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Regulatory Services

September 24, 2014

Hardy Strozier
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SUBJECT: Results of Biological Resource Assessment and Focused Plant Surveys for the Temescal Creek Bridge Project, an Approximately 56.7-Acre Property Located Within Unincorporated Riverside County, California

Dear Mr. Strozier,

On March 5, 11, 24, April 4, 14, and June 10, 2014, Glenn Lukos Associates (GLA) biologist Jason Fitzgibbon conducted general biological reconnaissance surveys, habitat assessments, and focused plant surveys for the Temescal Creek Bridge Project site (site), located immediately south of the Interstate 15 freeway in unincorporated Riverside County, California. The entire site occurs within a Criteria Area Plant Species Survey Area (CAPSSA), Narrow Endemic Plant Species Survey Area (NEPSSA), and burrowing owl survey area, as depicted by the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). As a result, focused plant surveys and a habitat assessment for burrowing owl were conducted in accordance with the MSHCP.

Additionally, other sensitive resources considered during this assessment include special-status species (e.g., threatened and endangered, species of concern, etc.), special-status habitats, and nesting birds. 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.

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1.0 SITE LOCATION, DESCRIPTION, AND RELATION TO THE MSHCP

The subject site comprises a total area of approximately 56.7 acres and is located immediately south of the Interstate 15 freeway, west of Lake Street, and adjacent to Temescal Canyon Road, within unincorporated Riverside County, California [Exhibit 1 – Regional Map]. One blue-line drainage, Temescal Creek, flows east to west through the site as depicted on the U.S. Geological Survey (USGS) topographic map Alberhill (dated 1964 and photorevised in 1981) at Sections 15, 16, and 22, Township 5 South, Range 5 West [Exhibit 2 – Vicinity]. The site is bordered to the north by the Interstate 15 freeway, to the east by Lake Street, to the south by the active Pacific Clay mining operation, and to the west by Bernard Street. Aside from Temescal Canyon Road, the site is currently undeveloped, although the majority of upland areas adjacent to Temescal Creek have been recently cleared of non-native eucalyptus trees. As a result of the tree removals, the majority of the site is highly disturbed.

The entire site occurs within a Criteria Area Plant Species Survey Area (CAPSSA), Narrow Endemic Plant Species Survey Area (NEPSSA), and burrowing owl survey area, as depicted by the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). As a result, focused plant surveys and a habitat assessment for burrowing owl were conducted in accordance with the MSHCP.

2.0 METHODOLOGY

GLA biologist Jason Fitzgibbon visited the Project site on March 5, 11, 24, April 4, 14, and June 10, 2014 to conduct general biological reconnaissance surveys, habitat assessments, and focused plant surveys. 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 Project site was walked following transects spaced appropriately in order to provide complete coverage of the Project site. The Project site was inspected to determine whether any special-status species or habitats were present on site.

In addition to site reconnaissance, evaluation of the property included a review of the California Natural Diversity Database (CNDDB) for the Alberhill quadrangle[1], a review of the 2010 California Native Plant Society (CNPS) on-line inventory[2], and a soil map review. The Project site is located within the MSHCP survey area for the burrowing owl (*Athene cunicularia*). As a result, GLA biologist Jason Fitzgibbon conducted a habitat assessment for the burrowing owl at the Project site. No suitable burrowing owl habitat was found to occur on the Project site.

[1] California Department of Fish and Wildlife. July, 2014. Natural Diversity Database: RareFind 5.
[2] California Native Plant Society. 2010. On-Line Inventory of Rare and Endangered Plants of California (Eighth Edition).

3.0 RESULTS

3.1 Existing Conditions

The Project site occurs within a primarily rural, undeveloped setting. The active Pacific Clay mine occurs immediately south of the site, and the Interstate 15 Freeway occurs immediately north of the site. Undeveloped land occurs to the east of the site opposite Lake Street, and rural development occurs to the west of the site, opposite Bernard Street. The existing two-laned Temescal Canyon Road traverses the site from east to west, crossing the intermittent drainage, Temescal Creek via a narrow concrete beam bridge. In general, the majority of the site exhibits high levels of past and present disturbance; several large eucalyptus trees have been recently removed from the site, and soils in many areas of the site appear to have been graded or tilled in the past.

3.2 Vegetation Mapping

The site comprises an area of approximately 56.7 acres. Six different vegetation communities/land use types were mapped at the site including, disturbed/developed areas, non-native grassland, eucalyptus woodland, disturbed Riversidean sage scrub, disturbed willow riparian, and coast live oak woodland [Exhibit 3]. All six vegetation communities/land use types are described in detail below.

Disturbed/developed

Disturbed/developed land at the site comprises and area of approximately 35.49 acres. Several existing developed areas occur on site, including Temescal Canyon Road, Bernard Street, and various previously developed or disturbed areas associated with the active Pacific Clay mine. Additionally, much of the disturbed/developed areas mapped at the site are associated with the recent removals of non-native eucalyptus woodland. Vegetation, where present, is comprised of sparse, non-native and ruderal species including Russian thistle (*Salsola* tragus), black mustard (*Brassica* nigra), western ragweed (*Ambrosia psilostachya*), and tocalote (*Centaurea melitensis*).

Non-native Grassland

Non-native grassland comprises an area of approximately 7.98 acres. Non-native grassland occurs in previously disturbed areas throughout the site and is comprised primarily of non-native annual grasses and ruderal species including ripgut brome (*Bromus diandrus*), slender wild oat (*Avena barbata*), cheat grass (*Bromus tectorum*), western ragweed, wild radish (*Raphanus raphanistrum*), black mustard, tocalote, sweet clover (*Melilotis indicus*), and pigweed (*Amaranthus albus*).

Eucalyptus woodland

Eucalyptus woodland comprises an area of approximately 4.48 acres. Eucalyptus woodland occurs throughout the site, likely as a result of adjacent development, historical planting for ornamental and windrow purposes, and the subsequent encroachment of the species into adjacent open spaces. Vegetation in these areas is comprised almost entirely of large eucalyptus trees (*Eucalyptus* sp.), and eucalyptus saplings in the understory. A dense layer of eucalyptus leaf litter and bark appears to have prevented other species from establishing in the understory.

Disturbed Riversidean sage scrub

Disturbed Riversidean sage scrub comprises an area of approximately 3.47 acres. Disturbed Riversidean sage scrub occurs primarily along Interstate 15 as a planted community on a manufactured slope. Additionally, a small area of disturbed Riversidean sage scrub occurs on a north-facing slope in the southwest corner of the site. Vegetation in these areas exhibits low species diversity and a prevalence of non-native annual species occurring in large open spaces between native shrub species. Native species present include California buckwheat (*Eriogonum fasciculatum*), desert brittlebush (*Encelia farinosa*), and California sagebrush (*Artemisia californica*). Non-native species occupying the open spaces between native shrubs consist of various non-native grasses and weedy species such as ripgut brome, slender wild oat, and tocalote.

Disturbed willow riparian

Disturbed willow riparian comprises an area of approximately 3.72 acres, and occurs within and immediately adjacent to Temescal Creek at the east and west ends of the Project site. A small area of disturbed willow riparian also occurs along the southern boundary of the site and is associated with a highly disturbed drainage feature that appears to have once entered the site from the Pacific Clay mine to the south, but now terminates off site into a basin. These areas are characterized by a discontinuous canopy of large black willow (*Salix goodingii*), Fremont's cottonwood (*Populus fremontii*), and arroyo willow (*Salix lasiolepsis*) trees. Also present in the canopy layer are an assortment of non-native tree species including Mexican fan palm (*Washingtonia robusta*), tree of heaven (*Ailanthus altissima*), eucalyptus, and tree tobacco (*Nicotiana glauca*). Understory vegetation is very sparse and discontinuous and is comprised primarily of mulefat (*Baccharis salicifolia*), mugwort (*Artemisia douglasiana*), southern cattail (*Typha domingensis*), Mexican fan palm, and spanish false fleabane (*Pulicaria paludosa*).

Coast live oak woodland

Coast live oak woodland comprises an area of approximately 1.55 acres on the site, and occurs along Temescal Canyon Road. Coast live oak woodland consists entirely of coast live oak (*Quercus agrifolia*) trees, with an understory of non-native grasses and weedy species.

3.3 Focused Plant Surveys

The California Natural Diversity Database (CNDDB) and MSHCP were initially consulted to determine known occurrences of special-status plants in the region. Other sources used to develop a list of target species for the survey program included the CNPS Online Inventory (CNPS 2010). Based on this information, a list of special-status plant species and habitats that could occur within the Project site were developed and incorporated into a survey program for the Project site. Habitat assessments and focused plant surveys were conducted on March 5, 11, 24, April 4, 14, and June 10, 2014.

No special-status plant species were detected while conducting focused plant surveys. None of the MSHCP Criteria Area Plant Species or Narrow Endemic Plant Species were observed on site.

Table 3-2 provides a list of all special-status plants evaluated for the Project site through habitat assessments and focused surveys, including MSHCP covered species with special survey/conservation requirements. Species were evaluated based on a number of factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) within or in the vicinity of the Project site, 2) MSHCP species survey areas for which the property occurs within, and 3) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs onsite.

Table 3-2. Special-Status Plants Evaluated for the Project Site

Status

Federal
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate

State
SE – State Endangered
ST – State Threatened

CNPS
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 2B – 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).

Threat Code extension
.1 – Seriously endangered in California (over 80% occurrences threatened)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

MSHCP
NEPSSA – Narrow Endemic Plant Species Survey Area
CAPSSA – Criteria Area Plant Species Survey Area

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence On Site
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: NEPSSA	Vernal pools.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
California screw moss *Tortula californica*	Federal: None State: None CNPS: List 1B.2	Sandy soil in chenopod scrub, and valley and foothill grassland.	Does not 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 and coastal sage scrub.	Not observed during focused surveys. Not expected to occur on site.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: CAPSSA	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur on site due to a lack of suitable habitat.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: CAPSSA	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Does not occur on site due to a lack of suitable habitat.
Hammitt's clay-cress *Sibaropsis hammittii*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: NEPSSA	Chaparral and valley and foothill grassland.	Not expected to occur on site.
Heart-leaved pitcher sage *Lepechinia cardiophylla*	Federal: None State: None CNPS: List 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur on site due to a lack of suitable habitat.
Intermediate monardella *Monardella hypoleuca* ssp. *intermedia*	Federal: None State: None CNPS: List 1B.3	Chaparral.	Does not occur on site due to a lack of suitable habitat.
Hall's monardella *Monardella macrantha* ssp. *hallii*	Federal: None State: None CNPS: List 1B	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Does not occur on site due to a lack of suitable habitat.
Little mousetail *Myosurus minimus* ssp. *apus*	Federal: FSC State: None CNPS: Rank 3.1 MSHCP: CAPSSA	Valley and foothill grassland, vernal pools (alkaline soils).	Does not occur on site due to a lack of suitable habitat.
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: NEPSSA	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Not expected to occur on site.
Mesa horkelia *Horkelia cuneata* ssp. *puberula*	Federal: None State: None CNPS: List 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Not expected to occur on site.
Munz's onion *Allium munzii*	Federal: FE State: ST CNPS: Rank 1B.1 MSHCP: NEPSSA	Clay soils in chaparral, coastal sage scrub, and valley and foothill grasslands	Does not occur on site due to a lack of suitable habitat.
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CNPS: Rank 4.2	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Does not occur on site due to a lack of suitable habitat.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: CAPSSA	Chenopod scrub, playas, vernal pools.	Does not occur on site due to a lack of suitable habitat.
Paniculate Tarplant *Deinandra paniculata*	Federal: None State: None CNPS: Rank 4.2	Coastal sage scrub, and valley and foothill grasslands (usually vernally mesic).	Not observed during focused surveys. Has moderate potential to occur within disturbed areas on site.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: Rank 3.2	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Not expected to occur on site.
Round-leaved filaree *Erodium macrophyllum*	Federal: None State: None CNPS: Rank 2.1 MSHCP: CAPSSA	Clay soils in cismontane woodland, valley and foothill grassland	Does not occur on site due to a lack of suitable habitat.
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: List 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Does not occur on site due to a lack of suitable habitat.
San Miguel savory *Satureja chandleri*	Federal: None State: None CNPS: Rank 1B.2 MSHCP: NEPSSA	Rocky, gabbroic, or metavolcanic soils in chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
		foothill grassland.	
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1 MSHCP: NEPSSA	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Not expected to occur on site.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	Federal: None State: None CNPS: Rank 1B.1 MSHCP: CAPSSA	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Not expected to occur on site.
Spreading navarretia *Navarretia fossalis*	Federal: FT State: None CNPS: Rank 1B.1 MSHCP: NEPSSA	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Does not occur on site due to a lack of suitable habitat.
Thread-leaved brodiaea *Brodiaea filifolia*	Federal: FT State: SE CNPS: Rank 1B.1 MSHCP: CAPSSA	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Does not occur on site due to a lack of suitable habitat.
Wright's trichocoronis *Trichocoronis wrightii* var. *wrightii*	Federal: None State: None CNPS: Rank 2.1 MSHCP: NEPSSA	Alkaline soils in meadows and seeps, marshes and swamps, riparian scrub, vernal pools.	Does not occur on site due to a lack of suitable habitat.

3.3 Habitat Assessments for Special-status Animals

All wildlife species that were detected incidentally during biological surveys were documented. For reptiles, habitats were examined for diagnostic sign, which include shed skins, tracks, snake prints, and lizard tail drag marks. Birds were detected by both direct observation and by vocalizations. Mammals were detected both by direct observations and by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.). Habitat assessments and general biological surveys were conducted on March 5, 11, 24, April 4, 14, and June 10, 2014.

No special-status species were observed or detected during biological surveys at the site. Due to the high level of disturbance at the site, minimal habitat occurs on site for special-status animals that were not observed during surveys. Species with a low potential to occur on site include the San Diego horned lizard (*Phrynosoma coronatum blainvillei*), golden eagle (*Aquila chrysaetos*) [foraging], and yellow warbler (*Setophaga petechia*).

On the afternoon of June 10, 2014, the existing Temescal Canyon Road bridge was inspected for evidence of use by bats. The structure was inspected for signs of guano and urine staining, and for the presence of roosting bats. No bats or bat sign were observed at the existing Temescal Canyon Road bridge.

Table 3-3 provides a list of special-status animals evaluated for the Project site through habitat assessments, and general biological surveys. Species were evaluated based on a number of factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the property, 2) MSHCP species survey areas for which the Project site occurs within, and 3) any other special-status animals that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs onsite.

Table 3-3. Special-Status Animals Evaluated for the Project Site

Status

Federal	State
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened
FPT – Federally Proposed Threatened	CFP – California Fully-Protected Species
FC – Federal Candidate	SSC – Species of Special Concern

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence On Site
Invertebrates			
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
Vernal pool fairy shrimp *Branchinecta lynchi*	Federal: FT State: None	Seasonal vernal pools	Does not occur on site due to a lack of suitable habitat.
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *Plantago erecta* and *Castilleja exserta*. Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Not expected to occur on site due to a lack of suitable habitat.
Amphibians			
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 tarosa*	Federal: None State: SSC	Require sluggish pools in streams for breeding. Occur within wet forests, oak forests, chaparral or rolling grasslands. In dry, southern California, newts utilize oak woodland, and chaparral habitats.	Does not occur on site due to a lack of suitable habitat.
Western spadefoot *Spea hammondii*	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
Reptiles			
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	Federal: None State: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Not expected to occur on site due to a lack of suitable habitat.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Not expected to occur on site due to a lack of suitable habitat.
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Not expected to occur on site due to a lack of suitable habitat.
Coast horned lizard *Phrynosoma blainvillei*	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Has low potential to occur within disturbed scrub areas of the 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 suitable habitat.
Birds			
Burrowing owl (burrow sites and some wintering sites) *Athene cunicularia hypugaea*	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a yearlong resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Not expected to occur on site due to a lack of suitable habitat.
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Not expected to occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
Golden eagle *Aquila chrysaetos*	Federal: None State: SSC	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Has low potential to perch and forage on site. No suitable breeding habitat occurs on site.
Least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Not expected to occur on site due to a lack of suitable habitat. Disturbed riparian habitat on site lacks a dense and stratified canopy as well as a well-developed understory for nesting and foraging.
Southwestern willow flycatcher *Empidonax traillii extimus*	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 (nesting colony) *Agelaius tricolor*	Federal: None State: SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur on site due to a lack of suitable habitat.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Federal: FC State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur on site due to a lack of suitable habitat.
Yellow-breasted chat *Icteria virens*	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Not expected to occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence On Site
Yellow warbler *Dendroica petechia*	Federal: None State: SSC	Breeds in lowland and 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.	Has low potential to occur within disturbed riparian areas on site and forage within eucalyptus woodland areas.
Mammals			
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Not expected to occur on site due to a lack of suitable habitat.
San Diego black-tailed jackrabbit *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.
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Not expected to occur on site due to a lack of suitable habitat.
Bats (various)	Federal: None State: SSC (some species)	Variety of habitats, including rock outcrops, cliff faces, trees, and buildings.	Several species have the potential to forage on site. Bats do not currently utilize the Temescal Canyon Road bridge for roosting; no urine staining or guano was observed on or near the bridge.

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If you have any questions please call me at 949.837.0404, extension 27.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Jason Fitzgibbon
Biologist

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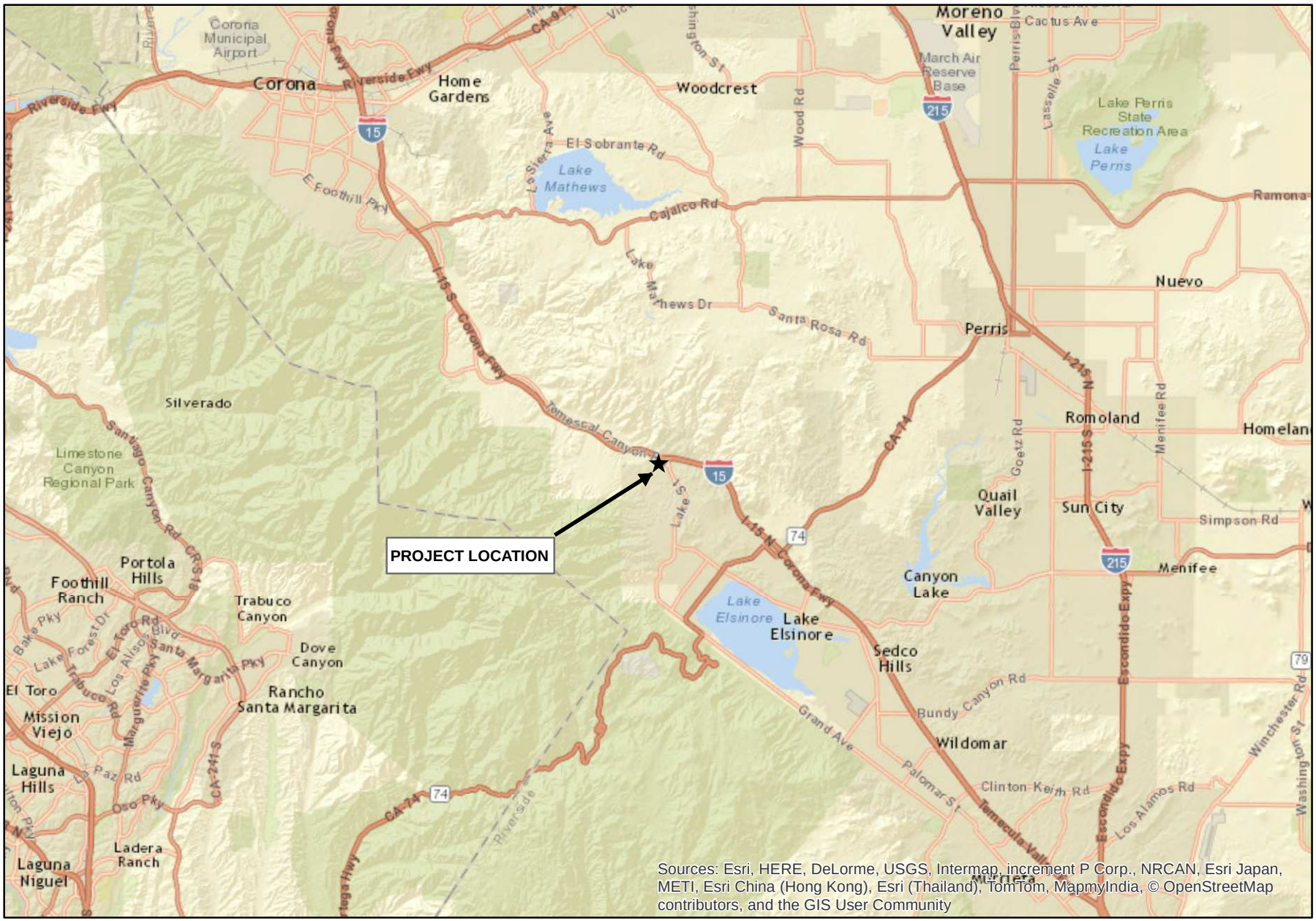

Source: ESRI World Street Map

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TEMESCAL CREEK BRIDGE PROJECT

Regional Map

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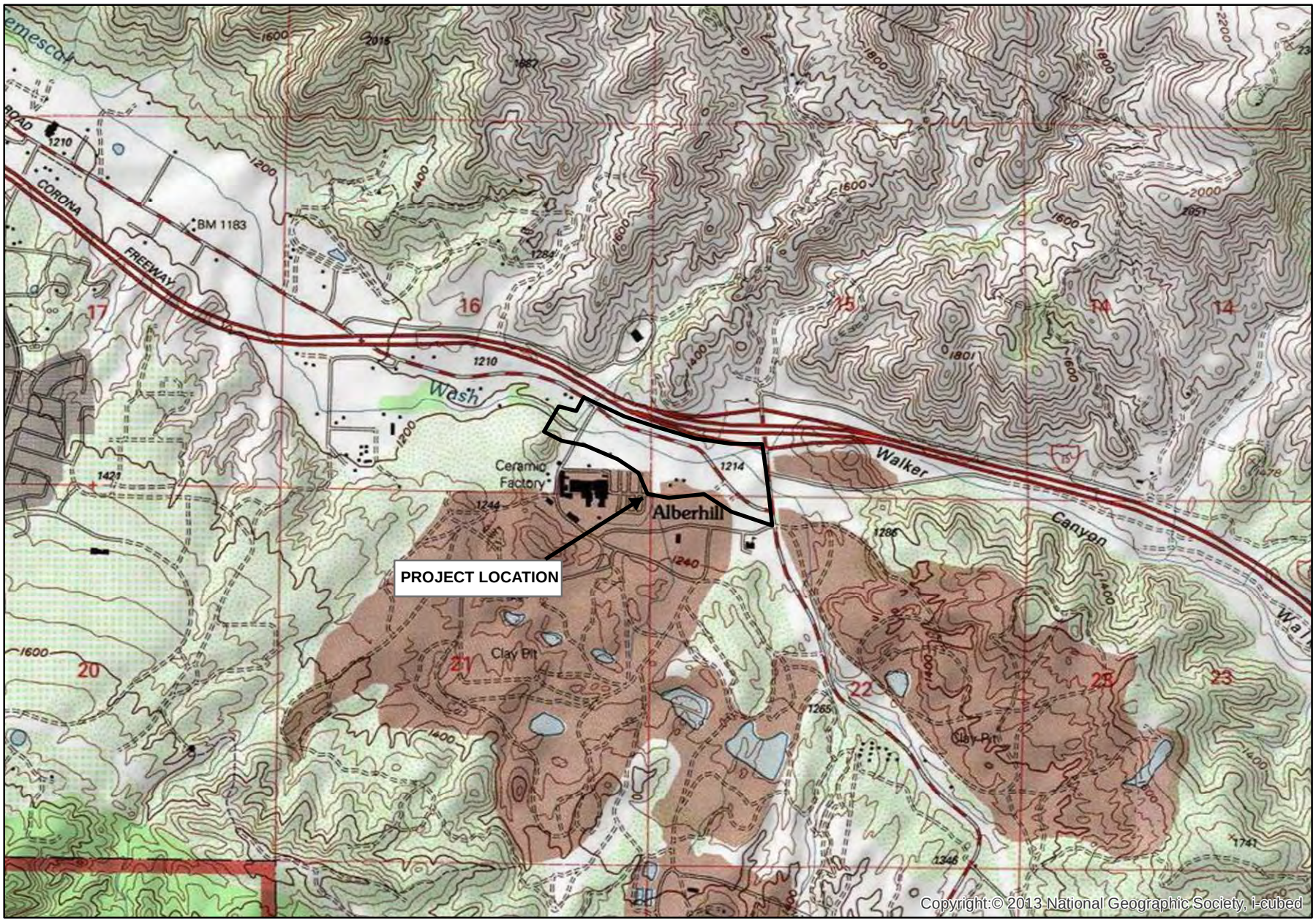
Exhibit 1



Adapted from USGS Alberhill, CA quadrangle

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0 1,000 2,000 4,000 Feet

TEMESCAL CREEK BRIDGE PROJECT

Vicinity Map

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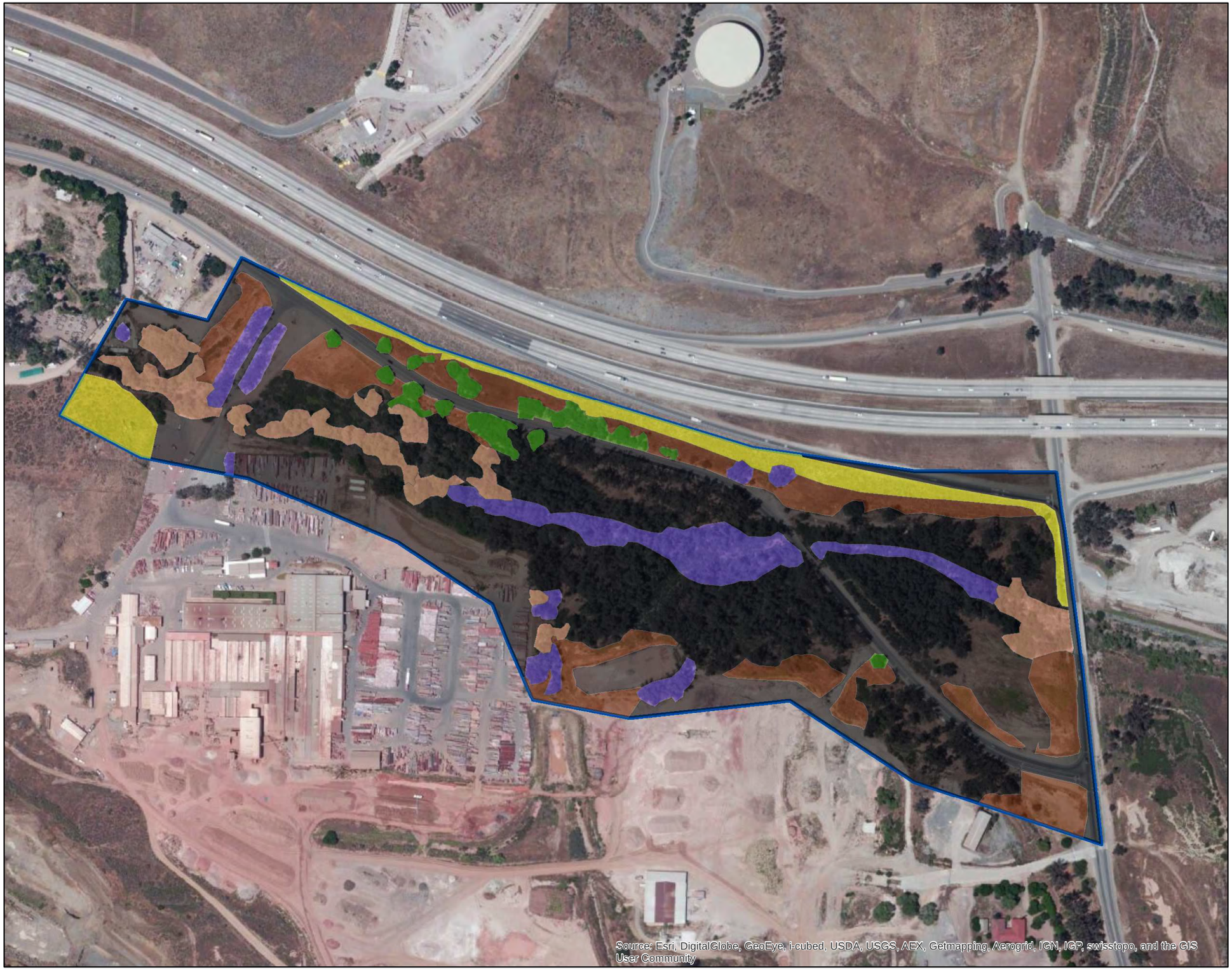
Exhibit 2



Legend

- Coast Live Oak Woodland
- Disturbed Riversidean Sage Scrub
- Disturbed Southern Willow Riparian
- Disturbed/Developed
- Eucalyptus Woodland
- Non-Native Grassland

N

0 150 300 600

Feet

TEMESCAL CREEK BRIDGE PROJECT

Vegetation Map

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Exhibit 3

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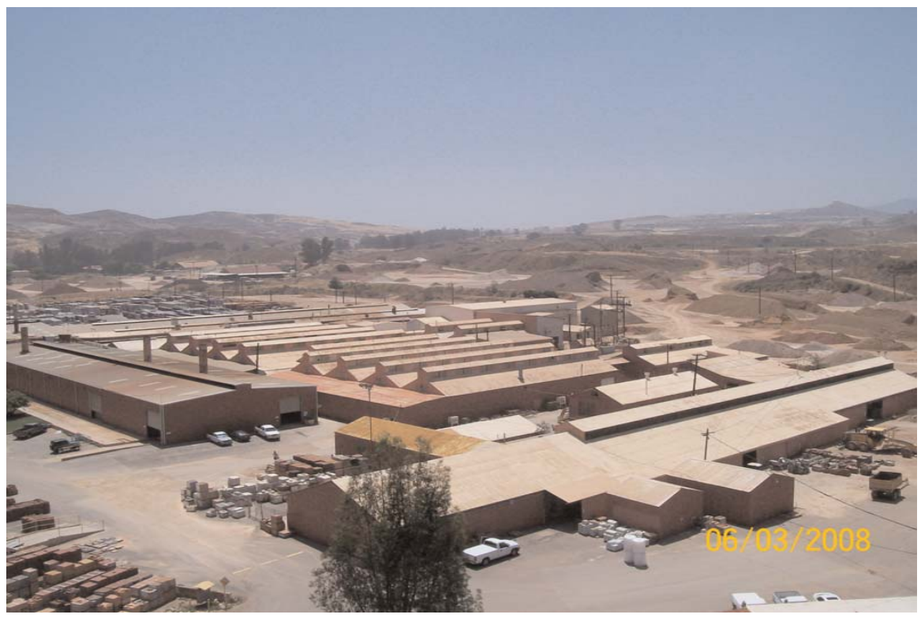
Photograph 1: Looking up the hill located just west of the entrance to the Pacific Clay MIne Site. This photograph depicts an area on site where Parry's spine-flower was observed.

Photograph 2: This photograph depicts some of the mining facilities in the fore-ground, in the background you can see some of the typical habitat located in the central portion of the Project Site. This photograph is looking south over the Site.



Photograph 3: View from the top of the hill depicted in Photograph1. This photo-graph is looking southeast over the mining facilities.

Photograph 4: This photograph is looking south-southeast over some of the mining facilities.

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Exhibit 4

PACIFIC CLAY MINE

Site Photographs

Photograph 5: This photograph depicts a typical holding pond on site, This artificial pond contained tadpoles of western toad.

Photograph 6: This Photograph depicts the largest drainage on site. Photograph is facing south looking upstream.

Photograph 7: This photograph depicts the upper portion of the drainage in Photograph 6. Photograph is facing downstream and north.

Photograph 8: This photograph depicts some of the riparian vegetation and surrounding lands in the central portion of the Project Site.

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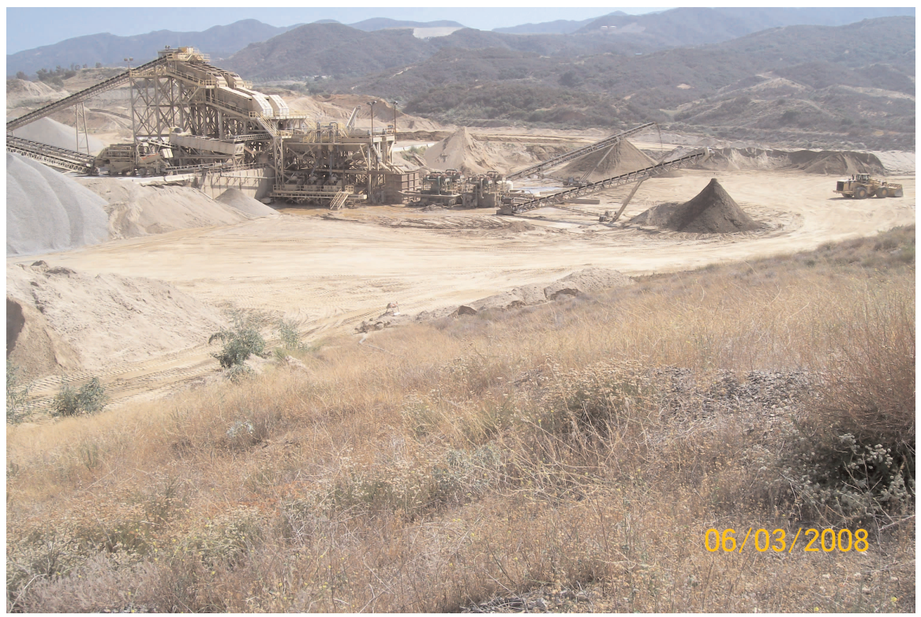
Exhibit 4

PACIFIC CLAY MINE

Site Photographs

Photograph 9: This photograph depicts the vegetation and land use in the central portion of the Project Site. Photo is looking north-northeast.

Photograph 10: This photograph depicts the disturbed mining operation on site. The area to the left of the hill was historically mapped as containing altamont clay soils.



Photograph 11: This photograph depicts the large mining operation located on site mentioned in the previous photograph.

Photograph 12: This photograph depicts some of the ponds and associated habitat located on site. This photograph is facing southwest.

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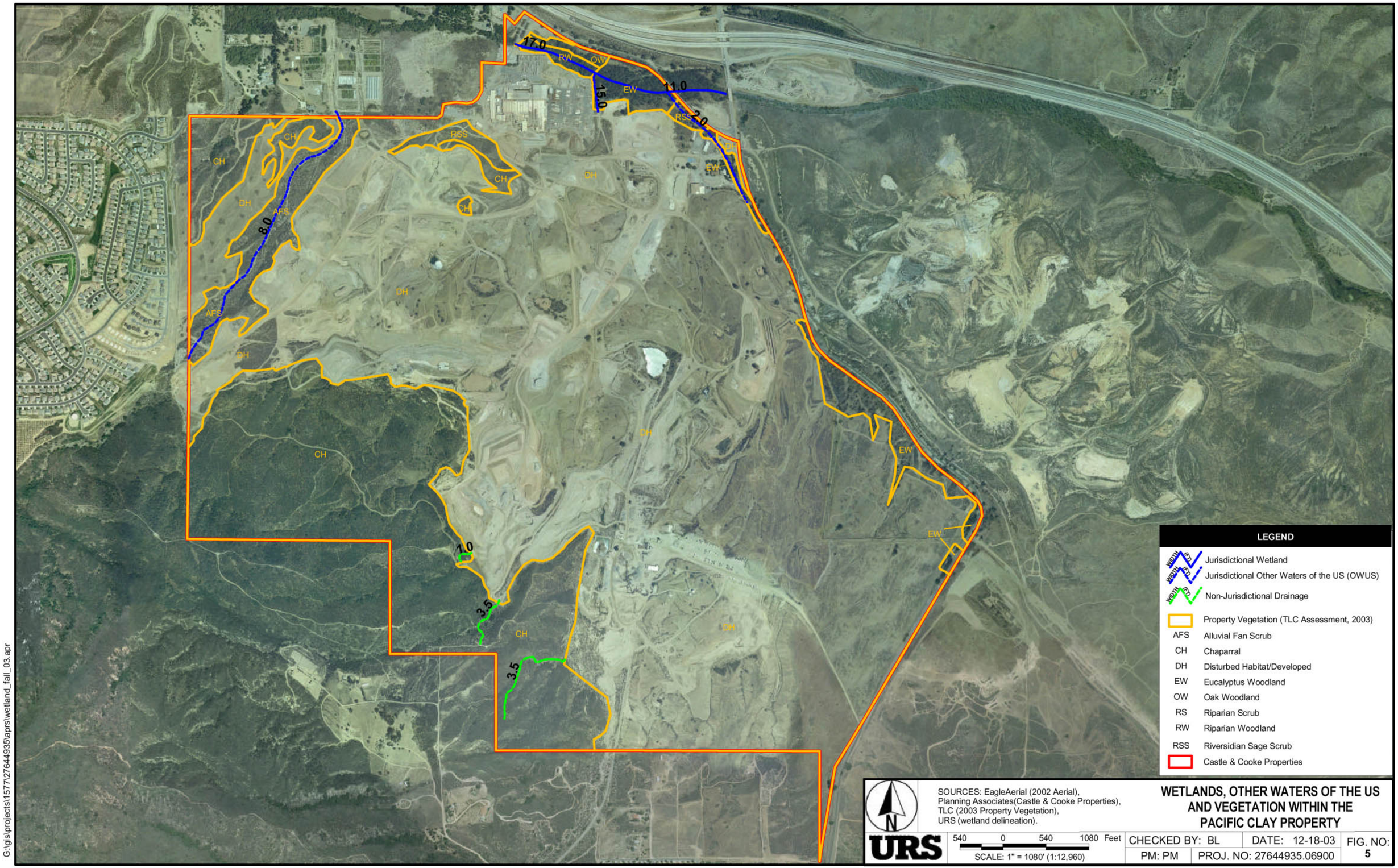
Exhibit 4

PACIFIC CLAY MINE

Site Photographs



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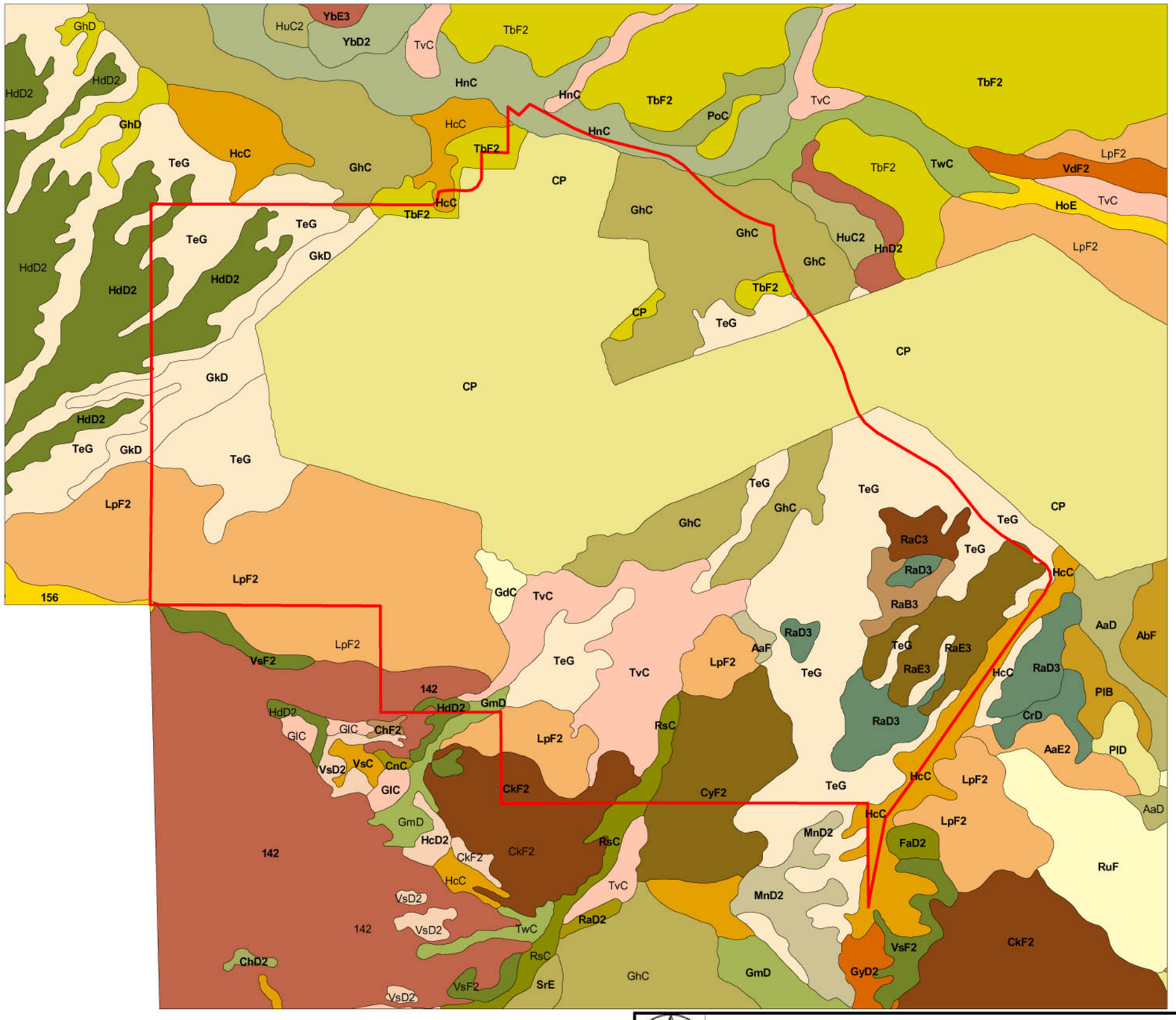
SOIL ACRONYMS/DESCRIPTIONS

142	Cieneba sandy loam, 30 to 75 percent slopes, eroded
156	Hanford sandy loam, 2 to 9 percent slopes
AaD	Altamont clay, 5 to 15 percent slopes
AaE2	Altamont clay, 15 to 25 percent slopes, eroded
AaF	Altamont clay, 25 to 50 percent slopes
AbF	Altamont cobbly clay, 8 to 35 percent slopes
CP	Clay Pits
ChD2	Cieneba sandy loam, 8 to 15 percent slopes, eroded
ChF2	Cieneba sandy loam, 15 to 50 percent slopes, eroded
CkF2	Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded
CnC	Cortina gravelly coarse sandy loam, 2 to 8 percent slopes
CrD	Cortina cobbly sandy loam, 2 to 12 percent slopes
CyF2	Crouch rocky sandy loam, 25 to 50 percent slopes, eroded
FaD2	Fallbrook sandy loam, 8 to 15 percent slopes, eroded
GdC	Garretson gravelly very fine sandy loam, 2 to 8 percent slopes
GhC	Gorgonio loamy sand, 0 to 8 percent slopes
GhD	Gorgonio loamy sand, 8 to 15 percent slopes
GkD	Gorgonio loamy sand, channeled, 2 to 15 percent slopes
GlC	Gorgonio loamy sand, deep, 2 to 8 percent slopes
GmD	Gorgonio gravelly loamy fine sand, 2 to 15 percent slopes
GyD2	Greenfield sandy loam, 8 to 15 percent slopes, eroded
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes
HcD2	Hanford coarse sandy loam, 8 to 15 percent slopes, eroded
HdD2	Hanford cobbly coarse sandy loam, 2 to 15 percent slopes, eroded
HnC	Honcut sandy loam, 2 to 8 percent slopes
HnD2	Honcut sandy loam, 8 to 15 percent slopes, eroded
HoE	Honcut cobbly sandy loam, 2 to 25 percent slopes
HuC2	Honcut loam, 2 to 8 percent slopes, eroded
LpF2	Lodo rocky loam, 25 to 50 percent slopes, eroded
MnD2	Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded
PlB	Placentia fine sandy loam, 0 to 5 percent slopes
PlD	Placentia fine sandy loam, 5 to 15 percent slopes
PoC	Porterville clay, 0 to 8 percent slopes
RaB3	Ramona sandy loam, 0 to 5 percent slopes, severely eroded
RaC3	Ramona sandy loam, 5 to 8 percent slopes, severely eroded
RaD2	Ramona sandy loam, 8 to 15 percent slopes, eroded
RaD3	Ramona sandy loam, 8 to 15 percent slopes, severely eroded
RaE3	Ramona sandy loam, 15 to 25 percent slopes, severely eroded
RsC	Riverwash
RuF	Rough broken land
SrE	Soboba cobbly loamy sand, 2 to 25 percent slopes
TbF2	Temescal rocky loam, 15 to 50 percent slopes, eroded
TeG	Terrace escarpments
TvC	Tujunga loamy sand, channeled, 0 to 8 percent slopes
TwC	Tujunga gravelly loamy sand, 0 to 8 percent slopes
VdF2	Vallecitos rocky loam, 8 to 50 percent slopes, eroded
VsC	Vista coarse sandy loam, 2 to 8 percent slopes
VsD2	Vista coarse sandy loam, 8 to 15 percent slopes, eroded
VsF2	Vista coarse sandy loam, 15 to 35 percent slopes, eroded
YbD2	Yokohl loam, 8 to 15 percent slopes, eroded
YbE3	Yokohl loam, 8 to 25 percent slopes, severely eroded



SOURCES: Planning Associates (Castle & Cooke Properties), SSURGO (Western Riverside Soils Geographic Database).

SOILS WITHIN THE PACIFIC CLAY PROPERTY

URS

750 0 750 1500 Feet

SCALE: 1" = 1500' (1:18,000)

CHECKED BY: BL | DATE: 12-18-03 | FIG. NO: 6

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