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September 6, 2018 IRD-01

Mr. Tony Spinrad
Irwindale Partners
510 E Foothill Blvd, Suite 206
San Dimas, CA 91773

Subject: Biological Letter Report for the Existing Conditions on The Park @ Live Oak Project Site

Dear Mr. Spinrad:

HELIX Environmental Planning, Inc. (HELIX) prepared this letter report to summarize existing conditions documented on The Park @ Live Oak Project Site (project site) and address the potential for special-status species to occur within the project site.

INTRODUCTION

Project Description

The project proposes development of a 78.3-acre property, which was formerly known as the JH Pit. The project site is located in the western portion of the City of Irwindale and was formerly an aggregate mine site that is currently proposed for reclamation. The proposed project includes up to 1,550,000 square feet of Industrial/Business Park and Commercial land uses.

Project Location

The approximately 78.3-acre project site comprises three parcels with Assessor's Parcel Numbers 8532-001-002, -006, and -900 and is located in the City of Irwindale, Los Angeles County, California (Figure 1, *Regional Location*). The project site is generally located to the west of Interstate (I-) 605 and south of I-210. The project site is situated in the U.S. Geological Survey 7.5-minute Baldwin Park quadrangle map within Township 1 South, Range 11 West (Figure 2, *USGS Topography*). Specifically, the project site is located directly east of the intersection of Live Oak Avenue and Arrow Highway and south of the intersection of Avenida Barbosa and Arrow Highway (Figure 3, *Aerial Photograph*).

Project Site Description and Land Use

The project site is primarily unvegetated and currently consists of stockpiles, excavated mining pits, and unpaved roads. The project site has previously been subject to mining activities and is currently under reclamation. Although the site is mostly unvegetated, a few remnant native species and non-native species typically associated with disturbed areas were observed. The project site does not support any drainage features. Soils on the project site are mostly mapped as Pits and Quarries (1180), although a small portion of the northern boundary of the site is mapped as Urban land, commercial-Soboba complex, 0 to 5 percent slopes (1106; Natural Resources Conservation Service [NRCS] 2018). The topography of the site is flat, with elevations ranging from approximately 250 feet above mean sea level (AMSL) near the western corner of the project site to a high of approximately 420 feet AMSL near the northeastern corner. Surrounding land uses include the Irwindale Speedway to the south, commercial/industrial businesses to the west and southeast, and mining activities to the north.

METHODS

Literature Review

HELIX reviewed regional planning documents, Google Earth aerials (2018), Natural Resources Conservation Service's (NRCS) Web Soil Survey (2018), and special-status species database records, including California Native Plant Society (CNPS)'s Inventory of Rare and Endangered Plants of California (2018), California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB; 2018), and U.S. Fish and Wildlife Service's (USFWS) critical habitat maps (2018).

Biological Survey

HELIX Biologist/Regulatory Specialist Ezekiel Cooley performed a general biological survey on March 6, 2018 to map existing plant communities, assess the suitability of habitat for special-status plant and animal species, map preliminary jurisdictional limits (if any), and note other special-status biological resources present or that have a potential to occur.

RESULTS

Vegetation Communities

A total of five vegetation communities or land uses were mapped on the project site, including disturbed, disturbed/buckwheat scrub, non-native vegetation, ornamental, and developed. The project site does not support any native-dominated vegetation communities (Table 1, *Vegetation and Land Use*; Figure 4, *Vegetation and Land Use*). A brief description of each vegetation community and land use mapped on the project site is provided below.

Table 1
VEGETATION AND LAND USE

Communities	Acres
Disturbed	56.98
Disturbed/California Buckwheat Scrub	1.07
Non-native Vegetation	14.21
Ornamental	0.90
Developed	5.30
TOTAL	**78.46**

Disturbed

Disturbed habitat includes land cleared of vegetation (e.g., dirt roads), land dominated by non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance (previously cleared or abandoned landscaping), or land showing signs of past or present animal usage that removes any capability of providing viable habitat.

Disturbed habitat dominates the project site and is a result of former aggregate mining and ongoing reclamation activities. Disturbed habitat mapped on the project site totaled 56.98 acres. These areas are mostly unvegetated, although a few species with high tolerance for disturbance were observed, such as Russian thistle (*Salsola tragus*), scale-broom (*Lepidospartum squamatum*), hairy yerba santa (*Eriodictyon trichocalyx var. trichocalyx*), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), and short-pod mustard (*Hirschfeldia incana*).

Disturbed/California Buckwheat Scrub

Disturbed/California buckwheat scrub is a community that is mostly disturbed, but also includes a low density of species associated with California buckwheat scrub. California buckwheat scrub occupies xeric sites such as steep slopes, severely drained soils, or clays that slowly release stored soil moisture. It is dominated by subshrubs with leaves that are deciduous during drought, an adaptation that allows the habitat to withstand the prolonged drought period in the summer and fall. Composition varies substantially depending on physical circumstances and the successional status of the vegetation community; however, characteristic species include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), brittlebush (*Encelia farinosa*), and several species of sage (*Salvia* spp.).

A small linear strip of disturbed/California buckwheat scrub community was observed within the western portion of the project site, which totaled 1.07 acres. This community was observed on a steep slope of one of the mining pits. The slope was mostly unvegetated, although scattered species commonly associated with California buckwheat scrub were observed. The primary species observed was California buckwheat, in addition to a few scale-broom, California sagebrush, giant reed (*Arundo donax*) and oat (*Avena* sp.) individuals.

Non-Native Vegetation

Non-native vegetation is typically associated with land that has been heavily influenced by human activities, including areas adjacent to roads, manufactured slopes, and abandoned lots. Non-native

vegetation areas are dominated by ornamental and exotic species that take advantage of previously cleared or abandoned landscaping or land showing signs of past or present animal usage that removes any capability of providing viable habitat.

Non-native vegetation was observed on steep slopes of the mining pits located near the eastern and central portions of the project site. Non-native vegetation totaled 14.21 acres. The most prevalent species observed was short-pod mustard; other non-native species included non-native species castor bean, cheeseweed (*Malva parviflora*), Russian thistle, and tree tobacco (*Nicotiana glauca*). A few scattered native species were also observed within these areas, including California croton (*Croton californica*), cliff aster (*Malacothrix saxatilis*), and Jimson weed (*Datura wrightii*).

Ornamental

Ornamental vegetation is characterized as stands of naturalized trees and shrubs (e.g., acacias [*Acacia* spp.], peppertrees [*Schinus* spp.]), many of which are also used in landscaping.

A strip of ornamental vegetation was observed along the eastern project boundary, adjacent to the I-605. Ornamental vegetation totaled 0.90 acre. Ornamental species observed included Aleppo pine (*Pinus halepensis*), Brazilian pepper tree (*Schinus terebinthifolius*), castor bean, oleander (*Nerium oleander*), Peruvian pepper tree (*Schinus molle*), purple fountain grass (*Pennisetum setaceum*), and statice (*Limonium perezii*).

Developed

Developed land is where permanent structures and/or pavement have been placed, which prevents the growth of vegetation, or where landscaping is clearly tended and maintained.

A developed area was observed in the northeastern corner of the project site, which totaled 5.30 acres. The developed area included paved roadways, office trailers, storage containers, and stockpiles. Some scattered vegetation was observed along the periphery of the developed area, adjacent to Arrow Highway. Vegetation in these areas consisted mostly of ornamental plantings, such as Aleppo pine, African fountain grass, castor bean, Mexican fan palm (*Washingtonia robusta*), oleander, purple fountain grass, saltcedar (*Tamarix ramosissima*), and statice.

Plants and Animals

A complete list of plant species observed during the site visit is provided in Attachment A, *Plant Species Observed*. The limited number of plant species observed on the project site supports some habitat for animal species, which are provided in Attachment B, *Animal Species Observed or Detected*. Representative photographs of the project site are provided as Attachment C, *Representative Site Photographs*.

Jurisdictional Areas

Based on field observations, no drainage features, wetlands, or other special aquatic sites were observed on the project site during the delineation.

BIOLOGICAL CONSTRAINTS

Special-Status Plant Species

Special-status plant species are those listed or candidate listed as federally threatened or endangered by the USFWS; state listed or candidate listed as threatened or endangered or considered special-status by the CDFW; and/or are CNPS California Rare Plant Rank (CRPR) List 1A, 1B, 2A, 2B, or 3 species, as recognized in the CNPS's Inventory of Rare and Endangered Vascular Plants of California and consistent with the California Environmental Quality Act (CEQA) Guidelines.

No special-status plant species have been reported on the project site, although 42 species were reported on CNDDB and/or CNPS to occur within the vicinity of the site. Of the 42 special-status species, 5 species were identified to potentially occur based on the literature review and existing habitat on the project site. Special-status species that have a potential to occur on the project site are listed in Table 2, *Potential Special-Status Plant Species* below. Due to the potential for five special-status plant species to occur on the project site, spring and summer special-status plant surveys were recommended. The survey results are provided below.

Survey Results

On March 6, 2018, Mr. Cooley performed a focused special-status plant survey for four of the five species that have potential to occur on-site, including mesa horkelia (*Horkelia cuneata* var. *puberula*), south coast branching phacelia (*Phacelia ramosissima* var. *austrolitoralis*), Brand's star phacelia (*Phacelia stellaris*), and chaparral ragwort (*Senecio aphanactis*). No special-status plants were observed during the focused survey.

On September 4, 2018, Mr. Cooley performed a focused special-status plant survey for the remaining species, southern tarplant (*Centromadia parryi* ssp*. australis*). No special-status plants were observed during the focused survey.

Table 2
POTENTIAL SPECIAL-STATUS PLANT SPECIES

Scientific Name	Common Name	Federal Listing	State Listing
Centromadia parryi ssp. *australis*	southern tarplant	None	None/CRPR[3] 1B.1
Horkelia cuneata var. *puberula*	mesa horkelia	None	None/CRPR 1B.1
Phacelia ramosissima var. *austrolitoralis*	south coast branching phacelia	None	None/CRPR 3.2
Phacelia stellaris	Brand's star phacelia	None	None/CRPR 1B.1
Senecio aphanactis	chaparral ragwort	None	None/CRPR 2B.2

[1] California Rare Plant Rating

Special-Status Animal Species

Special-status animal species are those listed or candidate listed as federally threatened or endangered by USFWS; and/or state listed or candidate listed as threated or endangered or considered species of special concern (SSC) by CDFW.

The project site is located outside of any USFWS-designated critical habitat. No special-status animal species have been reported on the site itself; however, 41 species have been reported within the vicinity of the project site. None of the 41 special-status animal species are expected to occur on the project site based on the isolated nature of the project site, historical and ongoing disturbance from mining and reclamation activities, and lack of native habitat. A number of special-status animal species were recorded within Santa Fe Flood Control Basin approximately 0.5 mile to the northwest of the project site, including coast horned lizard (*Phrynosoma blainvillii*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), least Bell's vireo (*Vireo bellii pusillus*), yellow-breasted chat (*Icteria virens*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and coastal California gnatcatcher (*Polioptila californica californica*). However, existing development and freeways separate the project site from the Santa Fe Flood Control Basin and the project site does not support suitable habitat for these species.

Nesting Birds

Given the vegetation observed on the project site, there is potential for nesting birds. Potential direct impacts to nesting bird species are not allowed under the Migratory Bird Treaty Act (MBTA). These protections are also reinforced at the state level through the California Fish and Game Code (CFG). An avoidance/minimization measure is recommended below to avoid project impacts to potential nesting birds on the project site.

Avoidance/Minimization Measure

Ground-disturbing activities should be conducted outside of the breeding season (generally September 1 to January 14). Grubbing, grading, or clearing during the breeding season of MBTA-covered species could occur if it is determined via a pre-construction survey that no nesting birds (or birds displaying breeding or nesting behavior) are present immediately prior to grubbing, grading, or clearing. If grubbing, grading, or clearing is proposed during the nesting season (generally January 15 to August 31), a pre-construction survey should be conducted prior to disturbance.

If you have any questions regarding the information presented in this memo, please contact me at EzekielC@helixepi.com or (949) 234-8770.

Sincerely,

Ezekiel Cooley
Biologist/Regulatory Specialist

Attachments:

Figure 1: Regional Location
Figure 2: USGS Topography
Figure 3: Aerial Photograph
Figure 4: Vegetation and Land Use
Attachment A: Plant Species Observed
Attachment B: Animal Species Observed or Detected
Attachment C: Representative Site Photographs

REFERENCES

California Department of Fish and Wildlife. 2018. California Natural Diversity Database and Rarefind. Available by subscription. California Department of Fish and Wildlife: Sacramento, California. Accessed April 9, 2018.

California Native Plant Society. 2018. Inventory of rare and endangered plants of California. California Native Plant Society. Retrieved from: http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi. Accessed April 9, 2018.

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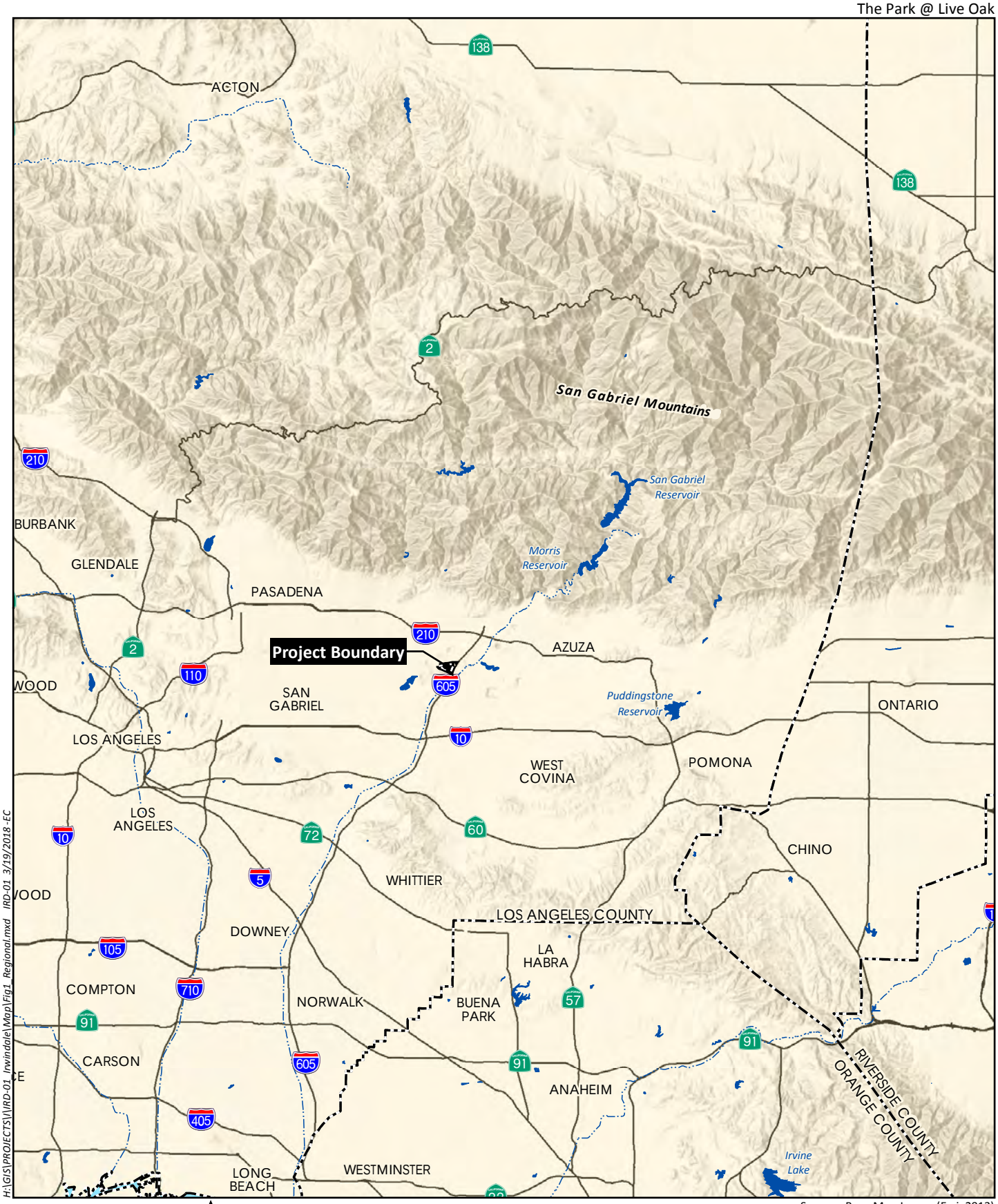
Natural Resources Conservation Service (NRCS). 2018. Web Soil Survey. United States Department of Agriculture (USDA). Retrieved from: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.Aspx. Accessed April 4, 2018.

U.S. Fish and Wildlife Service (USFWS). 2018. Critical habitat mapping. GIS files provided by USFWS. Accessed April 9, 2018.



H:\GIS\PROJECTS\IRD-01 Irwindale\Map\Fig1_Regional.mxd IRD-01 3/19/2018 -EC

0 6 Miles

Source: Base Map Layers (Esri, 2013)

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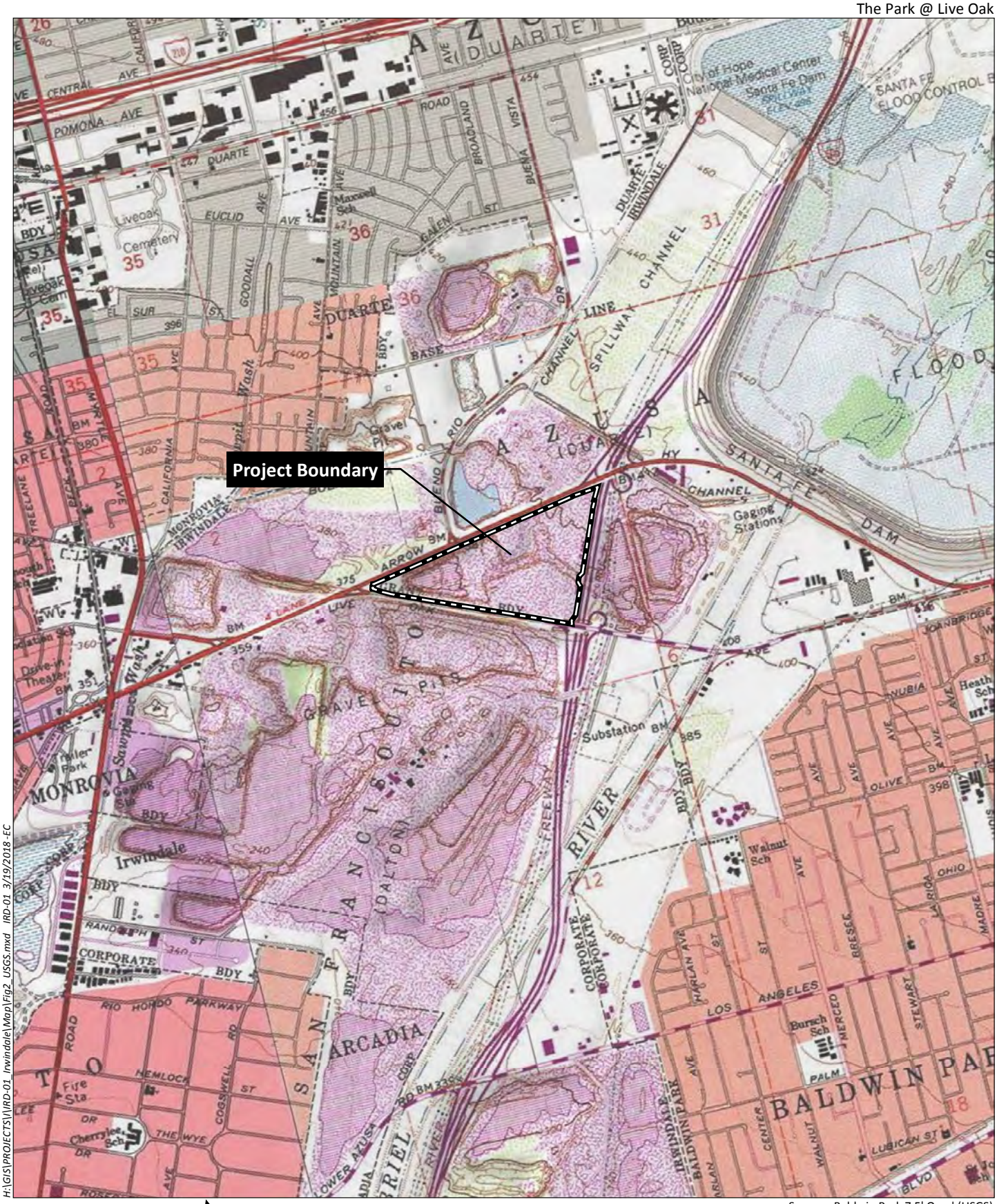
Regional Location

Figure 1



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Source: Baldwin Park 7.5' Quad (USGS)

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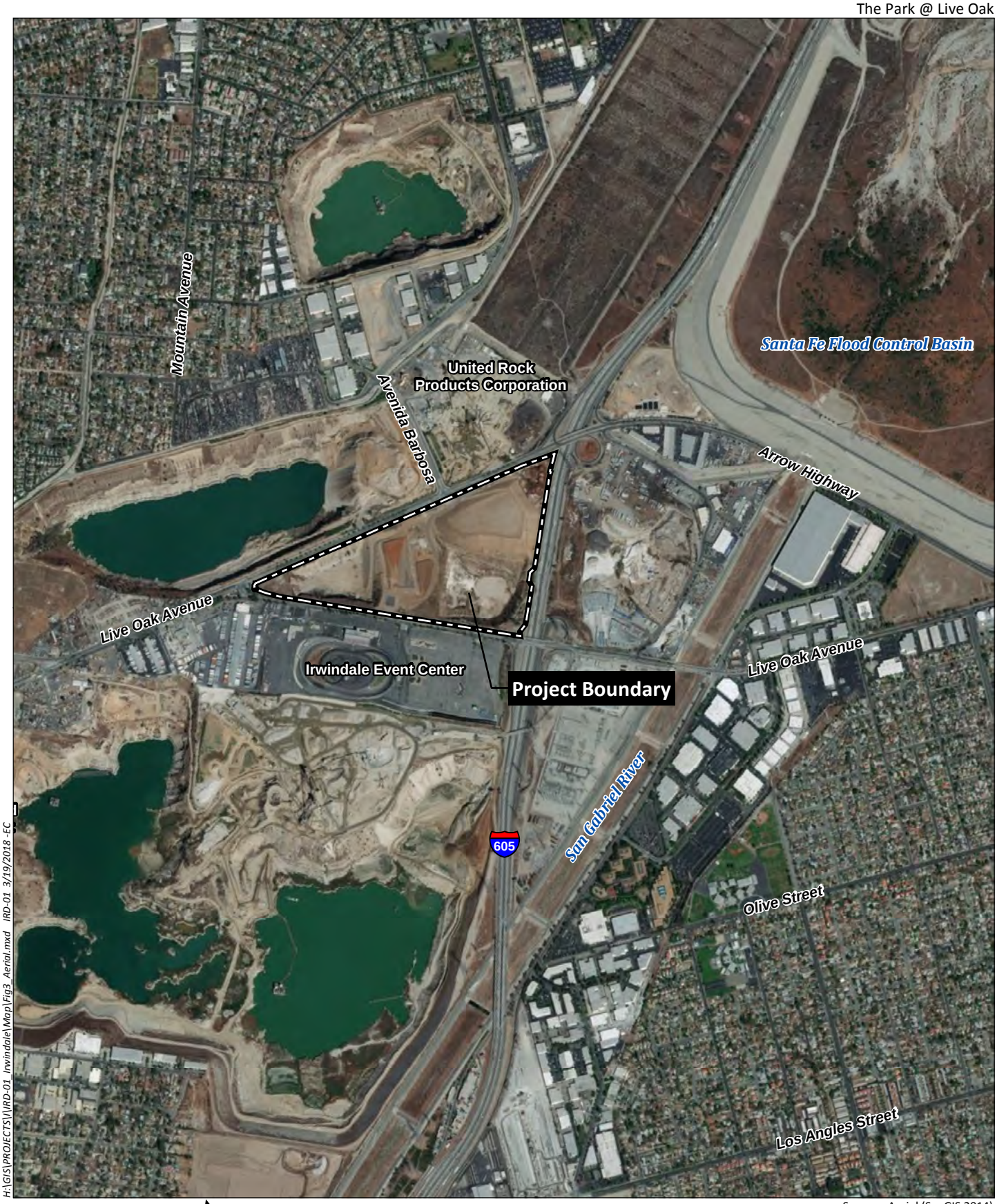
USGS Topography

Figure 2



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0 1,500 Feet

Source: Aerial (SanGIS 2014)

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Aerial Vicinity

Figure 3

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0 250 Feet

Source: Aerial (NearMap, 2017)

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Vegetation and Land Use

Figure 4

Attachment A
PLANT SPECIES OBSERVED

Family	Scientific Name	Common Name
GYMNOSPERMS		
Pinaceae	*Pinus halepensis*	Aleppo pine
ANGIOSPERMS		
Eudicots		
Anacardiaceae	*Malosma laurina*	laurel sumac
	Rhus aromatica	basket-brush
	Schinus molle	Peruvian peppertree
	Schinus terebinthifolius	Brazilian peppertree
Apocynaceae	*Funastrum cynanchoides* var. *hartwegii*	climbing milkweed
	Nerium oleander	oleander
Asteraceae	*Ambrosia psilostachya*	western ragweed
	Artemisia californica	California sagebrush
	Baccharis salicifolia	mule fat
	Lepidospartum squamatum	scale-broom
	Malacothrix saxatilis	cliff aster
	Pseudognaphalium californicum	California everlasting
	Pseudognaphalium luteoalbum	everlasting cudweed
	Sonchus asper	prickly sow thistle
Boraginaceae	*Eriodictyon trichocalyx* var. *trichocalyx*	hairy yerba santa
Brassicaceae	*Hirschfeldia incana*	short-pod mustard
Cactaceae	*Opuntia littoralis*	coastal prickly pear
Chenopodiaceae	*Salsola tragus*	Russian thistle
Euphorbiaceae	*Croton californicus*	California croton
	Ricinus communis	castor bean
Fabaceae	*Acmispon glaber*	deerweed
Geraniaceae	*Erodium cicutarium*	redstem filaree
Lamiaceae	*Marrubium vulgare*	horehound
Malvaceae	*Malva parviflora*	cheeseweed
Plumbaginaceae	*Limonium perezii*	statice
Polygonaceae	*Eriogonum fasciculatum*	buckwheat
Solanaceae	*Datura wrightii*	jimson weed
Solanaceae	*Nicotiana glauca*	tree tobacco
Tamaricaceae	*Tamarix ramosissima*	saltcedar
Monocots		
Arecaceae	*Washingtonia robusta*	Mexican fan palm
Poaceae	*Arundo donax*	giant reed
	Avena sp.	oats
	Pennisetum setaceum	purple fountain grass
Themidaceae	*Dichelostemma capitatum*	blue dicks

Attachment B
ANIMAL SPECIES OBSERVED OR DETECTED

Order	Family	Scientific Name	Common Name
VERTEBRATES			
Reptiles			
Squamata	Phrynosomatidae	*Sceloporus occidentalis*	western fence lizard
Birds			
Apodiformes	Trochilidae	*Calypte anna*	Anna's hummingbird
Columbiformes	Columbidae	*Columba livia*	rock pigeon
		Zenaida macroura	mourning dove
Passeriformes	Aegithalidae	*Psaltriparus minimus*	bushtit
	Fringillidae	*Haemorhous mexicanus*	house finch
	Passerellidae	*Melospiza melodia*	song sparrow
		Melozone crissalis	California towhee

Photograph 1 - View of the non-native vegetation, facing west.

Photograph 2 - View of the non-native vegetation to the left and ornamental vegetation to the right, facing northeast.

Photograph 3 - View of one of the active quarry pits, facing northwest.

Photograph 4 - View of the disturbed/California buckwheat scrub community located on a steep slope, facing east.

Photograph 5 - View of disturbed habitat, facing northeast.

Photograph 6 - View of another active quarry pit, facing northwest.

Note: See Figure 4 for photograph locations.

Source: HELIX 2018

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Representative Site Photographs

Attachment C