 10 Acres, NEC Ave. I and 37<sup>th</sup> Street East, Lancaster, CA
- 45) APN 3170-007-007, 29 Acres, Avenue K and 27<sup>th</sup> Street East, Lancaster, CA
- 46) APN 3109-001-061, 063 & 064, 15 Acres, 40<sup>th</sup> Street West and L-4, Lancaster, CA
- 47) APN 3204-16-56; 57;49, 15 Acres, SEC 70<sup>th</sup> Street W and Ave. L-12, Lancaster, CA
- 48) APN 3203-001-003 & 004; 3219-024-020, 120 Ac. Ave. I and 90<sup>th</sup> St. W, Lancaster
- 49) APN 3203-015-143 & 069, 13 Acres, Ave. J and 52<sup>nd</sup> St. West, Lancaster, CA
- 50) Avenue L and M, between 100<sup>th</sup> St W and 110<sup>th</sup> St. W, 768 Ac. Lancaster, CA
- 51) APN 3111-001-063, 10 Ac. NWC Ave. m-8 and 35<sup>th</sup> Street West, Lancaster, CA
- 52) APN 3150-029-003 & 004, 20 Acres, Ave. J and 37<sup>th</sup> Street East, Lancaster, CA
- 53) APN 394-031-011, 5 Acres, Amethyst Road and Tawny Ridge Lane, Victorville, CA
- 54) APN 3176-021-004, 005 & 062, 20 Acres, Ave I and 10<sup>th</sup> St. E, Lancaster, CA
- 55) APN 3150-003-001 & 002, 20 Acres, Ave I and 35<sup>th</sup> St. East, Lancaster, CA
- 56) Avenue J and 35<sup>th</sup> Street East, 30 Acres, Lancaster, CA
- 57) Avenue I and 12<sup>th</sup> Street East, 19 Acres, Lancaster, CA
- 58) APN 375-240-49, 2.3 Acres, 60<sup>th</sup> Street West and Willow Ave., Rosamond, CA
- 59) APN 3147-002-046, 10 Acres, Lancaster Blvd. and 20<sup>th</sup> Street East, Lancaster, CA
- 60) APN 3205-4-8; 3 & 0, 5 Acres, SWC 80<sup>th</sup> St, W and Elizabeth Lake Rd. L.A. Co.
- 61) APN 375-113-19, 2.5 Ac., Gaskell Road, 60<sup>th</sup> Street W, Rosamond, CA
- 62) Avenue J and 32<sup>nd</sup> St. West, 2 Acres, Lancaster, CA
- 63) APN 3024-8-14, 10 Acres, 60<sup>th</sup> Street East and Ave. R, Palmdale, CA
- 64) APN 3124- 013-010, 4.7 Acres, Ave J-8 and 20<sup>th</sup> St. West, Lancaster, CA

- 65) Lancaster Blvd. and 35<sup>th</sup> Street East, 16 Acres, Lancaster, CA
- 66) APN 3109-002-031; 032, 025 & 026, 34 Ac. Ave. M and 32<sup>nd</sup> St. W, Lancaster
- 67) APN 3150-010-030, 4.5 Acres, Ave J-6 and 22<sup>nd</sup> St. East, Lancaster, CA
- 68) APN 3111-012-056, 10 Acres, Ave M-12 and 45<sup>th</sup> St. West, Lancaster, CA
- 69) APN 3147-001-043,044,049, 050, 10 Acres, Ave. I and 15<sup>th</sup> St. E, Lancaster, CA
- 70) APN 3024-002-021;002-022, 20 Acres, Palmdale Blvd. and 75<sup>th</sup> St. E, Palmdale, CA
- 71) APN 3204-006-049,050,051, 8 Acres, Ave. K-12 and 57<sup>th</sup> St. West, Lancaster, CA
- 72) APN 472-10-025, 20 Acres, NEC Brabham and 35<sup>th</sup> St West, Rosamond, CA
- 73) APN 3133-016-011, 3.2 Acres, Genoa Ave. and Ave. J, Lancaster, CA
- 74) APN 3052-015-007;25;36;59;50;78, 106 Acres, Barrel Springs Road, Palmdale, CA
- 75) APN 3150-009-054, 10.5 Acres, Ave. J-4 and 22<sup>nd</sup> St. East, Lancaster, CA
- 76) APN 3150-012-025 & 026, 10 Acres, NWC Ave J-8 and 30<sup>th</sup> St. E, Lancaster, CA
- 77) APN 3153-012-014, 4 Acres, 32<sup>nd</sup> St. West And Ave J, Lancaster, CA
- 78) APN 3204-003-062 & 063, 157 Acres, SWC 72<sup>nd</sup> St West and Ave. L, Lancaster, CA
- 79) APN 3124-012-010, 3.25 Acres, NEC Ave. J-4 and 22<sup>nd</sup> St. West, Lancaster, CA
- 80) APN 3114-013-087,88,89, 35 Acres, 20<sup>th</sup> St. W and Ave. H-8, Lancaster, CA
- 81) APN 0394- 031-023 & 028, 17 Acres, Mojave Drive, Victorville, CA
- 82) APN 3203-003-006, 025 & 028, 15 Acres, SEC 40<sup>th</sup> St. E and Ave. Q, Palmdale, CA
- 83) APN 3153-025-003, 20 Acres, NEC Ave K and 50<sup>th</sup> Street West, Lancaster, CA
- 84) APN 3109-027-003, 004, 13 Acres, 40<sup>th</sup> St. West, Ave. L-6, Lancaster, CA
- 85) APN 3150-024-001; 008, 9,11 & 12, 20 Acres, Lancaster Blvd. and 25<sup>th</sup> St. E

- 86) APN 3109-020-023, 5 Acres, Ave. L-8 and 20<sup>th</sup> Street West, Lancaster, CA
- 87) APN 3204-008-031, 20 Acres, 60<sup>th</sup> Street West and Ave. L, Lancaster, CA
- 88) APN 3105-017-001 & 017, 20 Acres, Ave. H and 42<sup>nd</sup> St. West, Lancaster, CA
- 89) APN 3150-030-006;016 & 013, 8 Acres, Ave J-2 and 26<sup>th</sup> St East, Lancaster, CA
- 90) Challenger Way and Avenue K-6, 24 Acres, Lancaster, CA
- 91) APN 3204-023-182, 10 Acres, Ave. M-8 and 70<sup>th</sup> Street West, Lancaster, CA
- 92) APN 3109-012-024, 5 Acres, 28<sup>th</sup> St. West and Ave. L-10, Lancaster, CA
- 93) APN 3110-007-007, 10 Acres, 40<sup>th</sup> St. West and Ave. K-12, Lancaster, CA
- 94) TTM 060198, 40 Acres, 45<sup>th</sup> St. East and Avenue M-8, Lancaster, CA
- 95) APN 3123-005-042, 2 Acres, Ave. J and 20<sup>th</sup> St. West, Lancaster, CA
- 96) APN 3109-025-020, 2.5 Acres, Ave. L-8 and 10<sup>th</sup> St. West, Lancaster, CA
- 97) Avenue L and 10<sup>th</sup> St. West, 5 Acres, Lancaster, CA
- 98) APN 3111-002-001;2,24-26;16;17;62, 80 Acres, 40<sup>th</sup> St. W and Ave. N, Lancaster
- 99) APN 3150-012-033, 10 Acres, Ave. J-8 and 25<sup>th</sup> Street East, Lancaster, CA
- 100) APN 3109-001-065;066, 20 Acres, 35<sup>th</sup> St. West and Ave. L-4, Lancaster, CA
- 101) Avenue O and 10<sup>th</sup> Street West, 5 Acres, Palmdale, CA
- 102) APN 3111-002-050;052-054, 13 Acres, 45<sup>th</sup> Street West and Ave. M-14, Lancaster
- 103) APN 3023-040-018 & 062, 4 Acres, SEC 45<sup>th</sup> Street East and Ave. R., Palmdale
- 104) APN 3203-015-077, 5 Acres, SEC 55<sup>th</sup> Street West and Avenue J, Lancaster, CA
- 105) APN 3150-010-036, 2.4 Acres, Ave. J-6 and 22<sup>nd</sup> Street East, Lancaster, CA