

October 4, 2016

Brandon Roth Stratham Homes 2201 Dupont Drive, Suite 300 Irvine, California 92612

SUBJECT: Results of a Biological/Regulatory Overview for an 11.45-Acre Property (APN#

1100-191-04) Located in Rancho Cucamonga, San Bernardino County, California.

Dear Mr. Roth:

Glenn Lukos Associates, Inc. (GLA) visited the above-mentioned property on August 23, 2016 to determine the presence of potential development constraints¹. For the purpose of this report, constraints are considered sensitive biological and jurisdictional resources that may 1) require partial or complete avoidance of resources; 2) require permits from one or more regulatory agencies; 3) require mitigation to offset impacts to resources; 4) result in a seasonal delay to development; and/or 5) require additional focused surveys.

Sensitive resources considered for this analysis include special-status species (e.g., threatened and endangered, species of concern, etc.), special-status habitats, nesting birds, waters of the United States (including wetlands) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) and the Regional Water Quality Control Board, and waters of the State (including riparian vegetation) subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW). Impacts to special-status species and habitats must be addressed during project review under the California Environmental Quality Act (CEQA). In addition, federally listed species (threatened or endangered) are regulated by the U.S. Fish and Wildlife Service (USFWS) pursuant to the Federal Endangered Species Act (ESA). Species listed as threatened or endangered by the State of California are regulated by CDFW pursuant to the State ESA. Wildlife that are assigned other designations by CDFW (i.e., species of concern, fully-protected species, etc.), and plants given special status by the California Native Plant Society (CNPS) are not granted additional protection, except that impacts to these species may need to be evaluated pursuant to CEQA.

¹ Please note, the biological constraints analysis will alert the client to potential constraints in development of the property. Additional analysis may be necessary to support any permitting that may be required and/or to satisfy local or lead agency requirements under CEQA. Separate and more detailed surveys may be required for the permitting/approval process, if needed.

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1.0 SITE LOCATION AND DESCRIPTION

The approximately 11.45-acre property is located in the City of Rancho Cucamonga, San Bernardino County, California [Exhibit 1 – Regional Map]. The property is located approximately 152 meters (500 feet) northwest of the intersection between East Foothill Boulevard and East Avenue, and is depicted on the U.S. Geological Survey (USGS) topographic map Guasti, California (dated 1966 and photorevised in 1981) at Section 4, Township 1 South, Range 6 West [Exhibit 2 – Vicinity Map].

The property is surrounded by residential development to the north and east; a sports park to the west and private property to the south. Exhibit 3 provides an aerial image of the site, including the property boundary. The property contains several existing easements that extend linearly northeast to southwest through the property, including a Metropolitan Water District (MWD) easement, a Southern California Edison (SCE) easement, and other public utilities easements.

2.0 METHODOLOGY

GLA biologist Jeff Ahrens visited the property on August 23, 2016, to conduct a site review. Site reconnaissance was conducted in such a manner as to allow inspection of the entire site by direct observation, including the use of binoculars. The property was walked following transects spaced appropriately in order to provide complete coverage of the site. The property was inspected to determine whether any special-status species, habitats, or potential jurisdictional areas are present on site.

In addition to site reconnaissance, evaluation of the property included a review of the California Natural Diversity Database (CNDDB) for the Guasti quadrangle and surrounding quadrangles², a review of the California Native Plant Society (CNPS) on-line inventory³, and soil map review.

² California Department of Fish and Wildlife (August, 2016) Natural Diversity Database: RareFind 5.

³ California Native Plant Society. 2016. On-Line Inventory of Rare and Endangered Plants of California (Eighth Edition).

3.0 RESULTS

3.1 **Existing Conditions**

As previously stated, the 11.45-acre Project is located approximately 152 meters (500 feet) northeast of the intersection between Foothill Boulevard and East Avenue in the City of Rancho Cucamonga and is bordered by residential development and private undeveloped property. The Project site is highly disturbed due to long established land use practices including disking and mowing. In addition, the Project site supports a mixture of earthen, concrete and trash piles on site. Exhibit 4 provides representative site photographs.

Vegetation on site is dominated by non-native species including Mediterranean grass (*Schismus barbatus*). Other common plant species occurring on site includes Russian thistle (*Salsola tragus*), annual bur-sage (*Ambrosia acanthicarpa*), telegraph weed (*Heterotheca grandiflora*), doveweed (*Croton setigerus*), and California croton (*Croton californicus*). The northern portion of the Project site supports small patches of California buckwheat (*Eriogonum fasciculatum*) and several California sagebrush (*Artemisia californica*). The southern and eastern portion of the Project site supports a windrow of lemon-scented gum trees (*Corymbia citriodora*).

Due to the disturbed nature of the site and the low growth of the mostly non-native vegetation, animal species detected on site were limited. Numerous California ground squirrel (*Otospermophilus beecheyi*) burrows were detected sporadically throughout the site. Other common species detected on site include Botta's pocket gopher (*Thomomys bottae*), mourning dove (*Zenaida macroura*), rock pigeon (*Columba livia*), Say's phoebe (*Sayornis saya*) and house finch (*Haemorhous mexicanus*).

3.2 Special-Status Plants

The subject property is not expected to support any special-status plants due to the lack of suitable habitat and the level of disturbance. Table 1 provides a summary of all plants considered for this analysis. Species were considered based on a number of factors, including: 1) species identified by the August 2016 CNDDB as occurring (either currently of historically) on or in the vicinity of the property; 2) species identified by the 2016 CNPS Rare and Endangered Plant Inventory; and 3) any other species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site.

Table 1. Special-Status Plants Evaluated for the Property.

Federal State

 $\begin{array}{ll} FE-Fe derally \ Endangered \\ FT-Fe derally \ Threatened \\ \end{array} \begin{array}{ll} SE-State \ Endangered \\ ST-State \ Threatened \\ \end{array}$

CNPS Rare Plant Rank

Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.

Rank 2 – Plants rare, threatened, or endangered in California, but more common elsewhere.

Rank 3 – Plants about which more information is needed.

Rank 4 – Plants of limited distribution (a watch list).

CNPS Threat Rank Extensions

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

		Habitat	Potential for
Species Name	Status	Requirements	Occurrence
Brand's star phacelia Phacelia stellaris	Federal: None State: None CNPS: Rank 1B.1	Coastal dunes and coastal sage scrub.	Not expected to occur on site due to a lack of suitable habitat.
Braunton's milk-vetch Astragalus brauntonii	Federal: FE State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas.	Not expected to occur on site due to a lack of suitable habitat.
California muhly Muhlenbergia californica	Federal: None State: None CNPS: Rank 4.3	Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.	Not expected to occur on site due to a lack of suitable habitat.
California saw-grass Cladium californicum	Federal: None State: None CNPS: Rank 2B.2	Meadows and seeps, and alkaline or freshwater marshes and swamps.	Not expected to occur on site due to a lack of suitable habitat.
Chaparral ragwort Senecio aphanactis	Federal: None State: None CNPS: Rank 2.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Not expected to occur on site due to a lack of suitable habitat.
Chaparral sand-verbena Abronia villosa var. aurita	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Not expected to occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Coulter's goldfields Lasthenia glabrata ssp. coulteri	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Not expected to occur on site due to a lack of suitable habitat.
Coulter's saltbush Atriplex coulteri	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Not expected to occur on site due to a lack of suitable habitat.
Greata's aster Symphyotrichum greatae	Federal: None State: None CNPS: Rank 1B.3	Mesic soils in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.	Not expected to occur on site due to a lack of suitable habitat.
Grey-leaved violet Viola pinetorum var. grisea	Federal: None State: None CNPS: Rank 1B.3	Meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
Hall's monardella Monardella macrantha ssp. hallii	Federal: None State: None CNPS: Rank 1B.3	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Not expected to occur on site due to a lack of suitable habitat.
Intermediate mariposa-lily Calochortus weedii var. intermedius	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Not expected to occur on site due to a lack of suitable habitat.
Johnston's buckwheat Eriogonum microthecum var. johnstonii	Federal: None State: None CNPS: Rank 1B.3	Rocky soils in subalpine coniferous forest and upper montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
Jokerst's monardella Monardella australis ssp. jokerstii	Federal: None State: None CNPS: Rank 1B.1	Steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. Chaparral, lower montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
Laguna Mountains jewelflower Streptanthus bernardinus	Federal: None State: None CNPS: Rank 4.3	Chaparral and lower montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.

~		Habitat	Potential for
Species Name	Status	Requirements	Occurrence
Lemon lily Lilium parryi	Federal: None State: None CNPS: Rank 1B.2	Mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
Lucky morning-glory Calystegia felix	Federal: None State: None CNPS: Rank 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Not expected to occur on site due to a lack of suitable habitat.
Many-stemmed dudleya Dudleya multicaulis	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Not expected to occur on site due to a lack of suitable habitat.
Marsh sandwort Arenaria paludicola	Federal: FE State: SE CNPS: Rank 1B.1	Bogs and fens, freshwater marshes and swamps.	Not expected to occur on site due to a lack of suitable habitat.
Mesa horkelia Horkelia cuneata var. puberula	Federal: None State: None CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Not expected to occur on site due to a lack of suitable habitat.
Nevin's barberry Berberis nevinii	Federal: FE State: SE CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Not expected to occur on site due to a lack of suitable habitat.
Ocellated Humboldt lily Lilium humboldtii ssp. ocellatum	Federal: None State: None CNPS: Rank 4.2	Chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland. Occurring in openings.	Not expected to occur on site due to a lack of suitable habitat.
Parish's desert-thorn Lycium parishii	Federal: None State: None CNPS: Rank 2.3	Coastal sage scrub, Sonoran desert scrub	Not expected to occur on site due to a lack of suitable habitat.
Parry's spineflower Chorizanthe parryi var. parryi	Federal: None State: None CNPS: Rank 1B.1	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Not expected to occur on site due to a lack of suitable habitat.

		Habitat	Potential for
Species Name	Status	Requirements	Occurrence
Peirson's spring beauty Claytonia lanceolata var. peirsonii	Federal: None State: None CNPS: Rank 3.1	In scree within subalpine and upper montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
Plummer's mariposa lily Calochortus plummerae	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Not expected to occur on site due to a lack of suitable habitat.
Prairie wedge grass Sphenopholis obtusata	Federal: None State: None CNPS: Rank 2B.2	Mesic soils in cismontane woodland, meadows and seeps.	Not expected to occur on site due to a lack of suitable habitat.
Pringle's monardella Monardella pringlei	Federal: None State: None CNPS: Rank 1A	Sandy soils in coastal sage scrub.	Not expected to occur on site due to a lack of suitable habitat.
Prostrate vernal pool navarretia Navarretia prostrata	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Not expected to occur on site due to a lack of suitable habitat.
Rigid fringepod Thysanocarpus rigidus	Federal: None State: None CNPS: Rank 1B.2	Dry rocky slopes in pinyon and juniper woodland.	Not expected to occur on site due to a lack of suitable habitat.
Robinson's peppergrass Lepidium virginicum var. robinsonii	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub	Not expected to occur on site due to a lack of suitable habitat.
Rock Creek broomrape Orobanche valida ssp. valida	Federal: None State: None CNPS: Rank 1B.2	Granitic soils in chaparral, pinyon and juniper woodland.	Not expected to occur on site due to a lack of suitable habitat.
Rock monardella Monardella saxicola	Federal: None State: None CNPS: Rank 1B.2	Rocky, usually serpentinite soils in closed-cone coniferous forest, chaparral, and lower montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
Salt marsh bird's-beak Chloropyron maritimum ssp. maritimum	Federal: FE State: SE CNPS: Rank 1B.2	Coastal dune, coastal salt marshes and swamps.	Not expected to occur on site due to a lack of suitable habitat.
Salt Spring checkerbloom Sidalcea neomexicana	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Not expected to occur on site due to a lack of suitable habitat.

		Habitat	Potential for
Species Name	Status	Requirements	Occurrence
San Bernardino aster Symphyotrichum defoliatum	Federal: None State: None CNPS: Rank 1B.2	Occurs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grassland near ditches, streams, and springs from 2 to 2,040 meters (7 to 6,693 feet) MSL. Blooms July through November.	Not expected to occur on site due to a lack of suitable habitat.
San Bernardino Mountains owl's clover Castilleja lasiorhyncha	Federal: None State: None CNPS: Rank 1B.2	Mesic soils in chaparral, meadows and seeps, pebble (pavement) plain, riparian woodland, and upper montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.
San Diego ambrosia Ambrosia pumila	Federal: FE State: None CNPS: Rank 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Not expected to occur on site due to a lack of suitable habitat.
San Gabriel linanthus Linanthus concinnus	Federal: None State: None CNPS: Rank 1B.2	Rocky soils and openins in chaparral, lower and upper montane coniferous forests.	Not expected to occur on site due to a lack of suitable habitat.
San Gabriel manzanita Arctostaphylos glandulosa ssp. gabrielensis	Federal: None State: None CNPS: Rank 1B.2	Chaparral (rocky).	Not expected to occur on site due to a lack of suitable habitat.
San Gabriel ragwort Senecio astephanus	Federal: None State: None CNPS: Rank 4.3	Rocky slopes, coastal bluff scrub, chaparral.	Not expected to occur on site due to a lack of suitable habitat.
Sanford's arrowhead Sagittaria sanfordii	Federal: None State: None CNPS: Rank 1B.2	Marshes and swamps (assorted shallow freshwater).	Not expected to occur on site due to a lack of suitable habitat.
Santa Ana River woolly star Eriastrum densifolium ssp. sanctorum	Federal: FE State: SE CNPS: Rank 1B.1	Occurs in alluvial chaparral and coastal sage scrub from 90 to 610 meters (295 to 2,000 feet) MSL. Known to occur from San Bernardino and Riverside Counties. Blooms from May through September.	Not expected to occur on site due to a lack of suitable habitat.

		Habitat	Potential for
Species Name	Status	Requirements	Occurrence
Short-joint beavertail Opuntia basilaris var. brachyclada	Federal: None State: None CNPS: Rank 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Not expected to occur on site due to a lack of suitable habitat.
Singlewhorl burrobrush Ambrosia monogyra	Federal: None State: None CNPS: Rank 2.2	Sandy soils in chaparral and Sonoran desert scrub.	Not expected to occur on site due to a lack of suitable habitat.
Slender mariposa lily Calochortus clavatus var. gracilis	Federal: None State: None CNPS: Rank 1B.2	Chaparral and coastal sage scrub.	Not expected to occur on site due to a lack of suitable habitat.
Smooth tarplant Centromadia pungens ssp. laevis	Federal: None State: None CNPS: Rank 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Not expected to occur on site due to a lack of suitable habitat.
White rabbit-tobacco Pseudognaphalium leucocephalum	Federal: None State: None CNPS: Rank 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Not expected to occur on site due to a lack of suitable habitat.
White-bracted spineflower Chorizanthe xanti var. leucotheca	Federal: None State: None CNPS: Rank 1B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland.	Not expected to occur on site due to a lack of suitable habitat.
Woolly mountain-parsley Oreonana vestita	Federal: None State: None CNPS: Rank 1B.3	Gravel or talus in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest.	Not expected to occur on site due to a lack of suitable habitat.

3.3 **Special-Status Animals**

No special-status animals were observed onsite during the general survey. Some special-status species have some potential to occur onsite, including the burrowing owl (*Athene cunicularia*), Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), coast horned lizard (*Phrynosoma blainvillii*), silvery legless lizard (*Anniella pulchra pulchra*), ferruginous hawk (*Buteo regalis*), and loggerhead shrike (*Lanius ludovicianus*).

Table 2 provides a summary of all species considered for the constraints analysis. Species were considered based on a number of factors, including: 1) species identified by the August 2016 CNDDB as occurring (either currently of historically) on or in the vicinity of the property; and 2) any other special-status species that are known to occur within the vicinity of the property, or for which potentially suitable habitat occurs on site.

Table 2. Special-Status Animals Evaluated for the Property.

Federal State

 $\begin{array}{ll} FE-Federally\ Endangered & SE-State\ Endangered \\ FT-Federally\ Threatened & ST-State\ Threatened \end{array}$

FPT – Federally Proposed Threatened SSC – California Species of Special Concern BCC – Birds of Conservation Concern CFP – California Fully-Protected Species

Species Name	Status	Habitat	Potential For
_		Requirements	Occurrence
	Invert	ebrates	
Delhi sands flower-loving fly Rhaphiomidas terminatus abdominalis	Federal: FE State: None	Found only in areas of the Delhi sands formation in southwestern San Bernardino and northwestern Riverside Counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation.	Low potential to occur on site. The site is highly disturbed from long establish land use practices including disking and mowing, but the site does support Tujunga series soils; areas of unconsolidated sand and known DSF host plants.
	Fi		Miowii Bar nost plants.
Arroyo chub Gila orcuttii	Federal: None State: SSC	Los Angeles basin south coastal streams. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Does not occur on site due to a lack of aquatic habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Santa Ana speckled dace Rhinichthys osculus ssp. 3	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	Does not occur on site due to a lack of aquatic habitat.
Santa Ana sucker Catostomus santaanae	Federal: FT State: SSC	Endemic to Los Angeles basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear, water and algae.	Does not occur on site due to a lack of aquatic habitat.
		nibians	
Arroyo toad Anaxyrus californicus	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravely terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak.	Does not occur on site due to a lack of suitable habitat.
Coast Range newt Taricha torosa	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Northern leopard frog Lithobates pipiens	Federal: None State: SSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs. Generally prefers permanent water with abundant aquatic vegetation.	Does not occur on site due to a lack of suitable habitat.
Southern mountain yellow-legged frog	Federal: FE	Streams and small pools in	Does not occur on site due
Rana muscosa	State: SE, SSC	ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.	to a lack of suitable habitat.
Western spadefoot	Federal: None	Remaining suitable rain	Does not occur on site due
Spea hammondii	State: CSC	pool or vernal pool habitat, which is concentrated on valley terraces.	to a lack of suitable habitat.
	Rep		
California mountain kingsnake (San Bernardino population) Lampropeltis zonata (parvirubra)	Federal: None State: SSC	Bigcone spruce and chaparral at lower elevations. Black oak, incense cedar, Jeffery pine, and ponderosa pine	Does not occur on site due to a lack of suitable habitat.
		at higher elevations.	
coast horned lizard Phrynosoma blainvillii	Federal: None State: SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects.	Low potential to occur at the Project site. Native ants not detected during initial site review, however, disturbed friable sandy soils due occur on site.
coastal whiptail Aspidoscelis tigris stejnegeri	Federal: None State: SSC	Inhabits low elevational coastal scrub, chaparral, and valley and foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food-termites.	Not expected to occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Red-diamond rattlesnake Crotalus ruber	Federal: None State: SSC	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	Not expected to occur on site due to a lack of suitable habitat.
Silvery legless lizard Anniella pulchra pulchra	Federal: None State: SSC	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with coastal sage scrub, chaparral, coastal dunes, valley/foothill grasslands, oak woodlands, and pine forests.	Low to moderate potential to occur at the Project site.
Two-striped garter snake Thamnophis hammondii	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur on site due to a lack of aquatic habitat.
Western pond turtle Emys marmorata	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Does not occur on site due to a lack of aquatic habitat.
	Biı		
Black swift (nesting) Cypseloides niger	Federal: BCC State: SSC	Nests in forested areas near rivers in dark, damp areas. Forages in skies over mountainous areas and on coastal cliffs.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Burrowing owl Athene cunicularia (burrow sites and some wintering sites)	Federal: BCC State: SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by lowgrowing vegetation. Subterranean nester, dependent upon burrowing mammals.	Low to moderate potential to occur at the Project site due to the presence of suitable burrows and low growing vegetation.
Coastal cactus wren Campylorhynchus brunneicapillus sandiegensis	Federal: BCC State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Does not occur on site due to a lack of suitable habitat.
Coastal California gnatcatcher Polioptila californica californica	Federal: FT State: SSC	Obligate, permanent resident of coastal sage scrub below 2,500ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas are classified coastal sage scrub are occupied.	Does not occur on site due to a lack of suitable habitat.
Ferruginous hawk Buteo regalis	Federal: BCC State: SSC	Wintering habitat consists of open terrain and grasslands of plains and foothills.	Low potential to utilize the Project site and surrounding areas for wintering habitat.
Golden eagle (nesting & wintering) Aquila chrysaetos	Federal: BCC State: WL, FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Not expected to occur on site due to a lack of suitable habitat.
Grasshopper sparrow Ammodramus savannarum (nesting)	Federal: None State: SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	Not expected to occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Least Bell's vireo Vireo bellii pusillus (nesting)	Federal: FE State: SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms below 2,000ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, or mesquite.	Does not occur on site due to a lack of suitable habitat.
Loggerhead shrike Lanius ludovicianus	Federal: BCC State: SSC	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Low potential to occur on site.
Long-eared owl (nesting) Asio otus	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Not expected to occur on site due to a lack of suitable habitat.
Southwestern willow flycatcher Empidonax traillii extimus (nesting)	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur on site due to a lack of suitable habitat.
Tricolored blackbird Agelaius tricolor (nesting colony)	Federal: None State: SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Western yellow-billed cuckoo Coccyzus americanus occidentalis (nesting)	Federal: FC State: SE	Riparian forest nester, along the broad, lower flood-bottoms of larger riverine systems. Nests in riparian jungles of willow. Often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Does not occur on site due to a lack of suitable habitat.
White-tailed kite (nesting)	Federal: None	Low elevation open	Not expected to occur on
Elanus leucurus	State: FP	grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	site due to a lack of suitable habitat.
Yellow-breasted chat	Federal: None	Summer resident; inhabits	Not expected to occur on
Icteria virens (nesting)	State: SSC	riparian thickets of willow and other brushy tangles near water courses. Nests in low, dense, riparian consisting of willow, blackberry, and wild grape; forages and nests within 10ft of ground.	site due to a lack of suitable habitat.
Yellow warbler	Federal: None	Breeds in lowland and	Not expected to occur on
Dendroica petechia brewsteri (nesting)	State: SSC	foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	site due to a lack of suitable habitat.
Mammals			
American badger Taxidea taxus	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Does not occur on site due to a lack of suitable habitat.
Los Angeles pocket mouse Perognathus longimembris brevinasus	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	Low to moderate potential to occur on site.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Northwestern San Diego pocket mouse Chaetodipus fallax fallax	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral. Typically inhabits areas with rocky outcroppings and sandy soils.	Not expected to occur on site due to a lack of suitable habitat.
Pallid bat Antrozous pallidus	Federal: None State: SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Not expected to occur on site due to a lack of suitable habitat.
Pallid San Diego pocket mouse Chaetodipus fallax pallidus	Federal: None State: SSC	Desert border areas in eastern San Diego County in desert wash, desert scrub, and pinyon-juniper woodland. Utilizes sandy herbaceous areas, usually in association with rocks or coarse gravel.	Not expected to occur on site due to a lack of suitable habitat.
Pocketed free-tailed bat Nyctinomops femorosaccus	Federal: None State: SSC	Variety of arid areas in Southern California; pine- juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian. Rocky areas with high cliffs.	Not expected to occur on site due to a lack of suitable habitat.
San Bernardino kangaroo rat Dipodomys merriami parvus	Federal: FE State: SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Low potential to occur on site.
San Diego desert woodrat Neotoma lepida intermedia	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Not expected to occur on site due to a lack of suitable habitat.
San Diego black-tailed jack rabbit Lepus californicus bennettii	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Not expected to occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat	Potential For
		Requirements	Occurrence
Stephens' kangaroo rat	Federal: FE	Primarily annual and	Not expected to occur on
Dipodomys stephensi	State: ST	perennial grasslands, but	site due to a lack of
		also occurs in coastal	suitable habitat.
		scrub and sagebrush with sparse canopy cover.	
		Prefers buckwheat,	
		chamise, brome grass, and	
		filaree. Will burrow into	
		firm soil.	
Western mastiff bat	Federal: None	Mainly open, semi-arid to	Not expected to occur on
Eumops perotis californicus	State: SSC	arid habitats, including	site due to a lack of
		conifer and deciduous	suitable habitat.
		woodlands, coastal scrub,	
		grasslands, chaparral, etc.	
		Roosts in crevices in cliff	
		faces, high buildings,	
		trees, and tunnels.	
Western yellow bat	Federal: None	Found in valley foothill	Not expected to occur on
Lasiurus xanthinus	State: SSC	riparian, desert riparian,	site due to a lack of
		desert wash, and palm	suitable habitat.
		oasis habitats. Roosts in	
		trees, particularly palms.	
		Forages over water and	
		among trees.	

3.3.1 Special-Status Animals Requiring Further Discussion

Invertebrates

Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) – The Delhi sands flower-loving fly (DSF) is Federally listed as Endangered. The DSF is tied to fine, sandy soils, often with wholly or partly consolidated dunes referred to as the "Delhi" series (USFWS 1993). The DSF is typically found in relatively intact, open, sparse, native habitats with less than 50% vegetative cover (USFWS 1997). In most cases, California croton (*Croton californicus*), deerweed (*Lotus scoparius*), and telegraph weed (*Heterotheca grandiflora*) are associated with the presence of DSF (Ballmet 1989, USFWS 1997). In addition, both annual bur-sage (*Ambrosia acanthocarpa*) and sand aster (*Corethrogyne glandulifera*) have been identified with DSF (USFWS 1993).

Based on the review of historical aerial imagery and the site review, the Project site exhibits evidence of routine soil disturbance including disking and mowing. Nonetheless, the Project site

supports Tujunga gravelly loamy sand (72-percent of the site) and Tujunga loamy sand (28-percent of the site), both of which are known to support DSF [Exhibit 5 – Soils Map]. In addition, the Project site supports annual bur-sage, California croton, California buckwheat, sand aster, and telegraph weed on site, all of which as previously stated have been documented to be associated with the presence of DSF.

Birds

Burrowing Owl (Athene cunicularia) - The burrowing owl is designated as a FSC and a SSC. The burrowing owl occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident (Haug, et al. 1993). They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows (e.g., ground squirrels, rabbits, etc.). As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover. They may also dig their own burrow in soft, friable soil (as found in Florida) and may also use pipes, culverts, and nest boxes where burrows are scarce (Robertson 1929). The mammal burrows are modified and enlarged. In the case of nesting owls, one burrow is typically selected for use as the nest; however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl.

The burrowing owl including evidence of burrowing owl occupation (e.g., whitewash at burrow, cast pellets, or feathers at burrow) was not detected on site. However, the Project site supports suitable habitat including numerous California ground squirrel (*Otospermophilus beecheyi*) burrows.

Mammals

Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*) – The Los Angeles pocket mouse is designated as a CDFG Species of Special Concern. The historic range of the Los Angeles pocket mouse was estimated to be from Burbank and San Fernando in Los Angeles County east to the City of San Bernardino, San Bernardino County (the type locality) (Hall 1981). Its range extends eastward to the vicinity of the San Gorgonio Pass in Riverside County, and southeast to Hemet and Aguanga, and possibly to Oak Grove, in north-central San Diego County (Hall 1981; Patten *et al.* 1992).

Habitat of the Los Angeles pocket mouse has never been specifically defined, although Grinnell (1933) indicated that the subspecies "inhabits open ground of fine sandy composition" (cited in Brylski *et al.* 1993). This observation is supported by others who also state that the Los Angeles pocket mouse prefers fine, sandy soils and may utilize these soil types for burrowing (*e.g.*,

Jameson and Peters 1988). This subspecies may be restricted to lower elevation grassland and coastal sage scrub (Patten *et al.* 1992).

Vegetation associations probably are important for the Los Angeles pocket mouse and, like other heteromyid species, it probably prefers sparsely vegetated habitats. For another subspecies, the Pacific pocket mouse (*P. l. pacificus*), evidence indicates that mice avoid dense grass cover because of difficulty locomoting and finding seeds (M. Pavelka 1998-99; cited in Spencer and Schaefer 2000). However, soil characteristics probably also must be appropriate for a site to support the Los Angeles pocket mouse. Nonetheless, the habitat associated with the Los Angeles pocket mouse includes non-native grassland, Riversidean sage scrub, Riversidean alluvial fan sage scrub, chaparral and redshank chaparral.

The Los Angeles pocket mouse has been documented in the general vicinity of the Project site, south of Baseline Avenue. Although the majority of the property supports a sandy substrate, the property is highly disturbed from long established land use practices and is almost completely isolated by residential development. Potential connectivity for the Los Angeles pocket mouse occurs to the west and south along a narrow Southern California Edison easement, but the easement is separated by Foothill Boulevard, which is a major vehicular thoroughfare. As such, the Los Angeles pocket mouse is generally not expected to occur onsite, or at least not as population with long-term viability and conservation value, but its absence cannot be ruled out without focused trapping.

San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) – The San Bernardino kangaroo rat is designated as a federally endangered species and a CDFG Species of Special Concern. According to Hall (1981), the species *D. merriami* occupies a broad range of grasslands and arid habitats in southwestern North America, extending from northwestern Nevada southward through southeastern California, Baja California and in mainland Mexico south to northern Sinaloa. It ranges eastward to southeastern Utah, western and southern Arizona, central and southern New Mexico, and into western Texas.

The historic range of the subspecies San Bernardino kangaroo rat lies west of the desert divide of the San Jacinto and San Bernardino mountains and extends from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County (Lidicker 1960; Hall 1981). The USFWS estimates that at the time of listing in 1998, the San Bernardino kangaroo rat occupied approximately 6,576 ha (16, 440 acres) of suitable habitat in about seven general locations (USFWS 2000), including the Santa Ana River, Cajon Creek Wash, Lytle Creek Wash, City Creek, and upper Etiwanda Wash in San Bernardino County, and sites in western Riverside County.

The San Bernardino kangaroo rat, a subspecies of the Merriam's kangaroo rat (*Dipodomys merriami*), typically is found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub (McKernan 1997 as cited in USFWS 1998). Braden and McKernan (2000) suggest that the San Bernardino kangaroo rat also occurs in other habitats in their range, including chaparral and even disturbed areas that are associated with alluvial processes.

Soil texture is a primary factor in this subspecies' occurrence. Sandy loam substrates allow for the digging of simple, shallow burrows (McKernan 1997 as cited by USFWS 1998). *D. merriami*, and other kangaroo rat species, actively avoid rocky substrates (Brown and Harney 1993). Soils along occupied portions of the San Jacinto River include riverwash, Tujunga loam sand, Soboba cobbly loamy sand, Hanford coarse sandy loam, and Gorgonio loamy sand (Knecht 1971). All of these soils developed from granitic sources. However, as with vegetation types, Braden and McKernan (2000) demonstrated that the San Bernardino kangaroo rat occurs in various soil types, so soil alone cannot be used to rule out occupation. They argue that live-trapping is the only way to confirm or rule out occupation.

Vegetation and other plant species consistent with San Bernardino kangaroo rat occupation, includes California buckwheat (*Eriogonum fasciculatum*), scale-broom (*Lepidospartum squamatum*), California croton (*Croton californicus*), yerba santa (*Eriodictyon* sp.), deerweed (*Lotus scoparius*), telegraph weed (*Heterotheca grandiflora*), western verbena (*Verbena lasiostachys*), and red-stemmed filaree (*Erodium cicutarium*), they also include a high percentage cover of invasive non-native grasses and ruderal species such as bromes (*Bromus* spp.), slender wild oat (*Avena barbata*), tocalote (*Centaurea melitensis*), and black mustard (*Brassica nigra*). These invasive species tend to preclude the San Bernardino kangaroo rat where they grow in high densities. In most cases, San Bernardino kangaroo rat scat and burrows are present but difficult to detect in disturbed habitat, indicating that the population occurs at very low or trace densities.

The highest quality habitat supports abundant San Bernardino kangaroo rat surface sign and is almost free of invasive species (although all areas exhibit some disturbance in the form of exotics and ground disturbances). High quality habitat supports California buckwheat, California croton, and deerweed as dominant species, and scattered Spanish bayonet (*Yucca whipplei*), cacti (*Opuntia* spp.) and a variety of native annual forbs such as phacelia (*Phacelia* sp.), lupine (*Lupinus* sp.), cryptantha (*Cryptantha* sp.), and popcorn flower (*Plagiobothrys* sp.). Such areas support little black mustard and brome grasses.

The San Bernardino kangaroo rat has not been documented in the general vicinity of the Project site, and no kangaroo rat burrows were detected during the site review. Although the property overall supports a sandy substrate, the property is also highly disturbed from long established

land use practices and is almost completely isolated by residential development. Potential connectivity for the San Bernardino kangaroo rat does occur to the west and south along a narrow Southern California Edison easement, but the easement is separated by Foothill Boulevard, which is a major vehicular thoroughfare. As such, the San Bernardino kangaroo rat is generally not expected to occur onsite, or at least not as population with long-term viability and conservation value, but its absence cannot be ruled out without focused trapping.

3.4 **Special-Status Habitats**

A review of the August 2016 CNDDB identified the following special-status habitats as occurring within the vicinity or the property: California Walnut Woodland, Canyon Live Oak Ravine Forest, Coast and Valley Freshwater Marsh, Riversidian Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. The property does not support these or any other special-status habitats.

3.5 **Nesting Birds**

The property contains vegetation (trees, shrubs, and herbaceous vegetation) with the potential to support nesting birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act and California Fish and Game Code.⁴ The presence of vegetation with the potential to support nesting birds may represent a seasonal constraint to development if not removed at appropriate time of the year. As long as trees, shrubs, and herbaceous vegetation with the potential to support nesting birds are removed from September to January (outside of the nesting season), then no further actions are recommended. If vegetation must be removed during the nesting season (February 1 through August 31), a nesting bird survey should be conducted prior to any removals to prevent any impacts to active nests. If active nests are identified onsite, then adequate buffers should be provided around the nests, as determined by a qualified biologist, until the nests are no longer active.

3.6 Jurisdictional Waters

The Project site does not contain any aquatic features that meet the definition for Waters of the U.S. (including wetlands) pursuant to Section 404 of the Clean Water Act (CWA). Nor does the

⁴ The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

site contain streambeds or lakes as defined under Section 1600 of the California Fish and Game Code. Therefore, development of the property will not require permits from the Corps, Regional Board, or CDFW as it relates to jurisdictional waters.

4.0 CONCLUSIONS AND RECOMMENDATIONS

No special-status plants or animals were detected during the site review. Despite the disturbed nature of the Project site, the property does have the potential to support certain special-status resources that, if present, may require permits/authorizations for impacts, mitigation, and/or seasonal avoidance.

4.1 Burrowing Owl

Due to the known occurrence of burrowing owls in the region, and the presence of potentially suitable habitat, the property has some potential to support burrowing owls. As such, focused surveys are recommended to confirm the presence/absence of burrowing owls for purposes of determining impacts under CEQA, and to plan for the future exclusion/relocation of owls from the property, if necessary. Furthermore, surveys should be conducted prior to any major ground disturbance to avoid direct impacts to burrowing owls, including prior to grading.

Focused burrowing owl surveys are recommended during the breeding season following the 2012 CDFW Staff Report on Burrowing Owl Mitigation as part of any CEQA-related biological studies, and to determine if exclusion/relocation will be required.. The survey protocol consists of four survey visits to be completed from February 15 to July 15. Specifically, one survey should be conducted between February 15 and April 15, and a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15.

If burrowing owls are present at the property at the time of grading, then the owls will need to be relocated (either passively or actively) from the property following accepted CDFW protocols. The exclusion of burrowing owls will require the approval of an exclusion plan by CDFW, and mitigation would likely be required.

4.2 Delhi Sands Flower-loving Fly

Although the Project site is highly disturbed due to long established land use practices including disking and mowing, and therefore the likelihood for occurrence is low, the site does support Tujunga gravelly loamy and Tujunga loamy sands which both are known to support the Delhi Sands flower-loving fly (DSF). In addition, the Project site also supports plant species that are associated with DSF habitat. Therefore, a DSF habitat assessment conducted by a permitted DSF

biologist is recommended to determine if focused surveys for the DSF following the USFWS survey protocol would be required. If necessary, the DSF protocol requires surveys to be conducted over two consecutive years to confirm absence. If present, impacts to DSF habitat would require authorization from USFWS as well as mitigation, though the presence of DSF could also require habitat avoidance.

4.3 Small Mammals

Although the Project site is highly disturbed due to long established land use practices including disking and mowing, the site does support loose friable soils that have the potential to support sensitive small mammal species. Special-status small mammals know from the region includes the San Bernardino kangaroo rat and the Los Angeles pocket mouse. We recommend that a biologist permitted to trap special-status small mammals perform a habitat assessment to determine if trapping is warranted to rule out the presence of sensitive small mammal species.

4.4 **Nesting Birds**

The presence of nesting birds would represent a seasonal constraint to development, since active nests must be avoided until nesting is complete. Because there is the potential for migratory birds to nest on site, it is recommended that any construction activities associated with development of the property be conducted outside of the breeding season, which extends from February 1 to August 31. If this is not possible, it is recommended that a qualified biologist conduct a nesting bird survey(s) prior to removing trees, shrubs, tall herbaceous vegetation, and any structures in order to prevent any violations of the Migratory Bird Treaty Act.

If you have any questions regarding this report, please call me at (949) 837-0404, ext. 42.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Caril F. Mosty

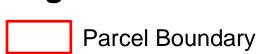
David F. Moskovitz

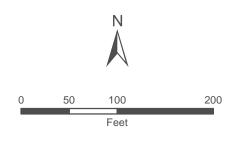
Senior Biologist/Regulatory Specialist

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Legend





Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83

Map Prepared by: C.Lukos, GLA
Date Prepared: August 26, 2016

APN# 1100-191-04

Aerial Site Map

GLENN LUKOS ASSOCIATES





Exhibit 4



Photograph 1: View looking southwest from the northeastern corner of the property.



Photograph 3: View looking south from near the northern portion of the property.

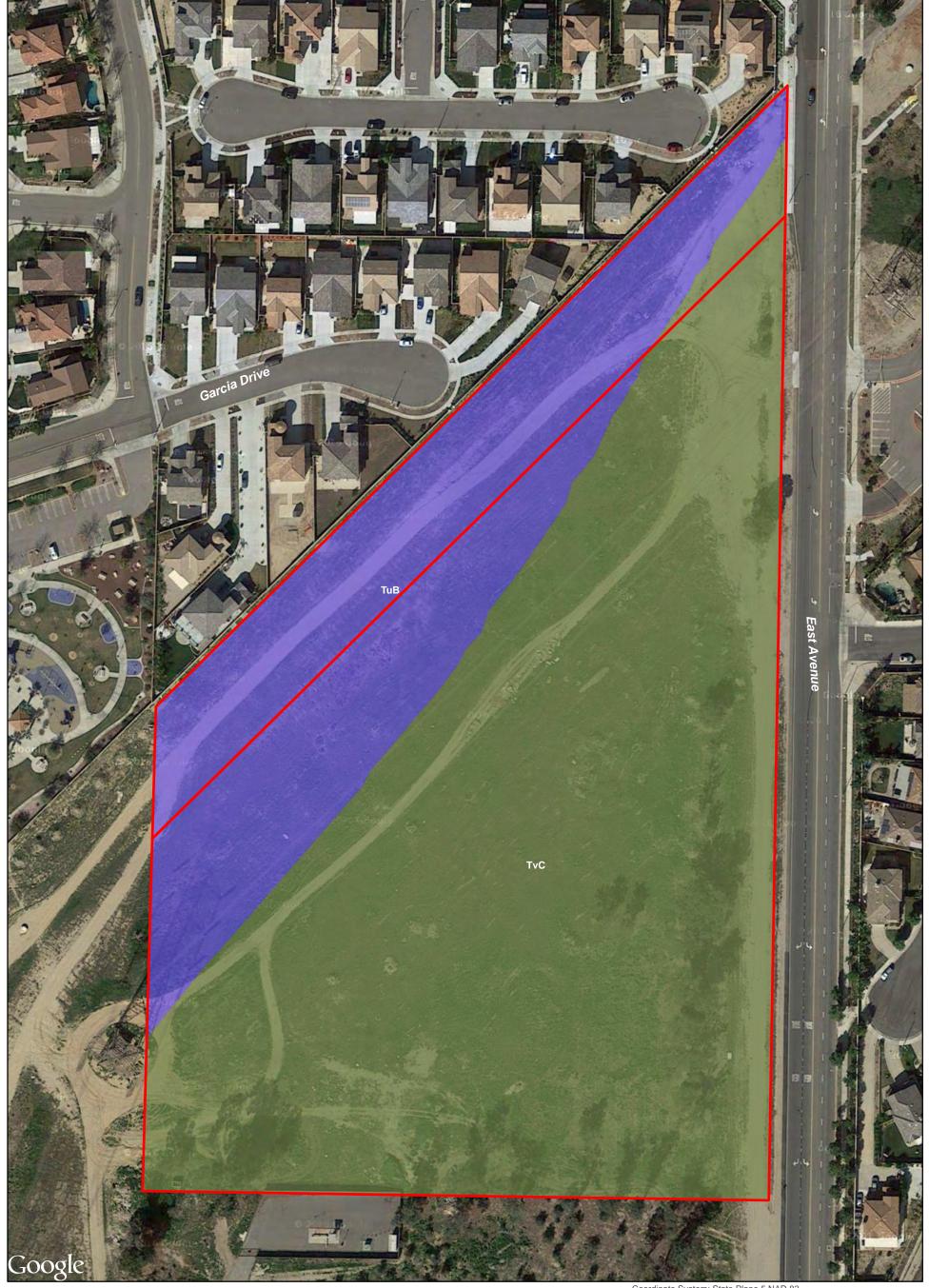


Photograph 2: View looking northeast at patches of California buckwheat (*Eriogonum fasciculatum*) near the northern portion of the property.



Photograph 4: View looking east from the southwestern corner of the property.





Legend

Parcel Boundary

TuB - TUJUNGA LOAMY SAND, 0 TO 5 PERCENT SLOPES

TvC - TUJUNGA GRAVELLY LOAMY SAND, 0 TO 9 PERCENT SLOPES

N

0 50 100 200 Feet Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83

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Map Prepared by: C.Lukos, GLA Date Prepared: August 26, 2016

APN# 1100-191-04

Soils Map

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