

Camp Vincent Kilpatrick, APN 4471-003-900, 4471-004-902, 4471-004-903, 4471-004-905
427 Encinal Road, Malibu CA 90265
R2012-02386, CDP 201500030

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4	Vicinity aerial diagram, showing bioconstraints: Brown dot-dash shows significant ridgelines separating drainages, and drainage names are given; Red (As) is collection area of whiptail lizard (<i>Aspidoscelis tigris stejnegeri</i>); green circles: Cm (<i>Calochortus plummerae</i>); Pl (<i>Pentachaeta lyonii</i>); Dm (<i>Dianthus minthornii</i>); Csg (<i>Calochortus clavatus</i> var. <i>gracilis</i>); Hatch green shows critical habitat for Lyon's pentachaeta, a federal and state endangered plant
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427 Encinal Road, Malibu CA 90265
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Biological Documents, Table of Contents

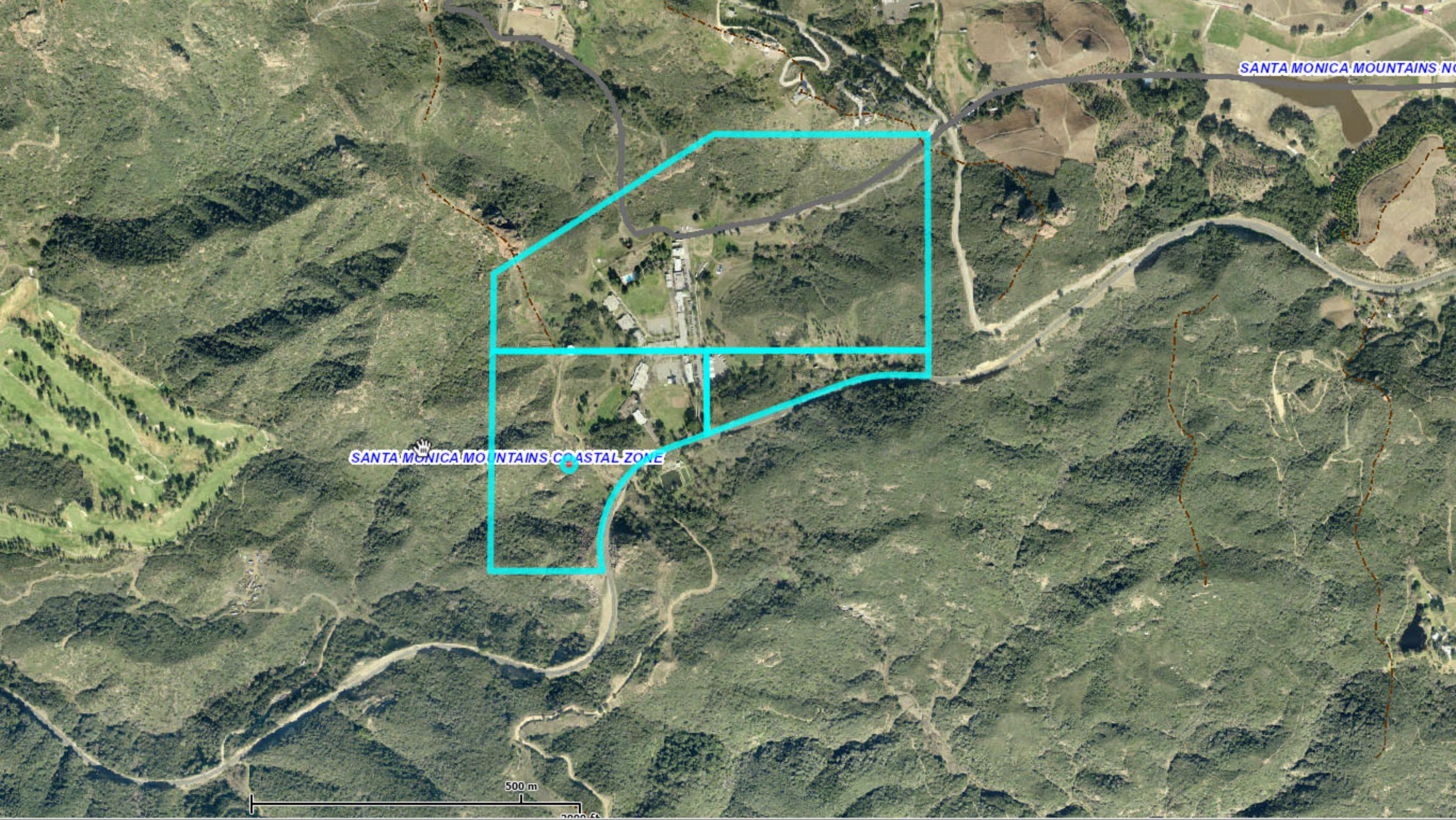
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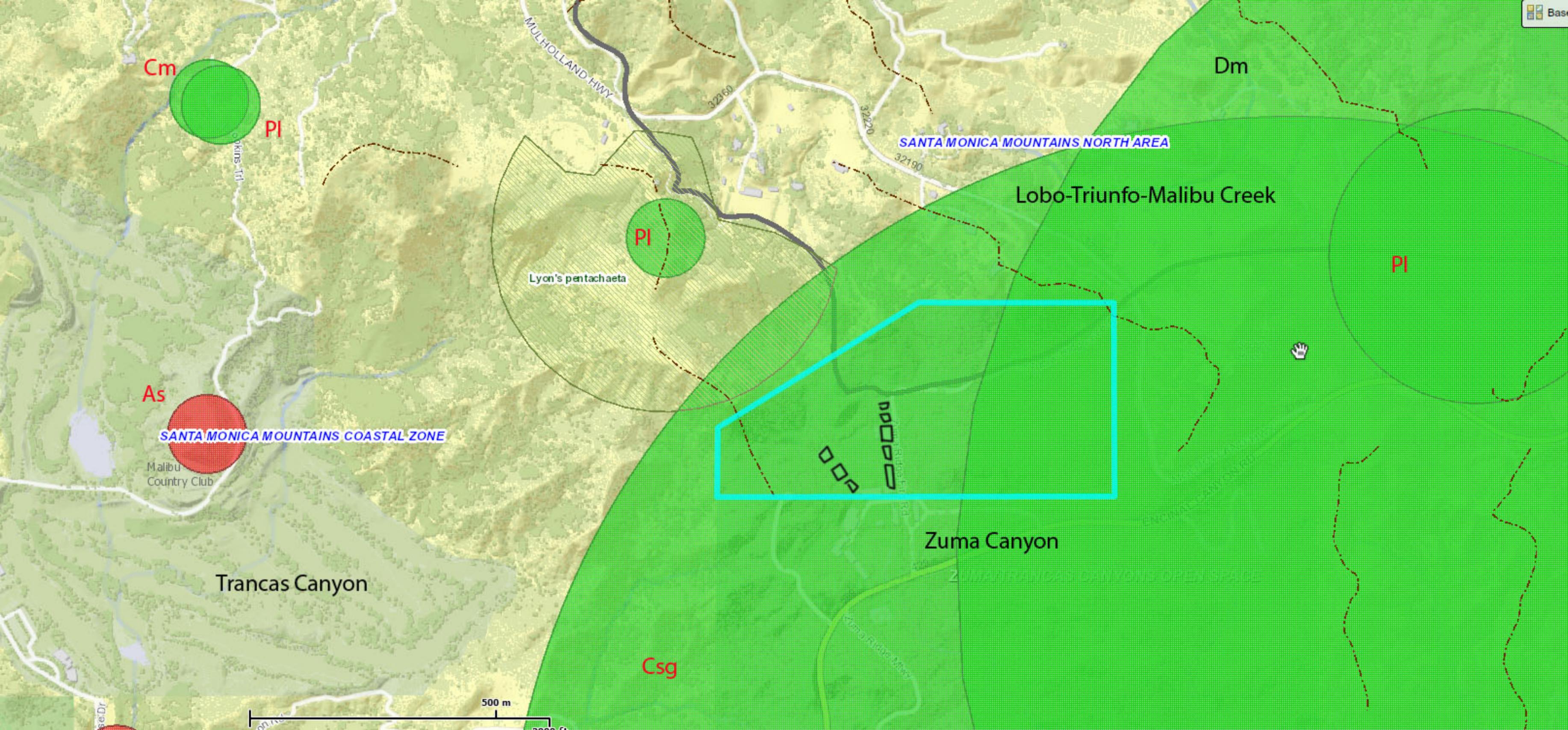
SANTA MONICA MOUNTAINS N

SANTA MONICA MOUNTAINS COASTAL ZONE

500 m

2000 ft





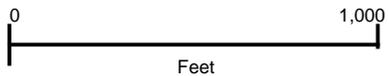


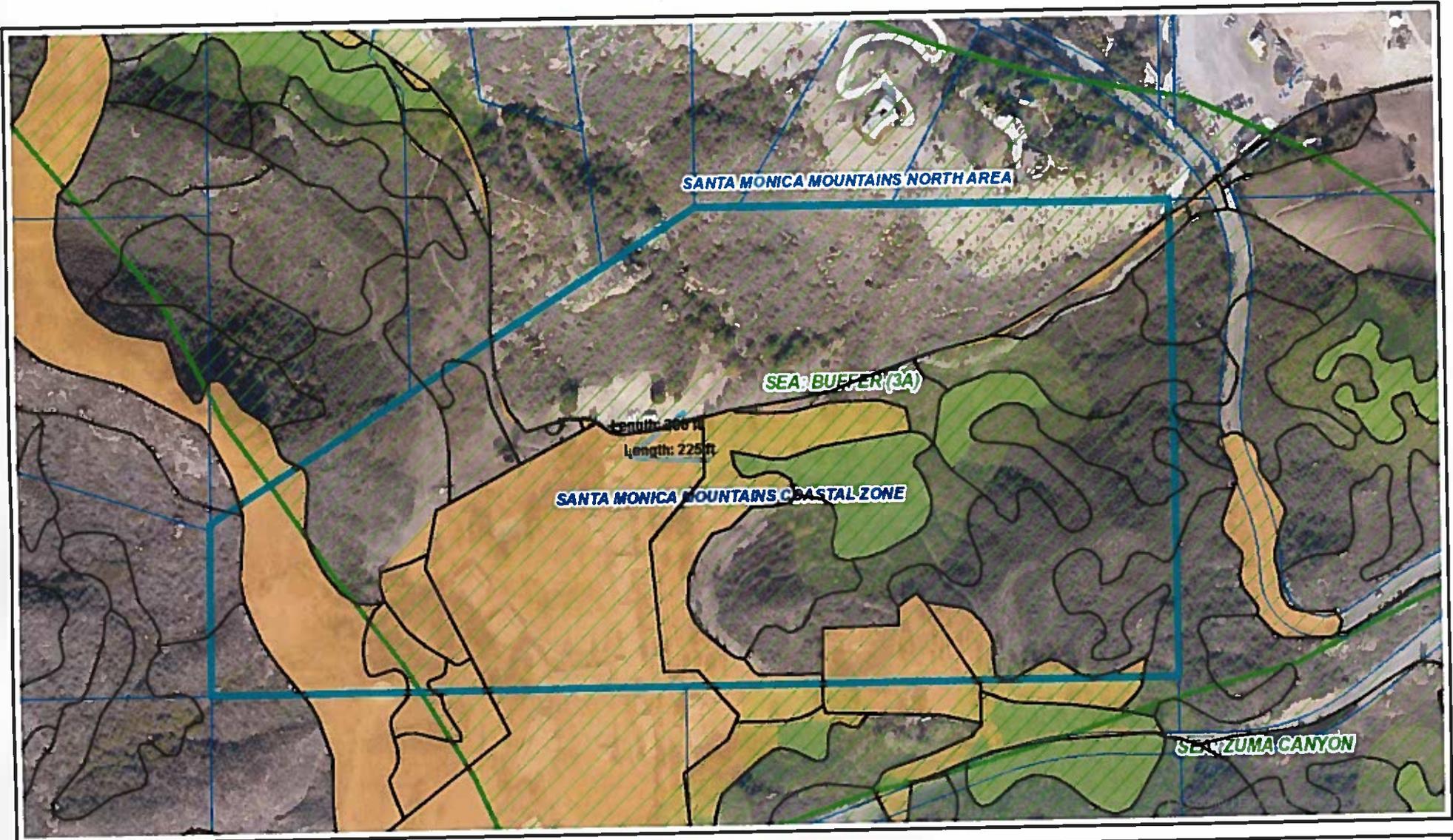
Camp Vernon Kilpatrick

4471-003-900; 4471-004-902 & -904

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Camp Vernon Kilpatrick

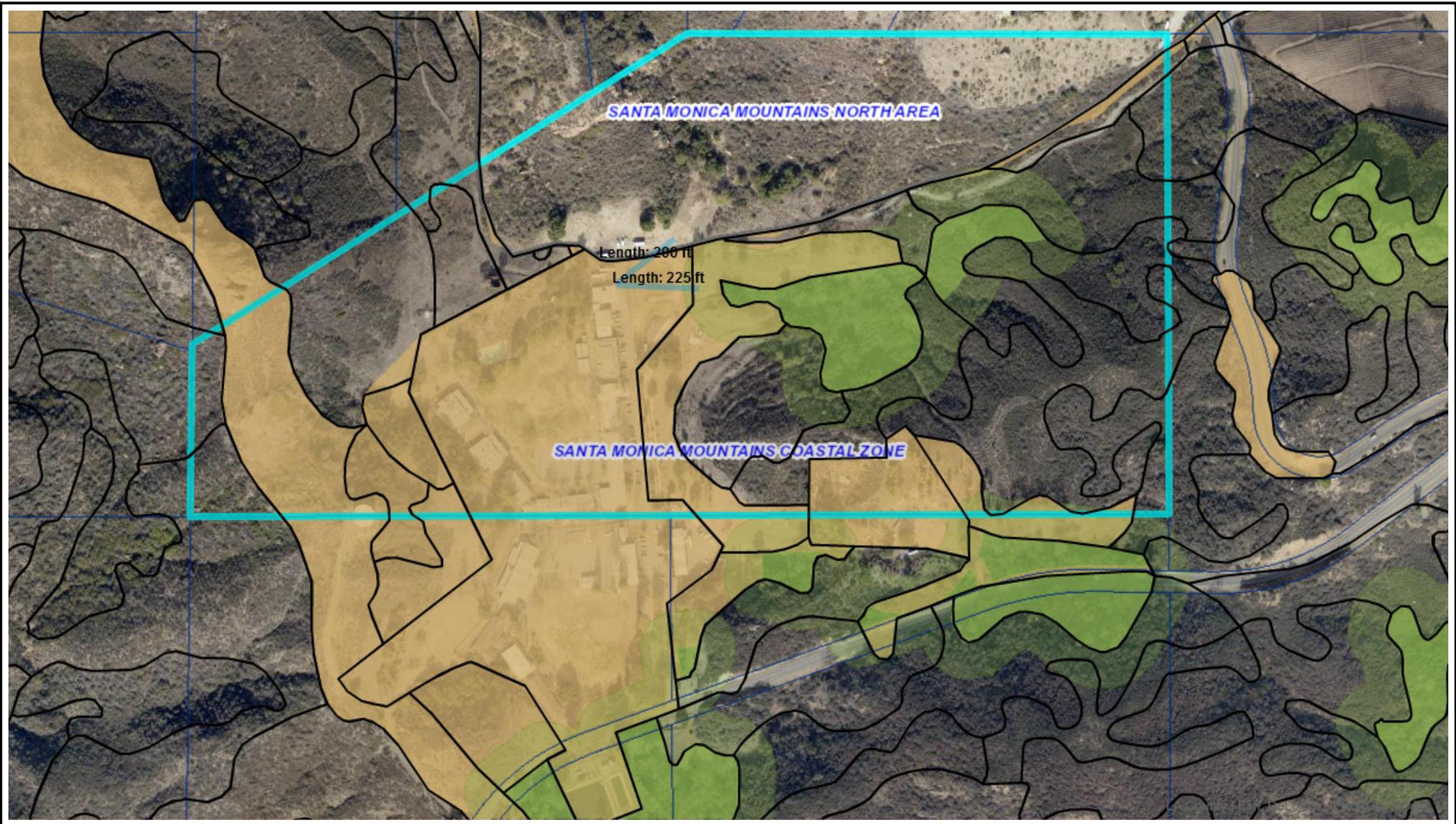
APN 4471-003-900, Habitat Polygons

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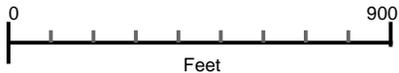


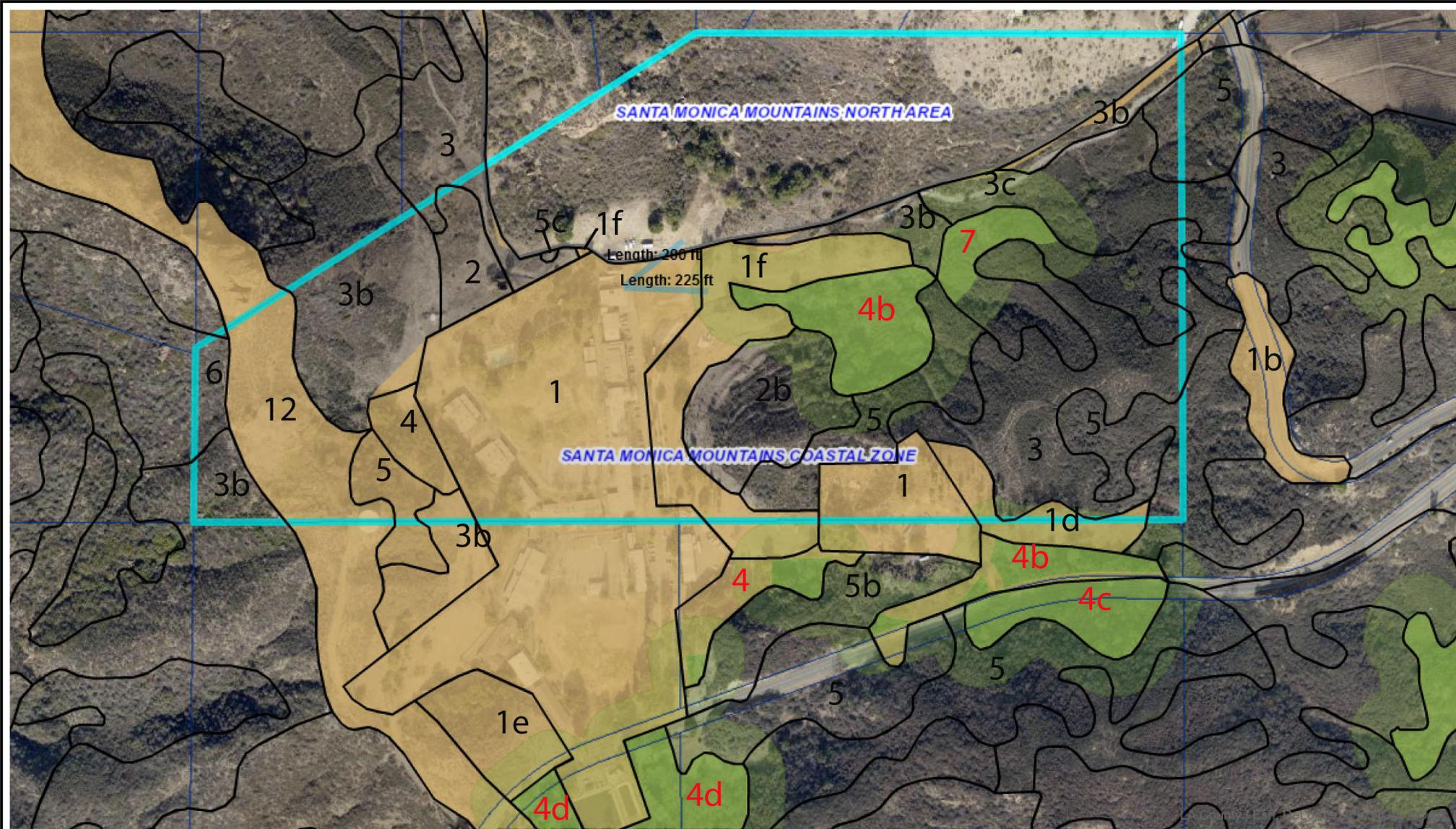
Camp Vernon Kilpatrick

APN 4471-003-900, Habitat Polygons

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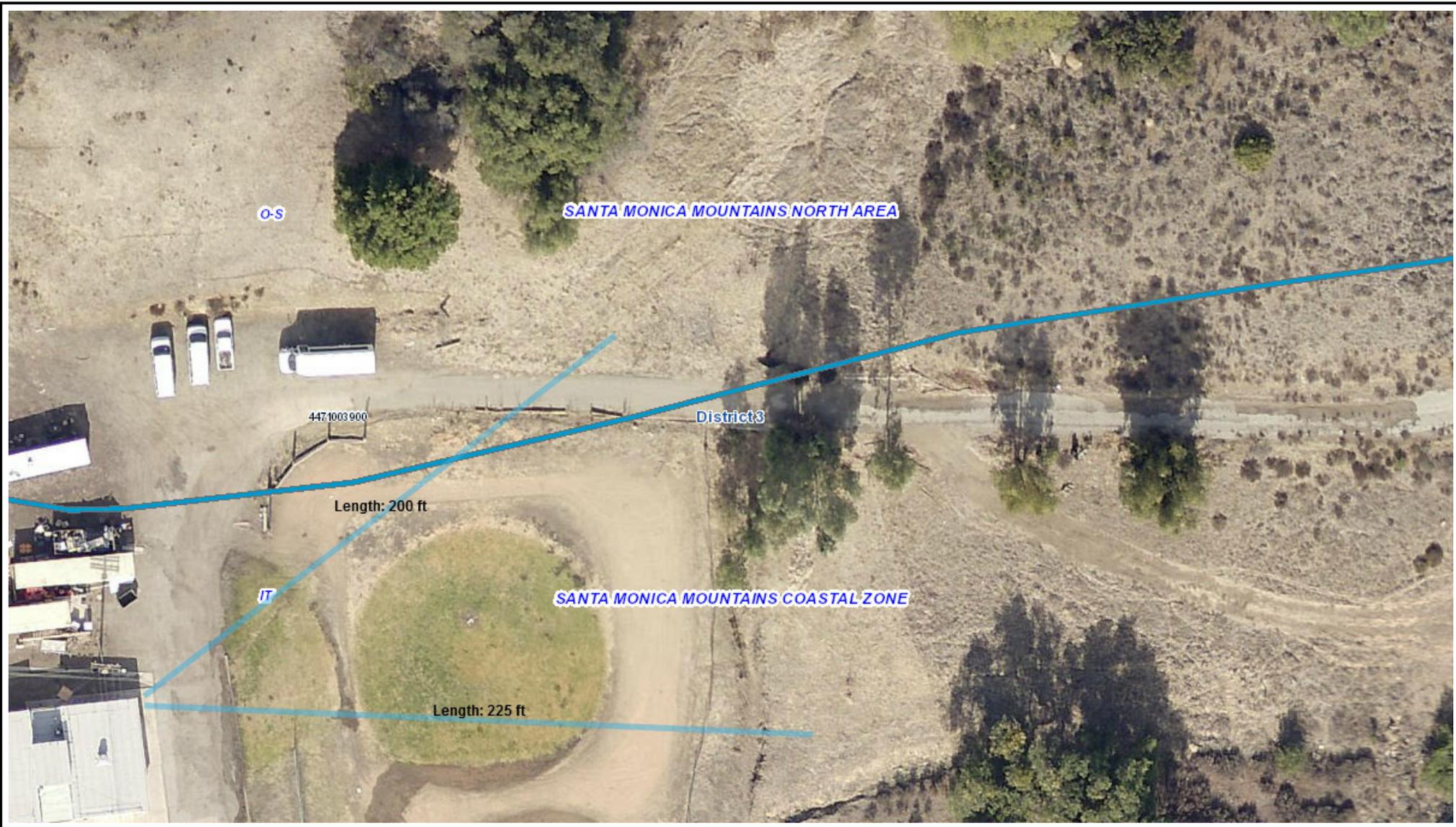


SANTA MONICA MOUNTAINS NORTH AREA

SANTA MONICA MOUNTAINS COASTAL ZONE

Length: 200 m
Length: 225 ft

3
3b
2
5c
1f
3b
3c
7
1f
4b
6
12
4
5
3b
1
2b
5
3
5
1b
3b
1d
4
5b
4b
4c
1e
5
5
4d
4d

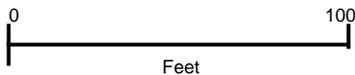


Camp Vernon Kilpatrick

APN 4471-003-900, Fuel Mod Extent

Printed: Mar 25, 2015

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SANTA MONICA MOUNTAINS NORTH



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Public Agency Submittal:
 Issued for Bidding:
 Issued for Construction:

Revisions:

DD SUBMITTAL
 03/09/2015

CAMP KILPATRICK REPLACEMENT PROJECT

427 South Encinal Canyon Road
 Malibu, CA 90265



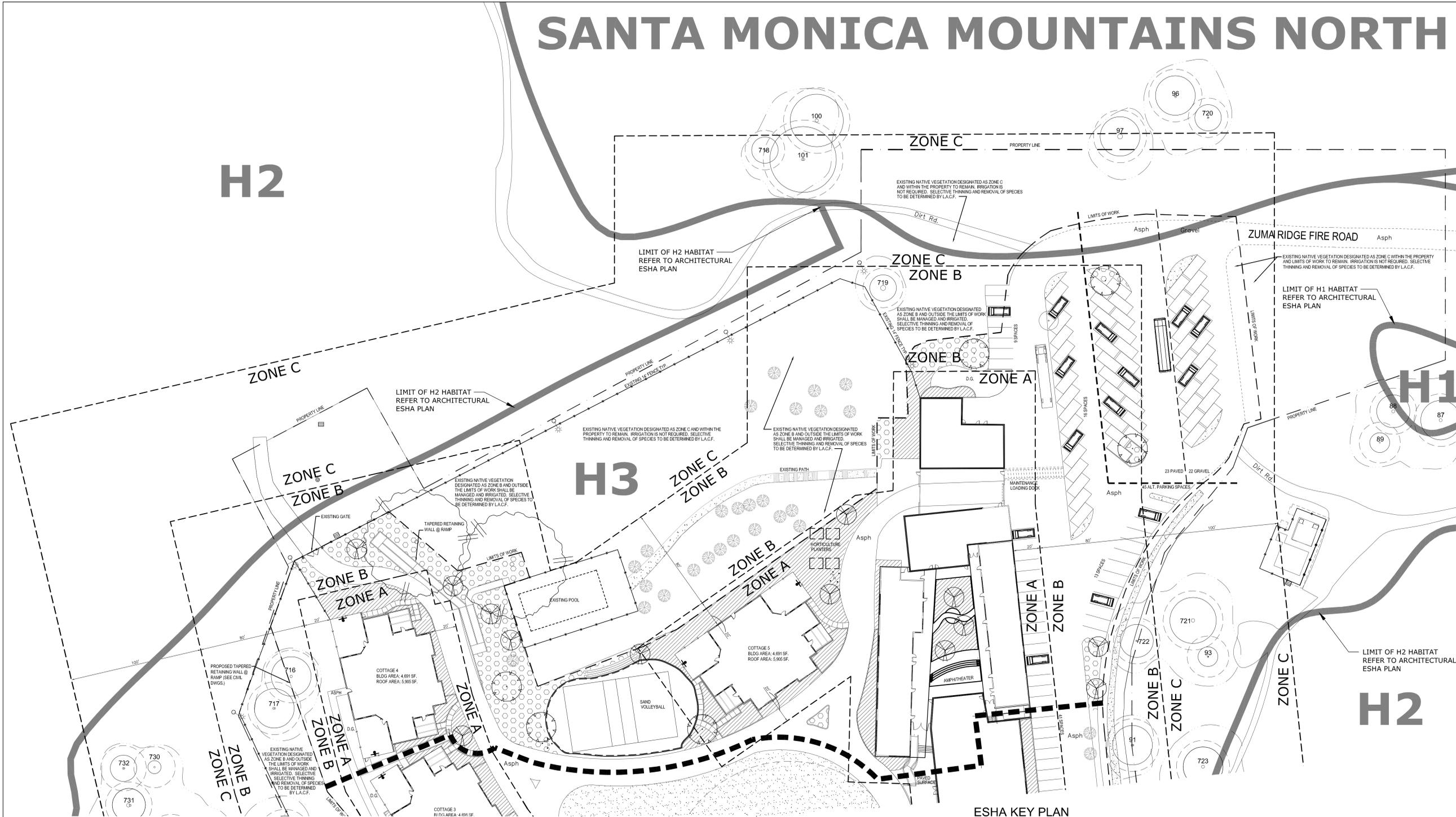
Los Angeles County
 Department of Public Works
 900 S. Fremont Ave.
 Alhambra, California 91803

DLR Project No 75-15221-00

PLANTING PLAN

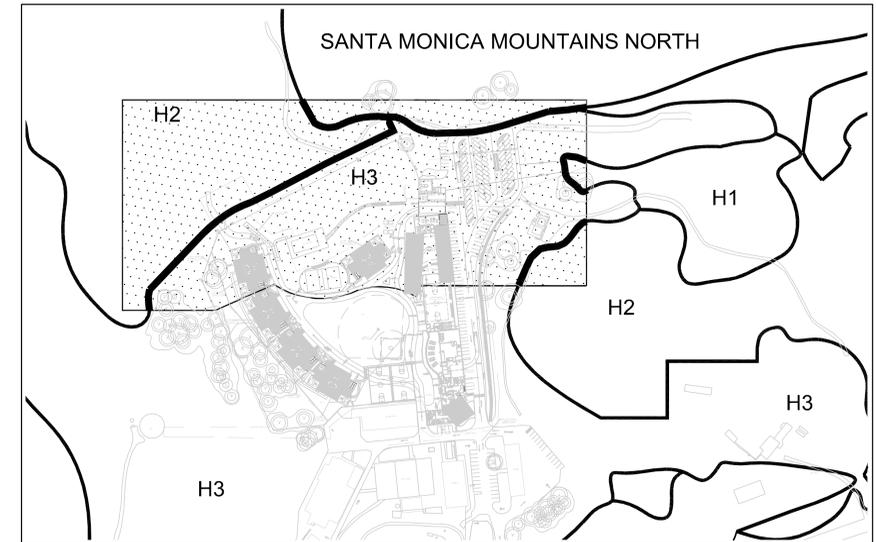
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 Issued Date: 03.09.2015
 Drawn By: AJ/CP
 Checked By: GO

L2.2
 Sheet No



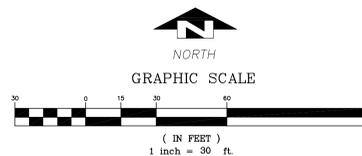
MATCHLINE SEE SHEET L2.1

ESHA KEY PLAN
 REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION



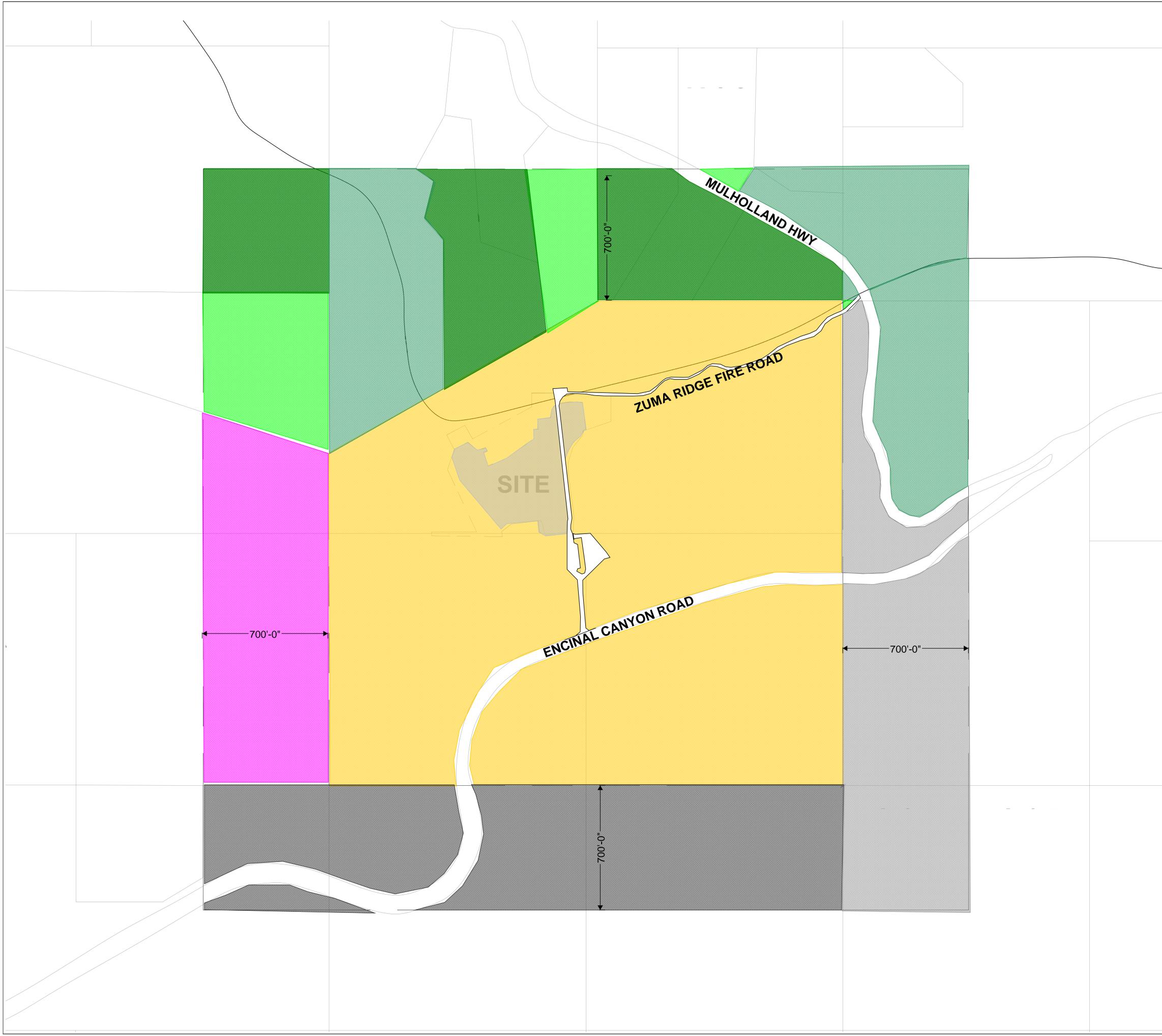
LEGEND

-  PROPOSED PLANTING AT ZONE A: SETBACK ZONE
-  PROPOSED PLANTING AT ZONE B: IRRIGATION/TRANSITION ZONE WITHIN LIMITS OF WORK
-  PROPOSED TURF
- D.G. STABILIZED DECOMPOSED GRANITE
- ZONE C THINNING ZONE (N.I.C.)



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- LEGEND NOTES**
LEGEND NOTES ARE COMMON TO ALL SHEETS. SOME NOTES MAY NOT APPLY TO THIS SHEET.
- LAND USE AREA PLAN**
- RANCH/
VINYARD/
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 - RESIDENCE
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 - OPEN SPACE - LA COUNTY
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Public Agency Submittal:
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 Issued for Construction:

Revisions:

DD SUBMITTAL
 03/09/2015

**CAMP KILPATRICK
 REPLACEMENT
 PROJECT**

427 South Encinal Canyon Road
 Malibu, CA 90265



Los Angeles County
 Department of Public Works

900 S. Fremont Ave.
 Alhambra, California 91803

DLR Project No 75-15221-00

**SITE PLAN:
 700' RADIUS LAND USE**

SCALE 1" = 200'

Issued Date: 03.09.2015
 Drawn By: AC/WL/MB/BJ
 Checked By: PO/GW

AS1.3B

Sheet No



September 6, 2012
Revised March 6, 2015

Mr. Vincent Yu
Capital Projects Program Manager
Department of Public Works
County of Los Angeles
900 South Fremont Avenue
Alhambra, California 91803

VIA EMAIL
vyu@dpw.lacounty.gov

Subject: Results of Special Status Plant Surveys for the Camp Kilpatrick Facility in Los Angeles County, California

Dear Mr. Yu:

This Letter Report presents the results of special status plant surveys at the Juvenile Camp Vernon Kilpatrick (Camp Kilpatrick) facility in the Santa Monica Mountains. The purpose of the survey was to determine the presence or absence of special status plants in the survey area.

The survey area is located within the Santa Monica Mountains in western Los Angeles County, California (Exhibit 1). It is located on the U.S. Geological Survey's (USGS') 7.5-minute Point Dume topographic quadrangle. Elevation in the survey area ranges from 1,740 to 1,840 feet above mean sea level (Exhibit 2). The survey area is located along Encinal Canyon Road approximately 0.5 mile west of its intersection with Mulholland Highway. The survey area for the project includes the developed area encompassing both Camp Kilpatrick and Camp Miller; the wastewater treatment plant (WTP) and water tank serving the camps; and a buffer area (which varies from 50 to 450 feet around the facilities) that extends into the undisturbed natural areas surrounding the camps and their related infrastructure (Exhibit 3).

Soil types in the survey area are Cotharin-Talepop association, 0 to 75 percent slopes; Cotharin-Talepop association, 15 to 50 percent slopes; and Kayiwish association, 0 to 9 percent slopes (Exhibit 4). Vegetation types in the survey area consist of California sagebrush scrub, chaparral, native grassland, non-native grassland, willow scrub, coast live oak woodland, ruderal, and ornamental plantings; the survey area also has developed areas such as buildings, sidewalks, and roads (Exhibit 5).

METHODS

Botanical surveys were floristic in nature and conducted following the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009) and the California Native Plant Society's (CNPS') Botanical Survey Guidelines (CNPS 2001). Prior to the field survey, a literature review was conducted to identify special status plants known from the general vicinity. This included a review of the USGS Point Dume 7.5-minute quadrangle in the California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDDB) (CDFG 2012) and the CNPS' Electronic Inventory of Rare and Endangered Vascular Plants of

California (CNPS 2012). For special status plant surveys, rainfall received in the winter and spring determines the germination of many annual and perennial herb species. The Malibu Canyon sensor (CDEC Station MCY) is about 7.2 miles due east of the Camp Kilpatrick survey area. Its available data ranges are 2005–2007 and 2009–2012 (the sensor was offline from late 2007 to late 2009). The average precipitation from October to July for calendar years 2005–2007 and 2009–2011 was 15.9 inches (Table 1). Rainfall in current 2011–2012 (October–July) was 13.18 inches, which is 83 percent of the average for the years with data available.

**TABLE 1
 PRECIPITATION RECORDED AT THE MALIBU CANYON SENSOR**

Year	Precipitation from October to June (inches)
2005–2006	20.12
2006–2007	5.60
2007–2008	No data ^a
2008–2009	No data ^a
2009–2010	13.03 ^b
2010–2011	24.94
<i>Average Precipitation (October–July)</i>	15.92
2011–2012	13.18 (83% of average)

^a The Malibu Canyon Sensor was offline for most of November 2007, all of December 2007, all of 2008, and most of 2009.
^b The Malibu Canyon Sensor was offline during October, November, and half of December 2010. It was brought back online on December 16, 2010. As a result, the listed precipitation for 2009–2010 is underrepresented.

The 2011–2012 winter season was dry in the region with only 5.73 inches of precipitation recorded between October 2011 and January 2012; most of this winter season’s rain fell after February 2012. Some annual plants that normally begin their growth with the onset of winter rains did not emerge at all in some coastal and inland regions, nor did these plants respond to late spring rainfall. Some annual plant species did emerge during the winter season, although generally in lesser numbers. Other species were less affected by the dry winter season. In years of unusual rainfall patterns, monitoring of reference populations is important in order to interpret survey results.

Reference populations were monitored to verify that the surveys were conducted during the appropriate blooming period for annual species (Table 2). Target species consisted of special status plant species reported from the project region and with potentially suitable habitat present in the survey area.

**TABLE 2
 SPECIAL STATUS PLANT SPECIES REFERENCE POPULATIONS**

Date Checked	Species	Status	General Location
April 23, 2012	<i>Astragalus brauntonii</i> Braunton's milk-vetch	Flowering	Claremont ^a
April 17, 2012	<i>Pentachaeta lyonii</i> Lyon's pentachaeta	Flowering	Agoura

^a This species is a fire and disturbance follower; it only lives for about 5 years following a disturbance. As such, there are very few reference populations, and fewer that are accessible for monitoring blooming. The Rancho Santa Ana Botanic Garden grows this species in a non-irrigated area, so it blooms according to natural conditions.

Plant surveys were conducted by BonTerra Consulting Senior Botanist Robert L. Allen. Senior Biologist Amber Oneal assisted Mr. Allen in flagging mariposa lilies on May 9, 2012. Biologist Morgan Johnston assisted Mr. Allen with his survey on July 5, 2012. Surveys were conducted on April 25, May 9, June 4, and July 5, 2012; a total of 25.25 person-hours were used to complete the surveys (Table 3). All suitable

habitat for special status plant species in the survey area were systematically surveyed during the site visits. All plant species observed were recorded in field notes. Global Positioning System (GPS) units were used to map locations of special status plant species in the survey area. Plant species were identified in the field or collected for subsequent identification using keys in Baldwin et al. (2012). Taxonomy follows Baldwin et al. (2012) for scientific and common names.

**TABLE 3
 PLANT SPECIES SURVEYS AND PERSONNEL**

Date of Survey	Personnel	Person Hours/day
April 25, 2012	R.L. Allen	4.75
May 9, 2012	R.L. Allen and A.S. Oneal	9.50
June 4, 2012	R.L. Allen	3.00
July 5, 2012	R.L. Allen and A.M. Johnston	8.00
Total Person Hours		25.25

During the May 9, 2012 survey, special status lilies were flagged for avoidance during fuel modification efforts that were scheduled for mid-May.

SURVEY RESULTS

Table 4 summarizes the survey results and characterizes the habitat suitability for each special status plant species in the survey area. Two special status plant species were observed in the survey area and are discussed further below. These include Catalina mariposa lily (*Calochortus catalinae*), observed on May 9, 2012 and Plummer’s mariposa lily (*Calochortus plummerae*), observed on July 5, 2012. Please note that Plummer’s mariposa lily was designated by the California Rare Plant Rank (CRPR) as a List 1B.2 species (“Plants Rare, Threatened, or Endangered in California and Elsewhere”) at the time of the field survey. However, this species’ designation has been subsequently changed to List 4.2 (“Plants of Limited Distribution – A Watch List”).

A list of all plants observed during the 2012 surveys is included in Attachment B.

**TABLE 4
 SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
 IN THE SURVEY AREA VICINITY
 (POINT DUME USGS QUADRANGLE)**

Species	Status			Habitat Suitability Within the Survey Area and Survey Results
	USFWS	CDFG	CRPR	
<i>Astragalus brauntonii</i> Braunton’s milk-vetch	FE	None	1B.1	Not expected to occur; not observed during focused surveys. Suitable rocky soils, scrub, and chaparral are present.
<i>Atriplex coulteri</i> Coulter’s saltbush	None	None	1B.2	Not expected to occur; no alkaline or clay soils among coastal scrub or grassland. Not observed during focused surveys.
<i>Baccharis malibuensis</i> Malibu baccharis	None	None	1B.1	Not expected to occur; not observed during focused surveys. Suitable scrub, chaparral, woodland, and riparian habitat are present.

TABLE 4 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE SURVEY AREA VICINITY
(POINT DUME USGS QUADRANGLE)

Species	Status			Habitat Suitability Within the Survey Area and Survey Results
	USFWS	CDFG	CRPR	
<i>California macrophylla</i> round-leaved filaree	None	None	1B.1	Not expected to occur; not observed during focused surveys. Suitable clay soils among cismontane woodland and grassland are present.
<i>Calochortus catalinae</i> Catalina mariposa lily	None	None	4.2	Observed in grasslands outside the facility fence. Suitable heavy soils among grassland, scrub, and oak woodland are present.
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa lily	None	None	1B.2	Not expected to occur; not observed during focused surveys. Suitable chaparral, scrub, and grassland are present.
<i>Calochortus plummerae</i> Plummer's mariposa lily	None	None	4.2 (formerly 1B.2)	Observed in grasslands outside the facility fence. Suitable dry rocky slopes and grasslands among coastal sage scrub, chaparral, oak woodlands are present.
<i>Camissoniopsis lewisii</i> Lewis' evening-primrose	None	None	3	Not expected to occur; no suitable sandy or clay scrub, dunes, grasslands, or woodlands are present. Not observed during focused surveys.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	None	None	1B.1	Not expected to occur; no suitable open sandy or rocky openings in coastal scrub, alluvial scrub, chaparral, grassland, or woodland are present. Not observed during focused surveys.
<i>Deinandra minthornii</i> Santa Susana tarplant	None	SR	1B.2	Not expected to occur; not observed during focused surveys. Suitable rocky soils among chaparral and coastal scrub are present.
<i>Didymodon norrisii</i> Norris' beard moss	None	None	2.2	Not expected to occur; no suitable moist woodlands or coniferous forests are present. Not observed during focused surveys.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None	None	1B.1	Not expected to occur; no coastal bluffs with rocky, clay, or serpentinite soils among coastal scrub or grasslands. Not observed during focused surveys.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i> Agoura Hills dudleya	FT	None	1B.2	Not expected to occur; not observed during focused surveys. Suitable rocky and volcanic soils among chaparral and woodland.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i> marcescent dudleya	FT	SR	1B.2	Not expected to occur; not observed during focused surveys. Suitable rocky and volcanic soils among chaparral are present.
<i>MPentachaeta lyonii</i> Lyon's pentachaeta	FE	SE	1B.1	Not expected to occur; not observed during focused surveys. Suitable rocky and clay soils among chaparral, coastal scrub, and grassland are present.

TABLE 4 (Continued)
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR
IN THE SURVEY AREA VICINITY
(POINT DUME USGS QUADRANGLE)

Species	Status			Habitat Suitability Within the Survey Area and Survey Results
	USFWS	CDFG	CRPR	
<i>Phacelia hubbyi</i> Hubby's phacelia	None	None	4.2	Not expected to occur; not observed during focused surveys. Suitable gravelly, rocky soils and talus slopes among grasslands, coastal scrub, and chaparral are present.
<i>Phacelia ramosissima</i> var. <i>australitoralis</i> south coast branching phacelia	None	None	3.2	Not expected to occur; no suitable sandy or rocky soils among coastal dunes, coastal scrub, chaparral, or coastal marshes are present. Not observed during focused surveys.
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	None	None	2.2	Not expected to occur; no suitable perennial seeps or streams are present. Not observed during focused surveys.
LEGEND:				
Federal (USFWS) State (CDFG)				
FE Endangered SE Endangered				
FT Threatened SR Rare				
California Rare Plant Rank (CRPR)				
1B Plants Rare, Threatened, or Endangered in California and Elsewhere				
2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere				
3 Plants About Which We Need More Information - A Review List				
4 Plants of Limited Distribution – A Watch List				
California Native Plant Society (CNPS) Threat Rank Extensions				
.1 Seriously threatened in California (high degree/immediacy of threat)				
.2 Fairly threatened in California (moderate degree/immediacy of threat)				
Note: Items in boldface type denote special status species that were observed during the survey.				

Catalina Mariposa Lily

Catalina mariposa lily (*Calochortus catalinae*) has a CRPR of 4.2. This lily grows in heavy soils, especially clay, among grassland, scrub, and oak woodland vegetation. It has a small underground bulb surrounded by a thin papery bulb coat. In early winter, it sends up a few grass-like leaves. Its tulip-like flowers are produced atop medium to long slender stalks, which open between February and June, depending on weather conditions. Suitable habitat for this species is present in many grassland and open areas of the survey area.

Four locations of this species were observed in the survey area. All locations were in the open space outside the facility fencing, west and northwest of the facility (Exhibit 5).

Location 1 (UTM 11S 3773950, 330372): A total of 428 plants were observed in native grassland with clay soils. Associated species include foothill needlegrass (*Stipa lepida*) and woolly blue curls (*Trichostema lanatum*). The lower slope of this location is within an existing fuel modification area.

Location 2 (UTM 11S 3773919, 330344): A total of 504 plants were observed in native grassland with clay soils. Associated species include foothill needlegrass and woolly blue curls. The lower slope of this location is within an existing fuel modification area.

Location 3 (UTM 11S 3774092, 330291): A total of 171 plants were observed in native grassland with clay soils with gravels. Associated species include foothill needlegrass and woolly blue curls. The lower slope of this location is within an existing fuel modification area.

Location 4 (UTM 11S 3774139, 33062): A total of 81 plants were observed in native grassland with clay soils with gravels. Associated species include foothill needlegrass and woolly blue curls. Much of this location is within an existing fuel modification area.

These mariposa lilies were initially observed in bud during the first survey on April 25, 2012. At that time, the species of lily was unknown (flowers are needed to identify the species). The Camp Kilpatrick staff mentioned that they had fuel modification scheduled for mid-May; BonTerra Consulting worked with the Los Angeles County Department of Public Works to avoid impacts on the area where the lilies were located. During the second field visit on May 9, 2012, BonTerra Consulting flagged the lilies, which were then blooming and identifiable as Catalina mariposa lily. The fuel modification was delayed until after the lilies set seed, between the June and July survey visits. Because these locations are within an existing fuel modification area, they would not be considered an Environmentally Sensitive Habitat (ESH) under the California Coastal Act (CCA). However, portions of the locations outside the existing fuel modification area would be considered an ESH under the CCA; any future impacts on them should be avoided to the extent practicable and would require consultation with the California Coastal Commission.

Plummer's Mariposa Lily

Plummer's mariposa lily (*Calochortus plummerae*) has a CRPR of 4.2 (at the time the original draft of this report was prepared this species had a CRPR of 1B.2). This lily grows on dry rocky slopes, often in grasslands and among openings in coastal sage scrub, chaparral, oak woodlands, and coniferous forests. It has an underground bulb surrounded by a thick fibrous bulb coat. In spring, it sends up its grass-like leaves. Its tulip-like flowers are produced atop long slender stalks, which open between May and July, depending on weather conditions. Suitable habitat is present in many grassland and open areas of the survey area.

Three locations of this species were observed in the survey area on July 5, 2012. All locations were in the open space outside the facility fencing, west and northwest of the facility (Exhibit 5). Plummer's mariposa lily locations in the survey area are within the Catalina mariposa lily locations described above. Catalina mariposa lily flowers first (early spring), and Plummer's mariposa lily flowers later (late spring). There was a short window of time during June that both species were in flower.

Location 1 (UTM 11S 3773973, 330338): Twenty-five plants were observed in native grassland with clay soils with gravels. Associated species include Catalina mariposa lily, foothill needlegrass, and woolly blue curls. This location is outside an existing fuel modification area.

Location 2 (UTM 11S 3773930, 330346): Twenty-eight plants were observed in native grassland with clay soils with some gravels. Associated species include Catalina mariposa lily, foothill needlegrass, and woolly blue curls. This location is outside an existing fuel modification area.

Location 3 (UTM 11S 3774100, 330292): Forty-one plants were observed in native grassland with clay soils with some gravels. Associated species include Catalina mariposa lily, foothill needlegrass, and woolly blue curls. This location is outside an existing fuel modification area.

These mariposa lilies were initially observed in bud and counted during the June 4, 2012 survey. Due to the late timing of blooming, it was assumed that they were Plummer's mariposa lily, and the species was confirmed during the July 5, 2012 survey. The fuel modification was conducted between the June and

July surveys. All Plummer's mariposa lily locations, observed initially during the June survey, were located outside the fuel modification areas. Because these locations are outside an existing fuel modification area, they would be considered an ESH under the CCA. Impacts on these locations should be avoided to the extent practicable and would require consultation with the California Coastal Commission.

PROJECT IMPACTS AND MITIGATION

Based on the current impact footprint (Exhibit 6), the proposed project would affect two of the four locations of Catalina mariposa lily (Locations 2 and 4) and one of the three locations of Plummer's mariposa lily (Location 2). The locations northwest of the facility (Location 2 for each species) would be impacted by infrastructure improvements. As mentioned above, locations of these species located outside the existing fuel modification areas would be considered an ESH under the CCA, and authorization from the CCC would be required prior to impacting these species. Therefore, impacts on these species would be considered significant under the California Environmental Quality Act (CEQA), and therefore, would require mitigation.

Mitigation to compensate for such impacts may include avoidance, purchase of off-site habitat areas containing these species, or establishment of new populations through propagation. Recommended mitigation measures for Catalina and Plummer's mariposa lily include the following:

- **Avoidance.** Locations shall be avoided to the extent possible. The location of Catalina mariposa lily north of the facility may be avoided if impacts are limited to within the existing facility fencing.
- **Compensation.** If avoidance is not possible, then off-site purchase of mitigation sites shall be researched to determine the feasibility of this option. The mitigation sites shall be in open spaces that contain substantial populations of this species and shall be dedicated in perpetuity to complement existing open space areas.
- **Propagation.** If avoidance and compensation are not viable options, then a program shall be developed to collect and transplant bulbs to an appropriate mitigation site. A mitigation plan shall be developed to include the following topics: (1) identification of an appropriate mitigation site; (2) methods of seed/bulb collection and application/transplant; (3) methods for site maintenance and monitoring; and (4) a description of performance standards to measure successful completion of the mitigation program.

Possible future threats to the Catalina and Plummer's mariposa lilies observed in the survey area include fuel modification and other facility maintenance activities that involve brush clearance during their blooming period. If possible, fuel modification and brush clearance/mowing should be conducted after the Catalina mariposa lilies have set seed for the year (i.e., end of June/early July). It is important that the fuel modification be kept within the existing footprint and not extended further upslope in order to avoid any further impacts to these lily populations. That being said, these lily species occur within open grasslands, and the fuel modification activities may, in part, keep these areas open enough for the lilies to occur (i.e., the habitat has not converted to chaparral). The lilies have persisted within the existing fuel modification regime; therefore, it is not necessary to eliminate the fuel modification in this area. Herbicide should not be used for weed control in the areas west and northwest of the facility, unless it is a targeted application conducted by an individual with knowledge of native plants or under the direction of a Biological Monitor.

Mr. Vincent Yu
March 6, 2015
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Although reference populations and regional rainfall amounts were monitored to ensure the scientific adequacy of these focused surveys, there is always a potential for false negative survey results, especially in years of lower rainfall, as species could possibly be present on a site but may not be detectable at the time of the survey.

If you have any comments or questions, please call Amber Heredia at (714) 751-7373.

Sincerely,
BonTerra Psomas



Amber Oneal Heredia
Senior Project Manager, Biological Resources

Enclosures: Exhibit 1 – Regional Location
 Exhibit 2 – Local Vicinity
 Exhibit 3 – Aerial View
 Exhibit 4 – Soils
 Exhibit 5 – Vegetation and Special Status Plants
 Exhibit 6 – Project Impacts
 Attachment A – Site Photos and Mariposa Lily Photos
 Attachment B – Plant Compendium
 Attachment C – CNDDDB Forms

REFERENCES

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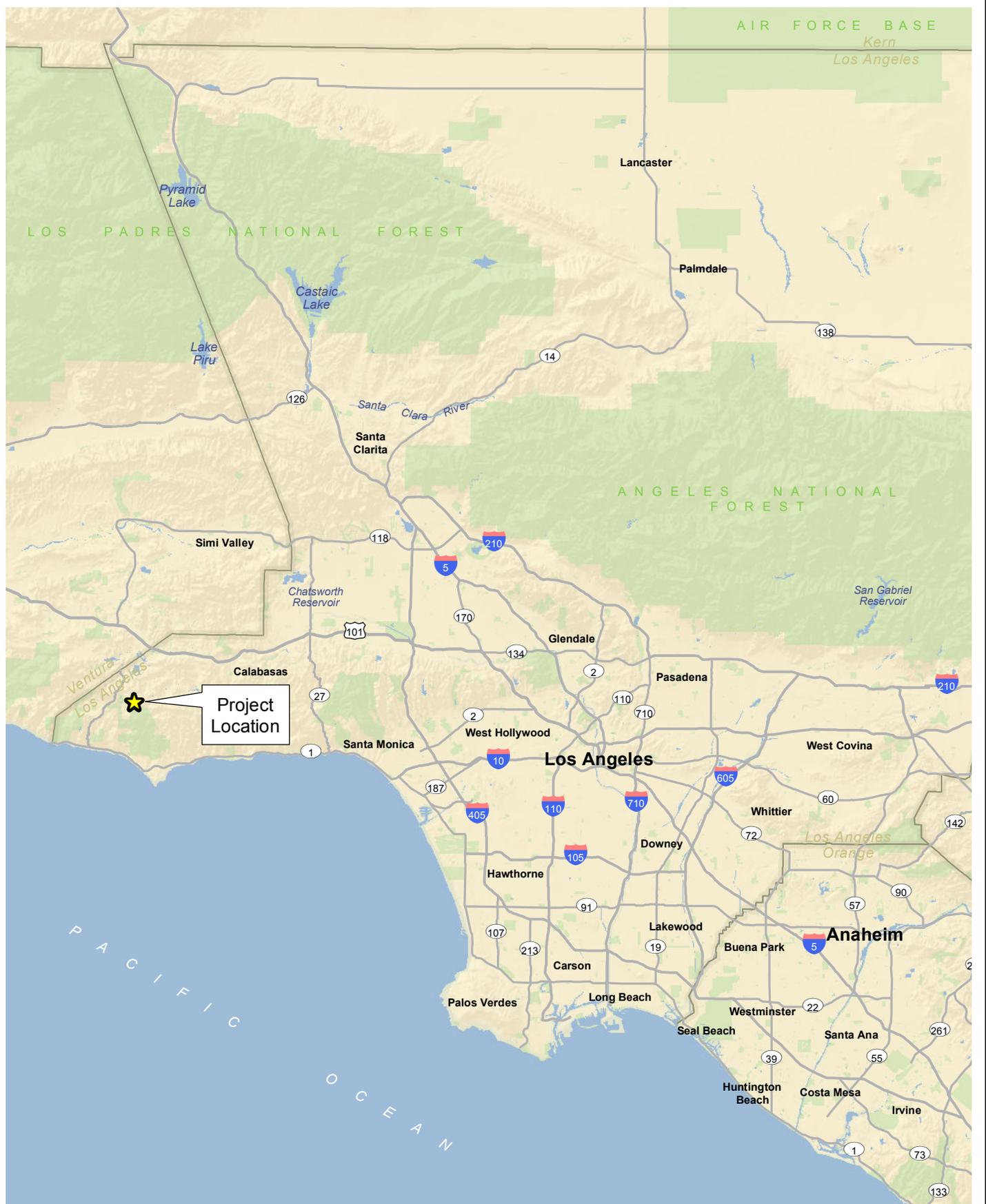
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Regional Location

Camp Kilpatrick

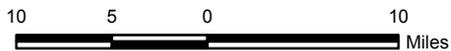
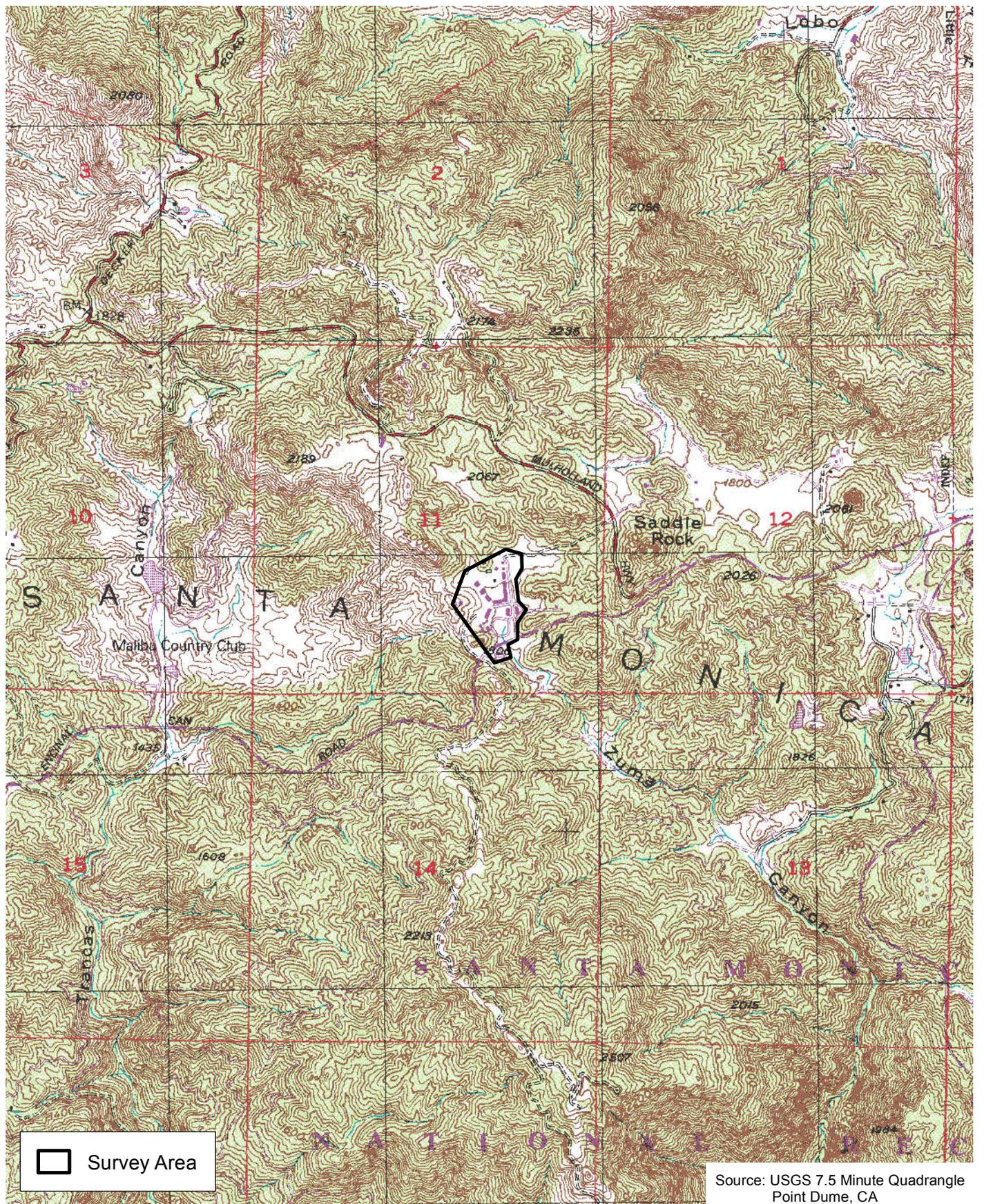


Exhibit 1

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Local Vicinity

Camp Kilpatrick

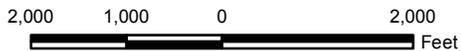
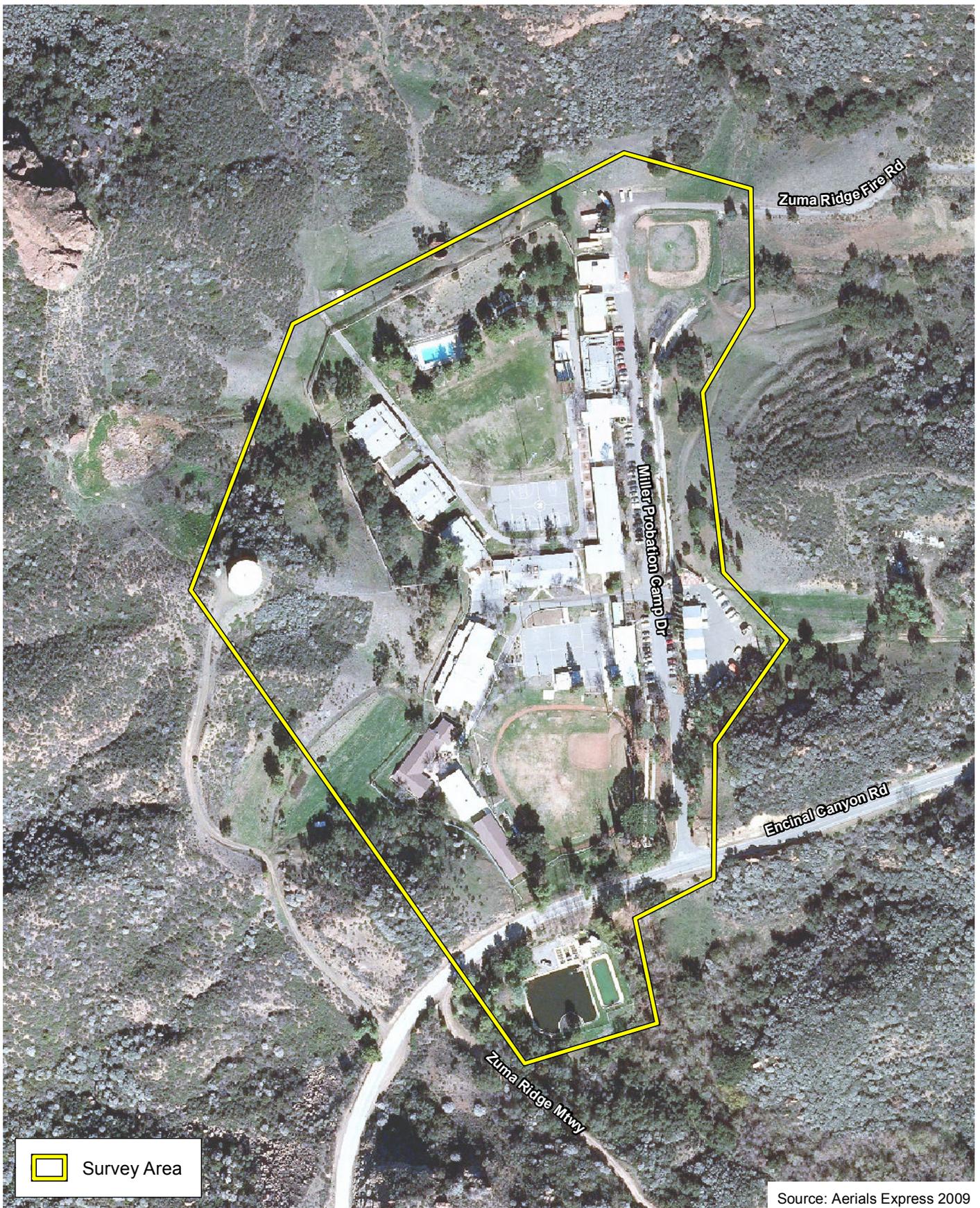


Exhibit 2



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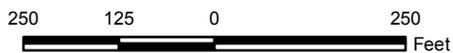
 Survey Area

Source: Aerials Express 2009

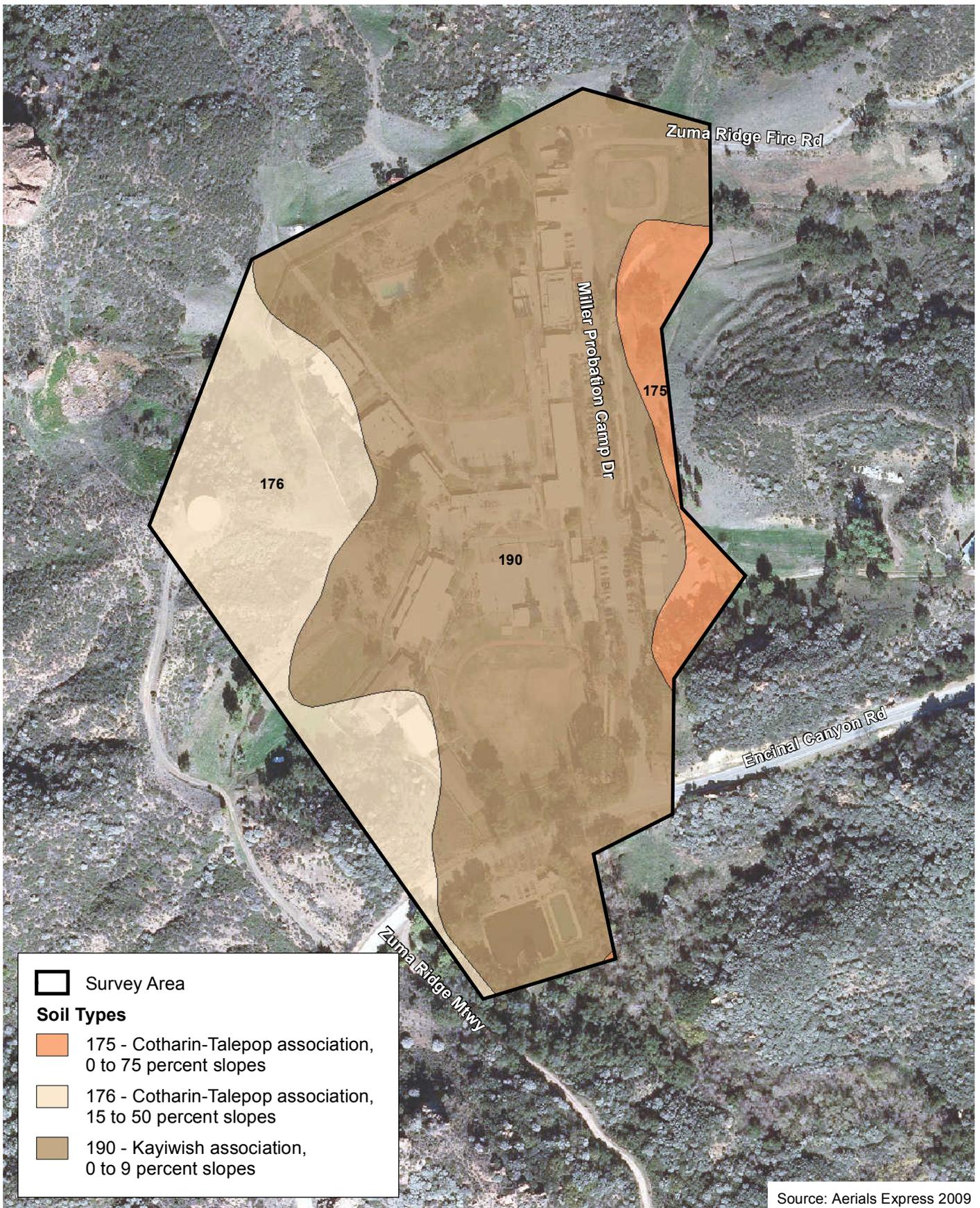
Aerial View

Exhibit 3

Camp Kilpatrick



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Soil Types

Camp Kilpatrick

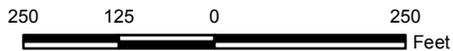
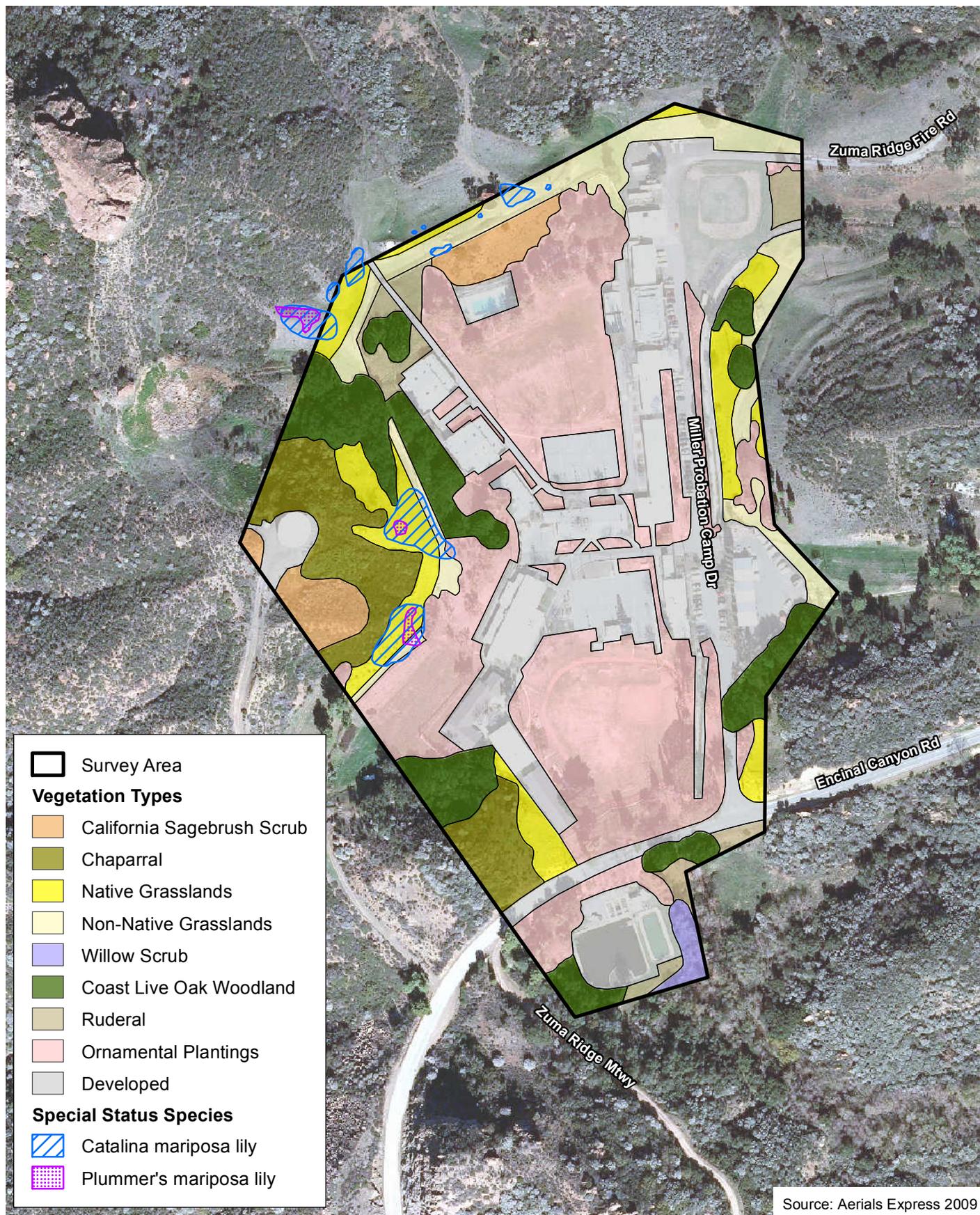


Exhibit 4





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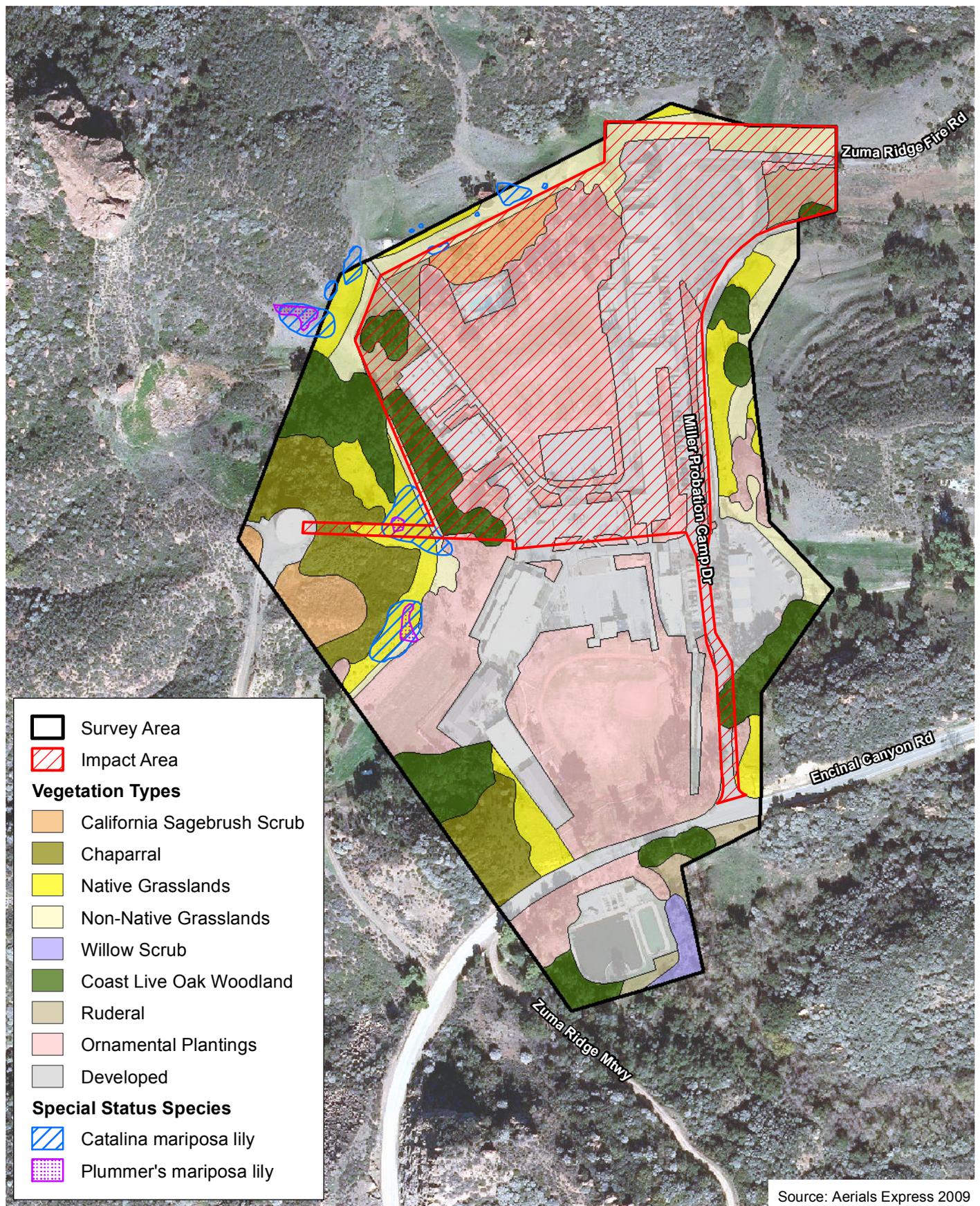
Biological Resources

Exhibit 5

Camp Kilpatrick



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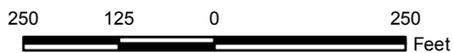


Source: Aerials Express 2009

Project Impacts

Exhibit 6

Camp Kilpatrick



ATTACHMENT A
SITE PHOTOGRAPHS



View of the northern portion of the facility from the hilltop near the water tower. In the foreground is California sagebrush scrub, chaparral, and coast live oak woodland vegetation. From the midground to background are ornamental plantings within the fenced area of the facility. The northernmost hill above the swimming pool and the old water tower behind the fence are visible at upper left.



View of the central portion of the facility from the hilltop near the water tower. In the foreground is California sagebrush scrub, chaparral, and coast live oak woodland vegetation. From the midground to background are ornamental plantings within the fenced area of the facility. The buildings that may be replaced are visible in a horizontal band just a bit above the middle of the photograph. Part of the grassland in which Catalina mariposa lily and Plummer's mariposa lily grow is visible at the lower right.

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Site Photographs

Camp Kilpatrick

Attachment A-1

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View of the north region toward the southwest. This area is within a fuel modification area and is mowed annually for fire prevention. Catalina mariposa lilies grow from the hilltop surrounding the old water tower, down to the grassland that is visible in the distant center in the area from the fence to about 15 feet toward the north (right). Plummer's mariposa lilies are far less common here; they grow in the grassland that is visible in the distant center.



View of native grassland and chaparral. This area lies downslope and southeast from the large water tower on the west side of the facility. The grassland is vegetated with purple needlegrass, woolly blue curls, Catalina mariposa lilies, and Plummer's mariposa lilies. The chaparral on the hill above the grassland is vegetated by woody shrubs, primarily chamise.

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Site Photographs

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Attachment A-2

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View from the northwest, toward the east-southeast of a mixture of native and non-native grassland species. The mariposa lilies grow in the grassland on this hillside. A few Plummer's mariposa lilies are visible in the foreground.



View of native grassland, looking up at the water tower. Just prior to this survey visit, the lower area down to the fence was cleared of vegetation for fuel modification. The mariposa lilies are scattered throughout this grassland area.

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Site Photographs

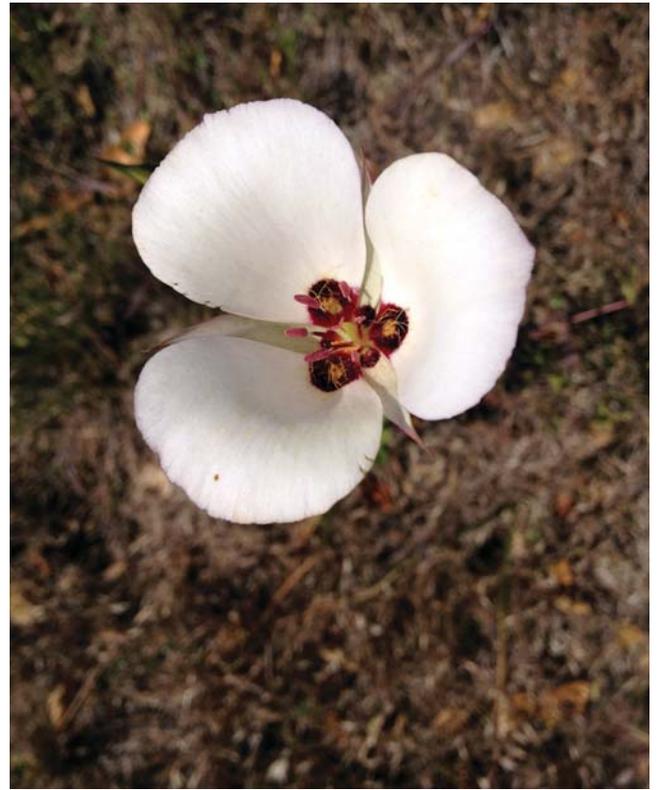
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Attachment A-3

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Catalina mariposa lily (*Calochortus catalinae*).



Catalina mariposa lily (*Calochortus catalinae*).



Plummer's mariposa lily (*Calochortus plummerae*).



Plummer's mariposa lily (*Calochortus plummerae*).

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Mariposa Lilies

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Attachment A-4

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ATTACHMENT B

PLANT COMPENDIUM

All plants included in the following compendium were observed during field surveys conducted on April 25, May 9, June 4, and July 5, 2012

PLANT COMPENDIUM FOR THE CAMP KILPATRICK SURVEY AREA

*Species observed during field surveys conducted on
April 25, May 9, June 4, and July 5, 2012*

Species	
PTERIDOPHYTES - FERNS AND ALLIES	
PTERIDACEAE - BRAKE FAMILY	
<i>Pentagramma triangularis</i> ssp. <i>triangularis</i>	goldenback fern
SELAGINELLACEAE - SPIKE-MOSS FAMILY	
<i>Selaginella bigelovii</i>	Bigelow"s or bushy spike-moss
GYMNOSPERMS – NAKED-SEEDED PLANTS	
CUPRESSACEAE - CYPRESS FAMILY	
<i>Calocedrus decurrens</i>	California incense-cedar
<i>Sequoia sempervirens</i>	California redwood
PINACEAE - PINE FAMILY	
<i>Pinus canariensis</i> *	Canary Island pine
<i>Pinus halepensis</i> *	Aleppo pine
ANGIOSPERMAE - FLOWERING PLANTS	
EUDICOTS	
ADOXACEAE - MUSKROOT FAMILY	
<i>Sambucus nigra</i> ssp. <i>caerulea</i> [<i>S. mexicana</i>]	blue elderberry
ANACARDIACEAE - SUMAC FAMILY	
<i>Malosma laurina</i>	laurel sumac
<i>Rhus ovata</i>	sugar bush
<i>Toxicodendron diversilobum</i>	western poison oak
APIACEAE - CARROT FAMILY	
<i>Conium maculatum</i> *	poison hemlock
<i>Foeniculum vulgare</i> *	sweet fennel
<i>Lomatium dasycarpum</i> ssp. <i>dasycarpum</i>	woolly-fruited lomatium
<i>Sanicula crassicaulis</i>	Pacific sanicle
APOCYNACEAE – DOGBANE AND MILKWEED FAMILY	
<i>Asclepias fasciculatus</i>	narrow-leaved milkweed
ASTERACEAE - SUNFLOWER FAMILY	
<i>Acourtia microcephala</i>	sacapellote
<i>Agoseris retrorsa</i>	spear-leaved agoseris
<i>Artemisia californica</i>	California sagebrush
<i>Artemisia dracunculus</i>	tarragon
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i> [<i>B. salicifolia</i>]	mule fat
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i> *	Italian thistle
<i>Centaurea melitensis</i> *	toçalote, Malta star-thistle
<i>Cirsium vulgare</i> *	bull thistle
<i>Corethrogyne filaginifolia</i> [<i>Lessingia filaginifolia</i>]	California-aster
<i>Deinandra</i> sp.	tarplant
<i>Dimorphotheca ecklonis</i> [<i>Osteospermum ecklonis</i>]*	blue and white daisybush
<i>Eriophyllum confertiflorum</i>	golden-yarrow
<i>Gazania linearis</i> *	gazania
<i>Grindelia camporum</i>	white-stem gumplant

PLANT COMPENDIUM FOR THE CAMP KILPATRICK SURVEY AREA
(Continued)

*Species observed during field surveys conducted on
April 25, May 9, June 4, and July 5, 2012*

Species	
<i>Hazardia squarrosa</i>	saw-toothed goldenbush
<i>Hedypnois cretica</i> *	Crete weed
<i>Helianthus gracilentus</i>	slender sunflower
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Hypochaeris glabra</i> *	smooth cat's-ear
<i>Logfia</i> sp. [<i>Filago</i> sp.]	cottonrose
<i>Madia gracilis</i>	gumweed
<i>Malacothrix saxatilis</i> var. <i>tenuifolia</i>	slender-leaved malacothrix
<i>Matricaria discoidea</i> [<i>Chamomilla suaveolens</i>]*	pineapple weed
<i>Pseudognaphalium biolettii</i> [<i>Gnaphalium bicolor</i>]	bicolored everlasting, Bioletti's cudweed
<i>Pseudognaphalium californicum</i> [<i>Gnaphalium</i> c.]	California everlasting
<i>Rafinesquia californica</i>	California chicory
<i>Silybum marianum</i> *	milk thistle
<i>Sonchus asper</i> ssp. <i>asper</i> *	prickly sow thistle
<i>Sonchus oleraceus</i> *	common sow thistle
<i>Stephanomeria</i> sp.	wreath plant
<i>Taraxacum officinale</i> *	common dandelion
<i>Uropappus lindleyi</i> [<i>Microseris</i> sp.]	silver puffs
<i>Venegasia carpesioides</i>	canyon sunflower
BORAGINACEAE - BORAGE FAMILY	
<i>Eucrypta chrysanthemifolia</i>	common eucrypta
<i>Pectocarya</i> sp.	pectocarya
<i>Phacelia cicutaria</i>	caterpillar phacelia
<i>Plagiobothrys nothofulvus</i>	rusty popcornflower
BRASSICACEAE (CRUCIFERAE) - MUSTARD FAMILY	
<i>Hirschfeldia incana</i> *	shortpod mustard
<i>Raphanus raphanistrum</i> *	jointed charlock
<i>Sisymbrium irio</i> *	London rocket
<i>Sisymbrium officinale</i> *	hedge mustard
CACTACEAE - CACTUS FAMILY	
<i>Opuntia ficus-indica</i> *	mission prickly-pear
CARYOPHYLLACEAE - PINK FAMILY	
<i>Silene gallica</i> *	small-flower catchfly
<i>Silene laciniata</i> ssp. <i>laciniata</i> [<i>Silene laciniata</i> ssp. <i>major</i>]	Mexican pink
CISTACEAE - ROCK-ROSE FAMILY	
<i>Cistus incanus</i> [<i>Cistus creticus</i>]*	purple rock-rose
CUCURBITACEAE - GOURD FAMILY	
<i>Marah macrocarpus</i>	chilicothe
ERICACEAE - HEATH FAMILY	
<i>Arctostaphylos glauca</i>	bigberry manzanita
EUPHORBIACEAE - SPURGE FAMILY	
<i>Euphorbia terracina</i> *	Geraldton carnation weed

PLANT COMPENDIUM FOR THE CAMP KILPATRICK SURVEY AREA
(Continued)

*Species observed during field surveys conducted on
April 25, May 9, June 4, and July 5, 2012*

Species	
<i>Ricinus communis</i> *	castor bean
FABACEAE (LEGUMINOSAE) - LEGUME FAMILY	
<i>Acmispon americanus</i> [<i>Lotus purshianus</i>]	Spanish lotus
<i>Acmispon strigosus</i> [<i>Lotus strigosus</i>]	strigose lotus
<i>Acmispon glaber</i> var. <i>glaber</i> [<i>Lotus scoparius</i> var. <i>scoparius</i>]	coastal deerweed
<i>Lathyrus vestitus</i> ssp. <i>vestitus</i>	chaparral sweet pea
<i>Lupinus albifrons</i> var. <i>albifrons</i>	silver lupine
<i>Lupinus bicolor</i>	miniature lupine
<i>Lupinus truncatus</i>	truncate lupine/collar lupine
<i>Medicago polymorpha</i> *	California burclover
<i>Melilotus indica</i> *	sourclover
<i>Robinia pseudoacacia</i> *	black locust
<i>Trifolium hirtum</i> *	rose clover
<i>Vicia</i> cf. <i>benghalensis</i> *	purple vetch
FAGACEAE - OAK/BEECH FAMILY	
<i>Quercus agrifolia</i>	coast live oak
<i>Quercus berberidifolia</i>	scrub oak/California scrub oak
GERANIACEAE - GERANIUM FAMILY	
<i>Erodium cicutarium</i> *	red-stemmed filaree
<i>Erodium moschatum</i> *	white-stemmed filaree
GROSSULARIACEAE - GOOSEBERRY FAMILY	
<i>Ribes aureum</i>	golden currant
<i>Ribes indecorum</i>	white-flowered currant
<i>Ribes speciosum</i>	fuchsia-flowered gooseberry
LAMIACEAE (LABIATAE) - MINT FAMILY	
<i>Salvia mellifera</i>	black sage
<i>Trichostema lanatum</i>	woolly blue curls
MALVACEAE - MALLOW FAMILY	
<i>Malva parviflora</i> *	cheeseweed
MYRSINACEAE - MYRSINE FAMILY	
<i>Anagallis arvensis</i> *	scarlet pimpernel
MYRTACEAE - MYRTLE FAMILY	
<i>Eucalyptus</i> sp.*	gum
ONAGRACEAE - EVENING PRIMROSE FAMILY	
<i>Camissonia micrantha</i>	small primrose
<i>Clarkia</i> sp.	clarkia
<i>Clarkia purpurea</i>	winecup clarkia
<i>Epilobium canum</i>	California fuchsia
<i>Epilobium ciliatum</i>	willow-herb
OROBANCHACEAE - BROOMRAPE FAMILY	
<i>Cordylanthus rigidus</i> ssp. <i>setigerus</i>	dark-topped bird's beak
<i>Orobanche fasciculata</i>	clustered broomrape

PLANT COMPENDIUM FOR THE CAMP KILPATRICK SURVEY AREA
(Continued)

*Species observed during field surveys conducted on
April 25, May 9, June 4, and July 5, 2012*

Species	
OXALIDACEAE - WOOD-SORREL FAMILY	
<i>Oxalis corniculata</i> *	yellow sorrel
PAEONIACEAE - PEONY FAMILY	
<i>Paeonia californica</i>	California peony
PAPAVERACEAE - POPPY FAMILY	
<i>Eschscholzia californica</i>	California poppy
PHRYMACEAE - LOPSEED FAMILY	
<i>Mimulus aurantiacus</i> ssp. <i>pubescens</i>	orange bush monkeyflower
PLANTAGINACEAE - PLANTAIN FAMILY	
<i>Penstemon heterophyllus</i>	foothill penstemon
<i>Plantago erecta</i>	dwarf plantain/California plantain
<i>Plantago lanceolata</i> *	English plantain
<i>Veronica anagallis-aquatica</i> *	water speedwell
POLYGONACEAE - BUCKWHEAT FAMILY	
<i>Eriogonum elongatum</i> var. <i>elongatum</i>	long-stemmed wild buckwheat
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Rumex conglomeratus</i> *	whorled dock
<i>Rumex crispus</i> *	curly dock
PORTULACACEAE – PURSLANE FAMILY	
<i>Portulaca oleracea</i> *	common purslane
RANUNCULACEAE - CROWFOOT FAMILY	
<i>Clematis</i> sp.	Virgin's bower
RHAMNACEAE - BUCKTHORN FAMILY	
<i>Ceanothus megacarpus</i> ssp. <i>megacarpus</i>	bigpod ceanothus
<i>Ceanothus spinosus</i>	greenbark ceanothus
<i>Rhamnus ilicifolia</i>	hollyleaf redberry
ROSACEAE - ROSE FAMILY	
<i>Adenostoma fasciculatum</i>	chamise
<i>Adenostoma sparsifolium</i>	red shank, ribbonwood
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	birch-leaf mountain-mahogany
<i>Heteromeles arbutifolia</i>	toyon/Christmas berry
<i>Drymocallis glandulosa</i> ssp. <i>reflexa</i> [<i>Potentilla glandulosa</i> ssp. <i>reflexa</i>]	Greene's cinquefoil
RUBIACEAE - MADDER FAMILY	
<i>Galium</i> sp.	bedstraw
<i>Galium andrewsii</i>	phlox-leaved bedstraw
<i>Galium angustifolium</i>	narrowly leaved bedstraw
<i>Galium aparine</i>	goose grass
<i>Galium nuttallii</i> ssp. <i>nuttallii</i>	San Diego bedstraw
SALICACEAE - WILLOW FAMILY	
<i>Salix</i> sp.	willow

PLANT COMPENDIUM FOR THE CAMP KILPATRICK SURVEY AREA
(Continued)

*Species observed during field surveys conducted on
April 25, May 9, June 4, and July 5, 2012*

Species	
SOLANACEAE - NIGHTSHADE FAMILY	
<i>Solanum umbelliferum</i>	blue witch
VISCACEAE - MISTLETOE FAMILY	
<i>Phoradendron serotinum</i> ssp. <i>tomentosum</i> [<i>Phoradendron villosum</i>]	oak mistletoe
VITACEAE – GRAPE FAMILY	
<i>Vitis vinifera</i> *	Cultivated grape
MONOCOTYLEDONES - MONOCOTS	
AGAVACEAE - CENTURY PLANT FAMILY	
<i>Hesperoyucca whipplei</i> [<i>Yucca whipplei</i>]	chaparral yucca
<i>Yucca aloifolia</i> *	Spanish dagger
ARECACEAE (PALMAE) - PALM FAMILY	
<i>Washingtonia robusta</i> *	Mexican fan palm
ASPHODELACEAE - ASPHODEL FAMILY	
<i>Asphodelus fistulosus</i> *	onionweed
CYPERACEAE - SEDGE FAMILY	
<i>Cyperus</i> cf. <i>esculentus</i>	yellow umbrella-sedge/nutgrass
IRIDACEAE - IRIS FAMILY	
<i>Sisyrinchium bellum</i>	western blue-eyed grass
LILIACEAE - LILY FAMILY	
<i>Calochortus catalinae</i>	Catalina mariposa lily
<i>Calochortus plummerae</i>	Plummer's mariposa lily
MELANTHIAECAE - FALSE-HELLEBORE FAMILY	
<i>Toxicoscordion fremontii</i> [<i>Zigadenus fremontii</i>]	Fremont's death camas
POACEAE [GRAMINEAE] - GRASS FAMILY	
<i>Avena barbata</i> *	slender wild oat
<i>Bromus diandrus</i> *	ripgut grass
<i>Bromus hordeaceus</i> *	soft chess
<i>Elymus condensatus</i> [<i>Leymus condensatus</i>]	giant wild rye
<i>Festuca</i> sp. [<i>Vulpia</i> sp.]	fescue
<i>Hordeum murinum</i> var. <i>leporinum</i> *	hare barley
<i>Lamarckia aurea</i> *	goldentop
<i>Melica imperfecta</i>	little California melic grass
<i>Poa annua</i> *	annual bluegrass
<i>Polypogon monspeliensis</i> *	annual beard grass
<i>Schismus barbatus</i> *	Mediterranean schismus
<i>Stipa lepida</i> [<i>Nassella lepida</i>]	foothill needlegrass
<i>Stipa pulchra</i> [<i>Nassella pulchra</i>]	purple needlegrass
THEMIDACEAE - BRODIAEA FAMILY	
<i>Dichelostemma capitatum</i>	blue dicks

PLANT COMPENDIUM FOR THE CAMP KILPATRICK SURVEY AREA

(Continued)

*Species observed during field surveys conducted on
April 25, May 9, June 4, and July 5, 2012*

Species	
TYPHACEAE - CATTAIL FAMILY	
<i>Typha angustifolia</i>	narrow-leaved cattail
* non-native species cf. appears similar to	

ATTACHMENT C

CNDDDB FORMS

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/09/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus catalinae

Common Name: Catalina mariposa lily

Species Found? Yes No _____ If not, why? _____
Total No. Individuals 428 Subsequent Visit? yes no
Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____
Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen & Amber S. Oneal
Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614
E-mail Address: aoneal@bonterraconsulting.com
Phone: (714) 444-9199

Plant Information

Phenology: 23 % vegetative 77 % flowering 0 % fruiting

Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown	
<input type="checkbox"/>					
wintering	breeding	nesting	rookery	burrow site	other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)
Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillside west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles
Quad Name: Point Dume Elevation: 1769 ft
T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S
Source of Coordinates (GPS, topo. map & type): GPS
T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S
GPS Make & Model Garmin
DATUM: NAD27 NAD83 WGS84
Horizontal Accuracy 15 ft meters/feet
Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)
Coordinates: 3773950 mN, 330372 mE (center of population) extends to 0330385 mE, 3773940 mN, and 0330341 mE, 3773993 mN

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Grassland, just downslope from chamise chaparral. Hillside faces approx due east and northeast. Associates: Stipa lepida, Trichostema lanatum. Calochortus plummerae came up here later in the year. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor
Immediate AND surrounding land use: youth detention facility and open space
Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.
Threats: Vegetation removal for fire clearance
Comments:

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): _____
 Compared with specimen housed at: _____
 Compared with photo / drawing in: _____
 By another person (name): _____
 Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital	
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/09/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus catalinae

Common Name: Catalina mariposa lily

Species Found? Yes No If not, why? _____

Total No. Individuals 171 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen & Amber S. Oneal

Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614

E-mail Address: aoneal@bonterraconsulting.com

Phone: (714) 444-9199

Plant Information

Phenology: 10% vegetative 85% flowering 5% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillside west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles

Quad Name: Point Dume Elevation: 1772 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Garmin GPSmap 60csx

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 15 ft meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 3774092 mN, 330291 mE NE to 3774130, 0330317

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Grassland, just downslope from chamise chaparral. Hillside faces approx due east and northeast. Associates: Stipa lepida, Trichostema lanatum. Calochortus plummerae appeared here later in the season. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: youth detention facility and open space

Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.

Threats: Vegetation removal for fire clearance

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/09/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus catalinae

Common Name: Catalina mariposa lily

Species Found? Yes No If not, why? _____

Total No. Individuals 81 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen & Amber S. Oneal

Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614

E-mail Address: aoneal@bonterraconsulting.com

Phone: (714) 444-9199

Plant Information

Phenology: 68 % vegetative 32 % flowering 0 % fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillsides west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles

Quad Name: Point Dume Elevation: 1801 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Garmin GPSmap 60csx

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 17 ft meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 3774139 mN, 330362 mE extends NE to 3774169, 0330407

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Grassland, on hilltop with old water tank, north of facility's swimming pool. Associates: Stipa lepida, Trichostema lanatum. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: youth detention facility and open space

Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.

Threats: Vegetation removal for fire clearance

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 05/09/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus catalinae

Common Name: Catalina mariposa lily

Species Found? Yes No _____ If not, why? _____
Total No. Individuals 504 Subsequent Visit? yes no
Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____
Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen & Amber S. Oneal
Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614
E-mail Address: aoneal@bonterraconsulting.com
Phone: (714) 444-9199

Plant Information

Phenology: 10% vegetative 85% flowering 5% fruiting

Animal Information

# adults	# juveniles	# larvae	# egg masses	# unknown	
<input type="checkbox"/>					
wintering	breeding	nesting	rookery	burrow site	other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)
Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillside west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles
Quad Name: Point Dume Elevation: 1765 ft
T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS
T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Garmin
DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy 15 ft meters/feet
Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)
Coordinates: 3773919.10 m N, 330344.91 m E (center of population), extends to 3773930.16 m N, 330346.86 m E, and 330347.89 m E, 3773910.17 m N

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*
Grassland, just downslope from chamise chaparral. Hillside faces approx due east and northeast. Associates: Stipa lepida, Trichostema lanatum. Calochortus plummerae came up here later in the year. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor
Immediate AND surrounding land use: youth detention facility and open space
Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.
Threats: Vegetation removal for fire clearance
Comments:

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): _____
 Compared with specimen housed at: _____
 Compared with photo / drawing in: _____
 By another person (name): _____
 Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 07/05/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus plummerae

Common Name: Plummer's mariposa lily

Species Found? Yes No _____ If not, why? _____

Total No. Individuals 25 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen

Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614

E-mail Address: rallen@bonterraconsulting.com

Phone: (714) 444-9199

Plant Information

Phenology: 36% vegetative 32% flowering 32% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillsides west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles

Quad Name: Point Dume Elevation: 1814 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Garmin GPSmap 60csx

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 3773973 mN, 330338 mE

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Grassland, just downslope from chamise chaparral. Hillside faces approx due east and northeast. Associates: Calochortus catalinae, Stipa lepidia, Trichostema lanatum. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: youth detention facility and open space

Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.

Threats: Vegetation removal for fire clearance

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

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Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 07/05/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus plummerae

Common Name: Plummer's mariposa lily

Species Found? Yes No If not, why? _____

Total No. Individuals 41 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen

Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614

E-mail Address: rallen@bonterraconsulting.com

Phone: (714) 444-9199

Plant Information

Phenology: 61% vegetative 21% flowering 18% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillside west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles

Quad Name: Point Dume Elevation: 1752 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Garmin GPSmap 60csx

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 3773930 mN, 330346 mE

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Grassland, just downslope from chamise chaparral. Hillside faces approx due east and northeast. Associates: Calochortus catalinae, Stipa lepidula, Trichostema lanatum. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: youth detention facility and open space

Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.

Threats: Vegetation removal for fire clearance

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@dfg.ca.gov

For Office Use Only

Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work (mm/dd/yyyy): 07/05/2012

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: Calochortus plummerae

Common Name: Plummer's mariposa lily

Species Found? Yes No If not, why? _____

Total No. Individuals 41 Subsequent Visit? yes no

Is this an existing NDDDB occurrence? _____ no unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Robert L. Allen

Address: BonTerra Consulting, 2 Executive Circle,
Suite 175, Irvine, CA 92614

E-mail Address: rallen@bonterraconsulting.com

Phone: (714) 444-9199

Plant Information

Phenology: 32% vegetative 51% flowering 17% fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
wintering breeding nesting rookery burrow site other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

Camp Kilpatrick, 427 S. Encinal Canyon Road, Malibu, CA 90265. Hillside west and northwest of facility, outside of fenced area.

County: Los Angeles Landowner / Mgr.: County of Los Angeles

Quad Name: Point Dume Elevation: 1745 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model Garmin GPSmap 60csx

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 3774100 mN, 330292 mE

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Grassland, just downslope from chamise chaparral. Hillside faces approx due east and northeast. Associates: Calochortus catalinae, Stipa lepidia, Trichostema lanatum. Clay soils, some areas with gravels.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: youth detention facility and open space

Visible disturbances: Portion of grassland has been weed-whipped for fire clearance.

Threats: Vegetation removal for fire clearance

Comments:

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: Familiarity with species

Photographs: (check one or more)

Slide	Print	Digital
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no



February 17, 2015

Ben Caras
Bernards
555 First Street
San Fernando, California 91340

VIA EMAIL
BCaras@Bernards.com

Subject: Updated Oak Tree Survey Report for the Camp Kilpatrick Replacement Project, Los Angeles County, California

Dear Mr. Caras:

The purpose of this Letter Report is to document occurrences of oak trees that are subject to regulation by the County of Los Angeles Oak Tree Ordinance (CLAOTO) and the *California Fish and Game Code* at the Camp Kilpatrick project site to support an application for an Oak Tree Permit. In addition to documenting oak tree occurrences, this report evaluates the potential impacts of upcoming construction activities on existing oak tree resources. These construction activities will consist of minor grading; excavations for infrastructure installation and building foundations; and construction of dormitories, a cafeteria, and various recreational facilities.

This report has been updated to analyze the impacts that the currently proposed design-build site plan will have on oak trees that have been documented on the project site. Oak tree locations and associated data presented herein are based on field work performed in August 2012. It is assumed that oak tree conditions have not significantly changed since that time and that no additional field analysis is necessary to adequately evaluate the proposed project's effect on these trees.

PROJECT LOCATION AND DESCRIPTION

The Los Angeles County Department of Public Works is proposing to replace the Camp Kilpatrick Juvenile Probation Center facilities with newly designed facilities to enhance implementation of the Probation Department's Integrated Treatment Model, dialectical behavior therapy, and multidisciplinary case planning. Camp Kilpatrick is located in unincorporated Los Angeles County at 427 South Encinal Canyon Road in Malibu, California (Exhibits 1 and 2). Camp Kilpatrick is located immediately to the north of Camp Miller, which is also a County of Los Angeles juvenile probation center. No improvements are proposed at Camp Miller, which would remain operational during construction of the replacement project at Camp Kilpatrick.

To date, project activities have consisted of demolishing all existing buildings and removing brick, concrete, and asphalt road and hardscape areas. Other activities within the demolition work limits have included the removal of chain-link fencing, a steel gate, and baseball field back stops.

REGULATORY BACKGROUND

The CLAOTO (Section 22.56.2050 of the Los Angeles County Code) protects oak trees (any species in the genus *Quercus*) whose trunks measure at least 8 inches in diameter (or, for trees with multiple trunks, having 2 trunks with a combined diameter of at least 12 inches), as measured 4.5 feet above natural grade. Heritage oak trees, as defined by the CLAOTO, include trees that either measure 36 inches or more in trunk diameter or have a significant historical or cultural importance. Prior to impacting any oak species, the CLAOTO requires that a permit application be submitted to the County of Los Angeles that includes any Oak Tree Report with an analysis of the oaks on the project site and a plan to mitigate impacts to oak trees.

Under the CLAOTO, the County of Los Angeles asserts jurisdiction over the “protected zone” of all oak trees that meet the minimum size requirement described above. The protected zone is defined in the CLAOTO as areas within 5 feet of the outer dripline, at least 15 feet from the trunk. Impacts to oak trees can be categorized as either (1) removal, in which an entire tree needs to be removed for project implementation; (2) encroachment, consisting of any soil disturbance (e.g., excavation, vehicle operation, grade changes) within the protected zone of an oak; and (3) tree trimming that exceeds the limits described in the CLAOTO (medium pruning of branches less than two inches in diameter).

The County of Los Angeles has recently begun analyzing impacts to oak woodlands as a vegetation type under the *Los Angeles County Oak Woodlands Conservation Management Plan* rather than just impacts to individual trees under the CLAOTO. Under this Management Plan, each oak tree’s “sphere of influence” is identified (ten times the tree canopy area). If other oak trees are located within this sphere of influence, they would constitute an oak woodland and any impacts within that woodland area would require mitigation. Though many of the trees on the project site would constitute an oak woodland under this scenario, this project is not subject to this requirement since the project’s EIR was certified prior to the adoption of the Management Plan in March 2014.

In addition to County requirements, many trees in the survey area are regulated by the *California Fish and Game Code*. The California Department of Fish and Wildlife (CDFW) is charged with issuing Streambed Alteration Agreements that would allow for the removal of native tree species that occur within the bed, channel, or bank of any river, stream, or lake (including concrete-lined channels that are present on the project site). The minimum size requirement for regulation by the CDFW is two inches in trunk diameter at breast height (dbh). Mitigation/replacement ratios for trees within CDFW jurisdiction is based on the size of the tree’s dbh (i.e., mitigation ratios increase as the size of the impacted tree increases). It should be noted that many trees in the survey area are subject to regulation by both the County Tree Ordinance and the *California Fish and Game Code*.

METHODS

Field surveys in support of this oak tree report were performed on August 23 and 24, 2012, by BonTerra Psomas Certified Arborist David Hughes. The survey area for this report consisted of the proposed impact footprint for the project as shown in the project Environmental Impact Report and all areas within 200 feet of the impact footprint. Since the currently proposed impact footprint is within the analyzed area for the EIR, no changes to the survey area were necessary for this analysis. A numbered aluminum tag was affixed to the north side of each tree that was

assessed for this tree survey. Trees that could not be tagged were given identifying numbers. A previous oak tree survey was performed in 2005 and the 2012 survey included an evaluation of all of these previously tagged trees along with several additional trees that were not part of the 2005 survey. Trees numbered between 1 and 139 were tagged during the 2005 survey; trees numbered between 701 and 755 were tagged as part of the 2012 survey. All data presented in this report were collected during the 2012 and includes some of the trees tagged during the 2005 survey as well as trees tagged during the 2012 survey. The following criteria were included as part of the assessment for each tree in the survey area:

- The trunk dbh for each tree was measured approximately 4.5 feet above natural grade.
- In the case of trees with multiple trunks, the number of trunks was recorded and the dbh was measured for each trunk. The two largest trunk diameters were combined to determine the total dbh for each tree.
- The height of each tree was visually estimated from mean natural grade to the highest living branch.
- The diameter of each tree's living canopy was estimated at its widest point and mapped on an aerial photograph.
- The locations of all oaks that met the criteria for protection under the CLAOTO and/or the *California Fish and Game Code* were recorded using a hand-held global positioning system (GPS) unit and were marked on an aerial photograph.

Tree aesthetics were evaluated with respect to overall form and symmetry, crown balance, branching pattern, and broken branches. Trees were rated on a scale of 1 to 5, as follows: 1=Very Poor, 2=Poor, 3=Fair, 4=Good, and 5=Excellent. The health of each tree was similarly assessed on a scale of 1 to 5, and was based on visual evidence of vigor (e.g., the amount of foliage); leaf color and size; presence of branch or twig dieback; severity of insect infestation; presence of disease, heart rot, fire damage, and/or mechanical damage; amount of new growth; appearance of bark; and rate of callous development over wounds. In addition, the health assessment considered such elements as structural integrity; presence of decay; weak branch attachments; and the presence of exposed roots due to soil erosion.

RESULTS

A total of 85 coast live oak trees (*Quercus agrifolia*) are located within the project survey area that meet the minimum size threshold described in the CLAOTO and/or the *California Fish and Game Code*. None of these trees are located within the proposed ground disturbance limits (Exhibit 3). Therefore, no direct removals of oak trees will occur as a result of project implementation. The ground disturbance limits approach several trees and appear to slightly overlap with the protected zone of trees 701, 703, 704, 707, 716, and 722. Though the protected zone of Tree 722 overlaps the ground disturbance limits on an aerial view, a concrete-lined channel is located between the tree and the disturbance limits. As a result, none of this tree's roots would be expected to occur within the project limits.

As shown on Exhibit 4, the proposed site plan will construct facilities on the approximate footprint of the old facilities. Dormitories will be located along the western edge of the property, adjacent to several oak trees immediately to the west. Depending on Fire Department requirements, several of these trees may need to be trimmed to provide sufficient clearance from

the new buildings. If trimming is required, the amount of required trimming may exceed the threshold described in the CLAOTO (i.e., limbs greater than two inches may be removed and the total canopy reduction would be more than “moderate”). Trees that may require trimming include numbers 701, 703, 704, 707, and 716.

None of the trees described above that may be affected by project activities meet the size requirement to be considered heritage trees per the CLAOTO.

Total project impacts described above are summarized in Table 1 and a summary of data collected for individual trees that may be affected by the project are summarized in Table 2. A summary of all trees assessed during the field survey is provided in Attachment A.

**TABLE 1
 SUMMARY OF PROJECT IMPACTS ON OAK TREES**

	Impact Type		
	Removal	Encroachment	Trimming
Quantity of coast live oaks	0	6	5
Tree numbers	N/A	701, 703, 704, 707, 716, 722	701, 703, 704, 707, 716
N/A: not applicable.			

**TABLE 2
 OAK TREES POTENTIALLY AFFECTED BY PROJECT CONSTRUCTION**

Tag No.	dbh (in) ^a	Height (ft)	Canopy Diameter (ft)	Protection Zone ^b Diameter (ft)	Health Rating	Aesthetic Rating	Impact Type	
							Encroachment	Trimming
701	28.7	60	40	50	5	5	X	X
703	20.9	40	30	40	4	4	X	X
704	23.4	30	25	35	4	3	X	X
707	10.6	12	15	30	2	2	X	X
716	22.4	30	30	40	3	4	X	X
722	24.0	30	25	35	3	4	X	

dbh: diameter at breast height; in: inches; ft: feet
^a Total dbh shown is the total of the 2 largest trunks.
^b The protection zone is defined by the CLAOTO as 5 feet outside the outer canopy limit, a minimum of 15 feet from the trunk (minimum diameter is 30 feet).

DISCUSSION

Based on the proposed project design, minimal impacts to on-site oak trees are expected. In fact, project construction may occur entirely outside the protected zones for all oak trees described in this report, though it is not possible to confirm this until project construction boundaries are staked in the field. Regardless, none of the proposed impacts to these oak trees are expected to have a significantly negative effect on the health or long-term survivorship of these trees. Therefore, no mitigation related to project construction is recommended.

Demolition of the facilities on the project site that are to be replaced occurred in the fall of 2014. Though minor encroachment into the protected zone of a few trees was necessary to remove the foundations of the old dormitories, it is assumed that this resulted in very little impact to these trees. The findings of this report assume that demolition work required no oak tree removals or significant encroachment.

Trees on the project site were generally in fair or good health at the time of the 2012 survey and it is assumed that the condition of these trees has not significantly changed since. Of the trees that may be affected by construction, the health of Tree 707 was rated as poor due to a significant lean and exposed roots. Other on-site trees in poor health include Trees 712, 719, and 751 due to moderate to severe internal decay.

Protective fencing, as required by the CLAOTO, shall be placed along the protected zone of any oak tree that is in the vicinity of project construction. Operating outside the protected zone will avoid the need for follow-up monitoring to assess long-term effects of encroachment. Any earth-disturbing work or vehicle operation within the protected zone of an oak tree should be monitored by a Certified Arborist to minimize the impact of construction activities.

As described in the Regulatory Background section, the CDFW regulates the removal of trees that overhang streambeds. Several trees within the survey boundaries fall under the CDFW's jurisdiction, though none of these trees will be affected by project activities. Tree 722 is located adjacent to the proposed ground disturbance limits, though (as described above) a concrete channel is located between it and construction activity. Therefore any ground disturbance work is not expected to encounter this tree's roots. Other riparian trees include numbers 87, 88, 91, 722, 724, and 733-741. Special attention should be made to avoid any impacts to these trees to avoid additional permitting and potential mitigation requirements.

At the conclusion of project construction, a summary memorandum should be prepared that confirms that no oak trees were removed or impacted beyond what is described in this report. The summary memo should also identify all the trees that have their protected zone encroached upon in case the County requires follow-up monitoring.

Please contact David Hughes at (626) 351-2000 with any questions or comments.

Sincerely,
BonTerra Psomas

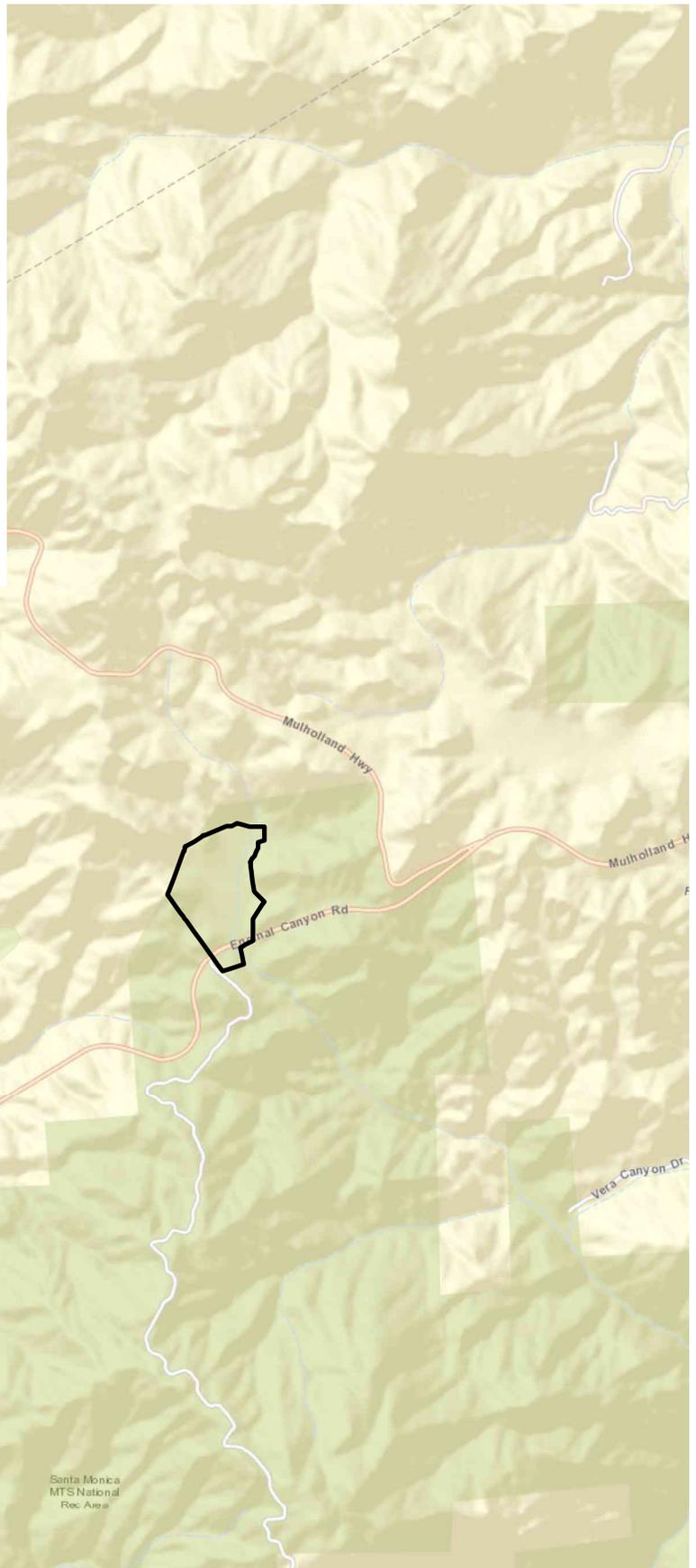


Melissa A. Howe
Vice President, Resource Management



David T. Hughes
Certified Arborist
International Society of Arboriculture
Certificate No. WE-7752A

Attachment A – Oak Tree Survey Data Summary



Legend

Local Vicinity

Oak Tree Survey for the Camp Kilpatrick Replacement Project

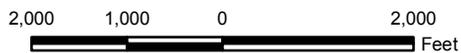
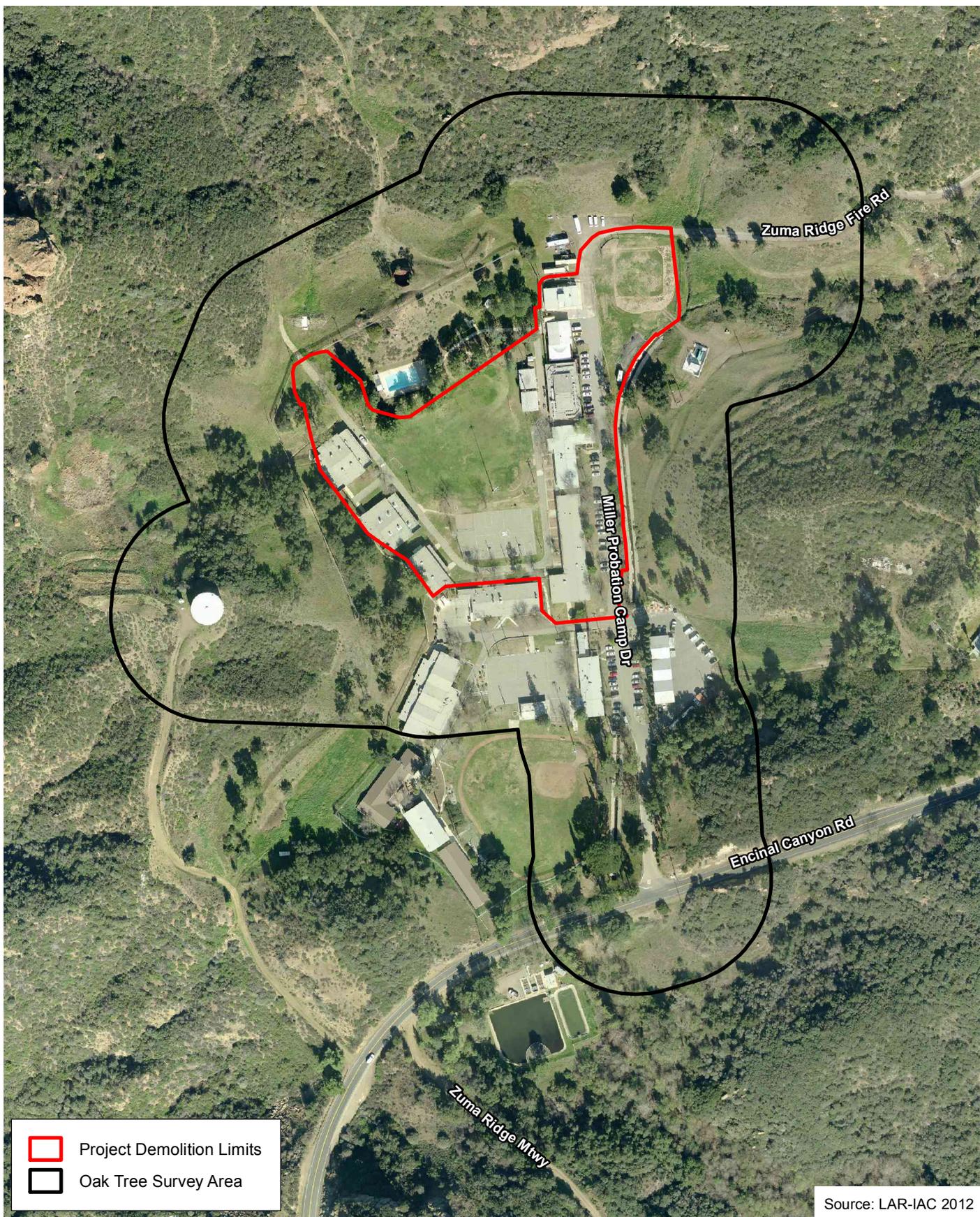


Exhibit 1



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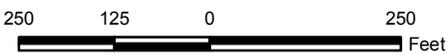


	Project Demolition Limits
	Oak Tree Survey Area

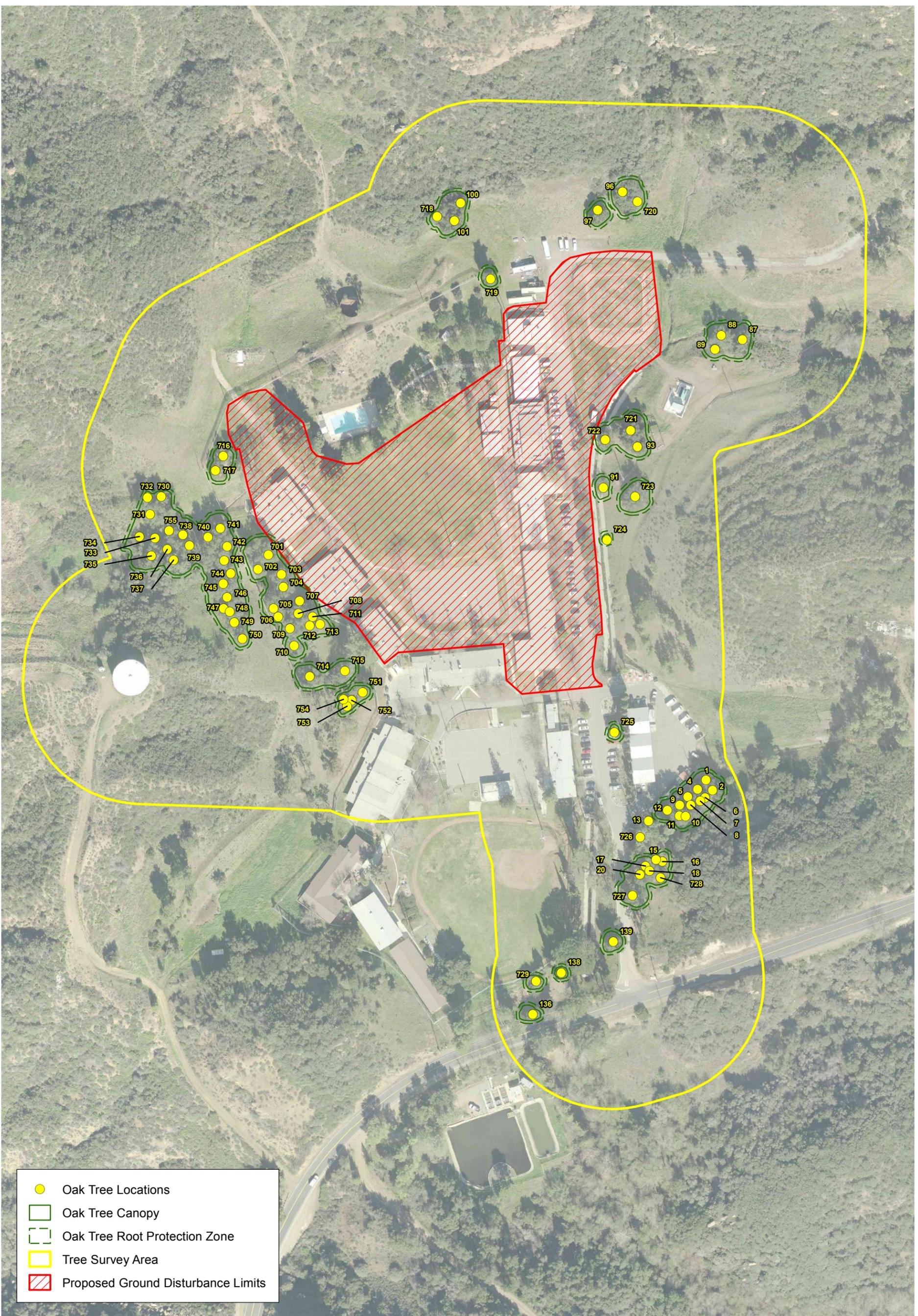
Project Location

Oak Tree Survey for the Camp Kilpatrick Replacement Project

Exhibit 2



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- Oak Tree Locations
- Oak Tree Canopy
- Oak Tree Root Protection Zone
- Tree Survey Area
- Proposed Ground Disturbance Limits

Oak Tree Locations

Oak Tree Survey for the Camp Kilpatrick Replacement Project

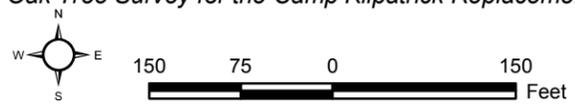
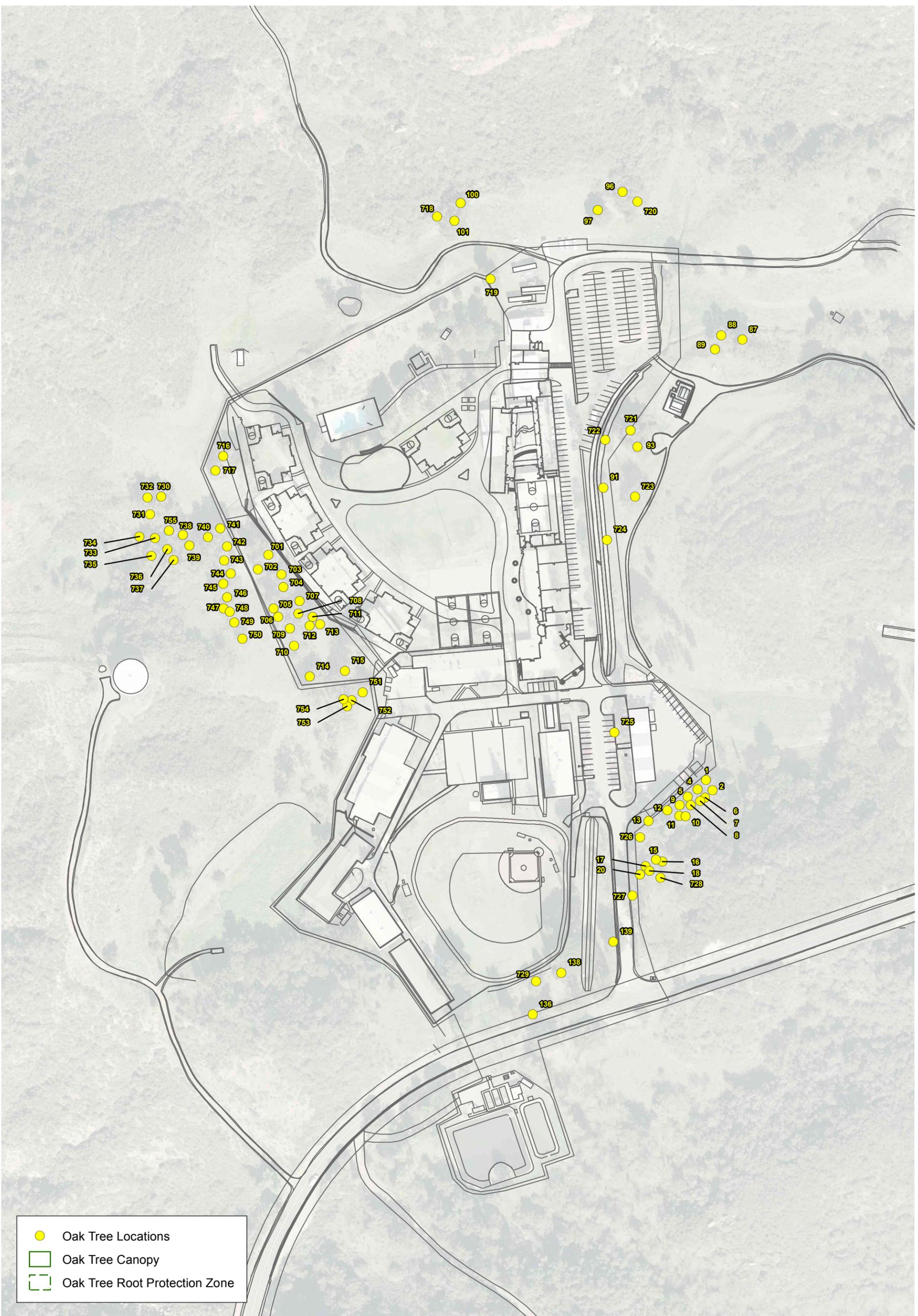


Exhibit 3



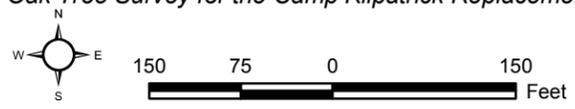
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Oak Tree Locations
 Oak Tree Canopy
 Oak Tree Root Protection Zone

Proposed Site Plan
 Oak Tree Survey for the Camp Kilpatrick Replacement Project

Exhibit 4



(Rev: 2-11-2015 CJS) R:\Projects\Bernards (BER)\Graphics\Updated_Oak_Rpt\Ex_site_plan.pdf

ATTACHMENT A
OAK TREE SURVEY DATA SUMMARY

OAK TREE SURVEY DATA SUMMARY

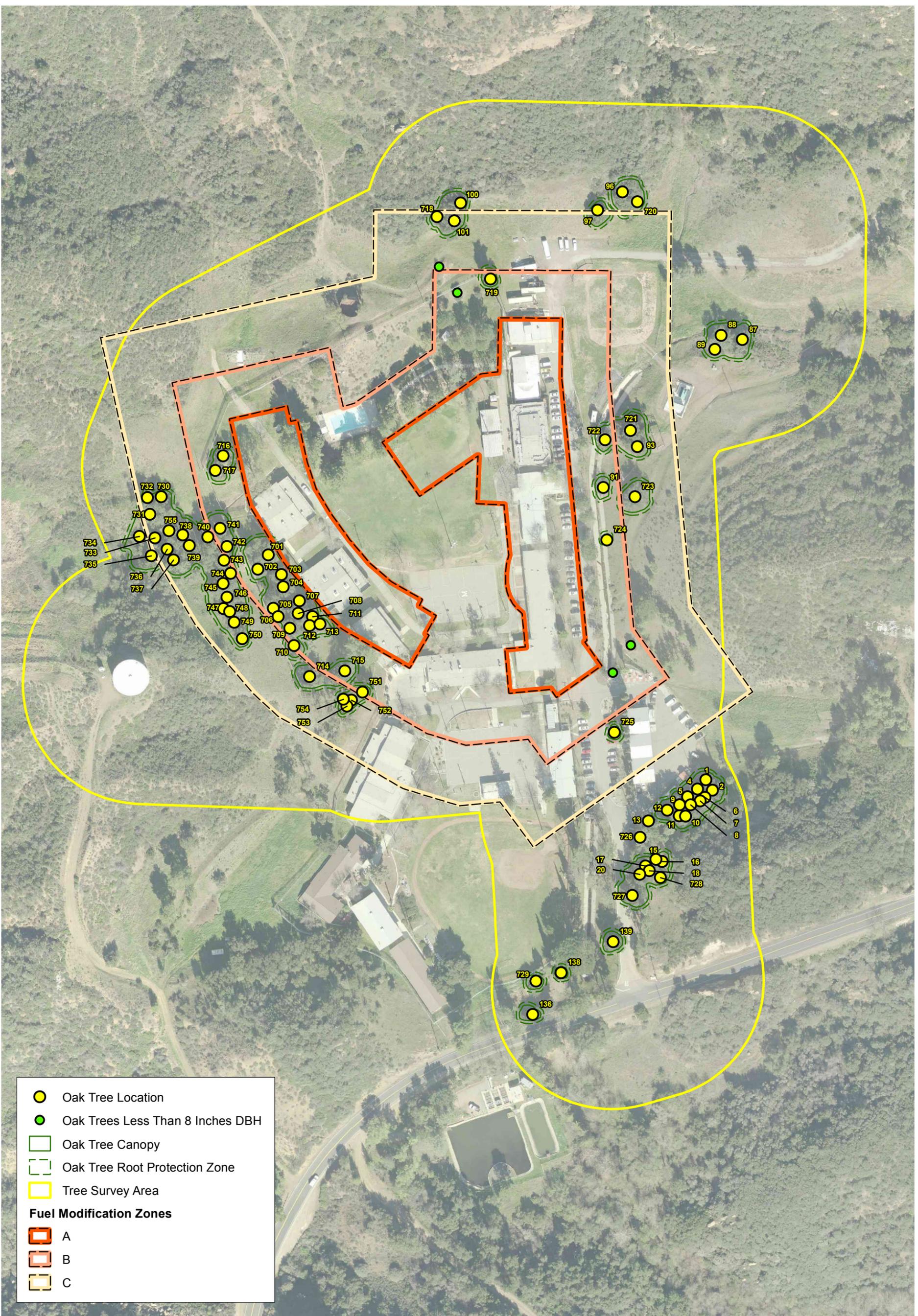
Tree No.	Species	Number of Trunks	Trunk Diameter (DBH) (in)	Sum of Two Trunks	Height (feet)	Canopy (feet)	Aesthetic Rating	Health Rating	Regulated by		Proposed Impact		
									CLAOTO	CDFW	Removal	Encroachment	Trimming
1	<i>Quercus agrifolia</i>	1	23.6	23.6	40	30	4	4	X				
2	<i>Quercus agrifolia</i>	1	15.7	15.7	35	20	3	2	X				
4	<i>Quercus agrifolia</i>	1	10.6	10.6	25	20	2	2	X				
5	<i>Quercus agrifolia</i>	3	9.4, 8.7, 8.3	18.1	30	30	2	2	X				
6	<i>Quercus agrifolia</i>	1	15.4	15.4	35	20	4	4	X				
7	<i>Quercus agrifolia</i>	1	18.1	18.1	30	20	4	4	X				
8	<i>Quercus agrifolia</i>	1	17.1	17.1	35	30	4	4	X				
9	<i>Quercus agrifolia</i>	1	16.7	16.7	35	20	3	4	X				
9	<i>Quercus agrifolia</i>	1	16.5	16.5	30	20	4	4	X				
10	<i>Quercus agrifolia</i>	1	13.8	13.8	35	20	3	3	X				
11	<i>Quercus agrifolia</i>	1	10.2	10.2	35	15	2	3	X				
12	<i>Quercus agrifolia</i>	1	17.3	17.3	50	25	4	4	X				
13	<i>Quercus agrifolia</i>	1	14.6	14.6	25	20	4	3	X				
15	<i>Quercus agrifolia</i>	1	11.6	11.6	25	15	3	2	X				
16	<i>Quercus agrifolia</i>	1	10.8	10.8	30	15	3	2	X				
17	<i>Quercus agrifolia</i>	1	14.0	14.0	25	15	3	3	X				
18	<i>Quercus agrifolia</i>	1	10.2	10.2	25	15	3	3	X				
20	<i>Quercus agrifolia</i>	3	17.5, 17.3, 14.6	34.8	40	30	4	4	X				
87	<i>Quercus agrifolia</i>	1	28.3	28.3	40	30	4	4	X	X			
88	<i>Quercus agrifolia</i>	1	28.7	28.7	40	25	4	3	X	X			
89	<i>Quercus agrifolia</i>	1	11.2	11.2	25	15	4	5	X				
91	<i>Quercus agrifolia</i>	2	19.1, 15.9	35.0	30	30	4	4	X	X			
93	<i>Quercus agrifolia</i>	5	10.2, 7.1, 5.5, 2.8, 2.0	17.3	15	15	3	5	X				
96	<i>Quercus agrifolia</i>	2	19.3, 16.5	35.8	40	30	3	3	X				
97	<i>Quercus agrifolia</i>	1	25.6	25.6	45	30	5	4	X				
100	<i>Quercus agrifolia</i>	1	29.9	29.9	45	40	4	2	X				
101	<i>Quercus agrifolia</i>	2	21.7, 21.3	42.9	60	50	5	4	X				
136	<i>Quercus agrifolia</i>	1	12.8	12.8	20	15	4	4	X				
138	<i>Quercus agrifolia</i>	1	14.4	14.4	20	15	4	4	X				
139	<i>Quercus agrifolia</i>	1	27.6	27.6	30	25	4	4	X				

OAK TREE SURVEY DATA SUMMARY

Tree No.	Species	Number of Trunks	Trunk Diameter (DBH) (in)	Sum of Two Trunks	Height (feet)	Canopy (feet)	Aesthetic Rating	Health Rating	Regulated by		Proposed Impact		
									CLAOTO	CDFW	Removal	Encroachment	Trimming
701	<i>Quercus agrifolia</i>	1	28.7	28.7	60	40	5	5	X			X	X
702	<i>Quercus agrifolia</i>	2	27.6, 22.4	50.0	50	40	4	4	X				
703	<i>Quercus agrifolia</i>	1	20.9	20.9	40	30	4	4	X			X	X
704	<i>Quercus agrifolia</i>	3	11.8, 11.6, 6.7	23.4	30	25	3	4	X			X	X
705	<i>Quercus agrifolia</i>	2	16.7, 9.6	26.4	45	20	4	4	X				
706	<i>Quercus agrifolia</i>	3	12.2, 8.1, 6.3	20.3	25	20	2	3	X				
707	<i>Quercus agrifolia</i>	1	10.6	10.6	12	15	2	2	X			X	X
708	<i>Quercus agrifolia</i>	1	15.4	15.4	25	20	3	5	X				
709	<i>Quercus agrifolia</i>	5	8.7, 8.1, 5.5, 5.5, 3.5	16.8	25	20	2	4	X				
710	<i>Quercus agrifolia</i>	3	20.1, 6.3, 5.9	26.4	30	20	2	4	X				
711	<i>Quercus agrifolia</i>	3	9.4, 8.5, 3.1	17.9	30	15	3	4	X				
712	<i>Quercus agrifolia</i>	1	15.4	15.4	15	10	1	1	X				
713	<i>Quercus agrifolia</i>	2	16.1, 5.9	22.0	20	20	3	4	X				
714	<i>Quercus agrifolia</i>	2	15.0, 15.0	15.0	20	30	4	4	X				
715	<i>Quercus agrifolia</i>	1	16.1	16.1	35	25	4	5	X				
716	<i>Quercus agrifolia</i>	1	22.4	22.4	30	30	4	3	X			X	X
717	<i>Quercus agrifolia</i>	2	18.9, 16.9	35.8	30	30	4	3	X				
718	<i>Quercus agrifolia</i>	3	15.4, 9.4, 6.3	24.8	30	20	2	2	X				
719	<i>Quercus agrifolia</i>	1	46.1	46.1	50	20	3	1	X				
720	<i>Quercus agrifolia</i>	3	10.8, 9.1, 8.7	19.9	30	20	3	3	X				
721	<i>Quercus agrifolia</i>	1	32.3	32.3	40	35	5	5	X				
722	<i>Quercus agrifolia</i>	2	13.8, 10.2	24.0	30	25	3	4	X	X		X	
723	<i>Quercus agrifolia</i>	1	29.1	29.1	40	30	5	5	X				
724	<i>Quercus agrifolia</i>	1	6.8	6.8	10	10	3	4	X	X			
725	<i>Quercus agrifolia</i>	2	18.1, 15.4	33.5	30	30	3	2	X				
726	<i>Quercus agrifolia</i>	1	18.5	18.5	40	30	4	4	X				
727	<i>Quercus agrifolia</i>	1	33.5	33.5	45	45	4	4	X				
728	<i>Quercus agrifolia</i>	1	15.6	15.6	25	20	4	4	X				
729	<i>Quercus agrifolia</i>	1	22.6	22.6	20	20	4	4	X				
730	<i>Quercus agrifolia</i>	1	14.8	14.8	20	10	1	3	X				
731	<i>Quercus agrifolia</i>	2	33.1, 20.1	53.1	30	25	4	4	X				

OAK TREE SURVEY DATA SUMMARY

Tree No.	Species	Number of Trunks	Trunk Diameter (DBH) (in)	Sum of Two Trunks	Height (feet)	Canopy (feet)	Aesthetic Rating	Health Rating	Regulated by		Proposed Impact		
									CLAOTO	CDFW	Removal	Encroachment	Trimming
732	<i>Quercus agrifolia</i>	2	16.9, 14.8	31.7	30	20	3	4	X				
733	<i>Quercus agrifolia</i>	1	14.2	14.2	6	6	1	1	X	X			
734	<i>Quercus agrifolia</i>	1	21.3	21.3	30	25	4	4	X	X			
735	<i>Quercus agrifolia</i>	1	22.0	22.0	40	30	4	4	X	X			
736	<i>Quercus agrifolia</i>	1	27.6	27.6	35	40	4	4	X	X			
737	<i>Quercus agrifolia</i>	1	22.4	22.4	45	25	4	5	X	X			
738	<i>Quercus agrifolia</i>	3	19.3, 10.2, 9.4	29.5	35	30	3	4	X	X			
739	<i>Quercus agrifolia</i>	2	20.1, 10.2	30.3	40	25	2	3	X	X			
740	<i>Quercus agrifolia</i>	1	19.1	19.1	40	20	4	4	X	X			
741	<i>Quercus agrifolia</i>	1	32.1	32.1	30	30	4	4	X	X			
742	<i>Quercus agrifolia</i>	1	20.3	20.3	40	30	3	4	X				
743	<i>Quercus agrifolia</i>	1	14.2, 11.6	25.8	30	25	3	3	X				
744	<i>Quercus agrifolia</i>	1	13.4	13.4	30	15	4	5	X				
745	<i>Quercus agrifolia</i>	1	24	24.0	40	25	4	5	X				
746	<i>Quercus agrifolia</i>	2	15.0, 12.6	27.6	35	30	3	4	X				
747	<i>Quercus agrifolia</i>	1	15.2	15.2	35	25	4	4	X				
748	<i>Quercus agrifolia</i>	1	12.4	12.4	20	15	3	4	X				
749	<i>Quercus agrifolia</i>	1	12.2	12.2	20	15	3	4	X				
750	<i>Quercus agrifolia</i>	2	17.7, 16.5	34.3	30	20	4	4	X				
751	<i>Quercus agrifolia</i>	1	24.4	24.4	30	30	2	2	X				
752	<i>Quercus agrifolia</i>	1	15.4	15.4	40	30	3	3	X				
753	<i>Quercus agrifolia</i>	1	11.4	11.4	25	15	4	4	X				
754	<i>Quercus agrifolia</i>	1	8.9	8.9	15	10	3	4	X				
755	<i>Quercus agrifolia</i>	1	22.0	22.0	35	30	4	4	X				



● Oak Tree Location
 ● Oak Trees Less Than 8 Inches DBH
 □ Oak Tree Canopy
 □ Oak Tree Root Protection Zone
 □ Tree Survey Area
Fuel Modification Zones
 A
 B
 C

Oak Tree Survey – Fuel Modification Zones

Oak Tree Survey for the Camp Kilpatrick Replacement Project

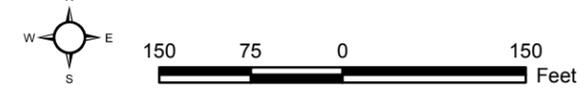


Exhibit A



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Biological Constraints Survey

Camp Vernon Kilpatrick Replacement Project County of Los Angeles, California

Prepared for | County of Los Angeles
Department of Public Works
900 South Fremont Avenue
Alhambra, California 91803

Prepared by | BonTerra Consulting
225 South Lake Avenue, Suite 1000
Pasadena, California 91101
T: (626) 351-2000 F: (626) 351-2030

March 20, 2015



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ATTACHMENTS

- A Site Photographs
- B Wildlife Compendium

1.0 INTRODUCTION

This Biological Resources Report presents the findings of a biological constraints survey for the Juvenile Camp Vernon Kilpatrick (Camp Kilpatrick) facility improvement project in the Santa Monica Mountains (hereinafter referred to as the “proposed project”) in Los Angeles County, California (Exhibit 1). BonTerra Consulting Senior Botanist Robert L. Allen conducted general plant and wildlife surveys concurrent with vegetation mapping on April 25, 2012. The purpose of the survey was to evaluate potential biological constraints on project development.

The California Native Plant Society’s (CNPS’) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2012) and the California Department of Fish and Game’s (CDFG’s) California Natural Diversity Database (CDFG 2012) were reviewed prior to the surveys to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. Database searches included the U.S. Geological Survey’s (USGS’) Point Dume 7.5-minute quadrangle. Nomenclature for vegetation types generally follows that of Sawyer et al. (2009). Plants were identified using Baldwin et al. (2012) and the Jepson Flora Project (2012). Vegetation was mapped in the field on a 1 inch equals 50 feet (1” = 50’) scale color aerial. In the event the tree canopy covered another vegetation type (e.g., oak canopy over a road), the vegetation was mapped as the corresponding vegetation type for the canopy.

2.0 PROJECT LOCATION

The survey area for the proposed project includes the proposed project’s impact area plus a buffer to include possible infrastructure improvements, which varies from 50 to 450 feet around the facility (Exhibits 2 and 3). The survey area is located on the U.S. Geological Survey’s (USGS’) 7.5-minute Point Dume topographic quadrangle (Exhibit 2). The facility is surrounded by ridges to the north, west, and east and topography slopes towards the south. Elevation ranges from 1,740 to 1,840 feet above mean sea level (msl). Zuma Canyon Creek is a blueline stream that extends from north to south through the survey area.

The survey area is located within the Santa Monica Mountains Coastal Zone, which is located in the unincorporated portion of the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary, excluding the City of Malibu. The Coastal Zone extends inland from the shoreline approximately 5 miles and encompasses approximately 81 square miles. The Santa Monica Mountains Local Coastal Program (LCP) consists of the Coastal Zone Plan and implementing actions, including the Community Standards District; amendments to Subdivision Ordinance and the Zoning Ordinance; Titles 21 and 22 of the County Code; and a zoning consistency program. The Coastal Zone Plan, which is a component of the Los Angeles County General Plan, will replace the Malibu Land Use Plan, which was certified by the Coastal Commission in 1986 and is currently the basic planning tool for the Santa Monica Mountains Coastal Zone. The Coastal Zone Plan includes some of the policies of the 1986 Land Use Plan, new policies, and many policies from the Santa Monica Mountains North Area Plan. Once the Santa Monica Mountains LCP is certified by the Coastal Commission, the County will have the authority to issue Coastal Development Permits (CDP). Until that occurs, all proposed development within the Santa Monica Mountains LCP area will require authorization from the California Coastal Commission.

3.0 PROJECT DESCRIPTION

The County of Los Angeles Department of Public Works (LACDPW) is proposing to replace the existing Camp Kilpatrick Detention Center with newly designed facilities intended to create a more

supportive and treatment-oriented environment. For example, replacing the large dormitories with small cottages is intended to enhance rehabilitation therapy and programs. Camp Kilpatrick is located immediately north of Camp Miller which is also a County of Los Angeles juvenile detention center. No improvements are proposed at Camp Miller, which would remain operational during construction of the replacement project at Camp Kilpatrick.

Currently, Camp Kilpatrick has a rated bed capacity of 125 minors and consists of 13 single-story buildings totaling 44,878 square feet (sf), approximately 86,325 sf of outdoor facilities (i.e., swimming pool, sports courts, multi-purpose field, ball field), hardscape and landscape areas, surface parking, and undisturbed natural open space areas, generally limited to the northern and eastern boundaries of the site. The proposed project involves demolition of all existing structures within Camp Kilpatrick, with the exception of the swimming pool, and the kitchen that currently serves both Camp Miller and Camp Kilpatrick. All other buildings and outdoor facilities within the Project site boundaries would be demolished and replaced with new buildings, outdoor facilities, surface parking, and hardscape and landscape features. The proposed structures and related facilities would generally be located in the same footprint as the existing Camp Kilpatrick facilities.

4.0 SURVEY RESULTS

4.1 VEGETATION TYPES

Vegetation types in the survey area consist of California sagebrush scrub, chaparral, native and non-native grasslands, willow scrub, coast live oak woodland, ruderal, ornamental plantings, and developed (buildings, roads, trails) (Exhibit 4). These vegetation types are described below. Representative photos of the site are included in Attachment A.

California sagebrush scrub occurs on the steep slopes by the water tower on the west side of the survey area and just inside of the fence on the Camp's northern border. Within the survey area, California sagebrush scrub is dominated by California sagebrush (*Artemisia californica*). Other plant species that occur in this vegetation type include California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), bigpod lilac (*Ceanothus megacarpus*), laurel sumac (*Malosma laurina*), white sage (*Salvia apiana*), toyon (*Heteromeles arbutifolia*), white currant (*Ribes indecorum*), and blue elderberry (*Sambucus nigra* ssp. *caerulea*).

Chaparral occurs on the western slopes of the survey area. Within the survey area, chaparral is dominated by chamise (*Adenostoma fasciculatum*). Other plant species that occur in this vegetation type include ribbonshanks (*Adenostoma sparsifolium*), bigberry manzanita (*Arctostaphylos glauca*), chaparral yucca (*Hesperoyucca whipplei*), black sage, poison oak (*Toxicodendron diversilobum*), golden yarrow (*Eriophyllum confertiflorum*), sawtooth goldenbush (*Hazardia squarrosa*), and woolly blue curls (*Trichostema lanatum*).

Native grasslands occur in patches on the slopes around the perimeter of the facility fencing. They are comprised of native plant species such as foothill needlegrass (*Stipa* [*Nassella*] *lepida*), purple needlegrass (*Stipa* [*Nassella*] *pulchra*), and western blue-eyed grass (*Sisyrinchium bellum*). Some non-native species, primarily slender wild oat (*Avena barbata*), also occur in native grasslands.

Non-native grasslands occur in areas directly adjacent to the facility's fence and along unpaved access roads, where they are disturbed by annual fuel modification and weed-abatement activities. This vegetation types contains mostly non-native species such as slender wild oat, rippgut grass (*Bromus diandrus*), onionweed (*Asphodelus fistulosus*), red-stemmed filaree (*Erodium cicutarium*), and white-stemmed filaree (*Erodium moschatum*). Some native species



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Regional Location

Camp Kilpatrick

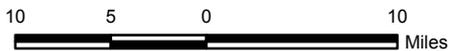
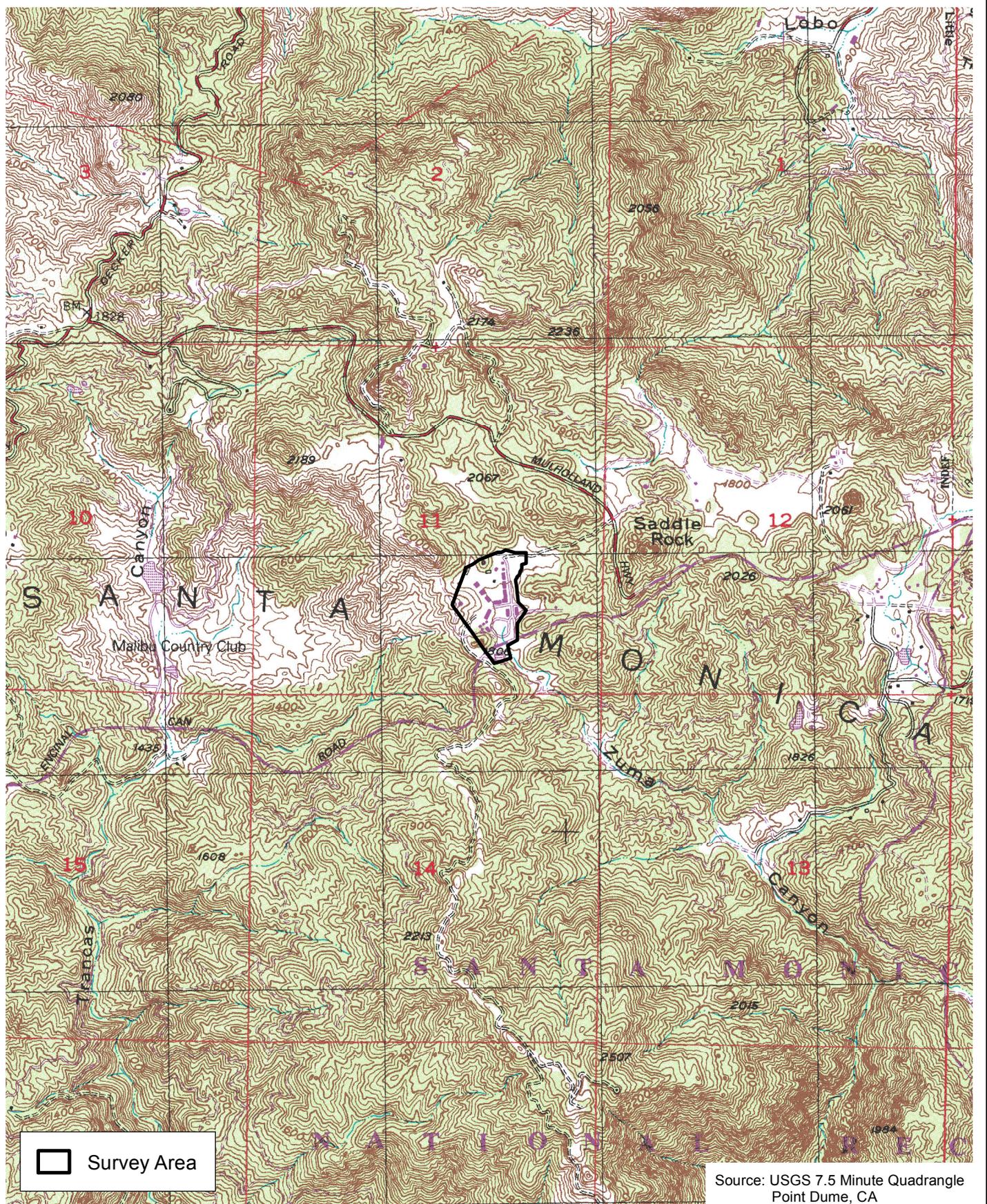


Exhibit 1



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Local Vicinity

Camp Kilpatrick



Exhibit 2



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 Survey Area

Survey Area

Camp Kilpatrick

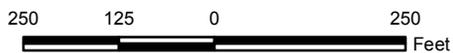


Exhibit 3



also occur at low densities in non-native grasslands, including scattered foothill needlegrass, purple needlegrass, and western blue-eyed grass.

Willow scrub occurs in a small patch in the southeastern portion of the survey area, along Zuma Creek. Drainage from the facilities is carried through a culvert under the road and empties into Zuma Creek near the sewage treatment pond. Species observed include willows (*Salix* spp.), mule fat (*Baccharis salicifolia*), and poison hemlock (*Conium maculatum*).

Coast live oak woodland occurs primarily on the slopes around the perimeter of the facility. The woodland is dominated by coast live oak (*Quercus agrifolia*) and California scrub oak (*Quercus berberidifolia*). Other species present include western poison oak, mugwort (*Artemisia douglasiana*), Pacific sanicle (*Sanicula crassicaulis*), and Greene's cinquefoil (*Drymocallis glandulosa* ssp. *reflexa*). This vegetation type also includes small groupings and individual oak trees.

Ruderal vegetation occurs in small patches adjacent to the facilities' developed areas. Ruderal species are weedy plant species that grow following disturbance and often include non-native annual species. The primary native ruderal species within this vegetation type is telegraph weed (*Heterotheca grandiflora*). Non-native ruderal species include slender wild oat, soft chess brome (*Bromus hordeaceus*), filarees (*Erodium* spp.), and tocalote (*Centaurea melitensis*).

Ornamental vegetation occurs throughout the facilities. Ornamental species include eucalyptus (*Eucalyptus* sp.), Canary Island pine (*Pinus canariensis*), Aleppo pine (*Pinus halepensis*), California incense cedar (*Calocedrus decurrens*), California redwood (*Sequoia sempervirens*), various non-native shrubs, and turf grasses.

Developed areas include buildings, paved areas, concrete-lined channels, compacted dirt roads, and the WTP.

4.2 WILDLIFE

Amphibian species observed or expected to occur in the survey area include the garden slender salamander (*Batrachoseps major major*), western toad (*Anaxyrus [Bufo] boreas*), and Baja California treefrog (*Pseudacris hypochondriaca [Hyla regilla]*). All these species would be expected in the native habitats surrounding the facilities. Reptile species observed or expected to occur in the survey area include western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), alligator lizard (*Elgaria multicarinata*), red coachwhip (*Coluber [Masticophis] flagellum piceus*), gopher snake (*Pituophis catenifer*), common kingsnake (*Lampropeltis getula*), and western rattlesnake (*Crotalus oreganus*). Any lizard species listed would be expected to occur both inside the facilities and in the natural areas surrounding the facilities, while the snake species would be expected primarily in the natural areas surrounding the facilities.

Bird species observed or expected to occur in the natural areas surrounding the facilities include red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), black-chinned hummingbird (*Archilochus alexandri*), Anna's hummingbird (*Calypte anna*), acorn woodpecker (*Melanerpes formicivorus*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), Pacific-slope flycatcher (*Empidonax difficilis*), ash-throated flycatcher (*Myiarchus cinerascens*), western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), mountain chickadee (*Poecile gambeli*), oak titmouse (*Baeolophus inornatus*), Bewick's wren (*Thryomanes bewickii*), house wren (*Troglodytes aedon*), wrentit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), phainopepla (*Phainopepla nitens*), orange-crowned warbler (*Oreothlypis celata*), Wilson's warbler (*Cardellina pusilla*),

spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), and dark-eyed junco (*Junco hyemalis*). Bird species expected to occur within the facilities include mourning dove (*Zenaidura macroura*), black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*). Raptors may also forage in the turf grass areas within the facility.

Mammal species observed or expected to occur both within the facilities and in the natural areas surrounding the facilities include Virginia opossum (*Didelphis virginiana*), desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), and northern raccoon (*Procyon lotor*). Additional species expected to occur in the natural areas surrounding the facilities include dusky-footed woodrat (*Neotoma fuscipes*), California vole (*Microtus californicus*), coyote (*Canis latrans*), common gray fox (*Urocyon cinereoargenteus*), striped skunk (*Mephitis mephitis*), bobcat (*Lynx rufus*), and mule deer (*Odocoileus hemionus*). Bat species with potential to forage in the survey area include Yuma bat [Yuma myotis] (*Myotis yumanensis*), canyon bat [western pipistrelle] (*Parastrellus [Pipistrellus] hesperus*), big brown bat (*Eptesicus fuscus*), Brazilian free-tailed bat (*Tadarida brasiliensis*), and greater bonneted bat [western mastiff bat] (*Eumops perotis*). The Yuma bat, big brown bat, and Brazilian free-tailed bat have potential to roost in buildings (if there are available openings or abandoned buildings) and trees within the facilities, while the canyon bat and greater bonneted bat could roost in rock crevices or cliff faces nearby the survey area.

A compendium of wildlife species observed during subsequent site surveys on May 9, 2012 and August 24, 2014 is provided in Attachment B.

4.3 SPECIAL STATUS VEGETATION TYPES

4.3.1 Coastal Sage Scrub

Coastal sage scrub occurs throughout the undeveloped foothills of Southern California. It has high potential to support special status plant and wildlife species. California sagebrush scrub, a type of coastal sage scrub, occurs on the hill above the swimming pool and on the hill with the water tank in the survey area. To the extent possible, the project should be designed to avoid or minimize effects on coastal sage scrub.

4.3.2 Native Grassland

Native grasslands have declined by approximately 99 percent in their historic range in California (Noss and Peters 1995). In the mid-nineteenth century, heavy grazing by cattle and sheep caused native perennials to be replaced by fast-growing annual grasses, which are able to take advantage of spring rains and produce seeds before the dry heat of summer. The native perennial grasses, which are more palatable to livestock than annuals, were damaged by grazing and trampling. Native grasslands have also been lost to development and conversion to agriculture. Native grassland occurs at several places around the perimeter of the facility. To the extent possible, the project should be designed to avoid or minimize effects on native grassland.

4.3.3 Oak Woodland

Oak forests and woodlands provide food, cover, and nesting or denning habitat for many wildlife species. There are a few areas of oak woodland around the perimeter of the facility; however, the trees within and scattered around the edges of the facility do not contain enough trees to be considered an extensive forest or woodland. Individual oak trees do provide high habitat value to native wildlife.

Oak trees are protected by the County of Los Angeles Oak Tree Ordinance (Section 22.56.2060 of the Los Angeles County Code). This regulation protects oak trees (any species in the genus *Quercus*) that are at least 8 inches in diameter (or for trees with multiple trunks, having 2 trunks with a combined diameter of at least 12 inches), as measured 4.5 feet above natural grade. A heritage oak tree, as defined by the oak tree ordinance, measures 36 inches or more in diameter, as measured 4.5 feet above natural grade, or any oak of less than 36 inches in diameter having a significant historical or cultural importance. Prior to impacting any oak species, a permit application must be submitted to the County of Los Angeles that includes an oak tree report with a detailed analysis of the oaks on the project site. An oak tree survey was conducted for the survey area by a BonTerra Consulting Certified Arborist in August 2012 (BonTerra Consulting 2012b). A total of 85 trees were mapped within the survey area; 1 of these was a heritage tree.

An impact to an individual oak tree would require mitigation in accordance with the City of Los Angeles Tree Ordinance (described below). To the extent possible, the project should be designed to avoid oak trees, including any work within an area covered by oak canopy.

4.3.4 Riparian/Jurisdictional Areas

Riparian vegetation (willow scrub) typically occurs along stream courses and intermittent drainages that are subject to seasonal flooding. In general, riparian vegetation can provide important biological functions for an ecosystem such as cover and water sources for wildlife; filtration of runoff water and groundwater recharge; and flood control and sediment stabilization. Due to the reduction in range of riparian vegetation throughout Southern California, these areas are considered a special status vegetation type. To the extent possible, the project should be designed to avoid willow scrub. Drainages, which may include wetlands and “Waters of the U.S.”, are protected under Section 404 of the Clean Water Act and are under the jurisdiction of the U.S. Army Corps of Engineers (USACE). “Waters of the U.S.” include navigable coastal and inland waters, lakes, rivers, and streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce. In addition, if drainages in the survey area meet the criteria established by Section 1600 of the *California Fish and Game Code*, the CDFG may require a Streambed Alteration Agreement prior to any modification of the bed, bank, or channel of streambeds in the survey area.

BonTerra Consulting conducted a jurisdictional delineation of Camp Kilpatrick on July 20, 2012, to define the extent of resources under the jurisdiction of the USACE, the Regional Water Quality Control Board (RWQCB), the CDFG, and the California Coastal Commission (CCC) (BonTerra Consulting 2012a). A total of 0.216 acre (0.195 non-wetland waters of the U.S.; 0.021 acre wetlands) in the survey area are under the jurisdiction of the USACE and RWQCB. A total of 1.444 acres of waters of the State in the survey area are under the jurisdiction of the CDFG. Because the survey area is also in the Coastal Zone, 0.216 acre of wetlands would be under the jurisdiction of the CCC,¹ Regulatory permits or agreements from these agencies would be required prior to any alteration of USACE or CDFG jurisdictional areas.

4.4 SPECIAL STATUS PLANT AND WILDLIFE SPECIES

Plants or wildlife may be considered “special status” due to declining populations; vulnerability to habitat change; or restricted distributions. Certain special status species that have been listed as

¹ The CCC only requires one criterion to be met to consider the area a “wetland”, which is less stringent than the USACE criteria for wetlands that requires three criteria to be met (hydrology, hydrophytic vegetation, hydric soils) to be considered a wetland; areas that only meet one criterion are considered “waters of the U.S.” by USACE and RWQCB.

Threatened or Endangered under the State and/or Federal Endangered Species Acts are described below.

4.4.1 Special Status Plant Species

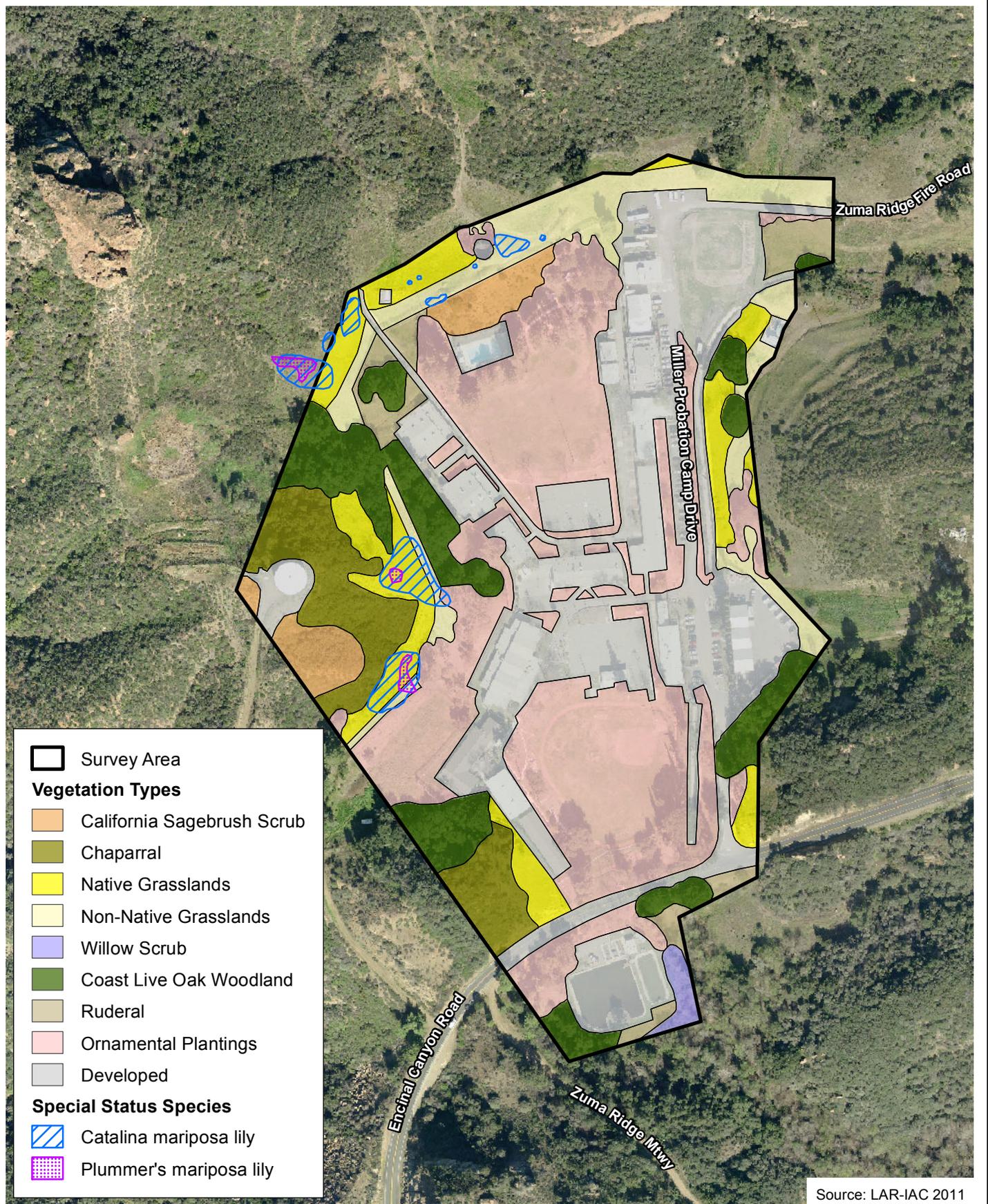
Several special status plant species have been reported from the project vicinity (CDFG 2012; CNPS 2012); however, only Threatened or Endangered species typically present constraints to development. The following federally and/or State-listed Endangered, Threatened, or Rare species have been reported in the project region: Braunton's milk-vetch (*Astragalus brauntonii*, federally Endangered and California Rare Plant Rank [CRPR] 1B.1 species), Santa Susana tarplant (*Deinandra minthornii*, State Rare, CRPR 1B.2), Agoura Hills dudleya (*Dudleya cymosa* ssp. *agourensis*, federally Threatened and CRPR 1B.2), marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*, federally threatened, State Rare), and Lyon's pentachaeta (*Pentachaeta lyonii*, federally and State Endangered, CRPR List 1B.1). Habitat for these species is generally absent from within the facilities; however, suitable habitat for these species is present in the natural areas surrounding the facilities. Focused surveys for special status plants were conducted in spring/summer 2012; none of these species were observed in the survey area (BonTerra Consulting 2012c). It should be noted that Braunton's milk-vetch is a fire-follower (i.e., it only blooms after fire or other disturbance) and therefore, it is not reliably detectable during surveys unless a fire or some other disturbance has recently occurred. Therefore, although it was not observed during focused surveys, it could be present in the seed bank in suitable habitat surrounding the facilities. This species has been reported from multiple locations in Zuma Canyon within the Santa Monica Mountains National Parklands (CDFG 2012). Because the area within the facilities has been disturbed repeatedly, this species can be considered absent from within the facilities.

In addition to the listed species above, species designated as CRPR 1B and 2 species may also be considered constraints on development per Section 15380 of the California Environmental Quality Act (CEQA) Guidelines.² The following CRPR species have been reported in the project region: Coulter's saltbush (*Atriplex coulteri*, CRPR 1B.2), Malibu baccharis (*Baccharis malibuensis*, CRPR 1B.1), round-leaved filaree (*California macrophylla*, CRPR 1B.1), slender mariposa lily (*Calochortus clavatus* var. *gracilis*, CRPR 1B.2), Plummer's mariposa lily (*Calochortus plummerae*, CRPR 1B.2), Parry's spineflower (*Chorizanthe parryi* var. *parryi*, CRPR 1B.1), Norris' beard moss (*Didymodon norrisii*, CRPR 2.2), Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*, CRPR 1B.1), and Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*, CRPR 2.2). Habitat for these species is generally absent from within the facilities; however, suitable habitat for the Malibu baccharis, round-leaved filaree, slender mariposa lily, and Plummer's mariposa lily is present in the natural areas surrounding the facilities. Coulter's saltbush, Parry's spineflower, norris' beard moss, Blochman's dudleya, and Sonoran maiden fern are not expected to occur due to lack of suitable habitat. Focused surveys for special status plants were conducted in spring/summer 2012; Plummer's mariposa lily was observed (BonTerra Consulting 2012c). A total of 94 individuals were observed in 3 locations outside the facility fencing in the survey area (Exhibit 4); none were located within the facility fencing. All three populations are located outside of the area that was currently cleared for fuel modification for the existing facilities.

Other CRPR 3 and 4 species reported from the project region include Catalina mariposa lily (*Calochortus catalinae*, CRPR 4.2), Lewis' evening-primrose (*Camissoniopsis lewisii*, CRPR 3), Hubby's phacelia (*Phacelia hunnyi*, CRPR 4.2), and south coast branching phacelia (*Phacelia*

² Section 15380 of the CEQA Guidelines states that a species can be treated as if it is Threatened or Endangered under CEQA, even if it is not formally listed by the resource agencies, if it can be shown to meet the definition of Rare, Threatened, or Endangered.

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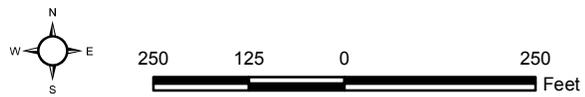


Source: LAR-IAC 2011

Biological Resources

Exhibit 4

Camp Kilpatrick



ramosissima var. *australitoralis*, CRPR 3.2). While impacts on these species should be avoided if possible, these species are typically not considered constraints on development. Habitat for these species is generally absent from within the facilities; however, suitable habitat for the Catalina mariposa lily and Hubby's phacelia is present in the natural areas surrounding the facilities. Lewis' evening-primrose and south coast branching phacelia are not expected to occur due to lack of suitable habitat. Focused surveys for special status plants were conducted in spring/summer 2012; Catalina mariposa lily was observed (BonTerra Consulting 2012c). A total of 1,184 individuals were observed in 4 general locations outside the facility fencing in the survey area (Exhibit 4); none were located within the facility fencing. Portions of these populations (those located on the lower slopes closer to the facility fencing) are located within the area currently cleared for fuel modification for the existing facilities.

4.4.2 Special Status Wildlife Species

Several special status wildlife species have been reported from the project region (CDFG 2012); however, only Threatened or Endangered species typically present constraints to development. The only federally and/or State-listed Endangered or Threatened species that has been reported from the project region (USGS Point Dume 7.5-minute quadrangle) is the bank swallow (*Riparia*, State Threatened), which was last reported from this area in 1964 (at Lake Sherwood) and is now considered extirpated as a breeder in Southern California (CDFG 2012). Threatened and Endangered species reported from neighboring USGS quadrangles (i.e., USGS Newbury Park, Thousand Oaks, Calabasas 7.5-minute quadrangles) include tidewater goby (*Eucyclogobius newberryi*, federally Endangered, CDFG Species of Special Concern [SSC]), southern steelhead (*Oncorhynchus mykiss irideus*, federally Endangered, CDFG SSC), California red-legged frog (*Rana draytonii*, federally Threatened, CDFG SSC), arroyo toad (*Anaxyrus californicus*, federally Endangered, CDFG SSC), coastal California gnatcatcher (*Poliopitila californica*, federally Threatened, CDFG SSC), and least Bell's vireo (*Vireo bellii pusilus*, federally Endangered, State Endangered). The tidewater goby, southern steelhead, and California red-legged frog are not expected to occur due to lack of a perennial stream in the survey area. The arroyo toad is not expected to occur due to a lack of wash habitat. Although limited coastal sage scrub habitat is present, coastal California gnatcatcher would not be expected to occur because the habitat consists of small stature shrubs (e.g., slope above the pool area) or consists of small patches of scrub surrounded by extensive chaparral, which is not preferred by the species. Similarly, although there is a small patch of willow scrub, least Bell's vireo would not be expected to occur due to the limited extent of habitat and because there are no larger areas of habitat in the general vicinity (e.g., creeks or rivers with riparian forest) known to be occupied by the species. Therefore, no Threatened or Endangered species are expected to occur in the survey area due to lack of suitable habitat.

In addition to species formally listed by the resource agencies, several special status wildlife species have been reported from the region: Pacific [western] pond turtle (*Actinemys [Emys] marmorata*), Blainville's [coast] horned lizard (*Phrynosoma blainvillii*), two-striped garter snake (*Thamnophis hammondi*), Cooper's hawk (*Accipiter cooperii*, nesting), golden eagle (*Aquila chrysaetos*, CDFG Fully Protected), greater bonneted [western mastiff] bat (*Eumops perotis*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus*), Yuma [myotis] bat (*Myotis yumanensis*), and American badger (*Taxidea taxus*). Habitat for these species is generally absent from within the facilities; however, suitable habitat for these species is present in the natural areas surrounding the facilities. Several bat species may forage over the facility and could roost in openings in buildings or in abandoned structures. The western pond turtle is not expected to occur due to lack of suitable habitat.

4.5 OTHER CONSIDERATIONS

4.5.1 Significant Ecological Areas

Significant Ecological Areas (SEAs) were established in 1976 by Los Angeles County to designate areas with sensitive environmental conditions and/or resources in order to preserve biological diversity. SEA boundaries are general in nature and broadly outline the biological resources of concern. The survey area is located within the Buffer Area for SEA No. 3 – Zuma Canyon (Exhibit 5). Zuma Canyon is protected because it is one of the last major drainages in the Santa Monica Mountains that has a perennial stream and remains in an undeveloped, unroaded condition. It supports a mix of coastal sage scrub and chaparral on the upper slopes and a rich riparian community in the canyon bottom (England and Nelson 1976). The survey area is located in Buffer Area No. 3A. Buffer Areas are protected in order to protect downstream resources within the SEA. These areas should be developed at very low intensity to ensure that the natural drainage through the watershed will not be disrupted (England and Nelson 1976).

4.5.2 Santa Monica Mountains Coastal Zone Plan

Land use planning and development standards in the Santa Monica Mountains Coastal Zone are governed by the California Coastal Act of 1976, as amended and contained in the *California Public Resources Code* (Section 30000 et seq.). The Coastal Act created a zone along the state's coastline that must be protected to preserve the state's coastal resources. The Coastal Act directs "[each] local government lying, in whole or in part, within the coastal zone" to prepare a local coastal program (LCP) for its portion of the California coastal zone (Section 30500). The coastal zone in the Santa Monica Mountains extends approximately five miles inland from the coast, and encompasses the survey area (Exhibit 5). Development applications must be submitted to the California Coastal Commission and found consistent with the LCP in order to be issued a coastal development permit.

4.5.3 Wildlife Movement

The overall landscape around the survey area consists primarily of undeveloped open space within the Santa Monica Mountains National Recreation Area. Local wildlife movement is expected to occur along ridgelines surrounding the facilities and drainages on the slopes outside the facilities and along Zuma Canyon Creek. Wildlife would not be expected to move through the facilities due to the fencing that surrounds the facility.

4.5.4 Nesting Birds/Raptors

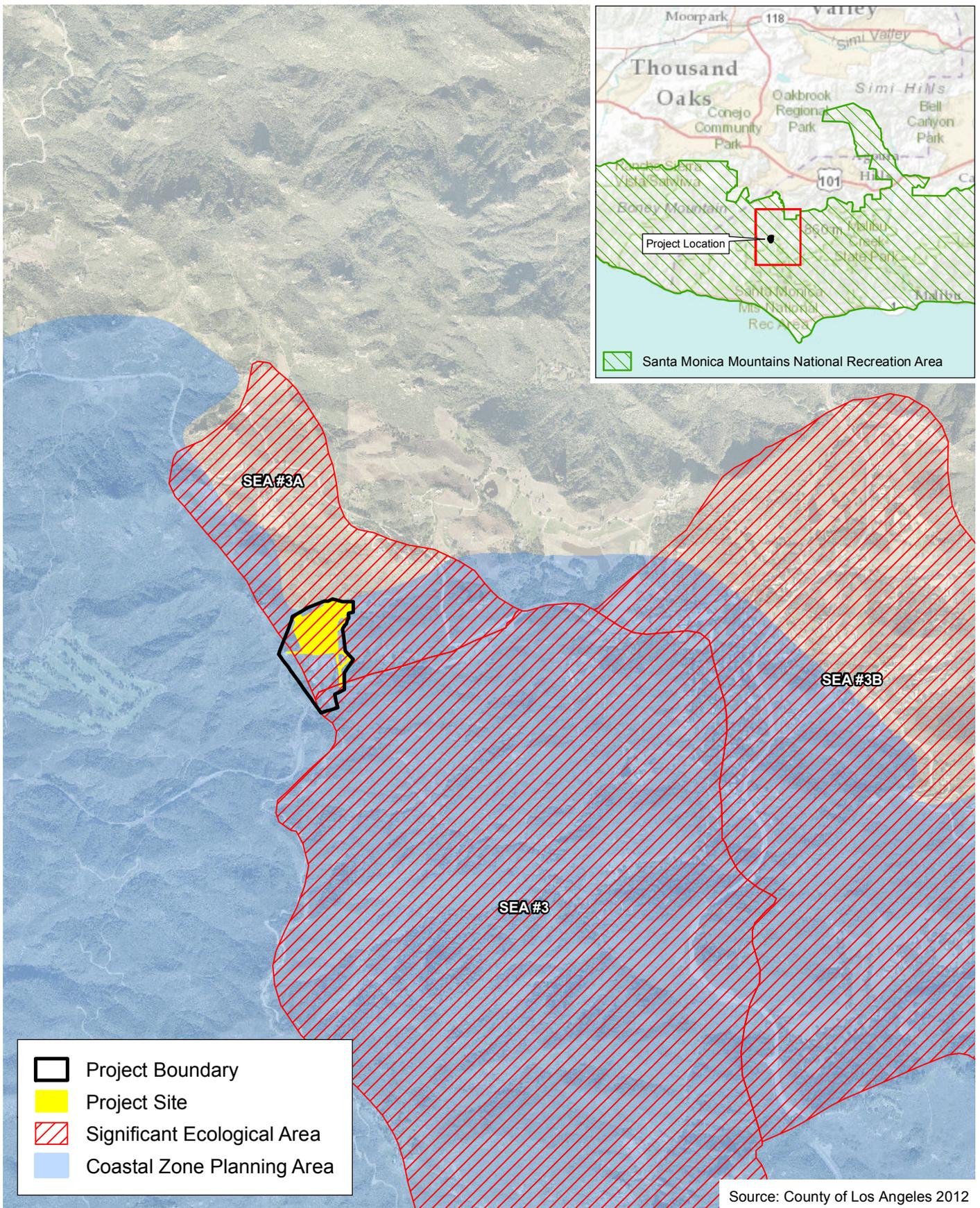
The Migratory Bird Treaty Act (MBTA) protects the taking of migratory birds and their nests and eggs. Active raptor nests are protected by Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code*. Trees and buildings within the facilities and natural vegetation surrounding the facilities could support nesting birds and raptors. Vegetation removal activities should be conducted outside the peak nesting season (February 1 to September 15) to avoid impacts on nesting birds and raptors. If vegetation removal is to occur during the peak nesting season, a nesting bird survey would be required prior to removal of vegetation.

5.0 PROJECT IMPACTS

5.1 VEGETATION TYPES/SPECIAL STATUS HABITATS

The proposed project would build new facilities primarily within the existing footprint of the existing facility; limited impacts would occur beyond the existing facility fencing and would be related to

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Regional Plans

Camp Kilpatrick

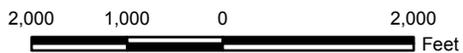


Exhibit 5



infrastructure improvements and construction-related ground disturbance. Fuel modification areas have not been analyzed in this analysis; they are assumed to be the same as the existing fuel modification areas. If the extent of fuel modification areas would be extended further than the existing approved areas, additional analysis would be required. The proposed project would impact a total of 11.65 acres, as shown in Table 1 and Exhibit 6.

**TABLE 1
VEGETATION TYPES IMPACTED BY
THE PROPOSED PROJECT**

Vegetation Type	Existing (acres)	Impacted (acres)
California Sagebrush Scrub	0.84	0.40
Chaparral	1.77	0.03
Native Grasslands	2.02	0.27
Non-native Grasslands	2.16	0.93
Willow Scrub	0.17	0.00
Coast Live Oak Woodland	2.60	0.76
Ruderal	0.79	0.55
Ornamental Plantings	8.43	3.46
Developed Areas	9.55	5.25
Total	28.33	11.65

5.1.1 California Sagebrush Scrub

The proposed project would impact 0.40 acre of the California sagebrush scrub that is located above the pool within the facility fencing. This vegetation is small in stature and sparse in density; as such, its value as habitat is limited. Due to the limited extent of impacts and the low quality of this patch of scrub vegetation, compared to the habitat available in the region, this impact would be considered less than significant.

5.1.2 Chaparral

The proposed project would impact 0.03 acre of chaparral on the slope between the water tank and the facility. This vegetation type is high quality, but is considered relatively common in the project region. Due to the limited extent of impacts compared to the habitat available in the region, this impact would be considered less than significant.

5.1.3 Native Grasslands

The proposed project would impact 0.27 acre of native grasslands on the slope between the water tank and the facility and also areas to the north of the facility. This vegetation type is high quality and contains locations of Plummer's mariposa lily and Catalina mariposa lily (discussed further below). Impacts on this vegetation type would be considered significant. Implementation of Mitigation Measure Bio-1 would reduce this impact to a less than significant level.

5.1.4 Non-native Grasslands

The proposed project would impact 0.93 acre of non-native grasslands within the facility and adjacent to the facility fencing. The areas of non-native grasslands that would be impacted are

within the existing fuel modification area for the existing facility and thus, are regularly cleared. Although it contains Catalina mariposa lily, this vegetation type is generally considered of relatively low biological value because it is non-native and the areas adjacent to the facility fencing are regularly cleared for fuel modification. Therefore, impacts on this vegetation type would be considered less than significant.

5.1.5 Willow Scrub

The proposed project would not impact willow scrub.

5.1.6 Coast Live Oak Woodland/Oak Trees

The proposed project would impact up to 0.76 acre of the coast live oak woodland that is located within the facility fencing. A total of 19 oak trees (including 1 heritage tree) are within the proposed impact area; an additional 9 trees are immediately adjacent to the impact area and may be impacted by project activities. This impact would be considered significant and should be avoided or minimized to the extent practicable through detailed engineering. Additional detail on impacts can be found in the Oak Tree Report prepared for the project (BonTerra Consulting 2012b). Implementation of Mitigation Measure Bio-2 would reduce this impact to less than significant.

5.1.7 Ruderal

The proposed project would impact 0.55 acre of ruderal vegetation within the facility fencing. This vegetation type is considered of relatively low biological value; therefore, impacts would be considered less than significant.

5.1.8 Ornamental Plantings

The proposed project would impact 3.46 acres of ornamental plantings within the facility fencing. This vegetation type is non-native and is considered of relatively low biological value; therefore, impacts would be considered less than significant.

5.1.9 Developed

The proposed project would impact 5.25 acres of developed areas within the facility fencing. These areas are considered of relatively low biological value; therefore, impacts would be considered less than significant.

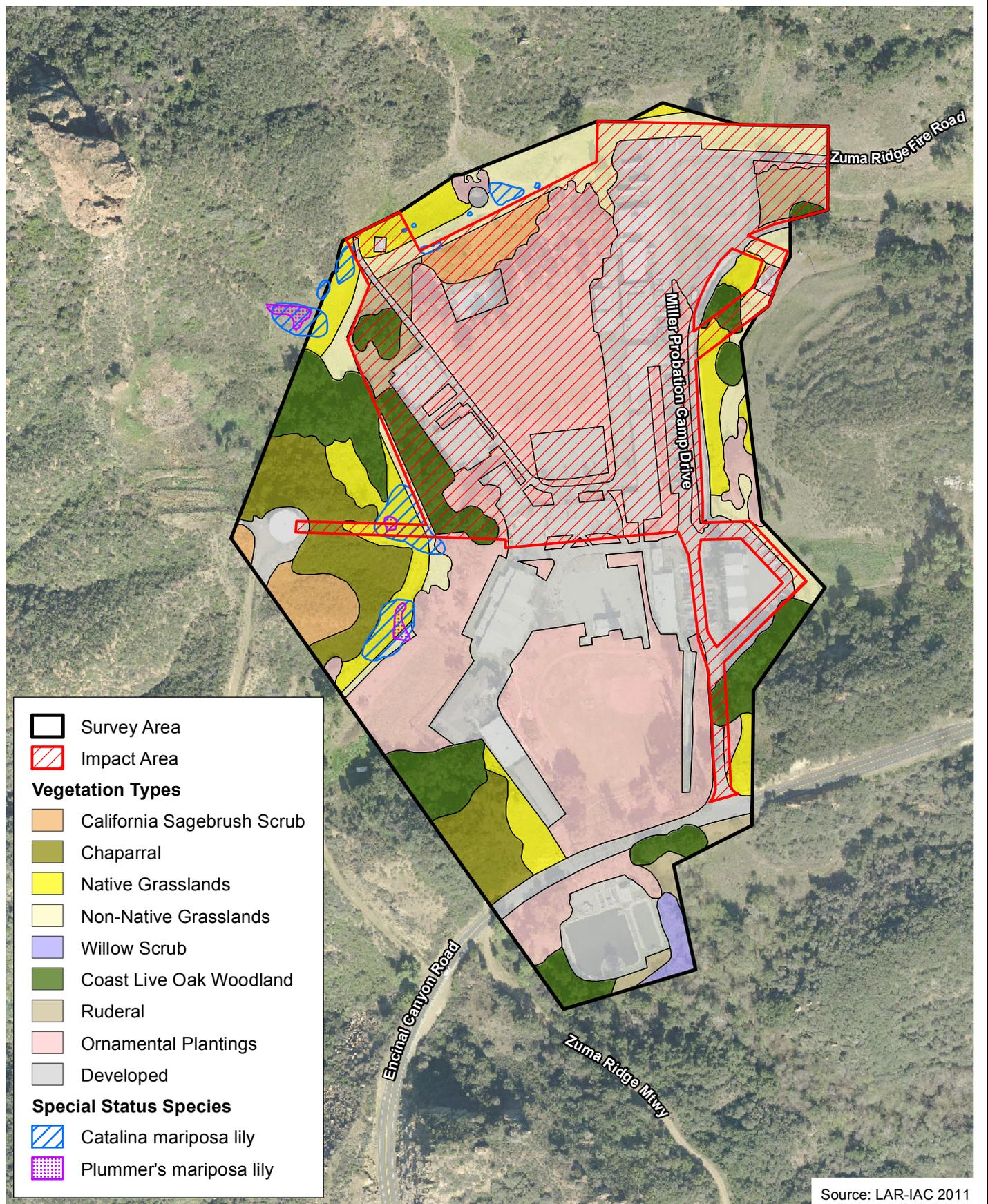
5.1.10 Jurisdictional Resources

The proposed project would impact a total of 0.043 acre (0.038 non-wetland waters of the U.S., 0.005 acre wetland) under the jurisdiction of the USACE and RWQCB. The proposed project would impact 0.240 acre of waters of the State under the jurisdiction of CDFG. The proposed project would impact 0.043 acre of wetlands under the jurisdiction of the CCC. These impacts would be considered significant and would require permitting with each of the agencies listed. Additional detail on impacts can be found in the Jurisdictional Delineation Report prepared for the project (BonTerra Consulting 2012a). Implementation of Bio-3 would reduce these impacts to less than significant.

5.2 SPECIAL STATUS PLANT SPECIES

Two special status plant species were observed in the survey area: Plummer's mariposa lily (CRPR List 1B.2) and Catalina mariposa lily (CRPR 4.2). The lily locations are all outside the

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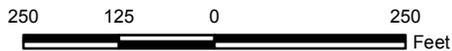


Source: LAR-IAC 2011

Project Impacts

Exhibit 6

Camp Kilpatrick



facility fencing. However, the proposed project would impact a few locations of Catalina mariposa lily along the facility fencing and both Plummer's mariposa lily and Catalina mariposa lily within the infrastructure improvement area (between the water tank and the facility fencing).

Plummer's Mariposa Lily: This species is considered rare, threatened or endangered in California and elsewhere; as such, impacts on this species are considered significant. Additionally, this location would be considered an Environmentally Sensitive Habitat (ESH)³ by the CCC, so designated due to the presence of the Plummer's mariposa lily. Therefore, its presence within or near the impact footprint of the proposed Project would need to be included in the CDP. Implementation of Bio-4 would reduce this impact to a less than significant level.

Catalina Mariposa Lily: This species is considered relatively limited in distribution, but is not yet considered rare, threatened or endangered. Typically, impacts on this species are not considered significant; however, the CCC considers any special status plant locations to be ESH. This designation is not applied to special status species located within existing approved fuel modification areas. Therefore, impacts on individual Catalina mariposa lilies that are within the existing fuel modification areas are considered less than significant, and impacts on individual Catalina mariposa lilies that are outside existing fuel modification areas would be considered significant and would need to be included in the CDP. Implementation of Bio-4 would reduce this impact to a less than significant level.

5.3 SPECIAL STATUS WILDLIFE SPECIES

No Threatened or Endangered species are expected to occur in the survey area; therefore, there would be no impact on these species.

Several special status wildlife species (that are not listed as Threatened or Endangered) have potential to occur in the natural areas surrounding the facilities. The proposed project would primarily impact areas within the existing facility that do not provide habitat for these species. However, the proposed project would impact a total of 2.94 acres of habitat for these species around the periphery of the facilities that may be used for foraging, denning, nesting, and roosting. Due to the limited amount of impact relative the amount of habitat available in the project vicinity, the loss of habitat for these species would be considered less than significant.

The existing building structures and trees in the facility have potential to be used by roosting bats (both common and special status). Several special status bat species have been reported from the project vicinity; demolition of the buildings and removal of the trees could impact bat roosts for these species. Impacts on bat roosts are considered potentially significant. Implementation of Bio-5 would be required to reduce this impact to a less than significant level.

5.4 SIGNIFICANT ECOLOGICAL AREAS

The proposed project is located within Buffer 3A of the existing Zuma Canyon SEA. The proposed project consists of upgrading the existing facility structures, it would not change the amount of development or the land use within the SEA. Impacts on the SEA would be considered less than significant; however, any project within an SEA (including buffers) must be reviewed by the Significant Ecological Area Technical Advisory Committee (SEATAC) to confirm that the development is consistent with the SEA guidelines. Implementation of Bio-6 would be required to ensure compliance with this process.

³ California Coastal Act Section 30107.5 defines an Environmentally Sensitive Habitat as an area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

5.5 SANTA MONICA MOUNTAINS COASTAL ZONE PLAN

The proposed project is located within the coastal zone; as such, a CDP would need to be obtained prior to project construction. As discussed above, the CDP would need to address impacts on 0.043 acre of wetlands; impacts on Plummer's mariposa lily; and impacts on Catalina mariposa lily outside the existing fuel modification areas. Implementation of Bio-7 would be required to ensure compliance with this process.

5.6 WILDLIFE MOVEMENT

Wildlife would not be expected to move through the facilities due to the fencing that surrounds the facility. The proposed project would be located within the existing facility and therefore would not be expected to impact wildlife movement.

5.7 NESTING BIRDS/RAPTORS

Bird species have potential to nest in native and non-native vegetation within the impact area; some species can also nest on building structures. Raptor species have potential to nest within the coast live oak woodland and a limited potential to nest in ornamental trees within the facility fencing. Active bird and raptor nests are protected by the MBTA and *California Fish and Game Code*. If possible, vegetation removal should occur outside the peak nesting season (February 1 to September 15) to avoid impacts on nesting birds and raptors. If vegetation removal would occur during the peak nesting season, project activities could impact an active nest. Any direct impact on an active bird nest and any direct or indirect impact on an active raptor nest would be considered significant. Implementation of Bio-8 would reduce this impact to a less than significant level.

6.0 MITIGATION MEASURES

The mitigation measures listed below are required to reduce impacts to less than significant.

Bio-1 Impacts on native grassland habitat will be avoided or minimized to the extent practicable based on the final Project design. Any native grassland areas impacted will be revegetated with needlegrass species (*Stipa* spp.) and other plant species typical of local native grassland habitats (wildflowers and other herbs, grasses, etc.). A native grassland restoration program will be prepared by a qualified Restoration Ecologist and will be submitted to the County of Los Angeles Department of Public Works (LACDPW) for review and approval. The native grassland revegetation program will be approved prior to issuance of grading permits. The restoration program will contain the items listed below.

- a) **Summary of Project Impacts and Required Restoration.** The habitat impact and restoration sites will be described and location(s) of the sites will be depicted in graphical exhibits.
- b) **Responsibilities and qualifications of the personnel to implement and supervise the plan.** The responsibilities of the landowner, specialists, and maintenance personnel that will supervise and implement the plan will be specified.
- c) **Native plant and seed sources.** A program of advance seed collection and/or container plant propagation will be specified to provide materials of local origin for restoration purposes (e.g., watershed-specific collection).

- d) **Site selection.** The native grassland area to be revegetated (i.e., the impacted area) will be identified.
- e) **Site preparation and plant and/or seed installation.** Site preparation will include: 1) protection of existing native species and habitats; 2) trash and weed removal; 3) native species salvage and reuse (i.e., duff); 4) soil treatments (e.g., imprinting, decompacting); 5) fully bio-degradable erosion control measures (i.e., rice or willow wattles); 6) irrigation system installation (as needed); 7) container planting; and 8) seed mix application.
- f) **Schedule.** Installation of the revegetation sites will be conducted between October 1 and December 31 following the completion of site preparation tasks (e.g., preliminary weed abatement). Native plants/seeds will be installed while the sites are in good condition for plant establishment (e.g., weed-free, non-compacted soils, etc.).
- g) **Maintenance plan/guidelines.** The maintenance plan will include: 1) protection of native species including sensitive species and habitats; 2) weed control materials and methods; 3) irrigation system operation and maintenance; 4) herbivory control; 5) trash removal; 6) maintenance training including native and non-native plant and seedling identification; and 7) remedial measures (e.g., replacement planting, re-seeding).
- h) **Monitoring Plan.** The monitoring plan will specify: 1) qualitative monitoring methods (i.e., photographs and general observations); 2) quantitative monitoring methods (i.e., randomly placed transect[s]); 3) documentation to include monthly reports for the first year, quarterly reports thereafter, and annual reports which will be submitted to the County for three years or until the performance criteria are achieved. The annual reports will include a summary of quantitative site performance and compliance with project performance criteria.

Performance standards (e.g., percent native plant coverage) will be developed based on quantitative assessment of a suitable reference site in the project vicinity. The habitat restoration program will be considered successful after three years if the percent coverage and plant species diversity of the revegetated habitat areas are comparable to the selected reference site(s).
- i) **Long-term preservation.** The boundaries of fuel modification will be clearly identified. If approval is obtained from the fire authority any fuel modification activities required in the native grassland restoration area will be conducted in the late summer (i.e., July or later) after most native plant species have bloomed and set seed.

Bio-2

Project design will avoid or minimize impacts on oak trees currently shown within or adjacent to the project footprint, particularly the heritage oak (Tree #719) and oak trees within the CDFG jurisdiction (Trees #87, #88, and #741). Prior to final construction plan preparation, a Certified Arborist will review the final plans and will determine the final number of trees that will be impacted by the proposed Project, and conduct a detailed assessment of the health of each tree to remain within the facility to ensure that these trees are structurally sound and will not become a hazard.

Any trees located within or adjacent to the impact area that would not be removed for Project construction will be protected with fencing placed five feet outside of the dripline of tree and at least 15 feet from the trunk. Any earth-disturbing work or vehicle operation within the protected zone of an oak tree will be monitored by a Certified Arborist to minimize the impact of construction activities.

Prior to project implementation, an oak tree permit (or other appropriate authorization) will be obtained from the County of Los Angeles Forester for any oak trees that would be impacted (including removal) in the final design plans. According to the minimum 2:1 replacement ratio specified by the County's oak tree ordinance, a minimum of 38 replacement trees will be required for impacts on the 19 oaks currently within the impact footprint. The County Forester may require additional replacement trees, up to a ratio of 10:1, to mitigate the removal of the heritage tree (Tree #719). Additional replacement trees may also be necessary if any encroachment trees (trees located within or adjacent to the impact area) die as a result of project construction activities. Encroached-upon trees will be monitored for a period of two years by a certified Arborist to determine if construction activities have resulted in the death of the tree. Trees that die as a result of encroachment within their protected zone will require the same mitigation as impacted trees. A Project site plan that includes the proposed location(s) for replacement tree establishment will be provided with the oak tree permit application.

Protective fencing, as required by CLAOTO, shall be placed five feet outside the outer canopy of any oak tree (i.e., the "protected zone") within the project's impact footprint that the LACDPW plans to preserve. Protective fencing shall also be placed around the protected zone of the 10 trees located immediately adjacent to the impact footprint. Operating outside the protected zone of these trees will avoid the need for additional monitoring or mitigation. Any earth-disturbing work or vehicle operation within the protected zone of an oak tree should be monitored by a Certified Arborist to minimize the impact of construction activities.

Replacement oak trees will be no smaller than a 15-gallon container, and will be indigenous to the Project region. CLAOTO defines indigenous as being within Los Angeles or Ventura Counties, though BonTerra Consulting recommends that the seed source for replacement trees be within 10 miles and 500 feet of elevation of the project site. Tree relocation or transplantation is not recommended due to the increased cost and care needed by transplanted oak trees and the expected high mortality rate.

At the conclusion of Project construction, a post-construction oak tree report will be prepared by a Certified Arborist that confirms the impacts listed in the oak tree permit or authorization. Any trees listed for removal or encroachment that were avoided during construction activities will be noted and the required mitigation will be reduced accordingly. The post-construction oak tree report will also identify any trees that had their protected zone encroached upon so that these trees can be monitored for two years. A final memorandum will be prepared by a Certified Arborist two years after construction to report on the post-construction health of any trees that were encroached upon during construction; any additional replacement trees necessary will be identified. The post-construction oak tree report and final memorandum will be submitted to the County Forester.

Bio-3

The County of Los Angeles Department of Public Works (LACDPW) will obtain all necessary approvals from the U.S. Army Corps of Engineers (USACE), California Department of Fish and Game (CDFG), and California Coastal Commission (CCC) for resources within their respective jurisdictions. Mitigation for the loss of jurisdictional areas will consist of: (1) payment of an in-lieu mitigation fee to the Santa Monica Mountain Conservancy or another conservation agency determined in coordination with UCACE, CDFG, and CCC; (2) preservation of existing jurisdictional resources (preferably within or near Zuma Canyon) and dedication to Santa Monica Mountains Conservancy or another conservation agency determined in coordination with

UCACE, CDFG, and CCC; or (3) restoration of riparian habitat (preferably within or near Zuma Canyon) and dedication to the County of Los Angeles or the Santa Monica Mountains Conservancy or another conservation agency determined in coordination with UCACE, CDFG, and CCC. Jurisdictional resources will be mitigated with the purchase or restoration of equivalent or superior quality habitat at no less than 1:1. The resource agencies will review the proposed acquisition during resource agency permitting to ensure that the lands to be acquired by the Applicant are of equivalent or superior quality to the resources impacted by the proposed project.

If the proposed project would mitigate through restoration of riparian habitat, a detailed Restoration Program will be prepared by a qualified Biologist for approval by the USACE and the CDFG prior to initiation of construction and will contain the following items:

- a) **Responsibilities and qualifications of the personnel to implement and supervise the plan.** The responsibilities of the Applicant, specialists, and maintenance personnel that will supervise and implement the plan will be specified.
- b) **Site selection.** Site selection for restoration and enhancement mitigation will be determined in coordination with the LACDPW and the resource agencies. The mitigation site(s) will be located in a dedicated open space area.
- c) **Site preparation and planting implementation.** Site preparation will include: (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting, decompacting); (5) temporary irrigation installation; (6) erosion-control measures (i.e., rice or willow wattles); (7) seed mix application; and (8) container species, if appropriate.
- d) **Schedule.** A schedule will be developed which includes planting to occur in late fall and early winter, between October 1 and January 30.
- e) **Maintenance plan/guidelines.** The maintenance plan will include: (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; (6) replacement planting; and (7) biological monitoring during maintenance activities that occur during the breeding season.
- f) **Monitoring Plan.** The monitoring plan will include: (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) performance criteria as approved by the resource agencies; (4) monthly reports for the first year, quarterly reports for following years; and (5) annual reports for three to five years, which will be submitted to the resource agencies annually. The site will be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas; however, if there is successful coverage prior to five years, the Applicant may be released from monitoring requirements with the approval of the resource agencies.
- g) **Long-Term Preservation.** Long-term preservation of the site will also be outlined in the conceptual mitigation plan to ensure the mitigation site is not impacted by future projects.

In addition, earth-moving equipment will avoid maneuvering in jurisdictional areas outside the identified grading limits. Prior to grading, the jurisdictional resource areas to be avoided will be clearly marked by the Construction Contractor. The Monitoring Biologist will take pre- and post-construction photographs at key

locations to record the existing and post-construction conditions. No earth-moving equipment will be allowed within jurisdictional areas located outside the project's disturbance limits.

Bio-4

Project design will avoid impacts on Plummer's mariposa lily and Catalina mariposa lily to the extent practicable. If lily impacts cannot be avoided, a Coastal Development Permit (CDP) will be obtained from the California Coastal Commission (CCC) that authorized impacts to Environmentally Sensitive Habitat (ESH) (i.e., lilies located outside of existing fuel modification areas) prior to impacting Plummer's mariposa lily and Catalina mariposa lily to construct the Project improvements.

Pre-construction surveys for Catalina mariposa lily and Plummer's mariposa lily will be conducted by a qualified Biologist during the peak flowering period for each species (approximately March through June, but varies depending on weather conditions) prior to initiation of construction activity that would affect lilies outside the existing fuel modification area. The limits of each lily location within the impact area will be clearly delineated with lath and brightly colored flagging during the pre-construction surveys. If the lily is located in the impact area, the loss of the Catalina mariposa lily and/or Plummer's mariposa lily will be mitigated by seed and bulb collection and re-vegetated into a suitable mitigation site in the undeveloped portion of the survey area or an alternative mitigation site identified in consultation with the CCC and County of Los Angeles Department of Public Works (LACDPW). A qualified Biologist will be selected by the Applicant to prepare and implement the mitigation plan. The detailed mitigation plan will include the requirements listed below:

- a) The existing locations of lily will be monitored every two weeks by the qualified Biologist selected by the Applicant to determine when the seeds are ready for collection. A qualified Seed Collector will collect all seeds from the impacted plants when the seeds are ripe, generally between April and August (but varies depending on weather conditions). The seeds will be cleaned and stored by a qualified nursery or institution with appropriate storage facilities.
- b) Following seed collection, the bulbs will be removed by bulb collection or block transplantation method in the fall (generally September and October). The bulbs will either be transplanted directly or stored by a qualified nursery or institution with appropriate storage facilities. If the bulbs are collected and the block transplantation method is not used, then the top 12 inches of topsoil from the lily locations will be scraped, stockpiled, and used at the selected mitigation site.
- c) The mitigation site will be located in dedicated open space in the Project area or at an off-site mitigation site. The site should not attempt to enhance existing populations and will not be impacted by any pesticides or herbicides used on adjacent properties.
- d) The lily mitigation site will be prepared for seeding as described in a Conceptual Restoration Plan.
- e) The topsoil will be re-spread in the selected location as approved by a qualified Biologist. Approximately 60 percent of the seeds and bulbs collected will be spread and/or placed in the fall or winter (generally September through February) following soil preparation. Forty percent of the seed and bulbs will be kept in storage for subsequent seeding, if necessary.
- f) A detailed Maintenance and Monitoring Plan will be developed by a qualified Biologist. The Plan will include detailed descriptions of maintenance appropriate for the site, monitoring requirements, and annual report requirements.

- g) The performance criteria will be developed in the Maintenance and Monitoring Plan and will be approved by the CCC and LACDPW. The performance criteria will include percent cover, density, and seed production requirements, and will be developed by a qualified Biologist following habitat analysis of an existing high quality lily population. This information will be recorded by a qualified Biologist.
- h) If the germination goal is not achieved following the first season, remediation measures will be implemented prior to seeding with the remaining 40 percent of seed and bulbs. Remedial measures will include at a minimum: soils testing, control of invasive species, soil amendments, and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional mitigation measures may be suggested as determined appropriate by a qualified Biologist.
- i) Potential seed sources from additional donor sites will also be identified in case it becomes necessary to collect additional seed for use on the site following performance of remedial measures.

Bio-5 A pre-construction survey for roosting bats will be conducted by a qualified Biologist prior to demolition of existing structures and removal of trees. If bats are roosting in buildings, measures will be implemented to exclude the bats from potential roosts prior to the commencement of demolition activities. If bats are roosting in trees that will be removed, tree removal will occur in two phases: (1) during the first day, all branches should be removed, leaving the main trunk standing overnight; (2) the following day, the main trunk may be removed. This methodology would allow any roosting bats to relocate during the night. However, exclusion from buildings and tree removal will not occur during hibernation (December through February) or during the breeding season (May through August) unless it is determined that the building is not being used by roosting bats. The pre-construction survey can be performed in advance of initial construction activity (i.e., demolition; site preparation) during a time outside the hibernation and breeding seasons (i.e., March, April, and September through January) and measures implemented, as described above, to prevent bat roosting in any buildings and to remove trees, as identified by LACDPW.

Bio-6 The County of Los Angeles Department of Public Works (LACDPW) will submit the Biological Constraints Report and Project plans to the Significant Ecological Area Technical Advisory Committee (SEATAC) for review to verify that the project is consistent with the SEA design compatibility criteria. The determination of when the Project design is sufficiently defined for determination of SEA compatibility, subsequent to selection of the Design-Build Contractor, will be made through coordination between LACDPW, Los Angeles County Chief Executive Office, and SEATAC.

Bio-7 The County of Los Angeles Department of Public Works will submit project plans and the Biological Resources Report to the California Coastal Commission for review to verify that the project is consistent with the Santa Monica Mountains Local Coastal Program.

Bio-8 Construction will occur outside the nesting season for birds/raptors (February 1 to September 15) if possible. If construction would be initiated during this time period, the following measures would apply:

Nesting Raptors: Seven days prior to construction activities, a qualified Biologist will conduct a survey to determine if any raptors are nesting in or adjacent to the impact area. If nesting is not occurring, construction work can proceed. If an active nest is present, construction work will be restricted within 250 feet of the nest (or as otherwise determined by the Project Biologist) until fledglings have left the nest. Results of the surveys will be provided to the California Department of Fish and Game (CDFG).

If nesting activity is present, the active site will be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the *California Fish and Game Code*. Nesting activity for raptors in the region normally occurs from February 1 to June 30. To protect any nest site, construction activities and access will not be allowed within 250 feet from any occupied nest during the nesting season (or until nests are no longer active, as determined by a qualified Biologist). Any encroachment into the buffer area around the known nest will only be allowed if it is determined by a qualified Biologist that the proposed activity will not disturb the nest occupants.

Nesting Birds: If vegetation clearing would be conducted during the nesting season (March 15 to September 15), a qualified Biologist will conduct a survey no more than three days prior to construction to determine if any birds are nesting in or adjacent to the impact area. If nesting is not occurring, construction work can proceed. If an active nest is present, construction work will be restricted within a protective buffer area (buffer size determined by the Project Biologist based on the sensitivity of the species and location of the nest) until fledglings have left the nest. Any encroachment into the buffer area around the known nest will only be allowed if it is determined by a qualified Biologist that the proposed activity will not disturb the nest occupants.

The pre-construction survey(s) for nesting raptors and birds can be performed in advance of initial construction activity that involves vegetation removal during the nesting season or vegetation and tree removal outside the nesting season.

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ATTACHMENT A
SITE PHOTOGRAPHS



View of the northern portion of the facility from the hilltop near the water tower. In the foreground is California sagebrush scrub, chaparral, and coast live oak woodland vegetation. From the midground to background are ornamental plantings within the fenced area of the facility. The northernmost hill above the swimming pool and the old water tower behind the fence are visible at upper left.



View of the central portion of the facility from the hilltop near the water tower. In the foreground is California sagebrush scrub, chaparral, and coast live oak woodland vegetation. From the midground to background are ornamental plantings within the fenced area of the facility. The buildings that may be replaced are visible in a horizontal band just a bit above the middle of the photograph. Part of the grassland in which Catalina mariposa lily and Plummer's mariposa lily grow is visible at the lower right.

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Site Photographs

Camp Kilpatrick

Attachment A-1

Bonterra
CONSULTING



View of the north region toward the southwest. This area is within a fuel modification area and is mowed annually for fire prevention. Catalina mariposa lilies grow from the hilltop surrounding the old water tower, down to the grassland that is visible in the distant center in the area from the fence to about 15 feet toward the north (right). Plummer's mariposa lilies are far less common here; they grow in the grassland that is visible in the distant center.



View of native grassland and chaparral. This area lies downslope and southeast from the large water tower on the west side of the facility. The grassland is vegetated with purple needlegrass, woolly blue curls, Catalina mariposa lilies, and Plummer's mariposa lilies. The chaparral on the hill above the grassland is vegetated by woody shrubs, primarily chamise.

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Site Photographs

Camp Kilpatrick

Attachment A-2

Bonterra
CONSULTING



View from the northwest, toward the east-southeast of a mixture of native and non-native grassland species. The mariposa lilies grow in the grassland on this hillside. A few Plummer's mariposa lilies are visible in the foreground.



View of native grassland, looking up at the water tower. Just prior to this survey visit, the lower area down to the fence was cleared of vegetation for fuel modification. The mariposa lilies are scattered throughout this grassland area.

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Site Photographs

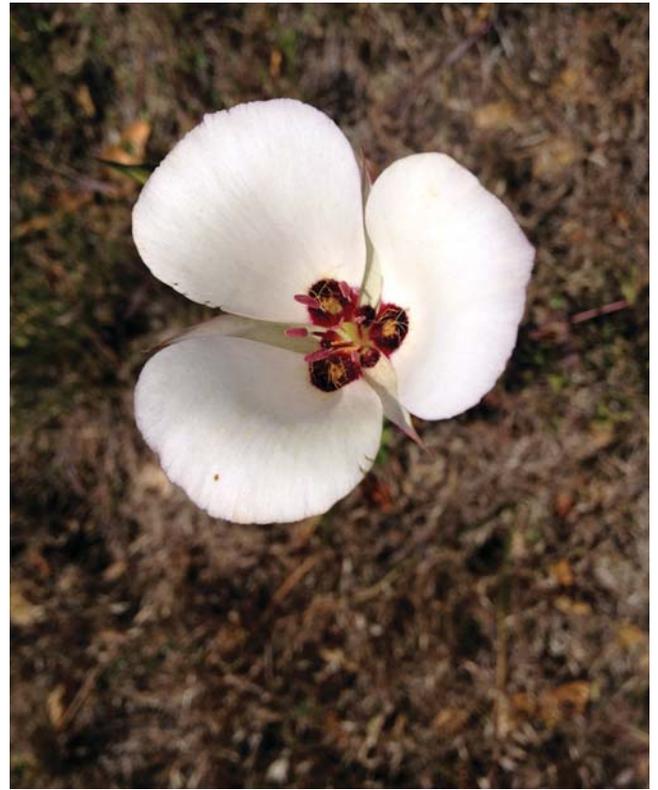
Camp Kilpatrick

Attachment A-3

Bonterra
CONSULTING



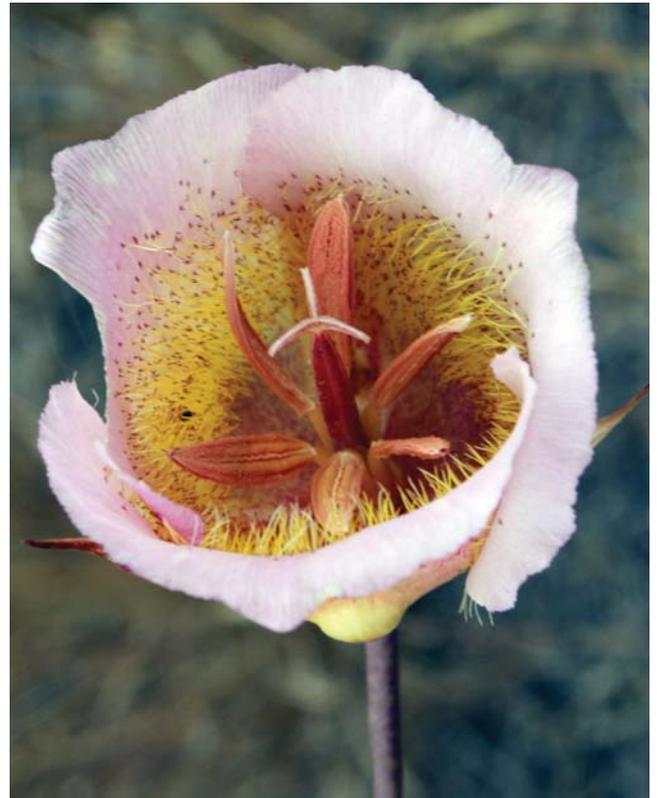
Catalina mariposa lily (*Calochortus catalinae*).



Catalina mariposa lily (*Calochortus catalinae*).



Plummer's mariposa lily (*Calochortus plummerae*).



Plummer's mariposa lily (*Calochortus plummerae*).

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Mariposa Lilies

Camp Kilpatrick

Attachment A-4



ATTACHMENT B

WILDLIFE COMPENDIUM

**All species included in the following compendium were observed during field surveys
conducted on May 9, 2012 and August 24, 2014**

SPECIES	
LIZARDS	
PHRYNOSOMATIDAE - SPINY LIZARD FAMILY	
<i>Sceloporus occidentalis</i>	western fence lizard
<i>Uta stansburiana elegans</i>	western side-blotched lizard
BIRDS	
ACCIPITRIDAE - HAWK FAMILY	
<i>Buteo jamaicensis</i>	red-tailed hawk
CAPRIMULGIDAE - GOATSUCKER FAMILY	
<i>Phalaenoptilus nuttallii</i>	common poorwill
TROCHILIDAE - HUMMINGBIRD FAMILY	
<i>Calypte anna</i>	Anna's hummingbird
PICIDAE - WOODPECKER FAMILY	
<i>Melanerpes formicivorus</i>	acorn woodpecker
TYRANNIDAE - TYRANT FLYCATCHER FAMILY	
<i>Empidonax difficilis</i>	Pacific-slope flycatcher
<i>Sayornis nigricans</i>	black phoebe
<i>Myiarchus cinerascens</i>	ash-throated flycatcher
CORVIDAE - JAY AND CROW FAMILY	
<i>Aphelocoma californica</i>	western scrub-jay
<i>Corvus corax</i>	common raven
PARIDAE - TITMOUSE FAMILY	
<i>Poecile gambeli</i>	mountain chickadee
TROGLODYTIDAE - WREN FAMILY	
<i>Troglodytes aedon</i>	house wren
<i>Thryomanes bewickii</i>	Bewick's wren
TURDIDAE - THRUSH FAMILY	
<i>Sialia mexicana</i>	western bluebird
PARULIDAE - WOOD-WARBLE FAMILY	
<i>Oreothypis celata</i>	orange-crowned warbler
<i>Cardellina pusilla</i>	Wilson's warbler
EMBERIZIDAE - SPARROW FAMILY	
<i>Pipilo maculatus</i>	spotted towhee
<i>Melospiza crissalis</i>	California towhee
<i>Melospiza melodia</i>	song sparrow
<i>Junco hyemalis</i>	dark-eyed junco
CARDINALIDAE - CARDINALS, GROSBEAKS AND ALLIES FAMILY	
<i>Pheucticus melanocephalus</i>	black-headed grosbeak
<i>Passerina caerulea</i>	blue grosbeak
<i>Passerina amoena</i>	lazuli bunting
ICTERIDAE - BLACKBIRD, COWBIRD AND ORIOLE FAMILY	
<i>Molothrus ater</i> *	brown-headed cowbird
<i>Icterus bullockii</i>	Bullock's oriole
FRINGILLIDAE - FINCH FAMILY	
<i>Haemorhous mexicanus</i>	house finch
<i>Carduelis psaltria</i>	lesser goldfinch

SPECIES	
MAMMALS	
VESPERTILIONIDAE – VESPER BATS	
<i>Parastrellus hesperus</i>	canyon bat
MOLOSSIDAE – FREE-TAILED BATS	
<i>Tadarida brasiliensis</i>	Brazilian free-tailed bat
LEPORIDAE – HARES AND RABBITS	
<i>Sylvilagus audubonii</i>	desert cottontail
* introduced	



MITIGATION MONITORING AND REPORTING PROGRAM

CAMP VERNON KILPATRICK
REPLACEMENT PROJECT
COUNTY OF LOS ANGELES, CALIFORNIA

CAPITAL PROJECT NO. 77295
SCH NO. 2012102002

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November 2013

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Pursuant to the California Environmental Quality Act (CEQA), the potential environmental effects of the proposed County of Los Angeles (County) Camp Vernon Kilpatrick Replacement Project (Project) have been analyzed in a Draft Initial Study/Mitigated Negative Declaration (IS/MND) (SCH No. 2012102002) dated September 2012.

Section 15074(d) of the CEQA Guidelines states that, when adopting a mitigated negative declaration, the lead agency shall adopt a program for reporting on or monitoring the changes that it has either required in the project or made a condition of approval to reduce or avoid significant environmental effects. Section 21081.6 of CEQA and Section 15097 of the CEQA Guidelines require a public agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) for assessing and ensuring the implementation of required mitigation measures applied to proposed projects. Specific reporting and/or monitoring requirements that will be enforced during project implementation shall be adopted simultaneously with final Project approval by the responsible decision making body. The MMRP provided in this document describes the mitigation program to be implemented by the County of Los Angeles (County).

The MMRP for the Camp Vernon Kilpatrick Replacement Project consists of Mitigation Measures (MMs) that will reduce or avoid significant environmental effects associated with Project implementation, and reflect any errata to mitigation measures in the Final MND. The MMs for the Project are listed in the first column in the Table below, along with the timeframe for implementing the MM in the second column; the agency or party with primary responsibility for implementing the MM in the third column; and the agency or party with responsibility for monitoring compliance in the fourth column. Implementation of the MMs for the Project would primarily be the responsibility of the County of Los Angeles, as the Lead Agency under CEQA, and its consultants/contractors.

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
Air Quality (Section 4.3 of the Draft IS/MND)			
<p>MM 4.3-1 The County shall include in the Contractor specifications that site preparation (clearing and grubbing) activities and site grading activities do not occur concurrently, but occur sequentially. This shall be verified by the County of Los Angeles Department of Public Works prior to issuance of a grading permit.</p>	<p>During construction activities (refers to all construction phases, unless otherwise noted)</p>	<p>Construction Contractor in accordance with Contractor Specifications</p>	<p>County of Los Angeles Department of Public Works</p>
Biological Resources (Section 4.4 of the Draft IS/MND)			
<p>MM 4.4-1 Impacts on native grassland habitat shall be avoided or minimized to the extent practicable based on the final Project design. The determination of impacts to native grassland shall be made by the County of Los Angeles Department of Public Works (LACDPW) through comparison of the demolition footprint and Project design footprint (as shown on construction plans) with the vegetation map of the site presented in the IS/MND. If there are no anticipated impacts to native grassland, this mitigation measure is not required. Otherwise, any native grassland areas impacted shall be revegetated with needlegrass species (<i>Stipa</i> spp.) and other plant species typical of local native grassland habitats (wildflowers and other herbs, grasses, etc.). A Native Grassland Restoration Program shall be prepared by a qualified Restoration Ecologist and shall be submitted to the County of Los Angeles Department of Public Works (LACDPW) for review and approval. The Native Grassland Revegetation Program shall be approved prior to issuance of grading permits. The restoration program shall contain the items listed below.</p> <p>a) Summary of Project Impacts and Required Restoration. The habitat impact and restoration sites shall be described and location(s) of the sites shall be depicted in graphical exhibits.</p> <p>b) Responsibilities and Qualifications of the Personnel to Implement and Supervise the Plan. The responsibilities of the landowner, specialists, and maintenance personnel that will supervise and implement the plan shall be specified.</p> <p>c) Native Plant and Seed Sources. A program of advance seed collection and/or container plant propagation shall</p>	<p>During Project design (resource avoidance) and Prior to issuance of grading permit (Native Grassland Revegetation Program)</p>	<p>County of Los Angeles Department of Public Works and Qualified Restoration Ecologist</p>	<p>County of Los Angeles Department of Public Works</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>be specified to provide materials of local origin for restoration purposes (e.g., watershed-specific collection).</p> <p>d) Site Selection. The native grassland area to be revegetated (i.e., the impacted area) shall be identified.</p> <p>e) Site Preparation and Plant and/or Seed Installation. Site preparation shall include (1) protection of existing native species and habitats; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (e.g., imprinting, decompacting); (5) fully bio-degradable erosion-control measures (i.e., rice or willow wattles); (6) irrigation system installation (as needed); (7) container planting; and (8) seed mix application.</p> <p>f) Schedule. Installation of the revegetation sites shall be conducted between October 1 and December 31 following the completion of site preparation tasks (e.g., preliminary weed abatement). Native plants/seeds shall be installed while the sites are in good condition for plant establishment (e.g., weed-free, non-compacted soils, etc.).</p> <p>g) Maintenance Plan/Guidelines. The maintenance plan shall include (1) protection of native species, including sensitive species and habitats; (2) weed-control materials and methods; (3) irrigation system operation and maintenance; (4) herbivory control; (5) trash removal; (6) maintenance training, including native and non-native plant and seedling identification; and (7) remedial measures (e.g., replacement planting, re-seeding).</p> <p>h) Monitoring Plan. The monitoring plan shall specify (1) qualitative monitoring methods (i.e., photographs and general observations); (2) quantitative monitoring methods (i.e., randomly placed transect[s]); (3) documentation to include monthly reports for the first year, quarterly reports thereafter, and annual reports which will be submitted to the County for three years or until the performance criteria are achieved. The annual reports shall include a summary of quantitative site performance and compliance with</p>			

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>Project performance criteria.</p> <p>Performance standards (e.g., percent native plant coverage) shall be developed based on quantitative assessment of a suitable reference site in the Project vicinity. The habitat restoration program shall be considered successful after three years if the percent coverage and plant species diversity of the revegetated habitat areas are comparable to the selected reference site(s).</p>			
<p>MM 4.4-2 Project design shall avoid or minimize impacts on oak trees currently shown within or adjacent to the Project footprint, particularly the heritage oak (Tree No. 719) and oak trees within the CDFG jurisdiction (Tree Nos. 87, 88, 721, and 741). Prior to final construction plan preparation, a Certified Arborist shall review the final plans; shall determine the final number of trees that will be impacted by the proposed Project; and shall conduct a detailed assessment of the health of each tree to remain within the facility to ensure that these trees are structurally sound and will not become a hazard.</p> <p>Any trees located within or adjacent to the impact area that would not be removed for Project construction shall be protected with fencing placed five feet outside the tree's dripline and at least 15 feet from the trunk. Any earth-disturbing work or vehicle operation within the protected zone of an oak tree shall be monitored by a Certified Arborist to minimize the impact of construction activities.</p> <p>Prior to Project implementation, an Oak Tree Permit (or other appropriate authorization) shall be obtained from the County of Los Angeles Forester for any oak trees that would be impacted (including removal) in the final design plans. According to the minimum 2:1 replacement ratio specified by the County's Oak Tree Ordinance, a minimum of up to 40 replacement trees would be required for impacts on the 20 total oaks currently within the impact footprint. The County Forester may require additional replacement trees, up to a ratio of 10:1, to mitigate the removal of the heritage oak tree (Tree No. 719). Additional replacement trees may also be necessary if any encroachment trees (trees located within or adjacent to the impact area) die as a result of Project</p>	<p>During Project design (resource avoidance) and Prior to construction activities (fencing around protected trees) and Subsequent to construction activities (Oak Tree Permit)</p>	<p>County of Los Angeles Department of Public Works and Certified Arborist</p>	<p>County of Los Angeles Department of Public Works and County of Los Angeles Forester</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>construction activities. Encroached-upon trees shall be monitored for a period of two years by a Certified Arborist to determine if construction activities have resulted in the death of the tree. Trees that die as a result of encroachment within their protected zone shall require the same mitigation as impacted trees. A Project Site Plan that includes the proposed location(s) for replacement tree establishment shall be provided with the oak tree permit application.</p> <p>Protective fencing, as required by CLAOTO, shall be placed five feet outside the outer canopy of any oak tree (i.e., the “protected zone”) within the Project’s impact footprint that the LACDPW plans to preserve. Protective fencing shall also be placed around the protected zone of the ten trees located immediately adjacent to the impact footprint. Operating outside the protected zone of these trees will avoid the need for additional monitoring or mitigation. Any earth-disturbing work or vehicle operation within the protected zone of an oak tree should be monitored by a Certified Arborist to minimize the impact of construction activities.</p> <p>Replacement oak trees will be no smaller than a 15-gallon container, and will be indigenous to the Project region. CLAOTO defines “indigenous” as being within Los Angeles or Ventura Counties, though BonTerra Consulting recommends that the seed source for replacement trees be within 10 miles and 500 feet of elevation of the Project site.. Tree relocation or transplantation is not recommended due to the increased cost and care needed by transplanted oak trees and the expected high mortality rate.</p> <p>At the conclusion of Project construction, a Post-Construction Oak Tree Report shall be prepared by a Certified Arborist that confirms the impacts listed in the Oak Tree Permit or authorization. Any trees listed for removal or encroachment that were subsequently avoided during construction activities shall be noted and the required mitigation shall be reduced accordingly. The Post-Construction Oak Tree Report shall also identify any trees that had their protected zone encroached upon so that these trees can be monitored for two years. A Final Memorandum shall be prepared by a Certified Arborist two years after construction to report on the post-construction health of any trees that were encroached</p>			

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>upon during construction; any additional replacement trees necessary shall be identified in this Final Memorandum. The Post-Construction Oak Tree Report and Final Memorandum shall be submitted to the County Forester.</p>			
<p>MM 4.4-3 Project design shall avoid impacts on Plummer’s mariposa lily and Catalina mariposa lily to the extent practicable. The determination of impacts to these lily species shall be made by the County of Los Angeles Department of Public Works (LACDPW) through comparison of the demolition footprint and Project design footprint (as shown on construction plans) with the vegetation map of the site presented in the IS/MND. If there are no anticipated impacts to these lily species, this mitigation measure is not required. Otherwise, if lily impacts cannot be avoided, a Coastal Development Permit (CDP) shall be obtained from the California Coastal Commission (CCC) that authorizes impacts to Environmentally Sensitive Habitat (ESH) (i.e., lilies located outside existing fuel modification areas) prior to impacting Plummer’s mariposa lily and Catalina mariposa lily to construct the Project improvements.</p> <p>Pre-construction surveys for Catalina mariposa lily and Plummer’s mariposa lily shall be conducted by a qualified Biologist during the peak flowering period for each species (approximately March through June, but varies depending on weather conditions), prior to initiation of a construction activity that would affect lilies outside the existing fuel modification area. The limits of each lily location within the impact area shall be clearly delineated with lath and brightly colored flagging during the pre-construction surveys. If the lily is located in the impact area, the loss of the Catalina mariposa lily and/or Plummer’s mariposa lily shall be mitigated by seed and bulb collection and re-vegetated into a suitable mitigation site in the undeveloped portion of the survey area or an alternative mitigation site identified in consultation with the CCC and County of Los Angeles Department of Public Works (LACDPW). A qualified Biologist (i.e., one with experience with these plant species and their transplantation) shall be selected by the Applicant to prepare and implement the mitigation plan. The detailed mitigation plan will include the requirements listed below:</p>	<p>During Project design (resource avoidance) and Between approximately March through June prior to construction activities (pre-construction surveys) and Concurrent with or subsequent to construction activities (mitigation plan)</p>	<p>County of Los Angeles Department of Public Works and qualified Biologist</p>	<p>California Coastal Commission</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>a) The existing locations of lily shall be monitored every two weeks by a qualified Biologist selected by the Applicant to determine when the seeds are ready for collection. A qualified Seed Collector shall collect all seeds from the impacted plants when the seeds are ripe, generally between April and August (but varies depending on weather conditions). The seeds shall be cleaned and stored by a qualified nursery or institution with appropriate storage facilities.</p> <p>b) Following seed collection, the bulbs shall be removed by bulb collection or block transplantation method in the fall (generally September and October). The bulbs shall either be transplanted directly or stored by a qualified nursery or institution with appropriate storage facilities. If the bulbs are collected and the block transplantation method is not used, then the top 12 inches of topsoil from the lily locations shall be scraped, stockpiled, and used at the selected mitigation site.</p> <p>c) The mitigation site shall be located in dedicated open space in the Project area or at an off-site mitigation site. The site should not attempt to enhance existing populations and shall not be impacted by any pesticides or herbicides used on adjacent properties.</p> <p>d) The lily mitigation site shall be prepared for seeding, as described in a Conceptual Restoration Plan.</p> <p>e) The topsoil shall be re-spread in the selected location as approved by a qualified Biologist. Approximately 60 percent of the seeds and bulbs collected shall be spread and/or placed in the fall or winter (generally September through February) following soil preparation. Forty percent of the seed and bulbs shall be kept in storage for subsequent seeding, if necessary.</p> <p>f) A detailed Maintenance and Monitoring Plan shall be developed by a qualified Biologist as part of the CDP process. The Plan shall include detailed descriptions of maintenance appropriate for the site, monitoring requirements, and annual report requirements.</p> <p>g) Performance criteria shall be developed in the</p>			

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>Maintenance and Monitoring Plan and shall be approved by the CCC and LACDPW. The performance criteria shall include percent cover, density, and seed production requirements, and shall be developed by a qualified Biologist following habitat analysis of an existing high-quality lily population. This information shall be recorded by a qualified Biologist.</p> <p>h) If the germination goal is not achieved following the first season, remediation measures shall be implemented prior to seeding with the remaining 40 percent of seed and bulbs. Remedial measures shall include, at a minimum, soils testing; invasive species control; soil amendments; and physical disturbance (to provide scarification of the seed) of the planted areas by raking or similar actions. Additional measures may be suggested, as determined appropriate by a qualified Biologist.</p> <p>i) Potential seed sources from additional donor sites shall also be identified in case it becomes necessary to collect additional seed for use on the site following performance of remedial measures.</p>			
<p>MM 4.4-4 A pre-construction survey for roosting bats shall be conducted by a qualified Biologist prior to demolition of existing structures and removal of trees. If bats are roosting in buildings (which occurs at night), measures (such as blocking entrances) shall be implemented during the daytime to exclude the bats from potential roosts prior to the commencement of demolition activities. If bats are roosting in trees that will be removed, tree removal shall occur in two phases: (1) during the first day, all branches shall be removed, leaving the main trunk standing overnight; (2) the following day, the main trunk shall be removed. This methodology would allow any roosting bats to relocate during the night. However, exclusion from buildings and tree removal shall not occur during hibernation (December through February) or during the breeding season (May through August) unless it is determined that the building is not being used by roosting bats.</p> <p>If demolition and/or construction activities are scheduled to begin during the hibernation and breeding seasons, the pre-</p>	<p>Prior to demolition activities, including outside hibernation and breeding season</p>	<p>County of Los Angeles Department of Public Works and qualified Biologist</p>	<p>County of Los Angeles Department of Public Works</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>construction survey for roosting bats shall be performed in advance of initial demolition or subsequent construction activities during a time outside the hibernation and breeding seasons (i.e., March, April, and September through January) and measures implemented, as described above, to both prevent bat roosting in any buildings and to remove trees, as identified by LACDPW.</p>			
<p>MM 4.4-5 The LACDPW shall obtain all necessary approvals from the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Coastal Commission (CCC) for resources within their respective jurisdictions. The CDFG also regulates the removal of trees greater than three inches in diameter at breast height (dbh) that overhang streambeds. Four encroachment oak trees (Numbers 87, 88, 721, and 741) are under CDFG jurisdiction. As required by MM 4.4-2, impacts to oak trees shall be avoided or minimized to the maximum extent practicable. Impacts to these trees under CDFG jurisdiction may require replacement at a ratio up to 20:1.</p> <p>Mitigation for the loss of jurisdictional resources (i.e., drainages) shall consist of one of the following three options: (1) payment of an in-lieu mitigation fee to the Santa Monica Mountain Conservancy or another conservation agency determined in coordination with the USACE, the CDFG, and the CCC; (2) preservation of existing jurisdictional resources (preferably within or near Zuma Canyon) and dedication to Santa Monica Mountains Conservancy or another conservation agency determined in coordination with the USACE, the CDFG, and the CCC; or (3) restoration of riparian habitat (preferably within or near Zuma Canyon) and dedication to the County of Los Angeles, the Santa Monica Mountains Conservancy, or another conservation agency determined in coordination with the UCACE, the CDFG, and the CCC. Jurisdictional resources shall be mitigated with the purchase or restoration of equivalent or superior quality habitat at no less than 1:1. The resource agencies shall review the proposed acquisition during resource agency permitting to ensure that the lands to be acquired by the Applicant are of equivalent or superior quality to the resources impacted by the proposed Project.</p>	<p>Prior to construction activities</p>	<p>County of Los Angeles Department of Public Works and qualified Biologist (for restoration plan preparation, if applicable)</p>	<p>U.S. Army Corps of Engineers and California Department of Fish and Game and California Coastal Commission</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>If the proposed Project would mitigate through restoration of riparian habitat (via selection of option 3 above), a detailed restoration program shall be prepared by a qualified Biologist for approval by the USACE and the CDFG prior to initiation of construction and will contain the following items:</p> <p>a) Responsibilities and qualifications of the personnel to implement and supervise the plan. The responsibilities of the Applicant, specialists, and maintenance personnel that will supervise and implement the plan shall be specified.</p> <p>b) Site selection. Site selection for restoration and enhancement mitigation shall be determined in coordination with the LACDPW and the resource agencies. The mitigation site(s) shall be located in a dedicated open space area.</p> <p>c) Site preparation and planting implementation. Site preparation shall include (1) protection of existing native species; (2) trash and weed removal; (3) native species salvage and reuse (i.e., duff); (4) soil treatments (i.e., imprinting, decompacting); (5) temporary irrigation installation; (6) erosion-control measures (i.e., rice or willow wattles); (7) seed mix application; and (8) container species, if appropriate.</p> <p>d) Schedule. A schedule shall be developed which includes planting to occur in late fall and early winter, between October 1 and January 30.</p> <p>e) Maintenance plan/guidelines. The maintenance plan shall include (1) weed control; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; (6) replacement planting; and (7) biological monitoring during maintenance activities that occur during the breeding season.</p> <p>f) Monitoring Plan. The monitoring plan shall include (1) qualitative monitoring (i.e., photographs and general observations); (2) quantitative monitoring (i.e., randomly placed transects); (3) performance criteria as approved by the resource agencies; (4) monthly reports for the first year, quarterly reports for following years; and (5) annual</p>			

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>reports for three to five years, which shall be submitted to the resource agencies annually. The site shall be monitored and maintained for five years to ensure successful establishment of riparian habitat within the restored and created areas; however, if there is successful coverage prior to five years, the Applicant may be released from monitoring requirements with the approval of the resource agencies.</p> <p>g) Long-Term Preservation. Long-term preservation of the site shall also be outlined in the Conceptual Mitigation Plan to ensure the mitigation site is not impacted by future projects.</p> <p>In addition, earth-moving equipment shall avoid maneuvering in jurisdictional areas outside the identified grading limits. Prior to grading, the jurisdictional resource areas to be avoided shall be clearly marked by the Construction Contractor. The Monitoring Biologist shall take pre- and post-construction photographs at key locations to record the existing and post-construction conditions. No earth-moving equipment shall be allowed within jurisdictional areas located outside the Project's disturbance limits.</p>			
<p>MM 4.4-6 Construction shall occur outside the nesting season for birds/raptors (the nesting bird season is between February 1 and September 15), if possible. If construction would be initiated during this time period, the measures described below would apply.</p> <p>Nesting Raptors: Seven days prior to construction activities, a qualified Biologist shall conduct a survey to determine if any raptors are nesting in or adjacent to the impact area. If nesting is not occurring, construction work can proceed. If an active nest is present, construction work shall be restricted within 250 feet of the nest (or as otherwise determined by the Project Biologist) until fledglings have left the nest. Results of the surveys shall be provided to the California Department of Fish and Game (CDFG).</p> <p>If nesting activity is present, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the <i>California Fish and Game Code</i>. Nesting activity for raptors in the region normally occurs from</p>	<p>Prior to construction activities</p>	<p>County of Los Angeles Department of Public Works and qualified Biologist</p>	<p>County of Los Angeles Department of Public Works</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>February 1 to June 30. To protect any nest site, construction activities and access shall not be allowed within 250 feet from any occupied nest during the nesting season (or until nests are no longer active, as determined by a qualified Biologist). Any encroachment into the buffer area around the known nest shall only be allowed if it is determined by a qualified Biologist that the proposed activity will not disturb the nest occupants.</p> <p>Nesting Birds: If vegetation clearing would be conducted during the nesting season (March 15 to September 15), a qualified Biologist shall conduct a survey no more than three days prior to construction to determine if any birds are nesting in or adjacent to the impact area. If nesting is not occurring, construction work can proceed. If an active nest is present, construction work shall be restricted within a protective buffer area (buffer size determined by the Project Biologist based on the sensitivity of the species and location of the nest) until fledglings have left the nest. Any encroachment into the buffer area around the known nest shall only be allowed if it is determined by a qualified Biologist that the proposed activity will not disturb the nest occupants.</p> <p>If demolition and/or construction activities are scheduled to begin during the nesting season, a survey for nesting raptors and birds shall also be performed in advance of initial demolition or subsequent construction activities that involve vegetation removal in the nesting seasons or vegetation and tree removal outside the nesting season and nesting deterrent measures implemented to reduce the likelihood of nesting within and near the demolition and construction footprint. Performance of the advance survey and implementation of nesting deterrent measures does not negate the requirement for the nesting bird and raptor pre-construction surveys immediately in advance of construction activity, as described above.</p>			

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
Cultural Resources (Section 4.5 of the Draft IS/MND)			
<p>MM 4.5-1 Should archaeological resources be found during ground-disturbing activities for the Project, the ground-disturbing activity shall halt in the vicinity of the location such that the potential resource is left intact and in place and a qualified Archaeologist shall be retained to first determine whether an archaeological resource uncovered during construction is a “unique archaeological resource” pursuant to Section 21083.2(g) of the <i>California Public Resources Code</i> (PRC) or a “historical resource” pursuant to Section 15064.5(a) of the CEQA Guidelines. If the archaeological resource is determined to be a “unique archaeological resource” or a “historical resource”, the Archaeologist shall formulate a mitigation plan in consultation with the County of Los Angeles that satisfies the requirements of the above-listed sections. Potential mitigation would include, at a minimum, one of the following approaches: planning construction to avoid the resource; protection and preservation in place; data recovery excavation of a representative sample of the site’s constituents; and/or another approach that equally satisfies the County of Los Angeles and the PRC.</p> <p>If the Archaeologist determines that the archaeological resource is not a “unique archaeological resource” or “historical resource”, s/he shall record the site and submit the recordation form to the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC). The Archaeologist shall prepare a report of the results of any study prepared as part of a testing or mitigation plan, following accepted professional practice. The report shall follow guidelines of the California Office of Historic Preservation. Copies of the report shall be submitted to the County of Los Angeles and to the California Historical Resource Information System (CHRIS) at the South Central Coastal Information Center (SCCIC).</p>	<p>During ground-disturbing activities</p>	<p>Construction Contractor in accordance with Contractor Specifications and qualified Archaeologist</p>	<p>County of Los Angeles Department of Public Works</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>MM 4.5-2 Prior to the commencement of ground-disturbing activities in native soils on the Project site, a qualified Paleontologist shall be retained to monitor excavations into the older Quaternary alluvium that lies below the younger Quaternary alluvium exposed at the surface. The schedule and extent of monitoring activities shall be established by the Supervising Paleontologist in coordination with Contractor and County staff at the Project's pre-grade meeting and as grading activities commence. Because it is often difficult to distinguish between older and younger Quaternary alluvium on sight, for the purposes of this mitigation measure, a qualified Paleontologist shall be retained to monitor excavations into native soils five feet below ground surface or deeper (i.e., grading and excavation for footings and utility trenches). It shall be the responsibility of the Supervising Paleontologist to demonstrate, to the satisfaction of the County, the appropriate level of monitoring necessary based on the on-site soils and final grading plans, when approved by the County and prior to initiation of grading activities. All paleontological work to assess and/or recover a potential resource at the Project site shall be conducted under the direction of the qualified Paleontologist. If a fossil discovery occurs during grading operations when a Paleontological Monitor is not present, grading shall be diverted around the area until the Monitor can survey the area. Any fossils recovered during Project site development, along with their contextual stratigraphic data, shall be donated to the County of Los Angeles or other appropriate institution with an educational and research interest in the materials. The Paleontologist shall prepare a report of the results of any findings as part of a testing/mitigation plan following accepted professional practice.</p>	<p>Prior to ground-disturbing activities and During excavation activities in native soils deeper than five feet below ground surface</p>	<p>Construction Contractor in accordance with Contractor Specifications and qualified Paleontologist</p>	<p>County of Los Angeles Department of Public Works</p>
<p>Noise (Section 4.12 of the Draft IS/MND)</p>			
<p>MM 4.12-1 The County of Los Angeles Public Works shall include the following requirement into the contractor specifications:</p> <ul style="list-style-type: none"> At the commencement of concrete crushing operations, if necessary to implement the proposed Project, the contractor shall measure the crusher noise level at a distance of 50 feet from the crusher in the direction of the single-family residences northeast of the Project Site. 	<p>At commencement of concrete crushing operations, if necessary</p>	<p>Construction Contractor in accordance with Contractor Specifications</p>	<p>County of Los Angeles Department of Public Works</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>For the measurement, the crusher shall be operated under maximum anticipated concrete crushing load conditions. If the noise level exceeds 86 dBA, the contractor shall implement noise-abatement measures to reduce the noise level to 86 dBA or less. The measures may include but are not limited to reorientating the crusher; adding enclosures on some crusher components; and constructing a temporary noise barrier, such as a plywood wall or acoustical blankets on a frame. If a temporary barrier is used, the barrier shall be solid from the ground to the top, and the top of the barrier shall break the line of sight between the crusher and the residences. A report of the noise measurements and noise abatement measures, if needed, shall be filed with the County of Los Angeles Public Works Director.</p>			
<p>MM 4.12-2 The County of Los Angeles Department of Public Works shall include the following requirements into the contractor specifications:</p> <ul style="list-style-type: none"> • Prior to any demolition, grading or heavy construction activities within 100 feet of Camp Miller, a 10-foot-high temporary noise barrier shall be constructed between the disturbance area and the nearest noise receiver at Camp Miller. The noise barrier shall be constructed of material with a minimum weight of three pounds per square foot with no gaps or perforations. The noise barrier may be constructed of, but is not limited to, 5/8-inch-thick plywood or 5/8-inch-oriented strand board. The noise barrier shall remain in place until the end of demolition and heavy construction activities; • Alternatively, prior to and during any demolition, grading, or heavy construction activities within 100 feet of Camp Miller, the County shall ensure that controls are in place at Camp Miller that would restrict persons from being within 100 feet of the Camp Kilpatrick construction areas. 	<p>Prior to any specified construction activities within 100 feet of Camp Miller</p>	<p>Construction Contractor in accordance with Contractor Specifications</p>	<p>County of Los Angeles Department of Public Works</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Mitigation Timing	Responsible Agency/Party	Monitoring Agency/Party
<p>MM 4.12-3 The County of Los Angeles Public Works Director shall include the following requirements into the contractor specifications:</p> <ol style="list-style-type: none"> 1. All construction vehicles or equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, which shall be periodically inspected to ensure compliance. 2. Stationary equipment, such as generators and air compressors, shall be located at least 250 feet from Camp Miller. If the noise barrier described in MM 4.12-2 is in place, or if Camp Miller persons are restricted to being 100 feet from the construction areas, then, stationary equipment may be located within 100 feet of Camp Miller. 3. Equipment maintenance and staging areas and crushing equipment shall be located at least 450 feet from Camp Miller. If the noise barrier described in MM 4.12-2 is in place, then the crusher may be located within 250 feet of Camp Miller. <p>The contractor's compliance with these requirements shall be performed to the satisfaction of the County Department of Public Works.</p>	<p>During construction</p>	<p>Construction Contractor in accordance with Contractor Specifications</p>	<p>County of Los Angeles Department of Public Works</p>

APPENDIX B-3
JURISDICTIONAL DELINEATION REPORT



JURISDICTIONAL DELINEATION REPORT

CAMP KILPATRICK REPLACEMENT PROJECT LOS ANGELES COUNTY, CALIFORNIA

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1.0 INTRODUCTION

This Jurisdictional Delineation Report (report) was prepared for the Los Angeles County Department of Public Works (LACDPW) to provide baseline data concerning the type and extent of resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the Regional Water Quality Control Board (RWQCB) for the approximate 28-acre Camp Kilpatrick Replacement Project (hereinafter referred to as “the proposed project”) (Exhibits 1 and 2). This Jurisdictional Delineation Report is based on the jurisdictional delineation survey performed on July 20, 2012.

1.1 PROJECT LOCATION AND DESCRIPTION

The LACDPW is proposing to replace the existing Camp Kilpatrick Detention Center with newly designed facilities intended to create a more supportive and treatment-oriented environment. Established in 1962, Camp Kilpatrick is located in unincorporated Los Angeles County at 427 South Encinal Canyon Road in Malibu, California. Camp Kilpatrick is located immediately to the north of Camp Miller, which is also a County of Los Angeles juvenile detention center. No improvements are proposed at Camp Miller, which would remain operational during construction of the replacement project at Camp Kilpatrick.

The physical design of the replacement camp is centered on evidence-based treatment programs that rehabilitate juveniles. Specifically, replacing the large dormitory with four small cottages is intended to enhance rehabilitation therapy and programs. The physical design of the replacement camp is intended to maximize collaboration with partnering agencies, including the Department of Mental Health, Juvenile Court Health Services, Los Angeles County Office of Education, and Community and Religious Based Organizations.

Currently, Camp Kilpatrick has a rated bed capacity of 125 minors and consists of 14 structures with a total of approximately 48,682 square feet (sf). The proposed project will replace the existing camp with a similar building square footage and capacity. No increase in juvenile capacity will be accommodated.

1.1.1 Facility Improvements

The proposed Project involves demolition of all existing structures within the Camp Kilpatrick Project site, with the exception of the swimming pool and appurtenant facilities, and the kitchen that currently serves both Camp Miller and Camp Kilpatrick. All other buildings and outdoor facilities within the Project site boundaries would be demolished and replaced with approximately 47,000 sf of new buildings. The Proposed Project Conceptual Site Plan illustrates the conceptual design for the proposed buildings and site layout for the proposed Camp Vernon Kilpatrick Replacement Project. As shown, the proposed structures and related facilities would generally be located in the same footprint as the existing Camp Kilpatrick facilities. The area of physical disturbance associated with construction of the proposed Project is referred to herein as the “impact footprint”.

1.2 REGULATORY AUTHORITY

1.2.1 Summary of Regulations

U.S. Army Corps of Engineers

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into “Waters of the U.S.” under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all “Waters of the U.S.” where the material (1) replaces any portion of a “Waters of the U.S.” with dry land or (2) changes the bottom elevation of any portion of any “Waters of the U.S.”. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these Waters. The selection of disposal sites for dredged or fill material is done in accordance with Section 404(b)(1) guidelines, which were developed by the U.S. Environmental Protection Agency (USEPA).

Waters of the United States

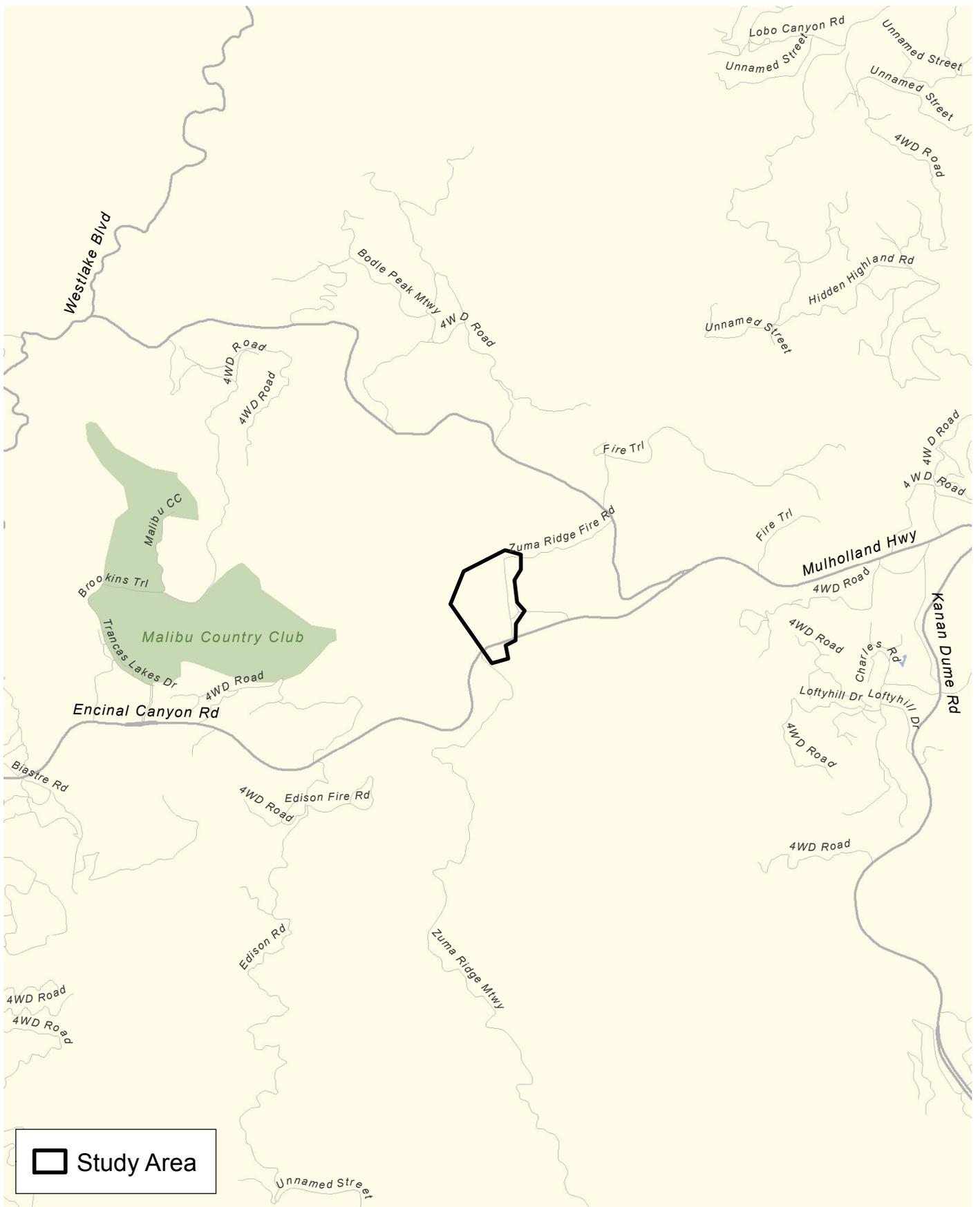
“Waters of the U.S.” can be divided into three categories: territorial seas, tidal waters, or non-tidal waters. The term “Waters of the U.S.” is defined by the *Code of Federal Regulations* (CFR, Title 33, Navigation and Navigable Waters; Part 328, Definition of Waters of the United States; §328.3, Definitions) and includes:

1. All waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, or streams (including intermittent streams); mudflats; sand flats; wetlands; sloughs; prairie potholes; wet meadows; playa lakes; or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce.
4. All impoundments of waters otherwise defined as “Waters of the U.S.” under the definition.
5. All tributaries of waters identified above.
6. The territorial seas.
7. All wetlands adjacent to waters (other than waters that are themselves wetlands) identified above.

Ordinary High Water Mark

The landward limit of tidal “Waters of the U.S.” is the high-tide line. In non-tidal waters where adjacent wetlands are absent, jurisdiction extends to the ordinary high water mark (OHWM). In the absence of wetlands in non-tidal waters, the extent of jurisdictional limits is determined by the OHWM. The OHWM is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR §328.3[e]).

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 Study Area

Local Vicinity

Camp Vernon Kilpatrick Replacement Project

Exhibit 1



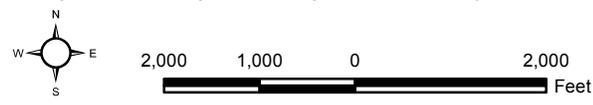


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Source: Aerials Express 2009

USGS 7.5-Minute Topographic Quadrangle
Camp Vernon Kilpatrick Replacement Project

Exhibit 2



(Rev: 8-07-2012 JCD) Projects\ColADPW\184\Graphics\UD\Ex2_LV_USGS.pdf

Wetlands

A wetland is a subset of jurisdictional waters and is defined by the USACE and the USEPA as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR §328.3[b]). Wetlands generally include swamps, marshes, bogs, and areas containing similar features. The definition and methodology for identifying wetland resources can be found in the USACE’s *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008c), a supplement to the USACE’s *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). The methodology contained in this supplement was used to identify the type and extent of wetland resources along the project alignment.

On June 19, 2006, a majority of the U.S. Supreme Court overturned two Sixth Circuit Court of Appeals decisions, finding that certain wetlands constituted “Waters of the U.S.” under the CWA. Justice Scalia argued that “Waters of the U.S.” should not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall. He also stated that a wetland may not be considered “adjacent to” remote “Waters of the U.S.” based on a mere hydrologic connection. On June 5, 2007, the USACE published a memorandum that provides guidance to both the USEPA regions and the USACE districts that implement the Supreme Court’s decision in the Rapanos cases (which address the jurisdiction over “Waters of the U.S.” under the CWA).¹ The memorandum includes a chart that summarizes its key points, which is intended to be used as a reference tool along with a complete discussion of issues and guidance furnished throughout the memorandum.

In summary, the USACE and the USEPA will assert jurisdiction over the following waters: (1) traditional navigable waters (TNW); (2) wetlands adjacent to a TNW; (3) relatively permanent, non-navigable tributaries of a TNW that typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and (4) wetlands that directly abut such tributaries.

The USACE and the USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW: (1) non-navigable tributaries that are not relatively permanent; (2) wetlands adjacent to non-navigable tributaries that are not relatively permanent; and (3) wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable tributary.

The USACE and the USEPA generally will not assert jurisdiction over the following features: (1) swales or erosional features (e.g., gullies or small washes characterized by low volume, infrequent, or short duration flow) and (2) ditches (including roadside ditches) excavated wholly within and draining only uplands and that do not carry a relatively permanent flow of water.

The USACE and the USEPA will apply the significant nexus standard defined as follows:

1. A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream TNWs.
2. A significant nexus includes consideration of hydrologic and ecological factors.

¹ Consolidated cases: *Rapanos v. United States* and *Carabell v. United States* refer to the U.S. Supreme Court’s decision concerning USACE jurisdiction over “Waters of the U.S.” under the Clean Water Act.

Regional Water Quality Control Board

The RWQCB is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB's jurisdiction extends to all "Waters of the State" and to all "Waters of the U.S.", including wetlands (isolated and non-isolated).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed, federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide "certification that there is reasonable assurance that an activity which may result in the discharge to 'Waters of the U.S.' will not violate water quality standards". Water Quality Certification must be based on a finding that the proposed discharge will comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine RWQCBs' Basin Plans.

The Porter-Cologne Act provides the State with very broad authority to regulate "Waters of the State" (which are defined as any surface water or groundwater, including saline waters). The Porter-Cologne Act has become an important tool in the post-SWANCC (Solid Waste Agency of Northern Cook Counties vs. United States Corps of Engineers) and Rapanos era with respect to the State's authority over isolated waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a "Report of Waste Discharge" (ROWD) when there is no federal nexus, such as under Section 404(b)(1) of the CWA. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

Los Angeles Regional Water Quality Control Plan (Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties)

There are nine RWQCBs in California. The project site is located within RWQCB Region 4, the Los Angeles Region. The State Water Resources Control Board (SWRCB) and the RWQCB have adopted a Water Quality Control Plan (or Basin Plan) for the coastal watershed of Los Angeles and Ventura counties. The Basin Plan contains goals and policies, descriptions of conditions, and proposed solutions to surface and groundwater issues. The Basin Plan also establishes water quality standards for surface and groundwater resources and includes beneficial uses and levels of water quality that must be met and maintained to protect these uses. These water quality standards are implemented through various regulatory permits pursuant to CWA Section 401 for Water Quality Certifications and Section 402 for Report of Waste Discharge permits.

The Basin Plan indicates that the survey area is located in the Malibu Hydrologic Unit, Trancas Canyon Hydrologic Subarea (HSA) 404.36. Table 3.8, Water Quality Objectives for Selected Constituents in Inland Surface Waters, of the Basin Plan indicates that the water quality objective for the Malibu Creek Watershed (including Zuma Canyon Creek) is 2,000 milligrams/liter (mg/L) of total dissolved solids (TDS).

The Basin Plan identifies a number of beneficial uses, some or all of which may apply to a specific HSA, including Municipal and Domestic Water Supply (MUN) waters; Agricultural Supply (AGR) waters; Industrial Service Supply waters (IND); Industrial Process Supply (PROC) waters; Groundwater Recharge (GWR) waters; Navigation (NAV) waters; Hydropower Generation (POW) waters; Water Contact Recreation (REC1) waters; Non-Contact Water Recreation (REC2) waters; Commercial and Sport Fishing (COMM) waters; Warm Fresh Water Habitat (WARM)

waters; Limited Warm Water Habitat (LWARM) waters; Cold Fresh Water Habitat (COLD) waters; Preservation of Biological Habitats of Special Significance (BIOL) waters; Wildlife Habitat (WILD) waters; Rare, Threatened or Endangered Species (RARE) waters; Marine Habitat (MAR) waters; Shellfish Harvesting (SHEL) waters; and Estuarine Habitat (EST) waters.

Table 2-1 Beneficial Uses of Inland Surface Waters of the Basin Plan identifies the following beneficial uses for Zuma Canyon Creek that would likely need to be addressed as part of the request for a CWA Section 401 Water Quality Certification: MUN, REC1, REC2, WARM, WILD, and RARE (RWQCB 1994).

- **MUN** waters are used for community, military, municipal, or individual water supply systems. These uses may include, but are not limited to, drinking water supply. The proposed project is not expected to affect municipal water supplies.
- **REC1** waters are used for recreational activities involving bodily contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs. Please note that while this beneficial use designation is assigned to surface water bodies in this Region, it should not be construed as encouraging recreational activities and access is prohibited in all or in part by the LACDPW. Surface water was present in Zuma Canyon Creek at the time of the survey and increased flows are likely to occur during the rainy season. However, it is unknown if flows are sufficient to support recreational fishing.
- **REC2** waters are used for recreational activities involving proximity to water, but do not normally involve bodily contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing and aesthetic enjoyment in conjunction with the above activities. Please note that while this beneficial use designation is assigned to surface water bodies in this Region, it should not be construed as encouraging recreational activities.
- **WARM** waters support warm water ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates. The proposed project is not expected to affect aquatic habitats, vegetation, fish, or wildlife within Zuma Canyon Creek.
- **WILD** waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife. The proposed project is not expected to affect the preservation or enhancement of vegetation and prey species used by waterfowl and other wildlife within Zuma Canyon Creek.
- **RARE (Rare, Threatened, or Endangered Species)** are uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under State or federal law as Rare, Threatened, or Endangered. The proposed project is not expected to affect any Rare, Threatened, or Endangered plant or wildlife species.

California Department of Fish and Game

The CDFG has jurisdictional authority over wetland resources associated with rivers, streams, and lakes pursuant to *California Fish and Game Code* (§§1600–1616). Activities of State and local agencies as well as public utilities that are project proponents are regulated by the CDFG under Section 1602 of the *California Fish and Game Code*; this section regulates any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake;

(2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Because the CDFG includes streamside habitats under its jurisdiction that, under the federal definition, may not qualify as wetlands on a particular project site, its jurisdiction may be broader than that of the USACE. Riparian forests in California often lie outside the plain of ordinary high water regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland. However, riparian forests are frequently within CDFG regulatory jurisdiction under Section 1602 of the *California Fish and Game Code*.

The CDFG enters into a Lake or Streambed Alteration Agreement (SAA) with a project proponent and can impose conditions on the agreement. The notification process involves the completion of the applications which will serve as the basis for the CDFG's issuance of a Section 1602 SAA. Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State.

The CDFG jurisdictional limits are not as clearly defined by regulation as those of the USACE. While they closely resemble the limits described by USACE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFG takes jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place within or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish and other aquatic plant and/or wildlife species, and watercourses that have a surface or subsurface flow that support or have supported riparian vegetation.

California Coastal Act

California voters adopted the Coastal Zone Conservation Act (Proposition 20) in 1972. It required that development within 1,000 yards inland from California's mean high tide obtain a permit from a regional or State coastal commission. It created a temporary California Coastal Zone Conservation Commission and six regional commissions to develop a statewide plan for coastal protection. The California Coastal Plan was submitted to the Legislature in 1975 and led to the passage of the California Coastal Act in 1976. The California Coastal Act established a State agency, the California Coastal Commission (Coastal Commission), whose mandate is to protect and enhance the resources of the Coastal Zone mapped by the Legislature.

The California Coastal Act of 1976 (*California Public Resources Code* §§30000 et seq.) establishes policies guiding development and conservation along the California coast. The intent of the California Coastal Act is to protect, maintain and, where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and artificial resources. Through the review of development plans, the Coastal Commission strives to assure orderly, balanced utilization and conservation of Coastal Zone resources taking into account the social and economic needs of the people of the state. One goal is to maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners.

Local Coastal Program

The Legislature found that “to achieve maximum responsiveness to local conditions, accountability, and public accessibility, it is necessary to rely heavily on local government and local land use planning procedures and enforcement” (Section 30004(a) of the California Coastal Act). Therefore, implementation of California Coastal Act policies is accomplished primarily through requiring local governments to prepare a Local Coastal Program (LCP) for areas within their jurisdictions that lie within the Coastal Zone boundary, which will then establish the policies governing the issuance of permits by the local governments for development within the Coastal Zone. An LCP is defined by Section 30108.6 of the Coastal Act as follows:

Local coastal program means a local government’s (a) land use plans, (b) zoning ordinances, (c) zoning district maps and (d) within sensitive coastal resources areas, other implementing actions, which, when taken together, meet the requirements of and implement the provisions and policies of, this division at the local level.

An LCP typically consists of a coastal Land Use Plan (LUP) and an Implementing Actions Plan. The land use plan indicates the kinds, location, and intensity of land uses; the applicable resource protection and development policies; and, where necessary, a listing of implementing actions. The Implementing Actions Plan consists of the zoning ordinances, zoning district maps, and other legal instruments necessary to implement the land use plan. Once prepared by a local government, the LCP is submitted to the Coastal Commission for certification that the LCP conforms to the requirements of the Coastal Act. Amendments to a certified LCP also require review and approval by the Coastal Commission prior to becoming effective.

After certification of an LCP, Coastal Development Permit (CDP) authority is delegated to the local government. The Coastal Commission retains original permit jurisdiction over certain specified lands (e.g., submerged lands, tidelands, and public trust lands) and has appellate authority over development approved by the local government in specified geographic areas; for major public works projects; and for major energy facilities. In issuing CDPs, the local government must make the finding that the development conforms to the certified LCP.

Santa Monica Mountains Local Coastal Program

The project site is located within the Santa Monica Mountains Coastal Zone, which is located in the unincorporated portion of the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County, and south of the coastal zone boundary, excluding the City of Malibu. The Coastal Zone extends inland from the shoreline approximately 5 miles and encompasses approximately 81 square miles. The Santa Monica Mountains LCP consists of the Coastal Zone Plan (the Plan) and implementing actions including the community standards district (CSD); amendments to Subdivision Ordinance and the Zoning Ordinance; Titles 21 and 22 of the County Code; and a zoning consistency program. The Plan, which is a component of the *County of Los Angeles General Plan*, replaced the Malibu Land Use Plan, which was certified by the Coastal Commission in 1986 and is currently the basic planning tool for the Santa Monica Mountains Coastal Zone. The Plan includes some of the policies of the 1986 Malibu Land Use Plan, new policies, and many policies from the Santa Monica Mountains North Area Plan. Once the Santa Monica Mountains LCP is certified by the Coastal Commission, the County will have the authority to issue coastal development permits. Until that occurs, all proposed development within the Santa Monica Mountains LCP area will require authorization from the California Coastal Commission.

The California Coastal Commission (CCC) defines wetlands under Section 30121 of the Coastal Act:

“Wetland” means lands within the coastal zone which may be covered periodically or permanently with shallow water and includes salt marshes, freshwater marshes, open and closed brackish water marshes, swamps, mudflats, and fens.

The boundaries of a wetland are determined by the extent of one or more key wetland characteristics: hydrology, hydric soils, and hydrophytic vegetation. The size and extent of CCC wetland boundaries may also be determined by aerial photographs, national wetland inventory maps, and soil conservation maps. Also, the CCC generally turns to the CDFG for assistance in determining the presence and extent of wetlands subject to regulation in the coastal zone.

In addition, Section 30233 of the Coastal Act states that:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
 - (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
 - (4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
 - (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
 - (6) Restoration purposes.
 - (7) Nature study, aquaculture, or similar resource-dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the CDFG, including, but not limited to, the 19 coastal wetlands identified in its report entitled, “Acquisition Priorities for the Coastal Wetlands of California”, shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this

division. For the purposes of this section, “commercial fishing facilities in Bodega Bay” means that not less than 80 percent of all boating facilities proposed to be developed or improved, where the improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

- (d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

2.0 METHODOLOGY

The three-parameter approach used to identify USACE wetlands is summarized in Sections 2.1 through 2.3; literature reviewed for the preparation of the delineation is outlined in Section 2.4; and the field delineation is outlined in Section 2.5.

2.1 VEGETATION

Hydrophytic vegetation (or hydrophytes) is defined as any macrophytic plant that is typically adapted to and subsequently grows within water or that is on a substrate at least periodically deficient in oxygen; this oxygen deficiency can be a result of excessive saturation conditions that range from open water to periodically saturated soils. Specifically, these plant species are specialized and can survive in permanently saturated to periodically saturated soils where oxygen levels are very low or the soils are anaerobic. The USACE, as part of an interagency effort with the USEPA, the U.S. Fish and Wildlife Service (USFWS), and the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), has approved a new National Wetland Plant List (NWPL) (*U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory [CRREL], June 2012*) to replace the Reed 1988 Wetlands Plant List. The NWPL went into effect on June 1, 2012, and is to be used to determine whether the hydrophytic vegetation parameter is met when conducting wetland determinations under the Clean Water Act and the Wetland Conservation Provisions of the Food Security Act. The NWPL is also intended to be used for wetland restoration, establishment, and enhancement projects. This report utilized the wetland plant list for the Arid West Supplement portion of the NWPL for California.

The following revisions were made to the Reed 1988 Wetland Plant List pursuant to the approved a new National Wetland Plant List (NWPL) *U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory [CRREL], June 2012*:

1. The USACE determined that, without real frequency data, it is difficult to adequately place species into one of the five wetland indicator status groups with any certainty. Adding finer-scale +/- ratings implies there are data to support their assignments, which is generally not the case. Therefore, to improve the accuracy of the overall list, the USACE decided to drop the +/- suffixes.
2. The USACE eliminated the “probability-of-occurrence” categories (e.g., <1 percent, 1-33 percent, 34–66 percent, 67–99 percent and >99 percent) due to the lack of data to support these ratings.

3. The new definition of wetland plant indicator status categories are as follows:

- **Obligate Wetland (OBL):** Plants that always occur in standing water or in saturated soils.
- **Facultative Wetlands (FACW):** Plants that nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may, on rare occasions, occur in non-wetlands.
- **Facultative (FAC):** Plants that occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats, but often occur in standing water or saturated soils.
- **Facultative Upland (FACU):** Plants that typically occur in xeric or mesic non-wetland habitats but may frequently occur in standing water or saturated soils.
- **Obligate Upland (UPL):** Plants that almost never occur in water or saturated soils.

The following are three procedures for determining hydrophytic vegetation: Indicator 1, "Dominance Test", using the "50/20 Rule"; Indicator 2, "Prevalence Index"; or Indicator 3, "Morphological Adaptation", as identified in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008c). Hydrophytic vegetation is present if any indicator is satisfied. If none of the indicators are satisfied, then hydrophytic vegetation is absent unless (1) indicators of hydric soil and wetland hydrology are present and (2) the site meets the requirements for a problematic wetland situation.

- **Dominance Test:** Vegetative cover is estimated and is ranked according to its dominance. Dominant species are the most abundant species for each stratum of the community (i.e., tree, sapling/shrub, herb, or woody vine) that individually or collectively amounts to 50 percent of the total coverage of vegetation plus any other species that, by itself, accounts for 20 percent of the total vegetation cover (also known as the "50/20 Rule"). These species are recorded on the "Wetland Determination Data Form – Arid West Region". The wetlands indicator status of each species is also recorded on the data forms based on the *National Wetland Plant List (NWPL)* (USACE 2012). If greater than 50 percent of the dominant species across all strata are OBL, FACW or FAC species, the criterion for wetland vegetation is considered to be met.
- **Prevalence Index:** The prevalence index considers all plant species in a community, not just the dominant ones. The prevalence index is the average of the wetland indicator status of all plant species in a sampling plot. Each indicator status category is given a numeric code (OBL=1, FACW=2, FAC=3, FACU=4, and UPL=5) and is weighted by the species' abundance (percent cover). Hydrophytic vegetation is present if the prevalence index is 3.0 or less.
- **Morphological Adaptation:** Morphological adaptations, such as adventitious roots (i.e., roots that take advantage of the wet conditions) and shallow root systems, must be observed on more than 50 percent of the individuals of a FACU species for the hydrophytic vegetation wetland criterion to be met.

2.2 SOILS

The National Technical Committee for Hydric Soils (NTCHS) defines a hydric soil as a soil that is formed under conditions of saturation, flooding, or ponding that occurs long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface and that favor the establishment of hydrophytic vegetation (USDA NRCS 2008). It should be noted that hydric soils created under artificial conditions of flooding and inundation

sufficient for the establishment of hydrophytic vegetation would also meet this hydric soils indicator.

The soil conditions are verified by digging test pits along each transect to a depth of at least 20 inches (except where a restrictive layer occurs in areas containing hard pan, cobble, or solid rock). It should be noted that, at some sites, it may be necessary to make exploratory soil test pits up to 40 inches deep to more accurately document and understand the variability in soil properties and hydrologic relationships on the site. Soil test pit locations are usually dug within the drainage invert or at the edge of a drainage course within vegetated areas. Soil extracted from each soil test pit is then examined for texture and color using the standard plates within the Munsell Soil Color Chart (1994) and recorded on the Data Form. The Munsell Soil Color Chart aids in designating soils by color labels based on gradations of three simple variables: hue, value, and chroma. Any indicators of hydric soils such as the following are also recorded on the Data Form: redoximorphic features (i.e., areas where iron is reduced under anaerobic conditions and oxidized following a return to aerobic conditions); buried organic matter; organic streaking; reduced soil conditions; gleyed (i.e., soils having a characteristic bluish-gray or greenish-gray in color) or low-chroma soils; or sulfuric odor. If hydric soils are found, progressive pits are dug along the transect moving laterally away from the active channel area until hydric soil features are no longer present within the top 20 inches of the soil. The soil descriptions are provided in Attachment A and Exhibit 3.

2.3 HYDROLOGY

Wetlands hydrology is represented by either (1) all of the hydrological elements or characteristics of areas permanently or periodically inundated or (2) areas containing soils that are saturated for a sufficient duration of time to create hydric soils suitable for the establishment of plant species that are typically adapted to anaerobic soil conditions. The presence of wetland hydrology is evaluated at each intersect by recording the extent of observed surface flows, the depth of inundation, the depth to saturated soils, and the depth to free water in soil test pits. In instances where stream flow is divided into multiple channels with intervening sandbars, the entire area between the channels is considered within the OHWM. Therefore, an area containing these features would meet the indicator requirements for wetland hydrology.

2.4 LITERATURE

Prior to conducting the delineation, BonTerra Consulting reviewed the following documents to identify areas that may fall under agency jurisdiction: the U.S. Geological Survey (USGS) Point Dume 7.5-minute quadrangle map; color aerial photography provided by Los Angeles Region Imagery Acquisition Consortium 2011; the U.S. Department of Agriculture, Natural Resources Conservation Service Soil Survey Geographic (SSURGO) database for Santa Monica Mountains Recreation Area, Parts of Los Angeles and Ventura Counties, California (USDA NRCS 2007); the National Hydric Soils List (USDA NRCS 2011); and the National Wetlands Inventory's Wetland Mapper (USFWS 2012). A description of this literature is provided below.

USGS Topographic Quadrangle. USGS quadrangle maps show geological formations and their characteristics; they describe the physical settings of an area through topographic contour lines and other major surface features. These features include lakes, streams, rivers, buildings, roadways, landmarks, and other features that may fall under the jurisdiction of one or more regulatory agencies. In addition, the USGS maps provide topographical information that is useful in determining elevations, latitude and longitude, and Universal Transverse Mercator Grid coordinates for a project site.

The juvenile detention center, which includes Camp Kilpatrick, is shown on the USGS Point Dume 7.5-minute quadrangle. This USGS quadrangle also shows that Zuma Canyon Creek

flows from the detention center to the Pacific Ocean approximately six aerial miles from the survey area.

Color Aerial Photography. BonTerra Consulting reviewed an existing color aerial photograph prior to the July 20, 2012, site visit to identify the extent of any drainages and riparian vegetation occurring on the project site.

The upper end of Zuma Canyon Creek is visible from within the project site. Most of the creek within the project area has been channelized within a 19-foot-wide concrete trapezoidal channel with culverts under the parking lots and primary access road.

U.S. Department of Agriculture, Natural Resources Conservation Service. The presence of hydric soils is one of the chief indicators of jurisdictional wetlands. BonTerra Consulting reviewed U.S. Department of Agriculture (USDA) soil data for the project alignment (USDA NRCS 2007).

The following soil types are mapped in the survey area: Cotharin-Talepop (0 to 75 percent slopes); Cotharin-Talepop (15 to 50 percent slopes); and Kayiwish (0 to 9 percent slopes). Kayiwish Association 0 to 9 percent slopes is listed as “hydric” on the National Hydric Soils List (USDA NRCS 2011). A brief description of the soil types mapped in the survey area is provided in Attachment A of this report.

U.S. Fish and Wildlife Service, National Wetlands Inventory. The Wetlands Mapper shows wetland resources available from the Wetlands Spatial Data Layer of the National Spatial Data Infrastructure (USFWS 2012). This resource provides the classification of known wetlands following the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). This classification system is arranged in a hierarchy of (1) Systems that share the influence of similar hydrologic, geomorphologic, chemical, or biological factors (i.e., Marine, Estuarine, Riverine, Lacustrine, and Palustrine); (2) Subsystems (i.e., Subtidal and Intertidal; Tidal, Lower Perennial, Upper Perennial, and Intermittent; or Littoral and Limnetic); (3) Classes, which are based on substrate material and flooding regime or on vegetative life forms; (4) Subclasses; and (5) Dominance Types, which are named for the dominant plant or wildlife forms. In addition, there are modifying terms applied to Classes or Subclasses.

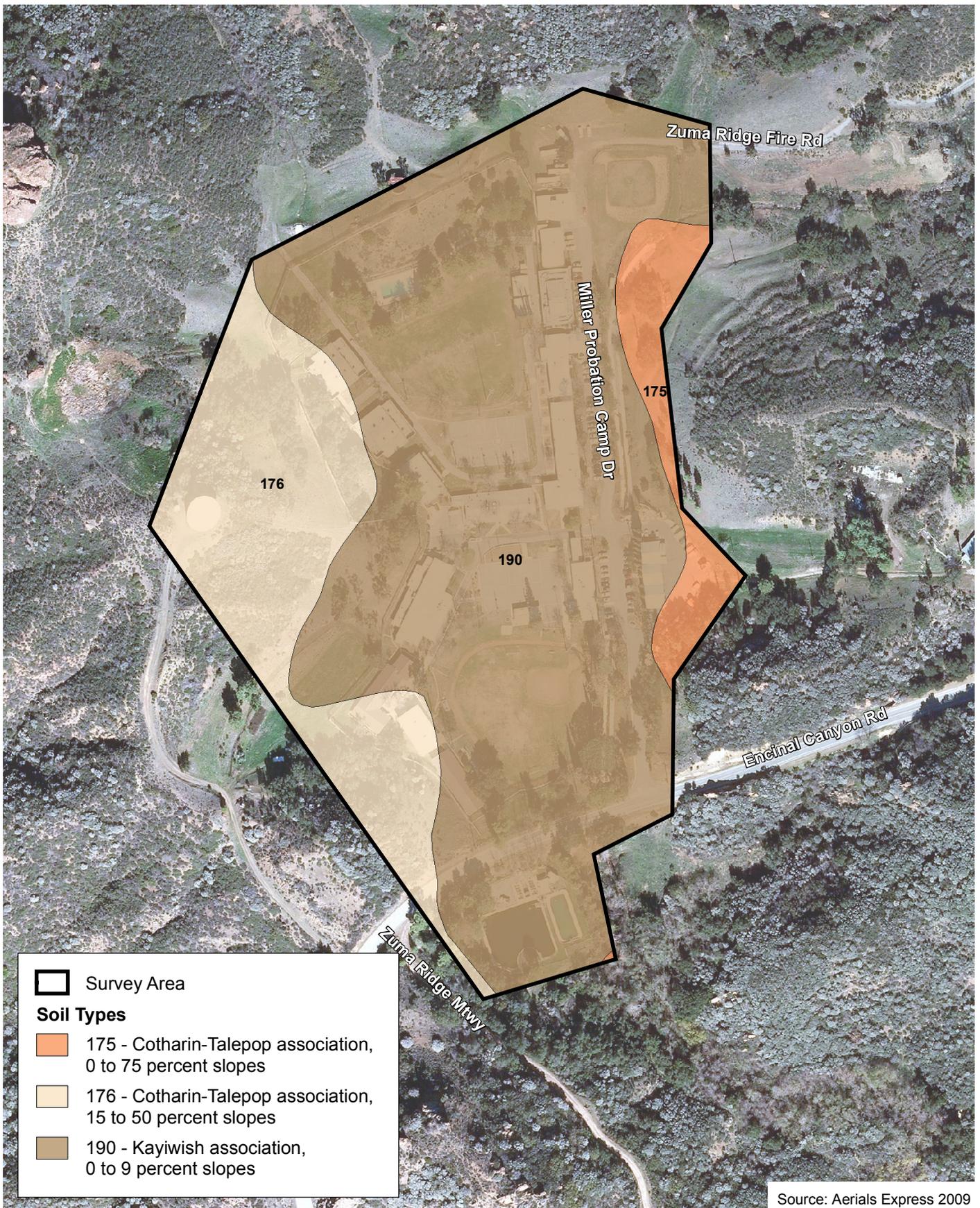
Within the survey area, Zuma Canyon Creek is mapped as PSS/FOA (Exhibit 4). The description for these codes is as follows:

PALUSTRINE (P): The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 parts per trillion (ppt). Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics: (1) are less than 8 hectares (20 acres); (2) do not have an active wave-formed or bedrock shoreline feature; (3) have a low water depth less than 2 meters (6.6 feet) in the deepest part of the basin; and (4) have a salinity due to ocean-derived salts of less than 0.5 ppt.

SCRUB-SHRUB (SS): Includes areas dominated by woody vegetation less than 6 meters (20 feet) tall. The species include true shrubs, young trees, (saplings), and trees and shrubs that are small or stunted because of environmental conditions.

FORESTED (FO): Characterized by woody vegetation that is 6 meters tall or taller:

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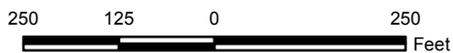


Source: Aerials Express 2009

Soil Types

Exhibit 3

Camp Vernon Kilpatrick Replacement Project



Survey Area

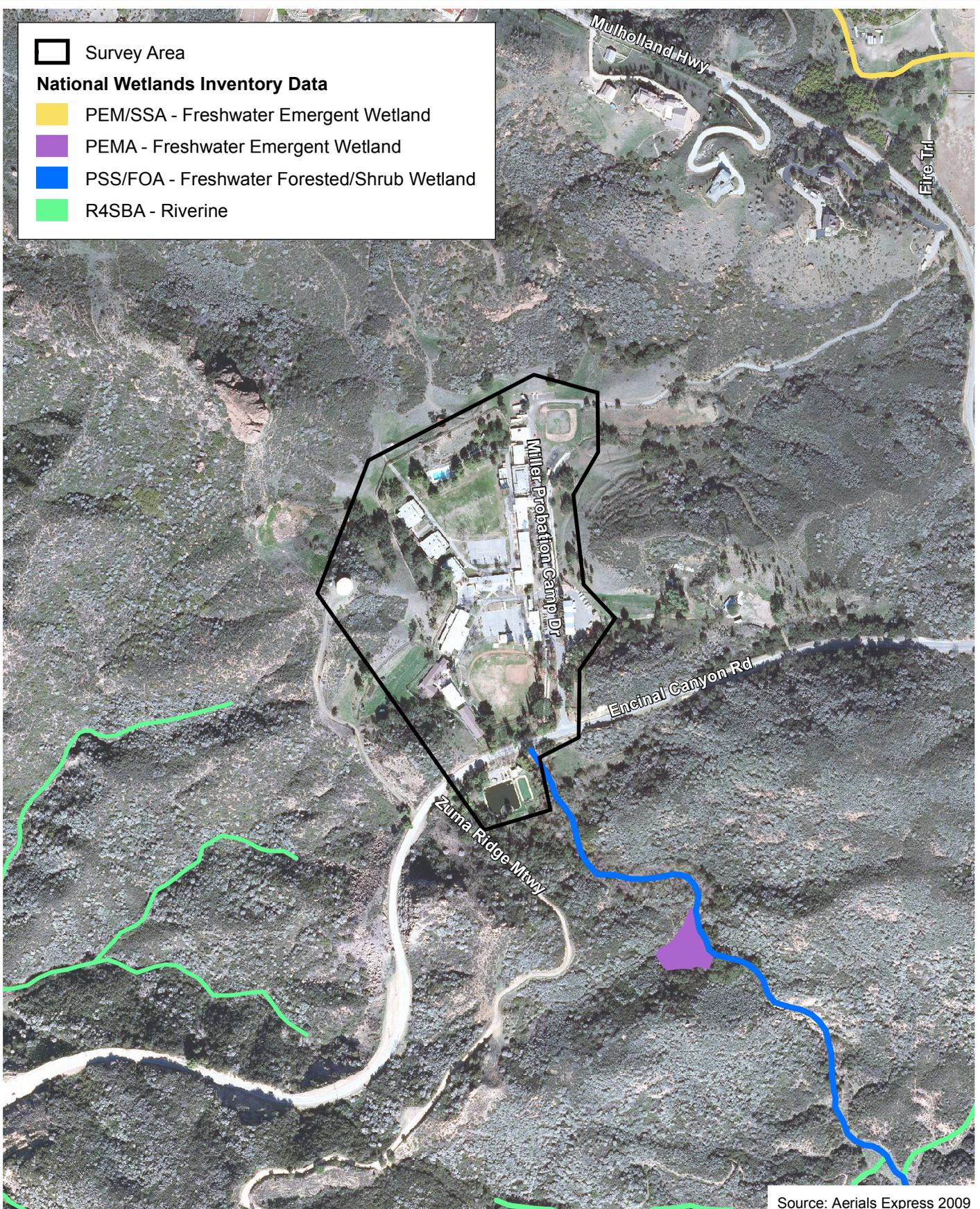
National Wetlands Inventory Data

PEM/SSA - Freshwater Emergent Wetland

PEMA - Freshwater Emergent Wetland

PSS/FOA - Freshwater Forested/Shrub Wetland

R4SBA - Riverine

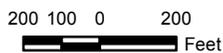


Source: Aerials Express 2009

National Wetlands Inventory

Exhibit 4

Camp Vernon Kilpatrick Replacement Project



Temporary Flooded (A): Surface water is presented for brief periods during growing season, but the water table usually lies well below the soil surface for most of the growing season. Plants that grow both in uplands and wetlands may be characteristic of this water regime.

UNCONSOLIDATED BOTTOM (UB): Includes all wetlands and deepwater habitats with at least 25 percent cover of particles smaller than stones (less than 6–7 centimeters), and a vegetative cover less than 30 percent.

Semipermanently Flooded (F): Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land's surface.

Excavated (x): Lies within a basin or channel that have been dug, gouged, blasted or suctioned through artificial means by man.

2.5 JURISDICTIONAL DELINEATION

In September 2008, the USACE issued the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. This regional supplement is designed for use with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Both the 1987 Wetlands Manual and the Arid West Supplement to the manual provide technical methods and guidelines for determining the presence of “Waters of the U.S.” and wetland resources. A three-parameter approach is used to identify wetlands and requires evidence of wetland hydrology, hydrophytic vegetation, and hydric soils. Wetlands generally include swamps, marshes, bogs, and similar areas. In order to be considered a wetland, an area must exhibit at least minimal hydric characteristics within the three parameters. However, problem areas may periodically or permanently lack certain indicators due to seasonal or annual variability of the nature of the soils or plant species on site. Atypical wetlands lack certain indicators due to recent human activities or natural events. Guidance for determining the presence of wetlands in these situations is presented in the regional supplement. Non-wetland “Waters of the U.S.” are delineated based on the limits of the OHWM, which can be determined by a number of factors including erosion, the deposition of vegetation or debris, and changes in vegetation.

It should be noted that the RWQCB shares USACE jurisdiction unless “isolated waters” conditions are present. If “isolated waters” conditions are present, the RWQCB takes jurisdiction using the USACE’s definition of the OHWM and/or the three-parameter wetlands methodology pursuant to the 1987 Wetlands Manual. The CDFG’s jurisdiction is defined as the top of the bank to the top of the bank of the stream, channel, or basin or to the outer limit of riparian vegetation located within or immediately adjacent to the river, stream, creek, pond, or lake or other impoundment.

The analysis contained in this report uses the results of a field survey conducted by BonTerra Consulting Associate Principal of Regulatory Services Gary Medeiros on July 20, 2012. Jurisdictional features were delineated using a 1 inch equals 150 feet (1" = 150') scale aerial photograph. The field survey included the collection of vegetation, soils, and hydrologic data from one sampling point on the project site; this information was recorded on Wetland Determination Data Form (Attachment B). Representative photographs of the project site are included in Attachment C.

3.0 **RESULTS**

Jurisdictional resources were delineated within the 27.4-acre survey area, as shown on Exhibits 5 and 6. These resources include the natural and concrete trapezoidal channel portions of Zuma Canyon Creek and an artificial drainage created by a sewage spreading area north of Encinal Canyon Road; and Zuma Canyon Creek south of Encinal Canyon Road.

Two pit sampling points were assessed within the project site within Zuma Canyon Creek. Table 1 includes a summary of the pit sampling points.

3.1 **VEGETATION**

The project is developed and contains mostly ornamental landscaping. A few coast live oak trees are located along the northwestern portion of the project site immediately adjacent to the facility buildings on the west side. Much of the portion of Zuma Canyon Creek north of Encinal Canyon Road and outside the developed portions of the site is characterized as a natural ephemeral drainage that includes coast live oak and is dominated by upland shrubs and non-native herbaceous plant species. The concrete trapezoidal channel portion of Zuma Canyon Creek within the project site contains patches of Typha and sedges and other wetland species that are sustained by flows originating from the treated effluent spreading area located west of the facility that flow to this channel. These wetland plants have become established on sediment located on the concrete channel bottom and are expected to be periodically removed during storm events.

Vegetation at Sampling Point No. 1 includes Eucalyptus (*Eucalyptus* spp.), mule fat (*Baccharis salicifolia* [*B. viminea*]), and artichoke thistle (*Cynara cardunculus*). Vegetation at Sampling Point No. 2 includes California sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), and arroyo willow (*Salix lasiolepis*). Sampling Point 1 did not pass the dominance or prevalence test. Sampling Point No. 2 passed the prevalence test; therefore, the hydrophytic vegetation criterion for wetlands was met at this sampling area.

Please note that coast live oak is designated as an upland plant species (UPL) (USACE 2012).

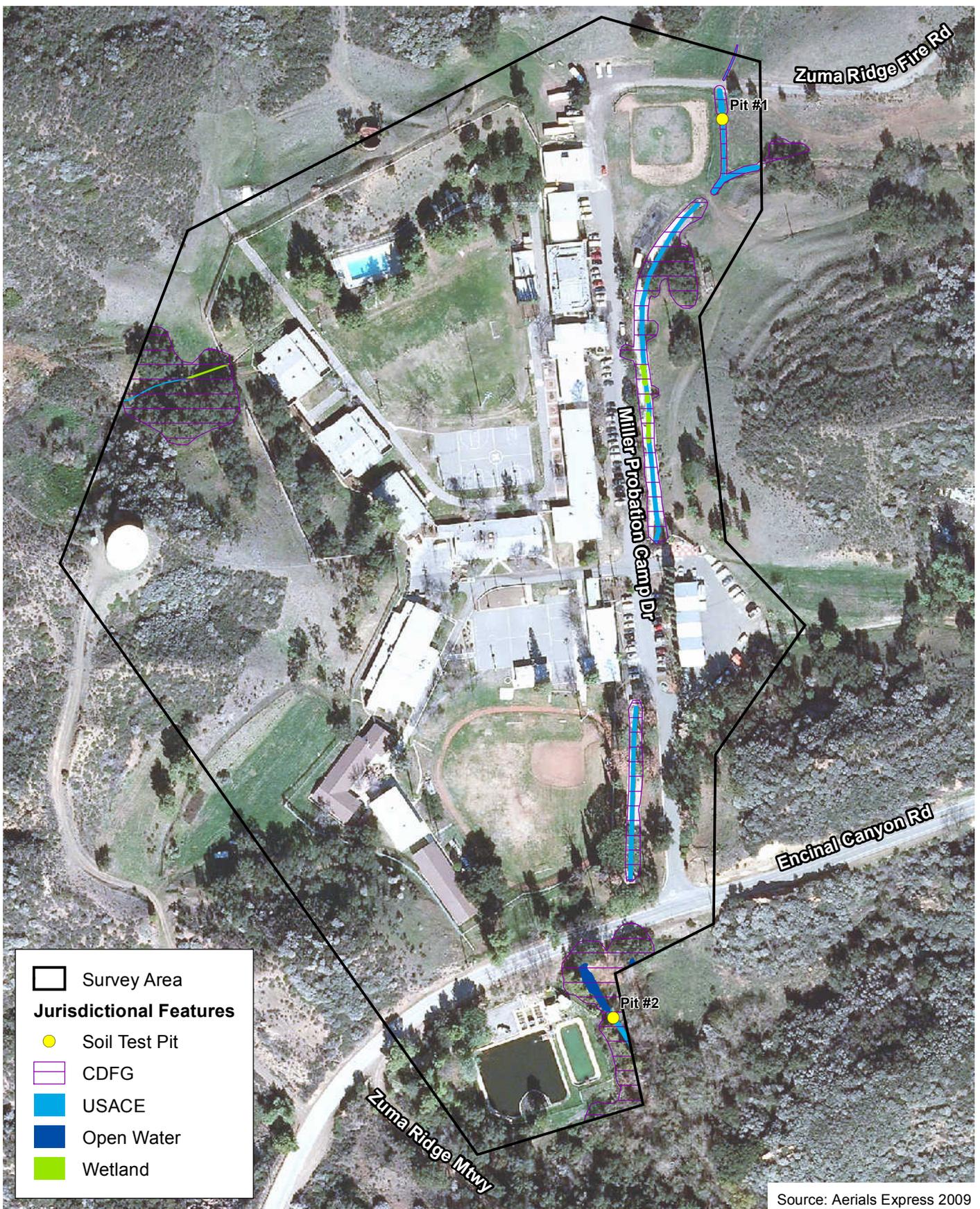
Soils within Zuma Canyon Creek south of Encinal Canyon Road contain hydric soils. Therefore, the hydric soil criterion for wetlands is met within Sampling Point 2 area.

3.2 **HYDROLOGY**

The following indicators of wetland hydrology were observed within Zuma Canyon Creek: sediment deposits and drift deposits (primary indicators) and Drainage patterns (a secondary indicator). Therefore, the wetland hydrology criterion for wetlands was met in this area.

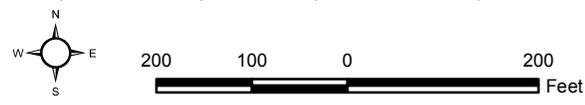
Please note that the drainage feature created by runoff from the treated effluent area also contains elements that would meet the hydrology criterion, even though this drainage was artificially created.

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USACE and CDFG Jurisdictional Resources
 Camp Vernon Kilpatrick Replacement Project

Exhibit 5



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Survey Area
 California Coastal Commission

Source: Aerials Express 2009

California Coastal Commission Jurisdictional Resources

Exhibit 6

Camp Vernon Kilpatrick Replacement Project

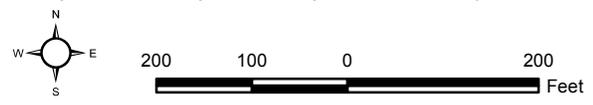


TABLE 1
SUMMARY OF HYDROPHYTIC VEGETATION, HYDRIC SOILS,
AND WETLANDS HYDROLOGY WETLANDS INDICATOR STATUS
BY SOIL TEST PIT LOCATION

Soil Test Pit	Location	Plant species	Common Name	Absolute Percent Cover	Wetland Indicator Status ^a	Passed Dominance Test	Passed Prevalence Index	Meets Hydrophytic Vegetation Criterion	Meets Hydric Soils Criterion	Meets Wetlands Hydrology Criterion
1	Zuma Cyn Creek North of Encinal Cyn Rd	<i>Baccharis salicifolia</i> [<i>B. viminea</i>]	Mulefat	60	FACW	No	No	Yes	No	No
		<i>Eucalyptus</i> spp.	Eucalyptus	40	UPL					
		<i>Cynara cardunculus</i>	Artichoke Thistle	3	UPL					
2	Zuma Cyn Creek South of Encinal Canyon Rd	<i>Quercus agrifolia</i>	Coast Live Oak	40	UPL	No	Yes	Yes	Yes	Yes
		<i>Platanus racemosa</i>	California Sycamore	25	FACW					
		<i>Baccharis salicifolia</i> [<i>B. viminea</i>]	Mulefat	20	FAC					
		<i>Salix lasiolepis</i>	Arroyo Willow	5	FACW					
		<i>Typha</i> spp.	Cattail	10	OBL					
		Non-Native Grasses	Annual Grasses	25	UPL					
<i>Toxicodendron diversilobum</i>	Poison Oak	10	UPL							

^a FACW: facultative wetlands; UPL: Obligate upland; FAC: facultative; OBL: Obligate Wetland.

3.3 CALIFORNIA RAPID ASSESSMENT METHOD

As part of the jurisdictional delineation for the project, BonTerra Consulting evaluated the quality of the jurisdictional resources using the California Rapid Assessment Method (CRAM) at four different locations within the site. CRAM is a wetland monitoring tool that was developed in response to a monitoring framework recommended by the U.S. Environmental Protection Agency (USEPA 2006) to help states meet monitoring requirements stated in the Federal Clean Water Act. Personnel from the U.S. Army Corps of Engineers, California Department of Fish and Game, and the State Water Resources Control Board (among other agencies) participated in the development of CRAM and it is an accepted assessment tool by these agencies. CRAM scores provide an assessment of the level of the various functions and services provided by an aquatic system. CRAM scores result from the evaluation of four equally-weighted attributes: (1) buffer and landscape context; (2) hydrology; (3) physical structure; and (4) biotic structure (Collins et al 2008). A summary of the definition of each of these attributes and associated metrics is provided in Table 2.

**TABLE 2
SUMMARY OF CRAM ATTRIBUTES AND METRICS**

Attribute	Metric	Description	
Buffer and Landscape Context	Landscape Connectivity	Measures connectivity along the riparian corridor for wildlife movement; non-buffer land types are identified 500 meters upstream and downstream of Assessment Area.	
	Buffer Condition	Combination of the three sub-metric scores described below.	
	Sub-metrics	Percent of Assessment Area with Buffer	Measures percentage of Assessment Area perimeter that contains land cover types that provide a buffer.
		Average Buffer Width	Measures the average width of identified buffer land types around Assessment Area.
Buffer Condition		Qualitatively evaluates buffer condition .	
Hydrology	Water Source	Qualitatively evaluates impacts to the extent, duration, and frequency of saturated or ponded conditions .	
	Hydroperiod/Channel Stability	Qualitatively evaluates channel equilibrium, degradation, or aggradation.	
	Hydrologic Connectivity	Measures the entrenchment of the channel to determine the ability for water to inundate adjacent upland areas.	
Physical Structure	Structural Patch Richness	Measures the diversity of physical riparian features that may potentially provide habitat for aquatic species (e.g., vegetated islands, pools, riffles).	
	Topographic Complexity	Qualitatively evaluates the variety of elevations (i.e. micro-topographic heterogeneity).	
Biotic Structure	Plant Community	Average of the three sub-metric scores described below.	
	Sub-metrics	Number of Plant Layers	Identifies of number of plant strata.
		Number of Co-dominant Species	Identifies the number of co-dominant plant species based on visual estimation.
		Percent Invasive Species	Measures the percent of invasive plant species among the co-dominant species identified above.
	Horizontal Interspersion	Qualitatively evaluates the variety and distribution of plant associations.	
Vertical Biotic Structure	Identifies the number and distribution of plant strata.		

CRAM scores for each of the four attributes range from 25 to 100. The attribute scores are then averaged to determine the final CRAM score for a site. The final score is a relative measurement to indicate how an individual site compares to the best achievable conditions.

On August 23 and 24, 2012, BonTerra Consulting Regulatory Specialist David Hughes visited the project site to perform the CRAM assessment. The locations of the four Assessment Areas (AA) are summarized below in Table 3. The size of each AA was defined according to CRAM protocols (i.e., 100 meters long with the width defined as the outer canopy of vegetation that overhung the channel) though AA2 was shortened to approximately 50 meters to encompass the entire reach of that channel. Information recorded in the field included: (1) percentage of the AA that was surrounded by a buffer and the condition of the buffer; (2) number of plant layers within the AA; (3) number of co-dominant species and invasive species; and (4) cross-sectional measurements to determine hydrologic connectivity to adjacent areas. Qualitative factors that were assessed include (1) degree of plant zonation; (2) vertical plant structure; (3) buffer condition; and (4) complexity of the channel's bank features. Worksheets that identified different structural patches and the degree of channel stability were also filled out for use in the assessment. Aerial photos of the site were later analyzed to determine the site's overall landscape connectivity, buffer width, and water sources.

**TABLE 3
ASSESSMENT AREA LOCATIONS**

Assessment Area	Location
1	Artificial drainage in northwest portion of site
2	Tributary to Zuma Creek adjacent to baseball field
3	Upper soft-bottom portion of Zuma Creek
4	Concrete lined portion of Zuma Creek adjacent to parking lot

The CRAM scores for the various channels were generally poor. Each of the channels received the lowest possible scores for landscape connectivity and structural patch richness. Other metrics that generally received poor to moderate scores include buffer condition (mostly due to the high level of non-native species), topographic complexity (due to a disturbed stream banks that were largely uniform or concrete lined), co-dominant plant species (due to generally low plant diversity), horizontal interspersion (due to a lack of habitat heterogeneity), and vertical biotic structure (due to a lack of overlap between plant strata). Metrics that received high scores include percent invasive species (an indication of low presence of invasive riparian species), and water source (an indication of generally undisturbed hydrology, except for AA1 which is fed artificially and AA4 which is partially fed by storm flows). A summary of the results of the CRAM evaluation of the project site is provided in Table 4.

**TABLE 4
SUMMARY OF CRAM SCORES**

Attribute	Metric	CRAM Scores ^a			
		AA1	AA2	AA3	AA4
Buffer and Landscape Context	Landscape Connectivity	D (3)	D (3)	D (3)	D (3)
	Buffer Condition (submetrics below)				
	Percentage of Assessment Area with Buffer	A (12)	C (6)	A (12)	C (6)
	Average Buffer Width	A (12)	C (6)	A (12)	C (6)
	Buffer Condition	B (9)	C (6)	C (6)	D (3)
Attribute Score		55.8	37.5	47.9	30.2
Hydrology	Water Source	C (6)	A (12)	A (12)	B (9)
	Hydroperiod/Channel Stability	B (9)	B (9)	A (12)	D (3)
	Hydrologic Connectivity	A (12)	B (9)	A (12)	D (3)
Attribute Score		75.0	83.3	100.0	41.7
Physical Structure	Structural Patch Richness	D (3)	D (3)	D (3)	D (3)
	Topographic Complexity	C (6)	C (6)	C (6)	D (3)
Attribute Score		37.5	37.5	37.5	25.0
Biotic Structure	Plant Community (submetrics below)				
	Number of Plant Layers	A (12)	B (9)	B (9)	A (12)
	Number of Co-dominant Species	C (6)	D (3)	C (6)	C (6)
	Percent of Invasive Co-dominant Species	A (12)	A (12)	A (12)	A (12)
	Horizontal Interspersion/Plant Zonation	D (3)	D (3)	C (6)	D (3)
	Vertical Biotic Structure	C (6)	D (3)	C (6)	D (3)
Attribute Score		52.8	38.9	58.3	44.4
Overall Assessment Area Score^b		55.3	49.3	60.9	35.3
^a RAM scores are indicated by the letter score (A through D) that is assigned to each metric and the corresponding numeric value of that score is in parentheses.					
^b The overall CRAM score is calculated by averaging the four attribute scores.					

4.0 JURISDICTIONAL DELINEATION

4.1 U.S. ARMY CORPS OF ENGINEERS DETERMINATION

“Waters of the U.S.” (Non-Wetland) Determination. Zuma Canyon Creek flows to the Pacific Ocean. Therefore, the required federal nexus to Traditional Navigable Waterway has been met and would be considered jurisdictional. Based on the field observations and data collected, 0.195 acre of non-wetland “Waters of the U.S.” (0.167 acre non-wetlands waters and 0.028 acre of open water) occur in the survey area. Based on the current project limits of disturbance, approximately 0.038 acre non-wetland water resources (0.038 acre permanent) would be impacted by project development (Exhibit 5; Table 5).

Wetlands Determination. As previously described in Section 2.0 of this report, an area must exhibit all three wetland parameters, as described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008c) and the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) in order to be considered a jurisdictional wetland. Hydrophytic vegetation, wetland hydrology, and hydric soils were present in Zuma Canyon Creek south of Encinal Canyon Road. Therefore, approximately 0.021 acre of wetland “Waters of the U.S.” occur in the survey area. Based on the current project limits of disturbance, approximately 0.005 acre would be permanently impacted by project development (Exhibit 5, Table 5).

TABLE 5
USACE JURISDICTIONAL “WATERS OF THE U.S.”, ISOLATED WATERS,
AND CDFG JURISDICTIONAL “WATERS OF THE STATE”
IN THE SURVEY AREA

Jurisdiction	Existing Jurisdictional Resources Within the Study Area (Acres)	Permanent
USACE Non-Wetland Waters	0.167	0.038
Open Water	0.028	0.000
USACE Wetlands	0.021	0.005
Total USACE “Waters of the U.S.”	0.216	0.043
Total CDFG Waters of the State	1.440	0.240
Total California Coastal Commission Wetlands	0.216	0.043

4.2 CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD DETERMINATION

The RWQCB jurisdictional boundaries are defined as those determined for the USACE under “Waters of the U.S.”. However, the RWQCB takes jurisdiction over both connected and isolated waters. Based on the field observations and data collected, approximately 0.216 acre under the jurisdiction of the RWQCB occur (0.167 acre non-wetlands waters, 0.028 open water, and 0.021 acre wetlands) in the survey area. Based on the current project limits of disturbance, approximately 0.043 acre (0.038 acre non-wetlands waters and 0.005 acre wetlands) would be permanently impacted by project development (Exhibit 5; Table 5).

4.3 CALIFORNIA DEPARTMENT OF FISH AND GAME DETERMINATION

The CDFG jurisdiction extends from the top of the bank to the top of the bank, except where there is adjacent riparian vegetation. Based on field observations and data collected, a total of 1.440 acres of “Waters of the State” under CDFG jurisdiction pursuant to Section 1602 of the *California Fish and Game Code* occur in the project area. Based on the current project limits of disturbance, approximately 1.440 acre of resources under the jurisdiction of CDFG occur within the project area and approximately (0.240 acre would be permanently) would be impacted by project development (Exhibit 5; Table 5).

4.4 CALIFORNIA COASTAL COMMISSION DETERMINATION

The California Coastal Commission determines wetlands based on Title 14 of the *California Code of Regulations* (CCR), which establishes a “one parameter definition” that only requires evidence of a single parameter to establish wetland condition (14 CCR §13577):

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

Therefore, the boundaries of a wetland are determined by the extent of one or more key wetland characteristics: hydrology, hydric soils, and hydrophytic vegetation. The size and extent of CCC wetland boundaries may also be determined by current and/or historical aerial photographs, national wetland inventory maps, and soil conservation maps.

Approximately 0.216 acre of resources under the jurisdiction of the California Coastal Commission occurs within the project site. Based on the current project limits of disturbance, approximately 0.043 acre of jurisdictional resources under the jurisdiction of CCC would be permanently impacted by project development (Exhibit 6; Table 5).

5.0 CONCLUSION OF REGULATORY APPROVAL PROCESS

5.1 REGULATORY PERMIT REQUIREMENTS

The following is a general summary of the various permits, agreements, and certifications required prior to initiation of project activities that would involve impacts to areas under the jurisdiction of the USACE, RWQCB, CDFG, and CCC.

- USACE Section 404 Permit;
- RWQCB Section 401 Water Quality Certification;
- CDFG Section 1602 Streambed Alteration Agreement; and
- CCC Coastal Development Permit.

It should be noted that all regulatory permit applications can be processed concurrently. The USACE permit would be issued subject to the receipt of the RWQCB's Section 401 Water Quality Certification and the CCC Coastal Development Permit. There is no filing fee for the Section 404 Permit. The Section 401 Water Quality Certification filing fee has a \$944 base fee with additional fees based on the size of the dredge or fill unless the project qualifies for a flat fee. For low impact discharges (e.g., discharge of less than 0.1 acre, 200 linear feet, and 25 cubic yards), there is no charge above the base fee. For fill and excavation discharges, there is a rate of \$4,059 per acre of discharge. For dredging discharges, there is a rate of \$0.15 per cubic yard of dredge volume. For discharges to isolated waters, the applicable fee is doubled, except for restoration projects. In addition, pursuant to Section 6103 of the *California Government Code*, public entities (such as the County) are exempt from the fees set forth in this schedule.

The CDFG's Streambed Alteration Agreement filing fee is based on project cost and length of permit authorization. For projects lasting five years or less, the maximum fee is \$4,482.75 for projects costing \$500,000 or more; the fee decreases as cost decreases. For projects lasting longer than five years, there is a base fee of \$2,689.50 plus a maximum of \$4,482.75. The current fee schedule can be found on the CDFG website at: <http://www.dfg.ca.gov/habcon/1600/forms.html>. The CDFG will not deem the application to be complete until the application fees have been paid and the agency is provided with a certified California Environmental Quality Act (CEQA) document and a signed copy of the receipt of County Clerk filing fees for the Notice of Determination (NOD). In addition, land use jurisdictions can no longer make "de minimis" findings if they determine that the project will not impact resources under the CDFG's jurisdiction. Therefore, the finding of "No Impact" to the CDFG jurisdictional resources must now be made by the CDFG prior to the payment of CDFG fees.

A detailed explanation of the regulatory permitting requirements for impacts to jurisdictional resources is provided in Sections 5.2 through 5.5.

5.2 U.S. ARMY CORPS OF ENGINEERS

Regulatory authorization in the form of an NWP is provided for certain categories of activities (e.g., repair, rehabilitation, or replacement of a structure or fill which was previously authorized; utility line placement; bank stabilization). On March 19, 2012, the USACE approved the new NWPs which will be in effect until March 18, 2017. NWPs authorize only those activities with minimal adverse effects on the aquatic environment and are valid only if the conditions applicable to the permits are met or waivers to these conditions are provided in writing from the USACE. Please note that waivers may require consultation with affected federal and State agencies, a lengthy process with no mandated processing time frames. If these conditions cannot be met, an Individual Permit (IP) will be required. "Waters of the U.S." temporarily filled, flooded, excavated, or drained but restored to pre-construction contours and elevations after construction are not included in the measurement of loss of "Waters of the U.S.". The appropriate permit authorization will be based on the amount of impacts to "Waters of the U.S.", as determined by the USACE.

5.2.1 Jurisdictional Determinations

Pursuant to USACE Regulatory Guidance Letter (RGL) 08-02 (dated June 26, 2008), the USACE can issue two types of jurisdictional determinations to implement Section 404 of the CWA: Approved Jurisdictional Determinations and Preliminary Jurisdictional Determinations (USACE 2008a). An Approved Jurisdictional Determination is an official USACE determination that jurisdictional "Waters of the U.S.", "Navigable Waters of the U.S.", or both are either present or absent on a site. An Approved Jurisdictional Determination also identifies the precise limits of jurisdictional waters on a project site.

The USACE will provide an Approved Jurisdictional Determination when (1) an applicant requests an official jurisdictional determination; (2) an applicant contests jurisdiction over a particular water body or wetland; or (3) when the USACE determines that jurisdiction does not exist over a particular water body or wetland. The Approved Jurisdictional Determination then becomes the USACE's official determination that can then be relied upon over a five-year period to request regulatory authorization as part of the permit application.

In addition, an Applicant may decline to request an Approved Jurisdictional Determination and instead obtain a USACE IP or General Permit Authorization based on a Preliminary Jurisdictional Determination or, in certain circumstances (e.g., authorizations by non-reporting nationwide general permits), with no Jurisdictional Determination.

Preliminary Jurisdictional Determinations are non-binding, advisory in nature, and may not be appealed. They indicate that there may be "Waters of the U.S." on a project site. An applicant may elect to use a Preliminary Jurisdictional Determination to voluntarily waive or set aside questions regarding CWA jurisdiction over a site, usually in the interest of allowing the applicant to move ahead expeditiously with the permitting process. The USACE will determine what form of Jurisdictional Determination is appropriate for a particular project site. Given the type and extent of project impacts and duration of construction, the USACE will likely approve the Jurisdictional Delineation Report through a Preliminary Jurisdictional Determination.

On January 31, 2007, the USACE published a memorandum clarifying the Interim Guidance for amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) implementing regulations (USACE 2007). The Interim Guidance applies to all Department of the Army requests for authorization/verification, including Individual Permits (standard permits and letters of permission) and all Regional General Permits (RGPs) and NWPs. The State or Tribal Historic Preservation Officer (SHPO/THPO) has 30 days to respond to a determination that a proposed activity, that otherwise qualifies for an NWP or RGP, has no effect

or no adverse effect on a historic property. If the SHPO/THPO does not respond within 30 days of notification, the Los Angeles District may proceed with verification. If the SHPO/THPO disagrees with the District's determination, the District may work with the SHPO/THPO to resolve the disagreement or request an opinion from the ACHP. The USACE will submit the Draft Jurisdictional Delineation Report to the SHPO/THPO for review prior to initiating the actual regulatory process.

The USACE Regulatory Branch Offices will coordinate with the USEPA Regional Office and USACE Headquarters (HQ), as outlined in its January 28, 2008, memorandum entitled the "Process for Coordinating Jurisdictional Delineations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the *Rapanos* and *SWANCC* Supreme Court Decisions" (USACE 2008b). The guidance provided in this memorandum is quoted as follows:

1. Effective immediately, unless and until paragraph 5(b) of the June 5, 2007, *Rapanos* guidance coordination memorandum is modified by a joint memorandum from Army and EPA, we will follow these procedures:
 - a. For jurisdictional determinations involving significant nexus determinations, USACE districts will send copies of draft jurisdictional delineations via e-mail to appropriate EPA regional offices. The EPA regional office will have 15 calendar days to decide whether to take the draft jurisdictional delineation as a special case under the January 19, 1989, "Memorandum of Agreement Between the Department of the Army and the USEPA Concerning the Determination of the Section 404 Program and the Application of the Exceptions under Section 404(f) of the Clean Water Act." If the EPA regional office does not respond to the district within 15 days, the district will finalize the jurisdictional determination.
 - b. For jurisdictional determinations involving isolated waters determinations, the agencies will continue to follow the procedure in paragraph 5(b) of June 5, 2007, coordination memorandum, until a new coordination memorandum is signed by USACE and EPA. (In accordance with paragraph 6 of the June 5, 2007, coordination memorandum, this is a 21-day timeline that can only be changed through a joint memorandum between agencies).
2. Approved JDs are not required for non-reporting NWP, unless the project proponent specifically requests an approved JD. For proposed activities that may qualify for authorization under a State Programmatic General Permit (SPGP) or RGP, an approved JD is not required unless requested by the project proponent.
3. The USACE will continue to work with EPA to resolve the JDs involving significant nexus and isolated waters determinations that are currently in the elevation process.
4. USACE districts will continue posting completed Approved JD Forms on their web pages.

Please note that if the USACE determines that the channels are jurisdictional and would be impacted by project implementation, the Applicant will be required to obtain a CWA Section 401 Water Quality Certification from the RWQCB before the USACE will issue the Section 404 permit. That is, the USACE may issue a "Denial Without Prejudice" as part of the issuance of the Section 404 permit that makes the permit valid once the Section 401 Water Quality Certification is issued. If the USACE determines that the impacted drainage is not jurisdictional, the Applicant will be required to obtain RWQCB authorization under the provisions of a Report of Waste Discharge (ROWD).

Please also note that the USACE has prepared Draft Guidelines on Identifying Waters Protected by the Clean Water Act (Act) to implement the U.S. Supreme Court's decisions concerning the extent of waters covered by the Act (*Solid Waste Agency of Northern Cook County v. USACE* [SWANCC] and *Rapanos v. United States* [Rapanos]). The review period for the draft guidelines ended in July 2011. The USEPA and the USACE will now consider comments received on the draft guidelines, make revisions where appropriate, finalize and undertake rulemaking consistent with the Administrative Procedure Act. The result will be a "nonbinding guidance" for the identification of resources under the jurisdiction of the USACE. The final guidance will not affect jurisdictional delineations that have already received approval from the USACE.

5.3 REGIONAL WATER QUALITY CONTROL BOARD

As noted above, issuance of the USACE Section 404 permit would be contingent upon the approval of a Section 401 Water Quality Certification from the Los Angeles RWQCB. Also, the RWQCB requires certification of the project's CEQA documentation before it will approve the Section 401 Water Quality Certification or ROWD. The RWQCB, as a responsible agency, will use the project's CEQA document to satisfy its own CEQA-compliance requirements.

Upon acceptance of a complete permit application, the RWQCB has between 60 days and 1 year to make a decision regarding the permit request. That is, USACE regulations indicate that the RWQCB has 60 days from the date of receipt of a completed application that requests water quality certification to make a decision (33 CFR §325.2[b][1][ii]). The USACE District Engineer may specify a longer time (up to one year) or shorter time based on his/her determination of a reasonable processing time (33 CFR §325.2[b][1][ii]). If the RWQCB determines that more than 60 days are needed to process the request, it has the option of requesting additional time from the USACE. Also, the RWQCB has the option of issuing a "Denial Without Prejudice", which does not mean that the request is denied, but that it requires more information in order to make a decision. This effectively stops the processing clock until this information is provided.

The RWQCB is required under *California Code of Regulations* (CCR) (Title 23, §3858[a]) to have a "minimum 21 day public comment period" before any action can be taken on the Section 401 application. This period closes when the RWQCB acts on the application. Since projects often change or are revised during the Section 401 permit process, the comment period can remain open. The public comment period starts as soon as an application has been received. Generally, the RWQCB Section 401, USACE Section 404, and CDFG Section 1602 permit applications are submitted at the same time. However, the RWQCB Section 401 Water Quality Certification may take longer to process.

The RWQCB requires the Applicant to address urban storm water runoff during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended to address the treatment of pollutants carried by storm water runoff and are required in all complete applications. Please note that the application would also require the payment of an application fee, which would be based on project impacts.

5.4 CALIFORNIA DEPARTMENT OF FISH AND GAME

The CDFG regulates all work (including initial construction and ongoing operation and maintenance) that may substantially divert or obstruct the natural flow of or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake through its Streambed Alteration Program. An Applicant must enter into an agreement with the CDFG to ensure no net loss of wetland values and acreages.

Impacts resulting from Project implementation will require a Section 1602 Streambed Alteration Agreement. The Streambed Alteration Agreement must address the initial construction and long-term operation and maintenance of any structures within areas identified as “Waters of the State” (such as a culvert or desilting basin) that may require periodic maintenance if these are included in the project design.

Prior to construction, a notification (Streambed Alteration Agreement application) must be submitted to the CDFG that describes any proposed streambed alteration contemplated by the proposed project. In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., Mitigated Negative Declaration) should be included in the submittal, consistent with CEQA requirements. The CDFG will prepare a draft Streambed Alteration Agreement, which will include standard measures to protect sensitive plant and wildlife resources during project construction and during ongoing operation and maintenance of any project element that occurs within a CDFG jurisdictional area.

If a Streambed Alteration Agreement is required, the CDFG may want to conduct an on-site inspection. The CDFG then prepares a draft Agreement, which will include measures to protect fish and wildlife resources that will be directly or indirectly impacted by project construction. The draft agreement will be transmitted to the Applicant within 60 calendar days of the CDFG’s determination that the notification is complete. It should be noted that the 60-day timeframe may not apply to long-range agreements.

The Applicant has 30 calendar days to notify the CDFG concerning the acceptability of the proposed terms, conditions, and measures. If the Applicant agrees with these terms, conditions, and measures, the agreement must be signed and returned to the CDFG. The agreement becomes final once the CDFG executes it and a Streambed Alteration Agreement is issued. Please note that all application fees must be paid and the final certified CEQA documentation must be provided prior to the CDFG’s execution of the agreement.

If the CDFG does not respond in writing concerning the completeness of the Notification within 30 days of its submittal, the Notification automatically becomes complete. If the CDFG does not submit a draft Streambed Alteration Agreement to the Applicant within 60 days of the determination of a completed Notification package, the CDFG will issue a letter that either (1) identifies the final date to transmit a draft Streambed Alteration Agreement or (2) indicates that a Streambed Alteration Agreement was not required. The CDFG will also indicate that it was unable to meet this date and that, by law, the Applicant must complete the project without a Streambed Alteration Agreement and must comply with all avoidance, minimization, and mitigation measures described in the submitted Notification package.

5.5 CALIFORNIA COASTAL COMMISSION

As previously noted, the CCC retains jurisdiction over all proposed land use requests pursuant to the Santa Monica Mountains Land Use Plan and the Coastal Act until the CCC certifies the Santa Monica Mountains LCP. Once LCP certification occurs, the County will be authorized to issue coastal development permits (CDPs).

Once a CDP application is submitted to the CCC, the CCC has 30 days to determine if the application is complete or to request additional information. The application requires the following information: (1) proof of applicant’s interest in the property (recorded deed); (2) Copy of any environmental documents (Draft and Final Environmental Impact Reports, Environmental Impact Statements, or Mitigated Negative Declaration); (3) verification of all other permits, permissions or approvals applied for or granted by public agencies; (4) estimated project cost; (5) square footage of proposed building, parking, and landscape areas; (6) cubic yards of cut

and fill and imported materials; (7) types and extension of utilities; (8) type, size, and number of trees to be removed; (9) description of existing structures; and (10) an alternatives analysis.

Although a CDP request can be submitted concurrently with USACE, CDFG, and RWQCB permit applications, it generally takes longer to process than any of these permits. It should be noted that the USACE may not issue the CWA Section 404 permit until the CDP is issued by the CCC.

5.6 RECOMMENDATIONS

Based on the conclusions of this Jurisdictional Delineation Report, the following recommendations are identified:

1. Schedule a pre-application meeting with USACE, CDFG, RWQCB, and CCC staff to discuss site conditions; biological and jurisdictional resources; the proposed project; impacts to these resources resulting from the proposed project; proposed minimization measures and the mitigation program to offset these impacts; and the regulatory permit process, including the need for an Approved Jurisdictional Determination or a Preliminary Jurisdictional Determination. The USACE will likely approve a Preliminary Jurisdictional Determination as the appropriate jurisdictional determination given the extent of project impacts and the length of project construction. Prepare and process a USACE Section 404 Permit; an RWQCB Section 401 Water Quality Certification; a CDFG Section 1602 Streambed Alteration Agreement; and the appropriate jurisdictional determination form approved by the USACE.
3. The Project Applicant should consider mitigating jurisdictional impacts resulting from project implementation on site through the preparation of a Habitat Mitigation Monitoring Plan (HMMP). The preparation of an HMMP early in the process will help to accelerate and shorten the regulatory permitting process. Mitigation ratios for impacts to USACE jurisdictional resources would be based on the California Rapid Assessment Method (CRAM) assessment and the USACE's Standard Operating Procedure for Determination of Mitigation Ratios mitigation.

6.0 REFERENCES

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ATTACHMENT A

SOIL SURVEY

The Official Soil Series Descriptions identified below were obtained from the U.S. Department of Agriculture, Natural Resources Conservation Service.²

Cotharin-Talepop Association:

The Cotharin-Talepop soils The Cotharin series consists of soils that are shallow to fractured bedrock and are well drained. These soils formed in residuum and colluvium derived from metavolcanic rock. They are on hills and mountains. Slopes are 15 to 75 percent. The mean annual precipitation is 18 to 24 inches (457 to 610 millimeters), the mean annual air temperature is 60 to 64 degrees F (15.5 to 17.5 degrees C), and the frost-free season is 290 to 350 days. Elevation is 380 to 3,110 feet (116 to 948 meters).are shallow, steep to very steep, well drained soils that formed in igneous volcanic rock.

Range in Characteristics:

This association contains rock and rock outcrop on hills and mountains. Cotharin loam in an area of Cotharin-Talepop association, 15 to 50 percent slopes; on a hillside at an elevation of 740 feet (226 meters), about 1 1/4 miles west of Arroyo Sequit and 500 feet northeast of Mulholland Highway; 3,750 feet east and 700 feet south of the northwest corner of sec. 18, T. 1 S., R. 19 W.; latitude 34 degrees, 5 minutes, 14 seconds north and longitude 118 degrees, 54 minutes, 42 seconds west; NAD 27; Triunfo Pass Quadrangle.

Drainage and Permeability:

Cotharin-Talepop soils are well drained and were formed in igneous volcanic rock

Kayiwish Association:

The Kayiwish series consists of soils that are moderately deep to soft bedrock and are moderately well drained. These soils formed in residuum and colluvium derived from metavolcanic rock. They are on hills. Slopes are 0 to 30 percent. The mean annual precipitation is 18 to 24 inches (457 to 610 millimeters), the mean annual air temperature is 60 to 64 degrees F (15.5 to 17.5 degrees C), and the frost-free season is 290 to 350 days. Elevation is 380 to 2,100 feet (116 to 640 meters).

Range in Characteristics:

Kayiwish association, 0 to 9 percent slopes; on the toeslope of a hill at an elevation of 790 feet (241 meters), in Serrano Valley; 460 feet west and 2,200 feet south of the northeast corner of sec. 9, T. 1 S., R. 20 W.; latitude 34 degrees, 6 minutes, 43 seconds north and longitude 119 degrees, 4 minutes, 16 seconds west; NAD 27; Point Mugu Quadrangle.

Drainage and Permeability:

0 to 4 inches (0 to 10 centimeters); very dark grayish brown (10YR 3/2) clay, very dark brown (10YR 2/2) moist; moderate medium angular blocky structure; hard, friable, very sticky and very plastic; common very fine roots between peds; common very fine tubular pores; neutral (pH 6.8 by pH meter, saturated paste); abrupt smooth boundary. 4 to 21 inches (10 to 53 centimeters); very dark grayish brown (10YR 3/2) clay, very dark brown (10YR 2/2) moist; moderate medium angular blocky structure; hard, friable, very sticky and very plastic; 75

² U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS). 2007. Soil Survey Geographic (SSURGO) Database for Santa Monica Mountains Recreation Area, Parts of Los Angeles and Ventura Counties, California. Fort Worth, TX: USDA, NRCS. <http://soils.usda.gov/technical/classification/osd/index.html>.

percent slickensides (pedogenic); neutral (pH 6.9 by pH meter, saturated paste); abrupt smooth boundary. 21 to 24 inches (53 to 60 centimeters); 30 percent brown (10YR 4/3) and 70 percent very dark grayish brown (10YR 3/2) clay, 30 percent dark brown (10YR 3/3) and 70 percent very dark brown (10YR 2/2) moist; moderate medium angular blocky structure; hard, friable, very sticky and very plastic; neutral (pH 6.9 by pH meter, saturated paste); abrupt smooth boundary. 24 to 27 inches (60 to 68 centimeters); extremely weakly cemented, soft metavolcanic rock that can easily be dug. Soil is well drained and were formed in sandstone and shale.

ATTACHMENT B
WETLAND DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Camp Kilpatrick City/County: Los Angeles County Sampling Date: 7/20/2012
 Applicant/Owner: County of Los Angeles State: CA Sampling Point: 1
 Investigator(s): Gary Medeiros Section, Township, Range: T1S,R19W,sec11
 Landform (hillslope, terrace, etc.): riverine Local relief (concave, convex, none): concave Slope (%): 8
 Subregion (LRR): CA Lat: 34° 05' 27.84"N Long: 118° 50' 14.59"W Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: Sampling point is within an ephemeral drainage that flows south to Zuma/Trancas Canyon then to the Pacific Ocean.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u>Eucalyptus spp.</u>	<u>40</u>	<u>Yes</u>	<u>UPL</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
	<u>40</u>	= Total Cover			
Sapling/Shrub Stratum (Plot size: <u>5'</u>)					
1. <u>Baccharis salicifolia [B. viminea]</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>60</u> x 3 = <u>180</u> FACU species _____ x 4 = _____ UPL species <u>120</u> x 5 = <u>600</u> Column Totals: <u>180</u> (A) <u>780</u> (B) Prevalence Index = B/A = <u>4.33</u>	
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
	<u>60</u>	= Total Cover			
Herb Stratum (Plot size: <u>5'</u>)					
1. <u>Non-Native Grasses</u>	<u>20</u>	<u>No</u>	<u>UPL</u>		
2. <u>Cynara cardunculus</u>	<u>40</u>	<u>Yes</u>	<u>UPL</u>		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
	<u>60</u>	= Total Cover			
Woody Vine Stratum (Plot size: <u>30'</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust _____					
Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)					
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.					
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>					

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10YR 3/2	100					Course sand	I

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock
 Depth (inches): 4

Hydric Soil Present? Yes No

Remarks:

The sample site is an ephemeral drainage.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The sample site is an ephemeral drainage.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Camp Kilpatrick City/County: Los Angeles County Sampling Date: 7/20/2012
 Applicant/Owner: County of Los Angeles State: CA Sampling Point: 2
 Investigator(s): Gary Medeiros Section, Township, Range: T1S,R19W,sec11
 Landform (hillslope, terrace, etc.): riverine Local relief (concave, convex, none): concave Slope (%): 1-2
 Subregion (LRR): CA Lat: 34° 05' 40.85"N Long: 118° 50' 12.53"W Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: Sampling point is within a perennial drainage that flows south to Zuma/Trancas Canyon and then to the Pacific Ocean.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Platanus racemosa</u>	<u>25</u>	<u>No</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
2. <u>Quercus agrifolia</u>	<u>40</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Salix lasiolepis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
4. _____	<u>70</u>	= Total Cover		Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>10</u> x 1 = <u>10</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>50</u> (A) <u>90</u> (B) Prevalence Index = B/A = <u>1.8</u>
Sapling/Shrub Stratum (Plot size: <u>5'</u>)				
1. <u>Baccharis salicifolia [B. viminea]</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>	
2. _____				
3. _____				
4. _____				
5. _____	<u>10</u>	= Total Cover		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Non-Native Grasses</u>	<u>25</u>	<u>No</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Typha spp.</u>	<u>10</u>	<u>No</u>	<u>OBL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____	<u>35</u>	= Total Cover		
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. <u>Toxicodendron divesilobum</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	
2. _____				
	<u>10</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust _____				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____				

Remarks:
 Coast live oak woodland with scattered California sycamore.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	5YR 2.5/2	100					Silty sand	I

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Remarks:
 Open water and hydrogen sulfide smell in soil sample. Flows are perennial due to the on-going application of treated effluent that is spread on a hillside north west of the project site.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input checked="" type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input checked="" type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Remarks:
 This drainage receives perennial flows from in the northwestern portion of the site via an effluent discharge spreading area.