L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

REVISED JURISDICTIONAL DELINEATION WITH LEAST ENVIRONMENTALLY DAMAGING PRACTICAL ALTERNATIVE FOR THE CITY OF MONROVIA HIGHLAND DESILTING BASIN AND 3 RESIDENTIAL UNITS

±7.8 Acre Property, ±7.8 Acres Surveyed

AIN 8503-013-004, City of Monrovia, Sections 22 & 23, Township 1 North, Range 11 West, USGS Mount Wilson 7.5' Topographic Quadrangle Map

Prepared For:

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Report Summary:

This report documents the presence of one (1) jurisdictional drainage and 10 associated tributaries subject to regulation by the California Department of Fish and Wildlife (CDFW) under the 1600 Code and RWQCB under the Porter-Cologne Water Quality Act. There are no State or Federal Wetlands present and no "Waters of the U. S." subject to the Clean Water Act Section 401 and 404. The current development plan will impact 0.29 acres of CDFW Streambeds and XX acres of RWQCB State Waters.

Delineation Conducted By: Leslie Nay Irish
Delineation Conducted On: July 26, 2019
Report Date: September 11, 2019, Updated May 15 2024

Celebrating 20+ Years of Service to Southern CA and the Great Basin, WBE Certified (Caltrans, CPUC, WBENC)
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MANAGEMENT SUMMARY

At the request of Todd Bowden of Bowden Development, L&L Environmental, Inc. (L&L) conducted a jurisdictional delineation on a property identified as 347 Highland Avenue, ±7.8 acres located in the City of Monrovia, County of Los Angeles, California. In 2024, in response to comments received from the City of Monrovia, L&L updated the regulatory section, modified text sections and modified and added figures to the report. These changes involved an updated Project and changes to the regulatory laws. None of these changes resulted in significant impacts that could not be mitigated through standard measures.

The property contains a single-family home, outbuildings, and a small retention basin in the south-central portion of the site. The Project proposes to remove the existing residence and outbuildings and construct three (3) pads for residential units, a common driveway, and a flood control basin and access road.

The site is located in the southern foothills of the San Gabriel Mountains and consists mainly of steep slopes with the existing and proposed development in the canyon bottom. Conserved open space is located to the north of the site. Most of the northern portion of the site burned in the Madison Fire in 2013. Native vegetation on the site is a mix of coastal scrub and chaparral vegetation with oak woodland in the canyon. There is no wetland or riparian habitat present on the site.

The purpose of a jurisdictional delineation is to quantify the portion of a property that is subject to jurisdiction of the U. S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB). A jurisdictional determination is performed to map the wetland and non-wetland drainages of the property that may be subject to regulation by State or Federal agencies and may require permits prior to disturbance/construction. All jurisdictional delineations are considered preliminary until verified or acted upon by the agencies.

L&L evaluated the site during a series of actions that included pre-survey research and data review followed by a field survey and desktop mapping effort. The research consisted of a review of topographic maps, soils information, aerial photography, and a field examination of vegetation, soils, and hydrology according to the federal three parameter (hydrophilic vegetation, hydric soils, and hydrology) method of wetland delineation (U. S. Department of the Army 1987). Post processing of the data included a review of the field data synthesized with topographic and LiDAR maps and Google Earth. Adjustment occurred where canyon depths, topography, or tree cover necessitated.

Based on wetland delineation training and experience, L&L identified one (1) primary drainage and associated tributaries (2971 lf / 0.57 acre) consisting of ephemeral non-wetland jurisdictional drainages meeting the definition of CDFW California Streambeds and RWQCB Waters of the State under the Porter-Cologne Water Quality Act (as amended 2016). L&L found no state wetlands present and no jurisdiction under the Clean Water Act (federal waters or federal wetlands). When a discharge is proposed to waters outside of the Clean Water Act[1] (federal) jurisdiction, the Water Boards regulate the discharge under Porter-Cologne[2] through the issuance of Waste Discharge Requirements (WDRs) and are referred to as orders or permits.

An evaluation of the planned development indicates that 1,191 lf (0.29 acre) of jurisdictional CDFW California Streambeds and RWQCB Waters of the State would be impacted by the Project. No state or federal wetlands or "Waters of the U. S." will be impacted by the proposed project design as none are present. The project will avoid 0.29 ac of CDFW California Streambeds and RWQCB Waters of the State. The proponent has worked to restrict development to only those areas necessary to achieve the project design. The current project design is the least environmentally damaging practicable alternative (LEDPA).

Consistent with recent changes in the regulatory environment, this document includes an evaluation of jurisdictional drainage functions and values and an avoidance/minimization and mitigation analysis, alternatives assessment, and a least environmentally damaging practicable alternative analysis.

As a result, this report is suitable for a CEQA analysis and may be appended to applications for permits for impacts to jurisdictional drainages. L&L advises the client that CDFW Streambed Alteration (1602) and RWQCB WDR permits will be required for planned impacts and will need to be completed prior to project related disturbances.

[1] Clean Water Act (CWA) and Federal Facilities | US EPA
[2] Porter-Cologne Water Quality Control Act - 2024 Version (ca.gov)

1.0) INTRODUCTION

The following report has been prepared for Todd Bowden of Bowden Development, by L&L Environmental, Inc/ (L&L). This report was prepared to accompany notifications or applications to the Regional Water Quality Control Board, and California Department of Fish and Wildlife (CDFW) for permits or agreements under applicable state laws. The project site, covering AIN 8503-013-004, is a proposed flood control basin and three (3) residences, associated infrastructure and utilities, located in the City of Monrovia, County of LA, California.

L&L recommends the project proponent apply for a Streambed Alteration Agreement (SAA) under the California Department of Fish and Wildlife 1600 Code and a Regional Water Quality Control Board Porter-Cologne Water Quality Control Act Waste Discharge Requirements (WDR) Permit for impacts to waters of the state.

L&L did not find federal waters or wetlands present nor jurisdiction under the Clean Water Act, as a result neither a 404 nor 401 permit is required.

2.0) Property Location

The survey area for the Monrovia Highland Desilting Basin and 3 Residential Unit Development is located on Highland Place above Hillcrest Blvd. in the City of Monrovia (Figure 1). The survey area is a single AIN 8503-013-004 with the physical address of 347 North Highland Place. The site is located within Sections 22 and 23, Township 1 North, Range 11 West of the Mount Wilson 1994 quadrangle (Figure 2).

The site is east of Sierra Madre and West of Duarte. The Santa Anita Wash is on the West and Sawpit Wash is located to the East. The San Gabriel River is located to the East and Southeast (Figure 1). The site is situated within a portion of Sections 22 and 23, Township 1 North, Range 11 West, which is found within the USGS Mount Wilson 7.5' series quadrangle map (Figure 2). The site is generally bounded as follows: to the west by undeveloped land with residential areas beyond; to the east by residential areas; to the north by conserved open space (Hillside Wilderness Preserve); and to the south by residential areas (Figure 3).

2.1) Property Site Description

The parcel can be described as a large residential property containing a single-family home with a guest house, a shed/shop, paved driveway and walkways, retaining walls, and ornamental landscaping confined to the lower elevations of the parcel. This is surrounded by steep hillsides cut with natural drainages within native habitat (Figure 3).

The relatively undisturbed hillsides and ridgelines of the site are inhabited by a mixture of chaparral and coastal scrub plants. Coast live oak woodland is present on the lower canyon slopes within the southern portions of the site. Non-native grasses dominate the oak understory and other open areas.

The elevations are as follows: Street level 686 ft. above mean sea level (AMSL), at the existing residence 763 ft. AMSL, and the highest point of the property (within undeveloped lands) at 1,035 ft. AMSL. Combined maximum vertical relief is roughly 347 feet between the highest and lowest points on the property. Surrounding topographic features in the project vicinity include the San Gabriel Mountains to the North and the San Gabriel River to the East. The parcel is located in an east facing canyon within a south projecting foothill between Santa Anita Wash and Sawpit Wash.

2.1.1 Madison Fire

The Madison Fire started on April 20, 2013 and was contained on April 24, 2013. The fire burned approximately 82 acres entirely within the City of Monrovia. Vegetation in and around the area prior to the fire consisted of grasses, coastal sage scrub, and oak vegetation. No structures were

damaged or destroyed (City of Monrovia 2013). The Madison fire burned approximately 4.85 acres (62 percent) of the Project site, mainly in the northern portion of the site (Figure 7).

The desktop review found that most of the southern extension is also vegetated with laurel sumac scrub and was not burned in the 2013 fire.

2.2) Proposed Project Description

For the purposes of this report, the 'Project site' or 'site' refers to the entire ±7.8-acre property, which consists of AIN 8503-013-004 (Figure 3). The Project impact area is defined as the area that will be directly impacted by implementation of the Project (i.e., grading, demolition, and vegetation removal) and is shown on the Conceptual Grading Plan in Appendix I. The Project impact area is ±1.17 acres.

The proposed project is the construction of a ±52,466 sf basin within area currently utilized as a residential property. The Highland Desilting Basin (Basin) will excavate ±2,030 CY of cut and place ±4386 CY of fill (net 2,556 CY). The bottom elevation will be ±745 ft. AMSL and the bottom area will be ±1,120 sf. The top elevation will be ±754 ft. AMSL with an area of ±3,732 sf and a total volume of 21,834 CF. The basin will be constructed in an area with a current upstream elevation of 760 ft. AMSL and a current elevation at the lowest point of ±760 ft. AMSL. The basin will be constructed within and adjacent to a CDFW streambed (Drainage 1, Figure 4).

One (1) existing residential unit will be removed and three (3) residential units with attached garages, retaining walls, a common driveway, and supporting utilities will be constructed within and immediately adjacent to CDFW streambed (Figure 4).

Residential Unit Pad (RUP) #1 will be constructed just east and downstream of the Basin with a planned Finished Floor (FF) elevation of 755 ft. AMSL. The attached garage will have an FF of 745 ft. AMSL. Minimal grading is required to construct this house pad, as it is primarily within a disturbed portion of the landscaped backyard of the existing residence. The garage will require excavation of the slope and construction of a retaining wall. Planned RUP #1 will begin at existing ground elevation of ±754 ft. AMSL and end at ±743 ft. AMSL.

RUP #2 will be constructed east and downstream of (RUP) #1 with a planned FF elevation of 743 ft. AMSL. The attached garage will have an FF of 733 ft. AMSL. Minimal grading is required to construct this house pad, as it is primarily within a disturbed portion of the current residential use area; specifically, the shed/shop of the existing residence. The garage will require excavation of the slope and construction of a retaining wall. Planned RUP #2 will begin at existing ground elevation of ±742 ft. AMSL and end at ±737 ft. AMSL.

RUP #3 will be constructed east and downstream of (RUP) #2 with a planned FF elevation of 720 ft. AMSL. The attached garage will have an FF of 710 ft. AMSL. Minimal grading is required to construct this house pad, as it is primarily within a disturbed portion of the current residential use area; specifically, within the landscaped front yard of the existing residence. The house will require excavation of the slope. Planned RUP #3 will begin at existing ground elevation of ±720 ft. AMSL and end at ±710 ft. AMSL.

A storm drainpipe will be installed in the shared driveway and will connect the Basin with Highland Place. Several storm drain inlet structures will be constructed along the private driveway. A separate SWIPP and WQ Management Plan will be produced for the project to explain BMPs that will be undertaken to protect downstream water/habitat.

Information from this project description was derived from Drawing Number G-1, Sheet ½, Dated 03-04-2019, a 60% progress drawing by Brad Merrell, PE, RCE, Merrell Johnson Companies of Apple Valley, California (Figure 4).

An additional area referred to as the Annexation Area, or Southern Extension was added to the project description after field work was complete. A desktop review was conducted and found ± three (3) drainages present (Figure 5).

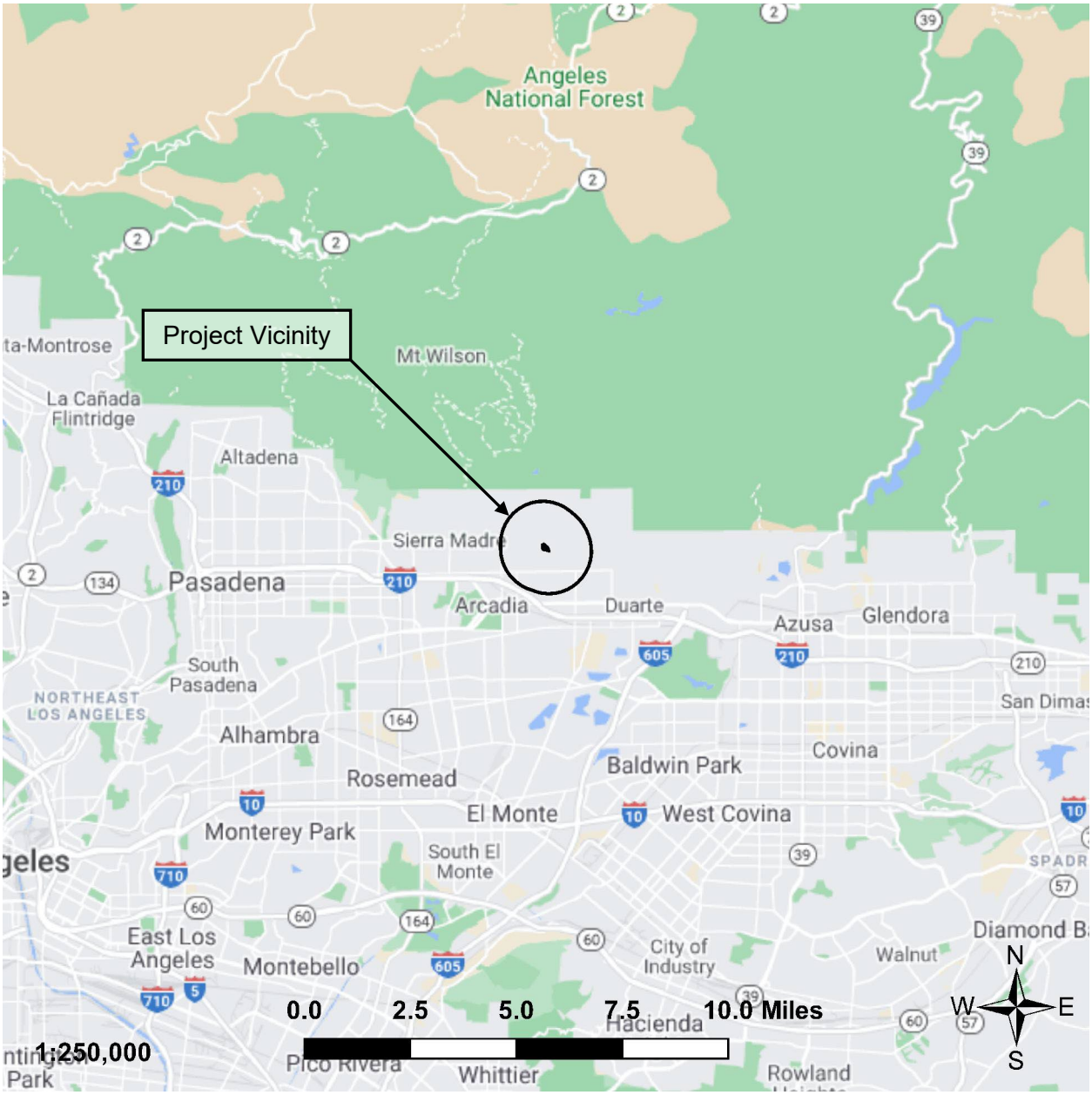

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Figure 1

Project Vicinity

347 North Highland Place, City of Monrovia
County of Los Angeles, California

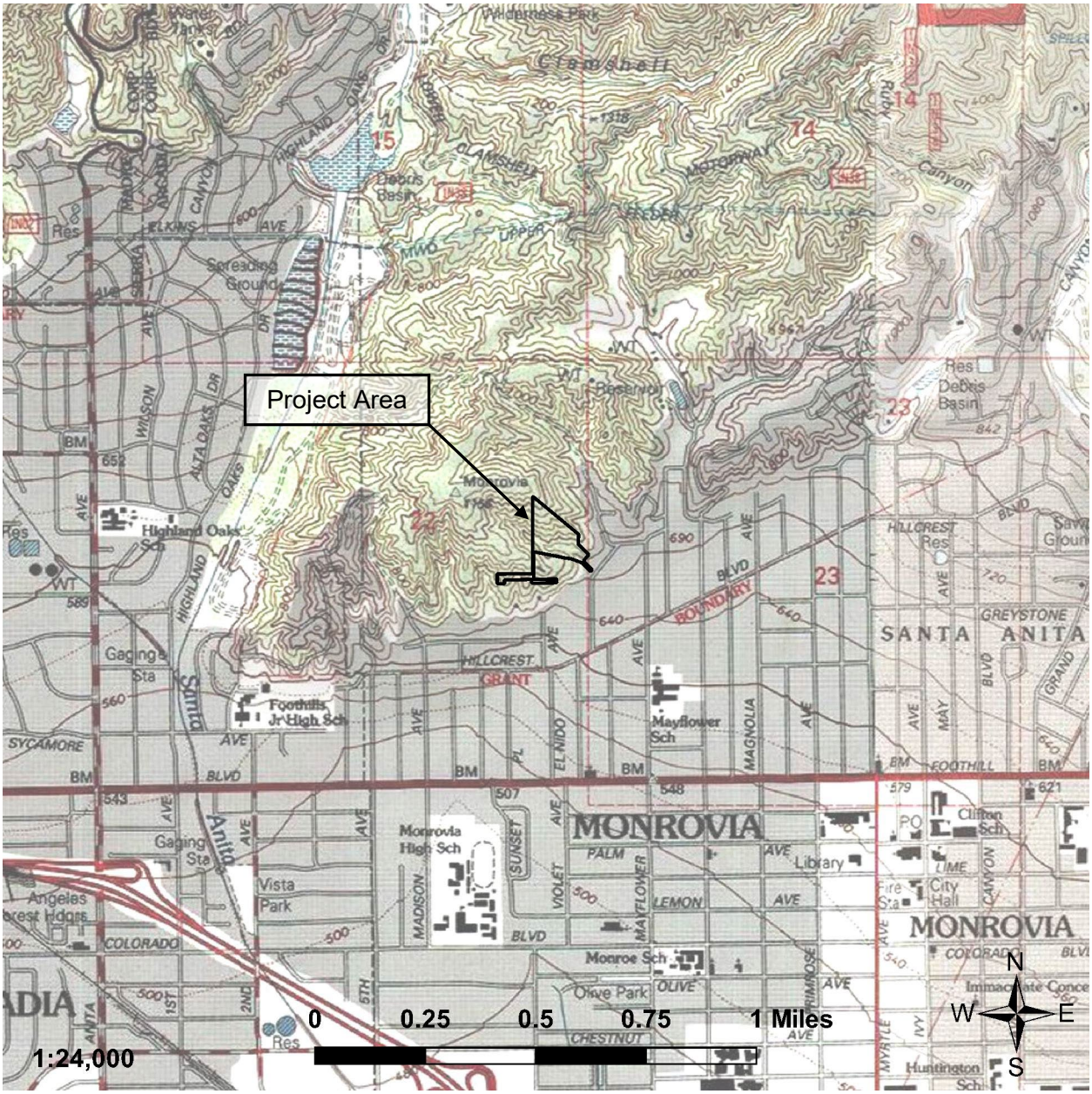

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Figure 2

Project Location Map

(USGS Mount Wilson [1994] quadrangle,
Sections 22 & 23, Township 1 North, Range 11 West)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

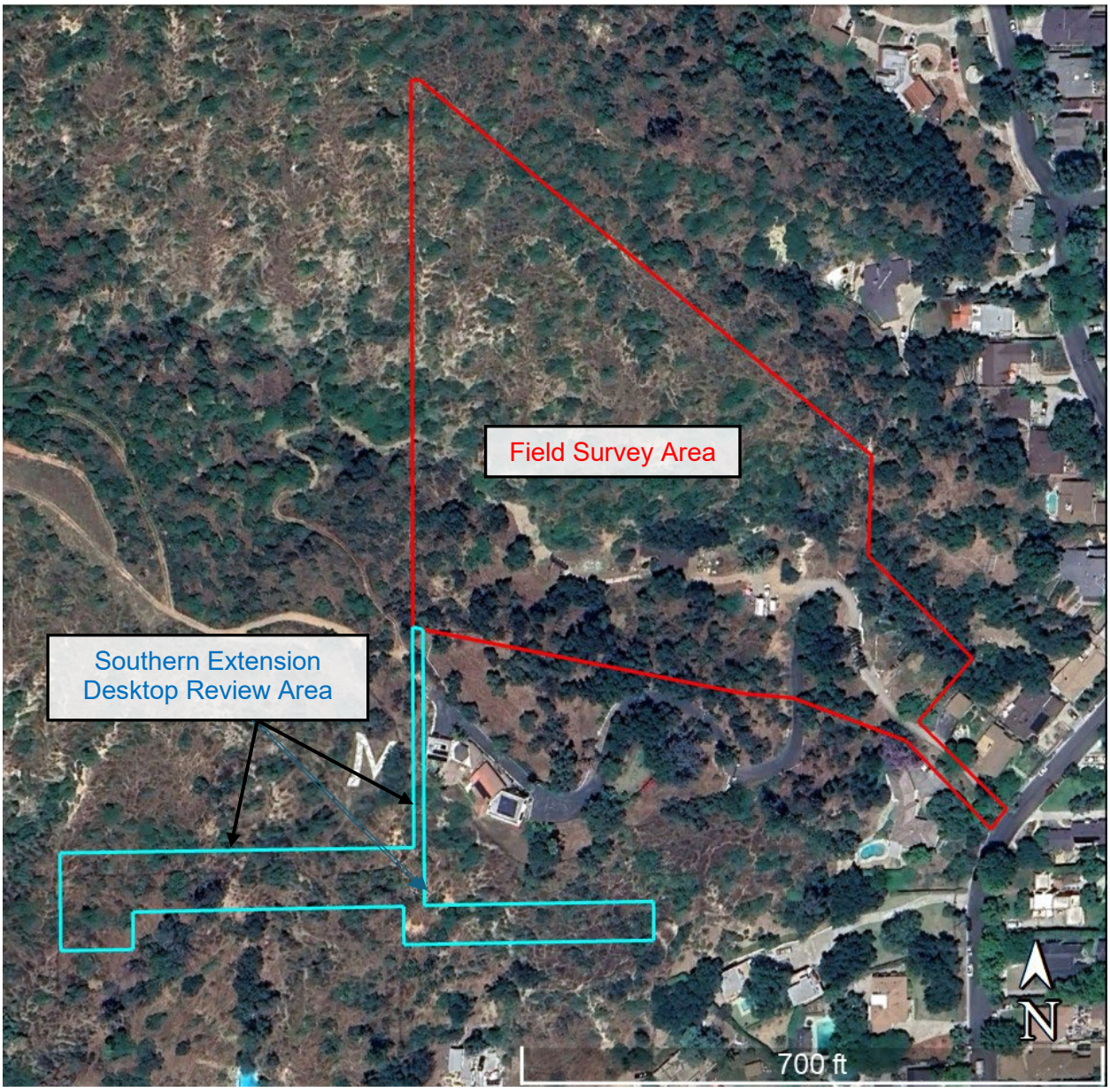

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Figure 3

Survey Area
(Aerial obtained from Google Earth, 5/2/2019)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

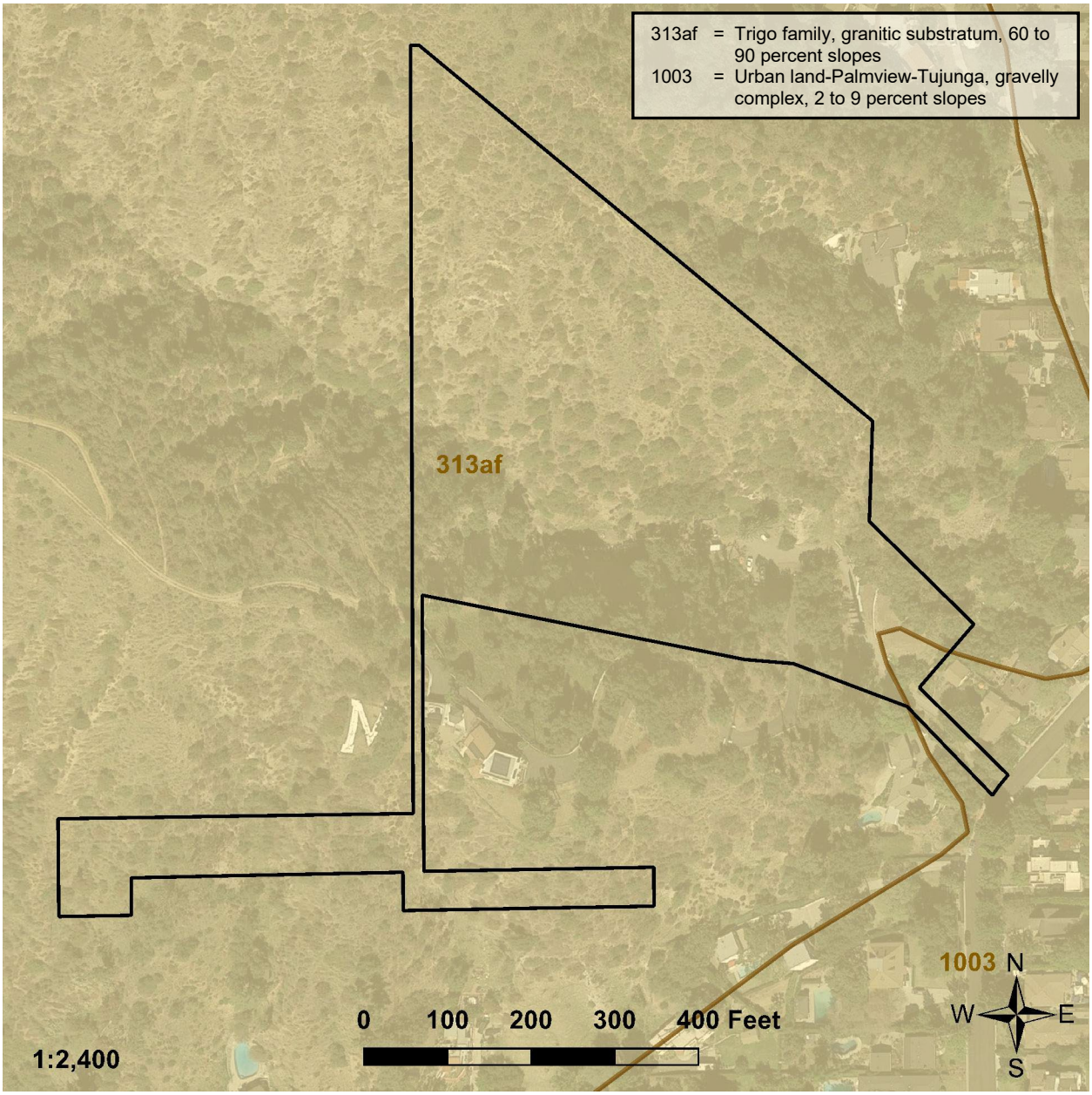

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Figure 4

Soils Map

(Aerial obtained from Google Earth, 5/2/2019
USDA Nat. Res. Cons. Serv. SSURGO Data)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

3.0) METHODS

3.1) Pre-Survey Research Methods and Purpose

A wealth of information is available online and is updated at regular intervals by the agencies and universities. To ensure efficiency and greater accuracy in the field, areas of interest are identified during the research stage prior to conducting the field survey. Useful maps are uploaded to handheld GPS and applications are downloaded in preparation for real-time data inquiries. Potential for jurisdictional drainages (streambeds/waters) or wetlands to occur on the site is assessed via aerial photography, topographic mapping, soil types, trends to hydric conditions, area hydrology, and prior wetlands inventory mapping, etc. Finally, the condition of the drainages is forecast based on available rainfall data.

Sources Project Level Engineering Topo (March 6, 2019), WebSoil, USDI Geological Survey, GlobeXplorer, Google Earth, 2024 Arid West Regional Wetland Plant List, Natural Resources Conservation Service, University of California at Davis, Agriculture and Natural Resources, California Soil Resources Lab, U. S. Department of the Interior Geological Survey (Anza and Mount Wilson Quads, 2018, Accessed July-August 2019), and the following web pages:

https://www.wunderground.com/dashboard/pws/KCAMONRO6

http://wetland-plants.usace.army.mil/nwpl_static/v33/home/home.html (Accessed August 2019)

http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (Accessed August 2019)

https://www.fws.gov/wetlands/Data/Mapper.html (Accessed August 2019)

3.2) Field Survey Methods and Purpose

The project boundaries are investigated to identify areas where water is received onto the property or transmitted offsite to downstream resources. Each drainage is then walked, measured, and assessed via three criteria to determine the presence or absence of OHWM / evidence of flow, hydrophilic vegetation, or hydric soil conditions. Inaccessible areas are viewed from the nearest vantage point and/or via google earth. Where evidence of flow is present, combined with or without hydrophytes, soils are examined for anoxic conditions. Soils identified as suitable for development of hydric conditions are given special attention. Soil color characteristics are evaluated using a “Munsell color chart” and all data are reported on appropriate Arid West Wetland Determination Data Forms.

The hydrology criterion is satisfied by the observation of standing or flowing water. The soil condition is satisfied by the development of saturated soils with anoxic conditions. The vegetation criterion is satisfied if half or more of the dominant plant species on a site are ranked as "obligate wetland," "facultative wetland," or "facultative" species (OBL, FACW, or FAC, respectively, see Table 1) for federal jurisdiction or presence of any of these species for state/local jurisdiction.

Vernal Pools

In the course of our investigation of the property we searched for vernal pools. To meet the definition of a vernal pool three factors must be addressed: suitable soil and soil conditions, proper hydrology, and one or more indicator species.

During our analysis we used the following indicators of wetlands vegetation:

Table 1. Summary of Wetlands Vegetation Indicator Categories

Indicator Status	Symbol	Definitions
Obligate	OBL	Almost always occur in wetlands. With few exceptions, these plants (herbaceous or woody) are found in standing water or seasonally saturated soils (14 or more consecutive days) near the surface.
Facultative Wetland	FACW	Usually occur in wetlands but may occur in non-wetlands. These plants predominantly occur with hydric soils, often in geomorphic settings where water saturates the soils or floods the soil surface at least seasonally.
Facultative	FAC	Occur in wetlands and non-wetlands. These plants can grow in hydric, mesic, or xeric habitats. The occurrence of these plants in different habitats represents responses to a variety of environmental variables other than just hydrology, such as shade tolerance, soil pH, and elevation, and they have a wide tolerance of soil moisture conditions.
Facultative Upland	FACU	Usually occur in non-wetlands but may occur in wetlands. These plants predominantly occur on drier or more mesic sites in geomorphic settings where water rarely saturates the soils or floods the soil surface seasonally.
Upland	UPL	Almost never occur in wetlands. These plants occupy mesic to xeric non-wetland habitats. They almost never occur in standing water or saturated soils. Typical growth forms include herbaceous, shrubs, woody vines, and trees.

4.0) RESULTS

4.1 Hydrology

The nearest Navigable Water is the Pacific Ocean, which is located 33 miles away. The San Gabriel River is located approximately 12.2 miles away. Stormwater leaves the parcel and flows down the street (Highland Place) to the storm drain entry point located at the intersection of Highland Place and West Hillcrest Boulevard. The storm drain then flows to Santa Anita Wash. Santa Anita Wash is almost entirely lined with concrete, except at a basin near the meeting point of Arcadia, Monrovia, and El Monte and farther downstream within a flood control and recreation area at Whittier Narrows Dam (which is at the point where Santa Anita Wash meets the San Gabriel River).

In 2019 the project area experienced between 29 and 32 inches of rain, an impressive amount considering the average annual rainfall over the decade was less than 15 inches. Rainfall runoff generally ceases to flow through the drainage on the parcel within a few days at most and water does not pond or pool at the surface. Water was not found to be present at the surface or subsurface in the Test Pit. All of the drainages were determined to be ephemeral riverine carriers of rainfall and drain to the San Gabriel River.

4.2) Jurisdictional Drainages

A total of one 1 ephemeral carrier of periodic rainfall and 10 tributaries were identified within the field survey area during the present survey (Figure 5 and Table 4 in Appendix A). An additional 3 drainages were identified but not calculated within the Annexation Area, or Southern Extension.

4.3.1) Drainage 1

Drainage 1 crosses the parcel from the western boundary, southeast to where the driveway meets the street. At the time of the field visit no water was present. The drainage is vegetated or contains sandy mineral deposits, is unvegetated or vegetated with upland species, and is mostly hard pack or paved. In the developed portions it contains a residential unit (occupied at the time of the site visit), a guest house, a shed, and concrete walkways and a paved driveway. This (852 lf) drainage comprises 10,275 sq. ft. of ephemeral CDFW California streambed and RWQCB State Waters. No state or federal wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.2) Tributary 1a

Tributary 1a is an ephemeral tributary to drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland

chamise chaparral. This (138 lf) drainage comprises 639 sq. ft. of ephemeral CDFW California streambed and RWQCB State Waters. No state or federal wetlands are present.. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.3) Tributary 1b

Ephemeral Tributary 1b is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (170 lf) drainage comprises 729 sq. ft. of ephemeral CDFW California streambed and RWQCB State Waters. No state or federal wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.4) Tributary 1c

Ephemeral Tributary 1c is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (171 lf) drainage comprises 1,455 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters. No state or federal wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.5) Tributary 1d

Ephemeral Tributary 1d is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (209 lf) drainage comprises 1,757 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters No state or federal wetlands are present.. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.6) Tributary 1e

Ephemeral Tributary 1e is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (340 lf) drainage comprises 3,114 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters. No state or federal wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.7) Tributary 1f

Ephemeral Tributary 1f is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (171 lf) drainage comprises 849 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters. No wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.8) Tributary 1g

Ephemeral Tributary 1g is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (128 lf) drainage comprises 1,114 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters. No wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.9) Tributary 1h

Ephemeral Tributary 1h is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (214 lf) drainage comprises 1,196 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters. No wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.10) Tributary 1i

Ephemeral Tributary 1i is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (262 lf) drainage comprises 1,271 sq. ft. of ephemeral CDFW California streambed and RWQCB state waters. No wetlands are present. Observed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.3.11) Tributary 1j

Ephemeral Tributary 1j is a tributary to Drainage 1 and flows from north to south. At the time of the field visit no water was present. Vegetation within the drainage was dominated by upland chamise chaparral. This (316 lf) drainage comprises 2,453 sq. ft. (0.056 acre) of ephemeral CDFW California streambed and RWQCB state waters. No wetlands are present. Observed

functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

4.4) Southern Extension Drainages

Calculations for these drainages were not included as no impacts are planned. No field survey occurred for these features and the drainage locations were estimated using desktop methods which include review of google earth and topography. Assumed functions and values include nutrient cycling, sediment retention and transport, pollutant trapping and filtration, and improvement of water quality, and wildlife habitat.

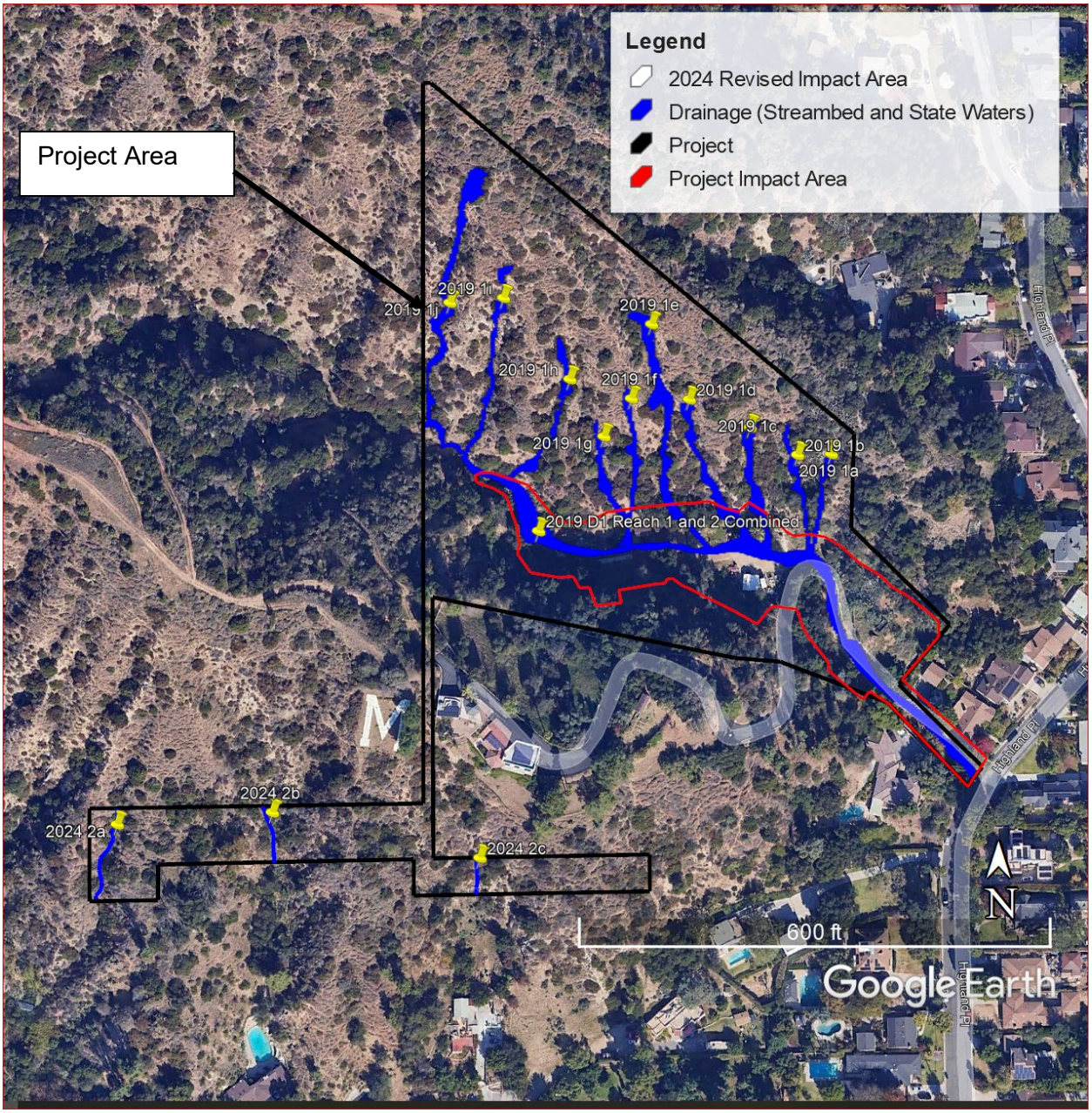

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Figure 5

Jurisdictional Areas
(Aerial obtained from Google Earth, June 2018)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

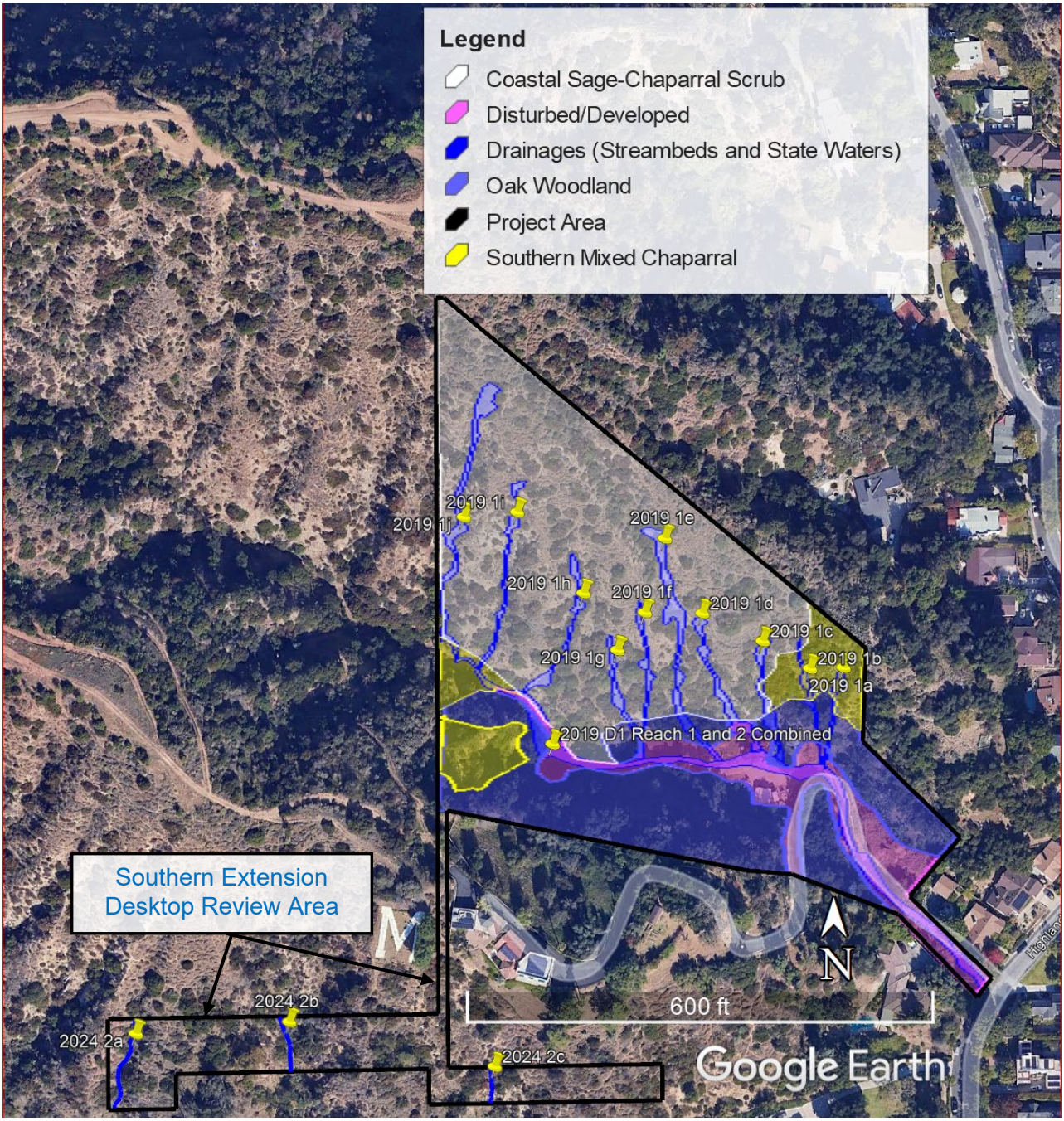

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Figure 6

Jurisdictional Drainages over Habitat

(Aerial obtained from Google Earth, June 2018)

AIN 850-301-3004, City of Monrovia

4.5) Soils

Soil Survey Geographic (SSURGO) Database shapefiles and Web-Soils (viewed 8-30-19) identify (313af) Trigo Family, granitic substratum, 60-90% slopes, a grade 6 non-ag land and (1003) Urban land-Palmview-Tujunga, gravelly complex, 2-9% slopes, no index rating as the soil mapping units on the parcel, 97.0-3.0% respectively. Nearly all of the drainages are mapped as Trigo, with a very small portion of Palmview-Tujunga near the street (Figure 6).

It is understood that mapping units, as defined by the Soil Conservation Service, are not necessarily composed entirely of the soil type they are named for. For example, areas shown as the "Cajalco" mapping unit are predominantly Cajalco soils but may include patches of unnamed soils with slightly different profiles. Descriptions by Knecht (1971) do not indicate that any of the soil mapping units on the project site have unmapped inclusions of hydric soils.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil more specific information, such as the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff 1993).

If soils are wet for long enough to be considered hydric, they should exhibit certain properties easily observed in the field. These visible properties are indicators of hydric soils and are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas 2006). Soils were examined in the field via test pits (Figure 5).

A test pit was excavated by Irish & Myhre on July 26, 2019 under clear skies. The most recent rain event occurred on March 11, 2019. Soils on the surface of the ground were dry and no water was observed in the pit. The test pit was located in an unvegetated sandy drainage channel at the base of a natural granitic waterfall within an enclosed drainage measuring about 6’ square. Overhanging vegetation included a single coast live oak, perched on the canyon wall above the drainage.

The test pit was excavated to a depth of 2 feet within decomposed granite with little to no organic component. Zero “O” horizon was found, the “A” horizon extended to 18” and the “B” horizon extended below. At 24 inches heavy cobble was present and the test pit excavation ceased. Trigo carries a hydric rating of zero and hydric soils were not anticipated at this location; however, a test pit was excavated primarily for training purposes.

The results of the test pits indicate absence of hydric soil development in Drainage 1. Ponding rating for this soil is none, meaning that the chance of ponding is considered zero in any year. A SSURGO database search offers the following information about the soil types mapped as present on the parcel and within the drainages.

Table 2. Depth to groundwater.

Summary by Map Unit — Los Angeles County, California, Southeastern Part (CA696)				
Map unit symbol	Map unit name	Depth to GW (centimeters)	Acres in AOI	Percent of AOI
313af	Trigo family, granitic substratum, 60-90% slopes	>200	6.3	97.0%
1003	Urban land-Palmview-Tujunga, gravelly complex, 2-9% slopes	>200	0.2	3.0%
Totals for Area of Interest			6.4	100.0%

Regarding the Depth to groundwater table above: “Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table. This attribute is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

4.6) Vegetation

Vegetation present on the property (Figure 7) includes Southern Mixed Chaparral (0.51 ac.), Coastal Sage Chaparral Scrub (3.53 ac.), Oak Woodland (1.65 ac.), Disturbed/Developed Lands (0.77 ac.)

4.7) Vernal Pool Habitat

Vernal pools are defined as:

". . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season.

Soil types are not consistent with an alkali playa or vernal pool complex and pools or depressions characteristic of vernal pool habitat were not noted as present on the subject property.

4.8) Watershed Hydrology

The United States is divided and sub-divided into successively smaller hydrologic units that are classified into four (4) levels: regions, sub-regions, accounting units, and cataloging units. The hydrologic units are arranged or nested within each other, from the largest geographic area (regions) to the smallest geographic area (cataloging units). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two (2) to eight (8) digits based on the four (4) levels of classification in the hydrologic unit system. The first level of classification divides the Nation into 21 major geographic areas or regions. These geographic areas contain either the drainage area of a major river, such as the Missouri region, or the combined drainage areas of a series of rivers, such as the Texas-Gulf region, which includes a number of rivers draining into the Gulf of Mexico. Eighteen (18) of the regions occupy the land area of the conterminous United States. Alaska constitutes region 19, the Hawaii Islands are region 20, and Puerto Rico and other outlying Caribbean areas are region 21.

The second level of classification divides the 21 regions into 221 subregions. A subregion includes the area drained by a river system, a reach of a river and its tributaries in that reach, a closed basin(s), or a group of streams forming a coastal drainage area. Depth to ground water is estimated at >200 centimeters as viewed on Soils Web (August 30, 2019).

The third level of classification subdivides many of the subregions into accounting units. These 378 hydrologic accounting units are nested within or can be equivalent to the subregions.

The fourth level of classification is the cataloging unit. A cataloging unit is a geographic area representing part or all of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature. These units subdivide the subregions and accounting units into smaller areas. There are 2,264 Cataloging Units in the Nation. Cataloging Units sometimes are called "watersheds".

The newest and most recent HUC delineation dataset named the Watershed Boundary Dataset (WBD) further divides the HUC levels to the 5th and 6th levels. The WBD contains the most current 8-digit, 10-digit, and 12-digit HUCs.

The parcel is located within Region 18 (California), Subregion 1807 (Southern California Coastal, an area of 11,100 sq. mi.), Accounting Unit 180701 (Ventura-San Gabriel Coastal, an area of 4,530 sq. mi.), Cataloging Unit 18070106 (San Gabriel, an area of 713 sq. mi.)

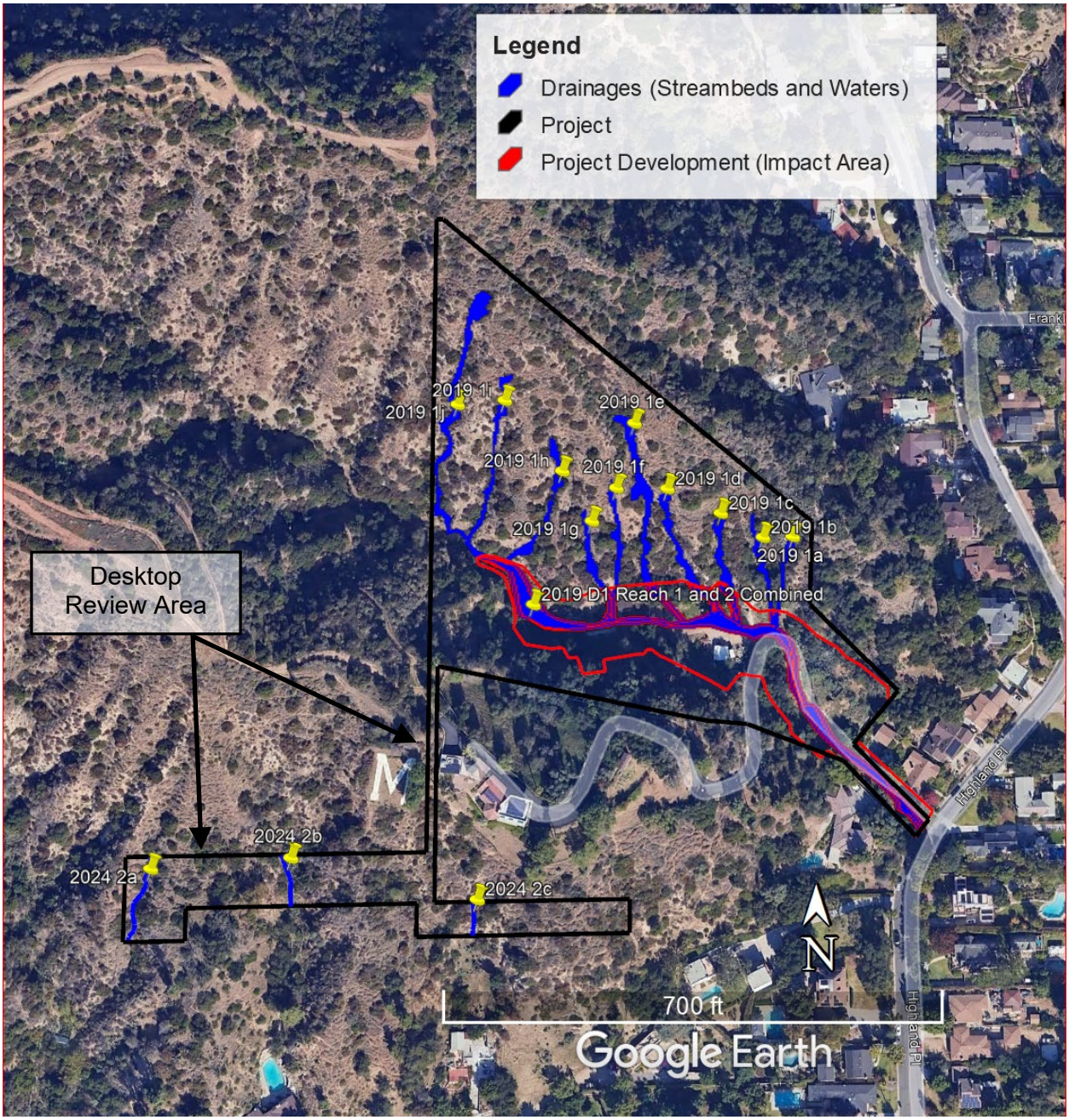

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Figure 8

Impacted Drainages
(Aerial obtained from Google Earth, 5/24/2013)

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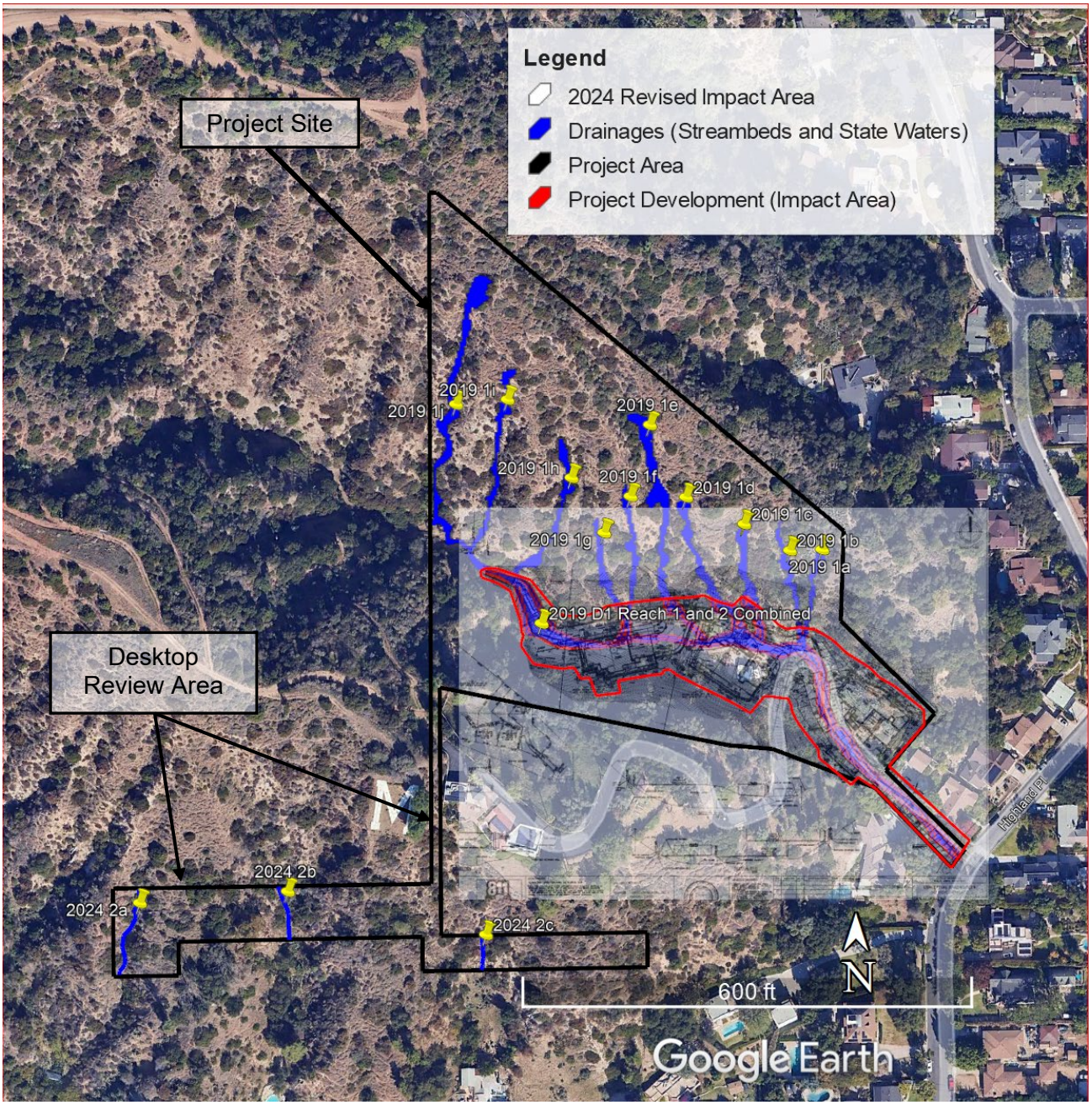

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Figure 9
Impacted Drainages with Development Plan
(Aerial obtained from Google Earth, June 2018)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

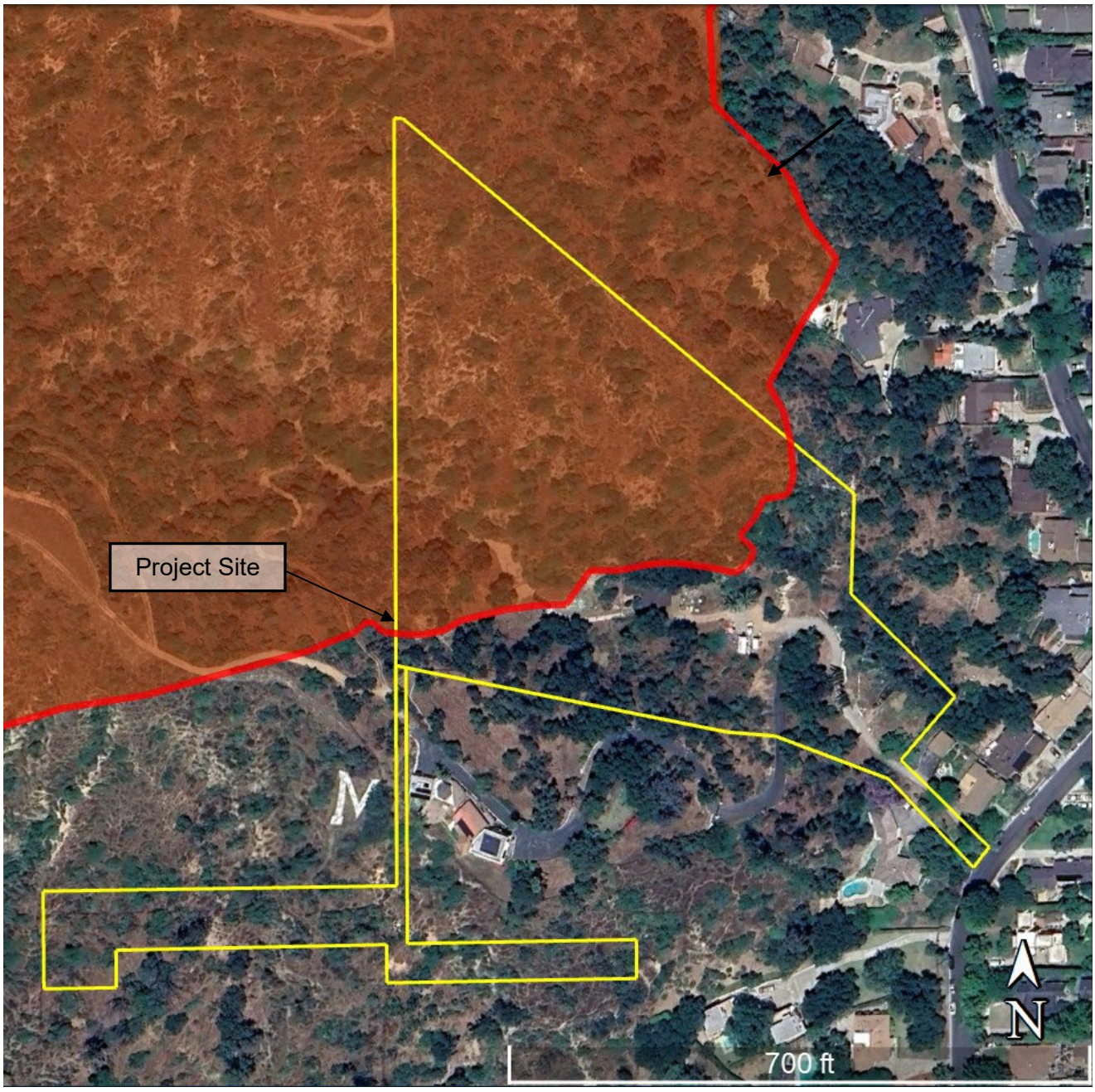

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Figure 8

Madison Fire Burn Area
(Aerial obtained from Google Earth, 5/24/2013)

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4.9) Functions and Values Assessment

The purpose of a functions and values assessment is to determine the net effect of impact(s) to where a project proposes to modify a drainage feature for non-water dependent use, such as housing. From a regulatory perspective human occupation is not water dependent, rather humans consume water or use water for recreation, etc. and these are considered beneficial human uses. Because other biological lifeforms are water dependent our system of laws requires us to consider the net impact of any action that would directly or indirectly affect a water feature. In this exercise we first avoid (where practicable), next we minimized unavoidable impacts to the maximum practicable point, and finally we proposed offsetting measures and mitigation. State laws require specific analysis of planned impacts and mitigation for impacts, including temporal loss which would result in loss of functional (biological) uses between the period of impact and the point fully functional mitigation is available to wildlife, etc. These factors are considered in the ratios applied for a determination that mitigation has reduced or eliminated any significant impact.

In considering the functions and values the planned impact is weighed against the planned offsetting measure to determine increase or decrease in functions or values. The goal is status quo or a net increase in functions and values for the combined actions (impacts and offsets).

The proposed project will create a basin upstream of the planned development and will replace the existing residential use(s) with improvements that include water quality measures not currently in place. The upstream basin is needed to offset water and debris flows that have occurred as a result natural runoff, particularly in post-burn rain events. The removal of existing residential use and installation of new residential use with BMPs will result in a net increase in functions and values locally and regionally with the watershed.

Table 3. Functions And Values Assessment.

Functions and Values	Net Increase or Loss
Short term surface water storage. Reduced downstream flood peaks. Reduced damage from erosion/cutting.	**Functional increase** due to the inclusion of a basin to prevent downstream impacts to habitat, the project and the local residents.
Long term surface water storage. Maintenance of stream flows, seasonal stream flows, & moderation of downstream habitat.	**Functional increase** since the project will provide needed water storage; while relatively short term it will decrease peek flows and reduce debris load which protects downstream habitat.
Maintenance of water table. Maintenance of stream flows, seasonal stream flow moderation. Maintenance of biodiversity.	**Functional increase** via mitigation ratios
Transforming and cycling of elements. Maintenance of nutrient stocks within wetland, production of dissolved and partially decayed organic matter, food for fish and shellfish downstream.	**Functional status quo**
Retention, removal of dissolved substances. Reduced transport of nutrients and pesticides downstream, maintenance of water quality. Safer drinking water.	**Functional increase** due to onsite water quality measures and the construction of the onsite basin.
Accumulation of peat (biomass), retention of nutrients, carbon, metals, and other substances. Maintenance of water quality, reduction of incremental increase to climate change.	**Functional increase** due to application of no-net-loss via mitigation ratios
Accumulation/retention of inorganic sediment. Retention of sediment and attached pesticides, phosphate, and other nutrients. Maintenance of water quality, clear water, fish population in downstream systems.	**Functional increase** due to onsite water quality measures
Maintenance of characteristic plant communities. Food, escape, and nesting cover for wildlife; spawning and nursery habitat for fish and shellfish, food for humans. Support for waterfowl and other wild game, furbearers, uncommon, rare, and endangered species, fish, and shellfish. Recreation downstream fishing and bird watching.	**Functional increase** due to application of no-net-loss via mitigation ratios
Maintenance of characteristic energy flow. Support for populations of vertebrates and invertebrates. Maintenance of biodiversity, bird watching, aesthetics.	**Functional status quo**

5.0) AVOIDANCE MINIMIZATION AND MITIGATION STRATEGY

Four (4) alternatives were examined during development planning regarding impacts to jurisdictional areas:

Increased Development Action entails use of the entire parcel. Since the entire site would be utilized, the only flow of water onsite would be associated with storm water runoff and water quality basins necessary to reduce flooding and for some nutrient and waste processing. All mitigation for impacts would occur offsite. This alternative was not advanced, as the development of the entire site would involve mass grading and increased development costs and greater impacts to biological resources.

Reduced Development Action includes avoidance of most jurisdictional Drainages (particularly the higher quality portions) and clustering of residential units within more disturbed, developed, ruderal, and ornamentally vegetated portions of habitat onsite. This alternative would allow for construction of an upstream basin with local and regional benefits and downstream BMPs, which will provide a functional increase in beneficial human use and downstream water quality. This alternative has been advanced as the least environmentally damaging practicable alternative (LEDPA) for State Water Quality Control Board/Clean Water Act purposes and (absent the discovery of any special status species prior to development) will reduce significant impacts to less than significant under CEQA.

No Action would require avoidance of all jurisdictional areas within the owned parcels. This option is considered impractical, as it does not accomplish the project purpose, which is development of needed residential housing for the Monrovia community, and it does not provide for needed water quality and public safety via the development of the upstream basin and the downstream BMPs.

Offsite Alternative would involve purchasing an equivalent sized area with no jurisdictional areas present within the immediate area which is suitable to meet the project goals. This alternative was judged to be impractical due to lack of available alternative sites, the investment in land acquisition, and a project design specific to this parcel.

5.1) Least Environmentally Damaging Practicable Alternative

When responding to a CEQA level development application that proposes impact to biological resources (particularly water resources), the combined regulatory and wildlife agencies assess proposed project alternatives to determine the least environmentally damaging practicable alternative. Local agencies also consider the highest and best use of the land subject to local ordinances and plans that have undergone a CEQA review. A proposed action that could directly or indirectly impact water resources is considered by the water regulatory agencies on regional, state, and federal levels for applicability under the existing system of codes, etc. This includes

avoidance, minimization, and mitigation of the proposed project based on functions and values as discussed in earlier sections. Consequently, this jurisdictional delineation provides information to support those actions in the event they are required.

The proposed project would remove an existing residential unit and replace it with three (3) units, water quality control measures, and best management practices measures that are not in place today. The proposed project will reduce downstream impacts to water and habitat, increase public safety, and provide needed housing for the Monrovia community. The proposed project design has avoided naturally vegetated jurisdictional drainages and clustered development within existing disturbance, resulting in minimal grading and little additional impact beyond the existing condition.

Other alternatives considered would place view lots at higher elevations, which would require substantial grading, impact viewshed, and alter the natural native habitat. The development of the entire parcel in an expanded development would provide additional revenue and accomplish the stated goal of providing residential units to the Monrovia community, but it would also increase non-pervious area and increase post project runoff, which would require additional mitigation.

The project has avoided, minimized, and mitigated impacts to water quality and will provide a functional increase in beneficial uses and habitat value. The proposed project is the Least Environmentally Damaging Practicable Alternative considered and is a higher and better use of the land than the present condition.

6.0) CONCLUSIONS

L&L found both jurisdictional CDFW Streambeds subject to the Department of Fish and Game 1600 Code and “waters of the state” subject to the Porter-Cologne Water Quality Act present in the study area and planned for impact by the proposed Project.

"Waters of the state" means any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code Section 13050[e]). Jurisdictional streambeds that connect to downstream habitat are also jurisdictional under the control of the CDFW.

Wetland areas within or adjacent to drainages that exhibit any one of the three (3) parameters (water modified soils, facultative vegetation, and surface or subsurface water) are jurisdictional under the control of the California Department of Fish and Wildlife (CDFW) whereas the RWQCB considers all three to be necessary. All jurisdictional delineations conducted by consultants are considered preliminary until verified by the agencies or acted upon by issuance of a permit.

Total Resources Present within the Study Boundary

Jurisdictional drainages within the study area include 2971 lf / 24,852 sq. ft. (0.58 acre) of ephemeral CDFW California state streambed and RWQCB waters of the state. No state or federal wetlands or federal waters are present.

Planned Impacts

Jurisdictional area planned for impacts include 1,191 lf / 12,325 sq. ft. (0.29 acre) of ephemeral CDFW California streambed and RWQCB state waters. No state or federal wetlands or federal waters will be impacted by the project as none are present.

Avoidance and Minimization Measures

The jurisdictional drainages planned for avoidance includes 1780 lf /12,527 sq. ft. (0.29 acre) of ephemeral CDFW California state streambed (or ±50% of that present) and RWQCB state waters.

Prior to undertaking any Project related surface or earth disturbing activities the Project Proponent will consult with the California Department of Fish and Wildlife for qualification under a state Streambed Alteration Agreement (1602) and the Regional Water Quality Control Board for Waste Discharge Requirements, under the Porter-Cologne Water Quality Act.

7.0) REFERENCES

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APPENDIX A

Table 4. Summary of wetlands criteria and jurisdictional areas.

				CDFW / RWQCB JURISDICTION				IMPACT TO CDFW / RWQCB JURISDICTION			CDFW/RWQCB
DRAINAGE	LAT. / LONG.	COWARDIN CODE	HGM CODE	State Length ft.	Streambed Area sq. ft. (Avg Width in ft.)	Streambed Only sq. ft.	Wetlands Only sq. ft.	Streambed Area sq. ft. (Length ft.)	Streambed Riverine Only sq. ft.	Wetlands Riparian Only sq. ft.	Avoided by Project Design (sq. ft.)
1	34.158047° N -118.012029° W	R6	Riverine	852	10,275 (12)	10,275	-----	10,086 (824)	10,086	-----	189
1a	34.158784° N -118.012704° W	R6	Riverine	138	639 (4.6)	639	-----	48 (21)	48	-----	591
1b	34.158788° N -118.012716° W	R6	Riverine	170	729 (4.3)	729	-----	69.6 (18)	69.6	-----	659.4
1c	34.158811° N -118.012887° W	R6	Riverine	171	1455 (8.5)	1,455	-----	493 (52)	493	-----	962
1d	34.158835° N -118.012974° W	R6	Riverine	209	1,757 (8.1)	1,757	-----	645 (143)	645	-----	1,112
1e	34.158821° N -118.013131° W	R6	Riverine	340	3,114 (9.2)	3,114	-----	578 (71)	578	-----	2536
1f	34.158933° N -118.013473° W	R6	Riverine	171	849 (5)	849	-----	42 (15)	42	-----	807
1g	34.158940° N -118.013493° W	R6	Riverine	128	1,114 (8.7)	1,114	-----	363 (47	363	-----	751
1h	34.159064° N -118.013967° W	R6	Riverine	214	1,196 (5.6)	1,196	-----	0	0	-----	1,196
1i	34.159155° N -118.014165° W	R6	Riverine	262	1,271 (4.9)	1,271	-----	0	0	-----	1,271
1j	34.159259° N -118.014307° W	R6	Riverine	316	2,453 (7.8)	2,453	-----	0	0	-----	2,453
						24,852	-----	12,325	12,325	-----	12527.4
TOTALS				2971	24,852 sf (0.58 ac.)	Total 24,852 sf (0.58 ac.)		Total 12,325 (1,191 ft.)	Total 12,325 sf (0.29 ac.)		Total 12,527 (0.29)

Note: Any discrepancy in totals is due to rounding

APPENDIX B

Table 5. List Of Plant and Wildlife Species Observed This list does not include all landscape ornamental shrubs/annuals associated with the onsite residence.

Scientific Name	Common Name
Plants	
Adoxaceae	**Moschatel Family**
Sambucus nigra ssp. *caerulea*	Blue Elderberry
Anacardiaceae	**Sumac Family**
Malosma laurina	Laurel Sumac
Toxicodendron diversilobum	Poison Oak
Apocynaceae	**Dogbane Family**
Nerium oleander	Oleander*
Arecaceae	**Palm Family**
Phoenix dactylifera	Date Palm*
Asteraceae	**Sunflower Family**
Artemesia californica	California Sagebrush
Bidens pilosa	Beggar-ticks*
Brickelia californica	California Brikellbush
Centaurea melitensis	Tocalote*
Carduus pychnocephalus	Italian Thistle*
Erigeron boniarensis	Flax-leaved Horseweed*
Eriophyllum confertiflorum	Golden Yarrow
Gutierrezia californica	California Matchweed
Helianthus annuus	Annual Sunflower
Heterotheca grandiflora	Telegraph Weed
Lactuca serriola	Prickly-lettuce*
Malacothrix saxatilis	Cliff Malacothrix
Pseudognaphalium californicum	California Everlasting
Pseudognaphalium luteo-album	Common Cudweed
Sonchus oleraceus	Sow-thistle*
Taraxacum officinale	Common Dandelion*
Boraginaceae	**Borage Family**
Amsinckia menziesii var. *intermedia*	Fiddleneck
Phacelia ramosissima	Branching Phacelia
Phacelia cicutaria	Caterpillar Phacelia
Brassicaceae	**Mustard Family**
Hirschfeldia incana	Short-pod Mustard*
Lobularia maritima	Sweet Alyssum*
Sisymbrium orientale	Field Mustard*

Plants (continued)

Scientific Name	Common Name
Cactaceae	**Cactus Family**
Opuntia sp.	Prickly Pear
Caprifoliaceae	**Honeysuckle Family**
Lonicera subspicata	Southern Honeysuckle
Chenopodiaceae	**Goosefoot Family**
Chenopodium album	Lamb's Quarters*
Salsola tragus	Russian Thistle*
Crassulaceae	**Stonecrop Family**
Crassula connata	Pygmy Stonecrop
Crassula ovata	Jade Plant*
Cucurbitaceae	**Gourd Family**
Marah macrocarpus	Wild-cucumber
Cuppresaceae	**Cyprus Family**
Cuppressus sempivirens	Italian Cypress*
Cycadaceae	**Cycad Family**
Cycus revoluta	Sego Palm
Euphorbiaceae	**Spurge Family**
Croton setiger	Doveweed
Euphorbia crenulata	Chinese Caps
Euphorbia sp.	Ground Spurge*
Geraniaceae	**Geranium Family**
Erodium cicutarium	Red-stemmed Filaree*
Geranium sp.	Crane's-bill*
Hamamelidaceae	**Witchhazel Family**
Liquidamber sp.	Sweetgum*
Lamiaceae	**Mint Family**
Salvia columbariae	Chia
Salvia mellifera	Black Sage
Stachys bullata	Southern Hedge Nettle
Oleaceae	**Olive Family**
Jasminum polyanthum	Pink Jasmine*
Ligustrum sp.	Privet*
Olea europea	Olive*
Plumbaginaceae	**Leadwort Family**
Plumbago sp.	Plumbago*

Scientific Name	**Common Name**
Plants (continued)	
Poaceae	**Grass Family**
Avena species	Wild Oat*
Bromus carinatus	California Brome
Bromus diandrus	Ripgut*
Bromus madritensis ssp. *rubens*	Foxtail Chess*
Bromus tectorum	Cheatgrass*
Cynodon dactylon	Bermuda Grass*
Leymus condensatus	Giant Wild Rye
Schismus barbatus	Mediterranean Grass
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum var. *polifolium*	California Buckwheat
Portulacaceae	**Purslane Family**
Portulaca oleracea	Common Purslane*
Ranunculaceae	**Buttercup Family**
Delphinium cardinale	Scarlet Larkspur
Rhamnaceae	**Buckthorn Family**
Rhamnus ilicifolia	Hollyleaf Redberry
Rosaceae	**Rose Family**
Cercocarpus betuloides	Mountain Mahogany
Heteromeles arbutifolia	Toyon
Pyrocantha coccinea	Firethorn*
Rubiaceae	**Madder Family**
Galium angustifolium	Narrow-leaved Bedstraw
Rutaceae	**Citrus Family**
Citrus sp.	Citrus*
Solanaceae	**Nightshade Family**
Nicotiana glauca	Tobacco Tree*
Solanum douglassi	White Nightshade
Solanum xanti	Purple Nightshade

* non-native species

Reptiles & Amphibians

Iguanidae	**Iguanid Family**
Uta stansburiana	Side-blotched Lizard
Sceloporus occidentalis	Western Fence Lizard

Precipitation Data

(https://www.wunderground.com/dashboard/pws/KCAMONRO6)

Precipitation data from the Santa Fe Dam RAWS for October 2009 through June 2021, by water year (October 1 through September 30) (WRCC 2021).

Water Year	Precipitation (inches)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2010	0.86	0.02	3.15	6.23*	5.19	0.74	1.32	0	0	0	0	0	17.51*
2011	1.62	1.19	11.39	0.81	3.86	2.98	0.01	0.26	0	0	0.07	0.01	22.20
2012	1.57	1.63	0.68	0.93	1.19	2.16	2.60	0.07	0*	0*	0	0	10.83*
2013	0.53	1.05	2.91	1.15	0.53	0.52	0.02	0.64	0	0	0	0	7.35
2014	0.06	0.76	0.46	0.09	3.02	0.90	0.41	0	0	0	0.09	0	5.79
2015	0.07	0.75	4.47	0.70	1.20	0.40	0.41	0.75	0	1.29	0	1.39	11.43
2016	0.28	0.42	0.73	4.61	0.66*	2.35	0.78	0.95	0	0	0	0*	10.78*
2017	0.11*	0.84	4.99	18.25	3.79	**	0.02	1.04	0	0	0.02	0.10	29.16*
2018	0.02	0.02	0	2.33	0.31	4.21	0.01	0.48	0	0	0	0	7.38
2019	0.64	1.80	2.30	6.38	8.29	2.51	0.10	1.19	0.18	0	0	0	23.39

*missing data; **anomalous data; ***through June

Precipitation data from the Henninger Flats RAWS for October 2009 through June 2021, by water year (October 1 through September 30) (WRCC 2021).

Water Year	Precipitation (inches)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2010	*	*	4.71	8.16	6.07	1.28	2.58	0.12	0.02	0	0	5.63	28.57*
2011	4.41	1.67	16.34	0.87	5.61	5.69	0.28	0.75	0.15	0	0	0.09	35.86
2012	1.31	2.13	0*	1.11*	0.86	3.30	3.13	0.71	0	0.01	0.07	0.01	12.64*
2013	1.00	1.38	**	2.15	0.70	1.20	0.29	1.40	0.01	0	0	0.01	8.14*
2014	0.46	1.15	0.55	0.19	3.19	0.83	0.55	0	0	0	0.01	0.14	7.07
2015	0.32	0.85	4.66	0.88	1.84	0.45	0.50	1.67	0.15	1.31	0*	0*	12.63*
2016	0.17	0.23	1.13	5.15	0.89*	2.66	2.42	0.60	0.12	0	**	0.13*	13.50*
2017	0.40	1.19	5.09	11.55*	5.71	0.84	0.15	0	0	0	0	0	24.93*
2018	0	0	0	2.60	0.46	6.80	0.03	1.75	0	0	0	0	11.64
2019	0.84	2.54	2.83	9.29	9.98	2.94*	0.56	2.82	0.36	0.04	0	0.43	32.63*

Site Photographs

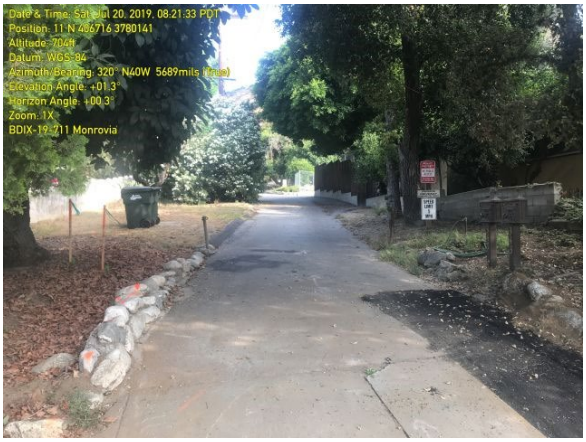


Photo 1: (892) Photo from the southern end of the property at Highland Place facing NW.

Photo 2: (891) Photo from the southeastern portion of the project north of the right of way facing N.

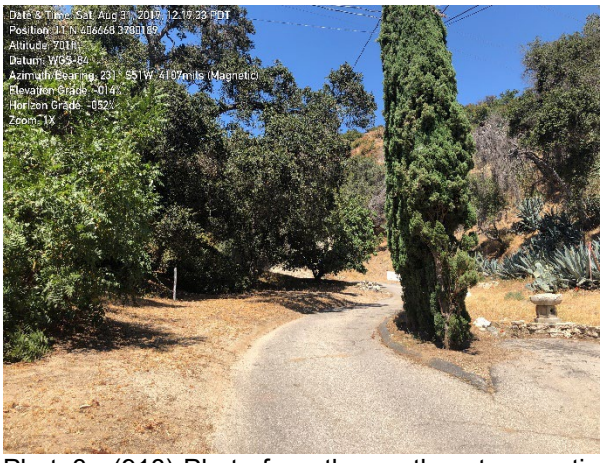


Photo3: (918) Photo from the southeastern portion of the project north of the right of way facing NNW.

Photo 4: (918) Photo from the southeastern portion of the property facing SE. Mule deer present.

Photo 5a: (918) Photo from the SE portion of the property facing NNW.

Photo 5b: (917) Photo from near the SE portion of the property facing ESE. Disturbance.

Photo 6a: (899) Photo from a secondary drive accessing southern property facing NW toward a shed and onsite residence. Oaks in foreground, recovering chaparral in back. Steep hillside visible.

Photo 6b: (900) Photo from the SE portion of the property facing NNW showing disturbed habitat in foreground, oaks and ornamentals in midground, chaparral in background. Steep hillside visible.

Photo 7:

Photo 8a: (902) Photo from a developed path adjacent to the residence facing E toward the driveway. Oaks and ornamentals visible.

Photo 8b: (903) from a developed path facing W toward steep chaparral hillside. Oaks in foreground, fence behind residence on right.

Photo 9a: (908) Photo from a knoll above the residence facing E toward the residence. Oak woodland bordering the driveway visible.

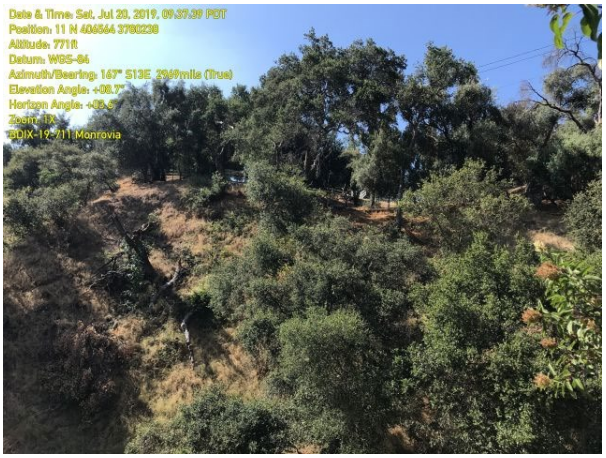


Photo 9b: (910) Photo from a knoll above the residence facing SSE. Oaks woodland with mainly non-native grass understory visible.

Photo 10: (906) Photo from NNW of the outbuilding facing SSE. Oak woodland with disturbed understory visible.

Photo 11: (904) Photo from the outbuilding facing NNW. View up a natural small canyon and drainage. No banks and beds visible. Steep slopes of chaparral visible.

Photo 12: (912) Photo from SW portion of the project area facing ESE. View down the canyon showing oak woodlands.

Photo 13a: (915) Photo from the SW project area facing NNE. View up the canyon walls showing chaparral habitat.

Photo 13b: (916) Photo from the SW project area facing ENE. Showing the very steep terrain and mix of oaks and chaparral.

Certification

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: September 11, 2019 SIGNED: 

Leslie Irish, Principal, L&L Environmental, Inc.
951-681-4929

1) Fieldwork Performed By:

Leslie Irish
Name

2) Fieldwork Performed By:

Justin Myhre
Name

3) Fieldwork Performed By:

_____
Name

4) Fieldwork Performed By:

_____
Name

5) Fieldwork Performed By:

_____
Name

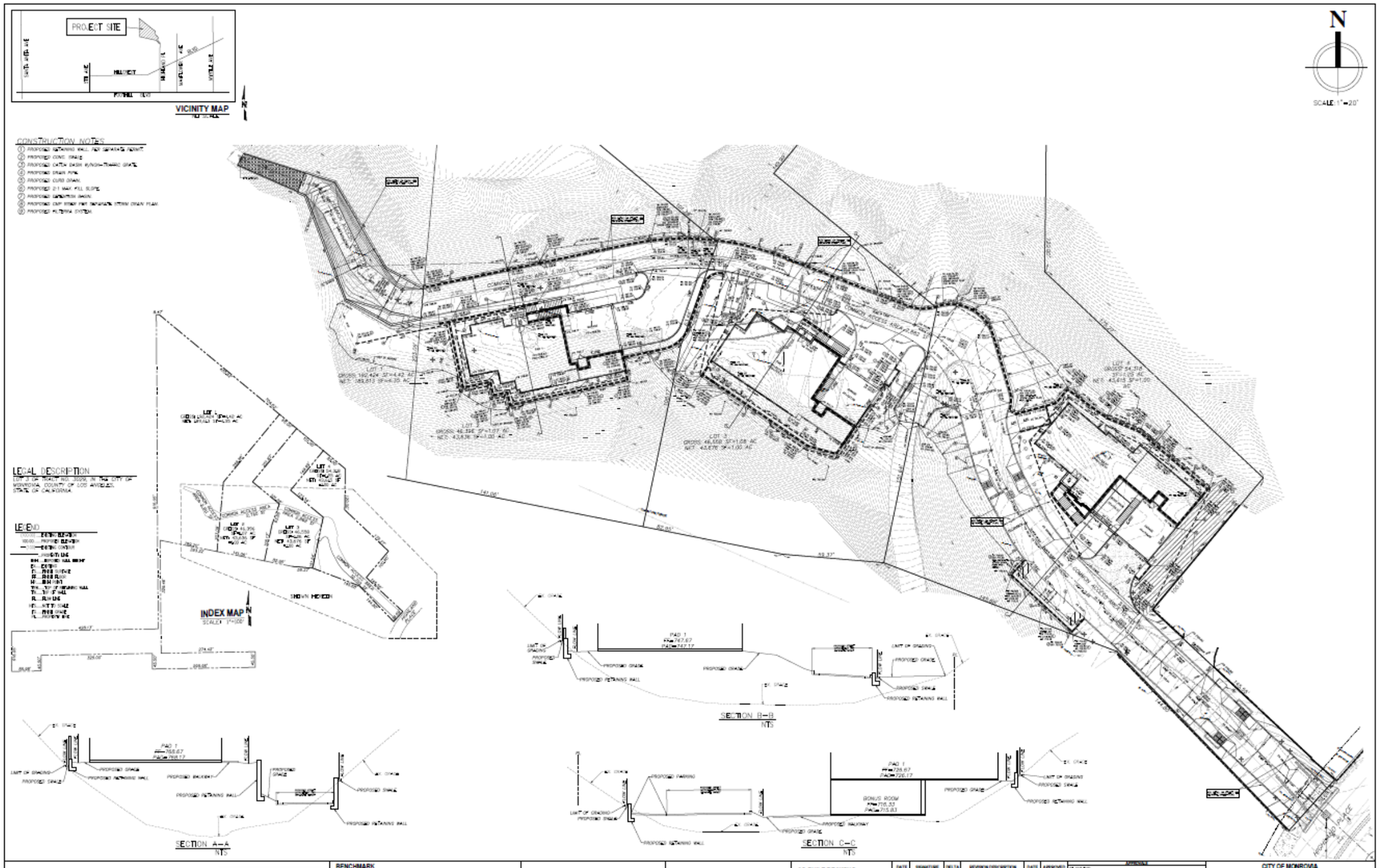
6) Fieldwork Performed By:

_____
Name

Check here _____ if adding any additional names / signatures below or on other side of page.

APPENDIX C

Conceptual Project Design


PROJECT SITE
VICINITY MAP
N
SCALE: 1" = 20'
CONSTRUCTION NOTES
LEGAL DESCRIPTION
LEGEND
INDEX MAP
SCALE: 1"=100'
SHOWN HEREON
SECTION A–A
NTS
SECTION B–B
NTS
SECTION C–C
NTS
PAD 1
BONUS ROOM
BENCHMARK
BASIS OF BEARINGS
EGL ASSOCIATES, INC.
ADDRESS: 11819 GOLDRING ROAD, UNIT A
ARCADIA, CA 91006
PHONE: 626-263-3588
EMAIL: MAIL@EGL88.COM
EGL JOB #: 21-241-002
AS-BUILT DRAWING
DATE
SIGNATURE
DELTA
REVISION DESCRIPTION
APPROVED
CITY OF MONROVIA
PUBLIC WORKS DEPARTMENT
CONCEPTUAL GRADING PLAN
347 HIGHLAND PLACE
CG- 1
Know what's below.
Call before you dig.
811