GENERAL BIOLOGICAL ASSESSMENT REPORT
FOR
ASSESSORS PARCEL NUMBERS
486-260-003, 486-260-004, 486-260-005, and 486-260-009

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

EPD Solutions, Inc.
2030 Main Street, Suite 1200
Irvine, CA 92614

Prepared by:

Hernandez Environmental Services
29376 North Lake Drive
Lake Elsinore, CA 92530

SEPTEMBER 2021

TABLE OF CONTENTS

FIGURES

APPENDICES

1.0 Introduction

Hernandez Environmental Services (HES) was contracted to prepare a General Biological Assessment (GBA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) habitat assessment for Assessor's Parcel Numbers (APNs) 486-260-003, 486-260-004, 486-260-005, and 486-260-009 located in the city of Moreno Valley, Riverside County, California.

1.1 Project Site Location

The approximate 26.74-acre project site is located southwest of the intersection of Alessandro Boulevard and Oliver Street in Riverside County, California (Figures 1 and 2). The site consists of Riverside County APNs 486-260-003, 486-260-004, 486-260-005, and 486-260-009. Specifically, the project site is located within Township 3 South, Range 3 West in Section 15 of the *Sunnymead* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33˚54'58.3226" North and 117˚11'04.2157" West.

1.2 Project Description

The proposed project includes the construction of 204 single-family residential units. The project also includes the installation of related parking lots, access driveways, and trailer parking stalls (Figure 3). The project will result in impacts to the entire 26.74-acre site.

2.0 Methodology

2.1 Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. A five-mile radius was used to identify sensitive species with the California Natural Diversity Data Base (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Endangered Species Lists, and the California Native Plant Society (CNPS) rare plant lists to obtain species information for the project area. The CNDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the project site. Additionally, the Western Riverside County MSHCP was reviewed for information on known occurrences of sensitive species within Riverside County.

2.1.1 Western Riverside County MSHCP

The Western Riverside County MSHCP is a comprehensive, multijurisdictional habitat conservation planning program for western Riverside County, California. The purpose of the Western Riverside County MSHCP is to preserve native habitats, and to this end, the plan focuses upon the habitat needs of multiple species rather than one species at a time. The Western Riverside County MSHCP provides coverage/take

authorization for some species listed under the federal or state Endangered Species Act (ESA) as well as non-listed special-status plant and wildlife species. It also provides mitigation for impacts to special-status species and their associated habitats.

Through agreements with the USFWS and California Department of Fish and Wildlife (CDFW), 146 listed and special-status plant and animal species receive some level of coverage under the Western Riverside County MSHCP. Of the 146 covered species, the majority have no additional survey needs or conservation requirements. Furthermore, the Western Riverside County MSHCP provides mitigation for project-specific impacts to these species, thereby reducing the degree of impact to below a level of significance, pursuant to the California Environmental Quality Act (CEQA).

Several of the species covered under the Western Riverside County MSHCP have additional survey requirements. These include the riparian communities and associated species addressed in Section 6.1.2 of the Western Riverside County MSHCP document ("Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools"), plants identified in Section 6.1.3 ("Narrow Endemic Plant Species"); and plants and animal species addressed in Section 6.3.2 ("Additional Survey Needs and Procedures").

2.1.2 Project Relationship to the Western Riverside County MSHCP

The project area is located within the Western Riverside County MSHCP boundaries. The County of Riverside, acting as the lead agency for the proposed project, is a permittee under the Western Riverside County MSHCP and, therefore, is afforded coverage under the state or federal ESAs for impacts to listed species covered by the plan. The County is required to document consistency with the Western Riverside County MSHCP in conjunction with any discretionary approvals for the project. As such, this report was prepared to provide all necessary information required to determine project consistency with the Western Riverside County MSHCP.

The project area is located within Western Riverside County MSHCP Moreno Valley Area Plan of the Western Riverside County MSHCP. The project site is not located within a Criteria Cell or Cell Group. The project site is not located within plan-defined areas requiring surveys for amphibian species, mammalian species, narrow endemic plant species or criteria area species. However, the project site is within the Western Riverside County MSHCP burrowing owl (*Athene cunicularia*) survey area. A habitat assessment conducted on the site determined that suitable habitat is present on the project site. Focused surveys found that the project site is not currently in use by burrowing owl.

Additionally, the project area does not contain any habitat that would be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside MSHCP. Further, no vernal pools were observed within the project boundaries.

2.2 Field Survey

On August 5, 2021, HES biologists conducted a field survey of the approximate 26.74-acre project site. The ambient temperature at 7:30 a.m. was 70 degrees Fahrenheit, with a clear sky and winds ranging from zero to one mile per hour from the north. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding land uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess the presence of constituent elements for critical habitat, if present.

Linear transects spaced approximately 50 to 100 feet apart were walked across the project site for 100 percent coverage. All species observed were recorded. Global Positioning System (GPS) waypoints were taken to delineate specific habitat types, species locations, state or federal waters, and any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

3.0 Existing Conditions and Results

3.1 Environmental Setting

The project site consists of vacant, disturbed lands with evidence of mowing for fuel management. The project site is relatively flat with elevation ranges from 1,512 feet above mean sea-level (AMSL) to 1552 feet AMSL. The project site contains is characterized by ruderal vegetation and disturbed non-vegetated areas. Surrounding land uses include Alessandro Boulevard followed by single-family residences to the north, Oliver Street followed by Discovery Christian Church east of the project site, and vacant undeveloped land to the south and west.

3.2 Soils

Three soil classifications have historically been mapped on the project site by the USDA Web Soil Survey (Appendix D). Onsite mapped soils are described in Table 1.

Table 1
Onsite Soil Types

Unit Name	Unit Symbol	Slope
Greenfield sandy loam	GyA	0 to 2 percent slopes
Greenfield sandy loam	GyC2	2 to 8 percent slopes, eroded
Hanford coarse sandy loam	HcC	2 to 8 percent slopes, eroded

3.3 Plant and Habitat Communities

The 26.74-acre project site contains approximately, 15.742-acres of disturbed areas, 10.99-acres of ruderal habitat, and 0.008-acre of ephemeral stream (Figure 4).

3.3.1 Disturbed Areas

The project site contains approximately 15.742-acres of disturbed areas that primarily lack vegetation. These areas are characterized by evidence of frequent mowing and dumping of debris. Ornamental Peruvian pepper trees (Schinus molle) are present along the site boundaries within the disturbed areas.

3.3.2 Ruderal Habitat

The project site contains 10.99-acres of ruderal habitat. The ruderal areas found on the site are heavily disturbed with evidence of mowing for fuel management. These areas are dominated by non-native plant species; however, some native species are present. Dominant species found in this habitat type include telegraph weed (*Heterotheca grandiflora*), bromus grass (*Bromus* ssp.), Canada horseweed (*Erigeron canadensis*), stinknet (*Oncosiphon piluliferum*), and brownplume wire lettuce (*Stephanomeria pauciflora*).

3.3.3 Ephemeral Stream Habitat

The project site contains 0.008-acre of ephemeral stream habitat. The ephemeral stream leads to a culvert located north of the project site. This habitat is upland vegetated and dominated by common sunflower (*Helianthus annuus*), jimson weed (*Datura stramonium*), shortpod mustard (*Hirschfeldia incana*), and Russian thistle (*Salsola tragus*).

3.4 Wildlife

General wildlife species documented on the project site or within the vicinity of the site include rock wren (*Salpinctes obsoletus*), common raven (*Corvus corax*), western kingbird (*Tyrannus verticalis*), and California ground squirrel (*Spermophilus beecheyi*). The complete list of species observed is included in Appendix A.

3.5 Regional Connectivity/Wildlife Movement

Wildlife movement corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species present. Wildlife corridors represent areas where wildlife movement is concentrated due to natural or anthropogenic constraints. Local corridors provide access to resources such as food, water, and shelter. Animals use these corridors, which are often hillsides or riparian areas, to move between different habitats. Regional corridors provide these functions and link two or more

large habitat areas. They provide avenues for wildlife dispersal, migration, and contact between otherwise distinct populations.

The project site is not located within a designated wildlife corridor or linkage. The project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The project site consists of flat, disturbed land characterized by disturbed/developed and ruderal areas. Further, the project site is surrounded by urban development such as busy roads, residential uses and commercial uses to north, east, and south. The vacant land to the west is also bordered by urban development. The ephemeral stream onsite is non-continuous. No wildlife movement corridors were found to be present on the project site.

4.0 Sensitive Biological Resources

4.1 Threatened and Endangered Species

A total of 55 sensitive species of plants and 63 sensitive species of animals has the potential to occur on or within the vicinity of the project location. These include those species listed or candidates for listing by the USFWS, California Department of Fish and Wildlife (CDFW) and CNPS. All habitats with the potential to be used by sensitive species were evaluated during the site visit and a determination has been made for the presence or probability of presence within this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws or directed to be evaluated under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Sensitive species which have a potential to occur will also be discussed in this section. Other special status species are addressed within Appendix B.

4.1.1 Threatened and Endangered Plants

A total of 18 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; are required to be reviewed under the Narrow Endemic Plant section of the Western Riverside MSHCP; or are 1B.1 listed plants on the CNPS Rare Plan Inventory. Below are descriptions of these species:

Chaparral sand-verbena

Chaparral sand-verbena (*Abronia villosa var. aurita*) is ranked 1B.1 in the CNPS Rare Plant inventory. It is found in sandy areas of chaparral, coastal scrub, and desert dunes habitats. No habitat for this species is present on the project site. **This species is not present.**

Munz's Onion

Munz's onion (*Allim munzii*) is federally listed as Endangered, and State listed as Threatened; the species rank is 1B.1 in the CNPS rare plant inventory. The species is found in grassy openings in coastal-sage scrub vegetation at elevations ranging from 300-900m. Its blooming period is from April to May. The project site has been disked and there is no suitable habitat for this species. **This species is not present.**

Marsh sandwort
Marsh sandwort (*Arenaria paludicola*) is on both the federal and state Endangered Species lists and is ranked 1B.1 in the CNPS Rare Plant inventory. Habitats it is found in include freshwater marsh, marsh and swamp, and wetland. No habitat for this species is present on the project site. **This species is not present.**

Horn's Milk-Vetch
Horn's milk-vetch (*Astragalus hornii var. hornii*) is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found in alkali playa, meadow, seep, and wetland habitats. No habitat for this species is present on the project site. **This species is not present.**

Jaeger's milk-vetch
Jaeger's milk-vetch (*Astragalus pachypus var. jaegeri*) is ranked 1B.1 in the CNPS Rare Plant inventory. IT is typically found in meadows and seeps, playas. No habitat for this species is present on the project site. **This species is not present.**

San Jacinto Valley Crownscale
The San Jacinito Valley crownscale (*Atriplex coronata* var *notaitor*) is federally listed endangered and rank 1B.1 in the CNPS rare plant inventory. Its habitat includes alkali playas and vernal pools. There is no habitat for this species on the project site. **This species is not present.**

Parish's brittlescale
Parish's brittlescale (*Atriplex parishii*) is federally listed endangered and rank 1B.1 in the CNPS rare plant inventory. Its habitat includes alkali playas and vernal pools. There is no habitat for this species on the project site. **This species is not present.**

Nevin's barberry
Nevin's barberry (*Berberis nevinii*) is a federal and state Endangered Species and is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found on steep, north facing slopes or in low grade sandy washes. Its habitat includes chaparral, cismontane woodland, coastal scrub, and riparian scrub. No habitat for this species is present on the project site. **This species is not present.**

Thread-leaved brodiaea
The thread-leaved brodiaea (*brodiaea filifolia*) is a federally Threatened, state Endangered Species, and a CNPS 1B.1 listed plant. It is found in chaparral, cismontane woodlands, coastal sage scrub, valley and foothill grasslands, vernal pools and wetland. No habitat for this species is present on the project site. **This species is not present.**

Smooth tarplant

Smooth tarplant (*Centromadia pungens ssp. laevis*) is ranked 1B.1 in the CNPS Rare Plant inventory. The species habitats include alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, and valley and foothill grasslands. No habitat for this species is present on the project site. **This species is not present.**

Salt marsh bird's-beak

Salt marsh bird's -beak (*Chloropyron maritimum*) is on both the federal and state Endangered Species list. Habitats it is found in include coastal dunes, marsh and swamps, salt marsh, and wetland. It is limited to the higher zones of salt marsh habitat. No habitat for this species is present on the project site. **This species is not present**.

Parry's spineflower

Parry's spineflower (*Chorizanthe parryi var. parryi*) is ranked 1B.1 in the CNPS Rare Plant inventory. The species occurs in dry, sandy soils on dry slopes and flats, sometimes at the interface of two vegetations types, such as chaparral and oak woodland. Its habitat includes coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. No habitat for this species is present on the project site. **This species is not present**.

Slender-horned spineflower

Slender - horned spineflower (*Dodecahema leptoceras*) is a federally and state listed Endangered Species and is ranked 1B.1 in the CNPS Rare Plant inventory. Its habitat includes chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub). No habitat for this species exists on the project site. **This species is not present.**

Santa Ana River Woolystar

Santa Ana River woollystar (*Eriastrum densifolium ssp. sanctorum*) is a federally and state listed Endangered Species and is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found in sandy soils on river floodplains or terraced fluvial deposits. Its habitat includes chaparral and coastal scrub. No habitat for this species is present on the project site. **This species is not present.**

Mesa horkelia

Mesa horkelia (*Horkelia cuneata var. puberula*) is ranked 1B.1 in the CNPS Rare Plant inventory. Its habitat includes chaparral, cismontane woodland, and coastal scrub. No habitat for this species is present on the project site. **This species is considered absent.**

Coulter's goldfields

Coulter's goldfields (*Lasthenia glabrata ssp.coulteri*) is ranked 1B.1 in the CNPS Rare Plant inventory. Its habitat includes alkali playas, marsh, swamp, salt marsh, vernal pool, and wetland. No habitat for this species is present on the project site. **This species is not present.**

Gambel's water cress
Gambel's water cress (*Nasturtium gambelii*) is federally listed Endangered species, a state listed Threatened species, and is ranked 1B.1 in the CNPS rare plant inventory. It is found in freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, and wetland. No marshes or swamps are present on the project site. **This species is not present.**

Spreading navarretia
Spreading navarretia (*Navarretia fossalis*) is a state listed Threatened species and is ranked 1B.1 in the CNPS rare plant inventory. It is found in vernal pools, chenopod scrub, marshes and swamps, playas. No marshes or swamps are present on the project site. No habitat for this species is present on the project site. **This species is not present.**

4.1.2 Threatened and Endangered Animals

A total of 18 animal species are listed as state and/or federal Threatened, Endangered, Candidate will be reviewed in this section. Sensitive species which have a potential to occur will also be discussed in this section. All sensitive species within a 5-mile radius of project area were reviewed and a complete list of those species are discussed within Appendix B. Below are descriptions of these species:

Tricolored blackbird
Tricolored blackbird (*Agelaius tricolor)* is state listed as candidate Endangered and listed by the CDFW as a Species of Special Concern. The species occupies freshwater marshes with canopies of willows and other riparian trees. This species requires open accessible water and suitable foraging space. There is no suitable habitat for this species on the project site. **The species is not present.**

Burrowing owl
Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojave desert scrub, Sonoran desert scrub, and valley and foothill grassland. This species is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel. Potential habitat for this species is present on the project site. Focused surveys for this species were conducted on the project site (Appendix E). Although suitable habitat occurs on the project site, this species was not observed during focused surveys. **This species is not present.**

Crotch bumble bee
Crotch bumble bee (*Bombus crotchii*) is a state listed candidate Endangered species. This species typically lives in coastal California east to the Sierra Cascade crest and south into Mexico. Its food plant genera

includes *Antirrhinum, Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. There is no suitable habitat for this species present on the project site. **This species is not present.**

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed Threatened species. This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland. The project site does not contain suitable habitat for this species. **This species is not present.**

Santa Ana sucker

Santa Ana sucker (*Catostomus santaanae*) is a federally listed Threatened species. Its habitat includes aquatic and south coast flowing waters. This species prefers sand-rubble-boulder bottoms, cool and clear water, and algae. It is endemic to Los Angeles Basin south coastal streams. The project site does not contain suitable habitat for this species. **This species is not present.**

Western yellow-billed cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is federally listed Threatened, and state listed Endangered species. This species typically nests in riparian jungles of willows, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape. It is found in riparian forest habitat. The project site does not contain suitable habitat for this species. **This species is not present.**

San Bernardino kangaroo rat

San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally listed Endangered species and a CDFW Species of Special Concern. It is found in coastal scrub habitat. This species is found in alluvial scrub vegetation on sandy loam substrates, characteristic of alluvial fans and flood plains. It needs early to intermediate seral stages. The project site does not contain suitable habitat for this species. **This species is not present.**

Stephens' kangaroo rat

Stephens' kangaroo rat (*Dipodomys stephensi*) is a federally listed Endangered and state listed Threatened species. This species is found in coastal sage scrub with sparse vegetation cover, and in valley and foothill grasslands. This species prefers buckwheat, chamise, brome grass, and filaree and will burrow into firm soil. The project site does not contain suitable habitat for this species. **This species is not present.**

Southwestern willow flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and state listed Endangered species. It is found in riparian woodland habitat in southern California. The project site does not contain suitable habitat for this species. **This species is not present.**

Quino checkerspot butterfly

Quino checkerspot butterfly (*Euphydryas editha quino*) is a federally listed Endangered species. It is found in chaparral and coastal sage scrub. This species requires high densities of food plants, including *Plantago erecta*, *P. insularis*, and *Orthocarpus purpurescens*. The project site does not contain suitable habitat for this species. **This species is not present.**

Bald Eagle

Bald eagle (*Halieaeetus leucocephalus*) is state listed as Endangered and has been delisted as a federal Endangered species. The species is fully protected under the regulations of the CDFW. It is found around wetlands, open water areas with an abundance of fish. It nests and roosts in large trees. There is no nesting habitat for this species on the project site. **The species is not present.**

California black rail

California black rail (*Laterallus jamaicensis coturniculus*) is a state listed Threatened species and is a CDFW Fully Protected Species. It inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. This species needs water depths of about one inch that do not fluctuate throughout the year and dense vegetation for nesting habitat. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, salt marsh, and wetland. The project site does not have suitable habitat for this species. **This species is not present.**

Steelhead-southern California DPS

Steelhead-southern California DPS (*Oncorhynchus mykiss irideus pop. 10*) is a federally listed Endangered species. This species is likely to have greater physiological tolerances to warmer water and more variable conditions. Its habitats include aquatic and south coast flowing waters. The project site does not have suitable habitat for this species. **This species is not present.**

Coastal California gnatcatcher

Coastal California gnatcatcher (*Polioptila californica californica*) is a federally listed Threatened species and CDFW Species of Special Concern. This species is found in coastal bluff scrub and coastal scrub habitat. This species is typically found in low, coastal sage scrub in arid washes, on mesas and slopes. The project site does not contain suitable habitat for this species. **This species is not present.**

Southern mountain yellow-legged frog

Southern mountain yellow-legged frog (*Rana muscosa*) is a federally and state listed Endangered species. It is found in aquatic habitat. This species is always encountered within a few feet of water. Tadpoles may require two to four years to complete their aquatic development. The project site does not contain suitable habitat for this species. **This species is not present.**

Delhi Sands flower-loving fly

Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*) is a federally listed Endangered species. It requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. It is found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. This species is found in interior dune habitat. The project site does not have suitable habitat for this species. **This species is not present.**

Riverside fairy shrimp

Riverside fairy shrimp (*Streptocephalus woottoni*) is a federally listed Endangered species. This species is found in coastal scrub, valley and foothill grassland, vernal pool, and wetland habitat. This species typically inhabits seasonally astatic pools filled by winter/spring rains. The project site does not contain suitable habitat for this species. **This species is not present.**

Least Bell's vireo

Least Bell's vireo (*Vireo bellii pusillus)* is a federal and state listed Endangered species. This species is found in riparian forest, riparian scrub, and riparian woodland. Nesting habitat of this species is restricted to willow and/or mulefat dominated riparian scrub along permanent or nearly permanent streams. No suitable habitat for this species is present on the project site. **This species is not present.**

4.2 Nesting Birds

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The project site contains trees and shrubs that can be utilized by nesting birds and raptors during the nesting bird season of February 1 through September 15.

4.3 Jurisdictional Waters

The project area does not contain any streams or drainages or riparian habitat. There CDFW, United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the project boundaries. Further, the project area does not contain any wetlands or vernal pools.

5.0 Project Impacts

5.1 Impacts to Existing Habitats

The development of the proposed project will impact the entire 26.74-acre project site, including approximately 15.742-acres of disturbed areas, 10.99-acres of ruderal habitat and 0.008 acre of ephemeral stream.

5.2 Impacts to Sensitive Species

No sensitive species have a potential to occur on the project site; therefore, no sensitive species will be impacted by this project.

5.3 Impacts to Nesting Birds

If the project will remove shrubs between February 1 and September 15, the project will have a potential to impact nesting birds. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to nesting birds are less than significant.

5.4 Impacts to Critical Habitat

The project site is not located within designated federal critical habitat. No impact to critical habitat would occur.

5.5 State and Federal Drainages

The proposed project will result in impacts to approximately 0.008 acre (58 linear feet) of CDFW jurisdiction consisting of 0.008 acre of upland vegetated ephemeral stream. Further the proposed project will result in impacts to approximately 0.008 acre of onsite waters of the state. Refer to Appendix F.

5.6 Impacts to Wildlife Movement Corridors

No wildlife movement corridors were found to be present on the project site. No impacts to wildlife movement corridors are expected.

5.7 Conflict with Local Policies or Ordinances Protecting Biological Resources

Any project activities that have the potential to impact onsite trees will require a survey of oak and native trees to comply with Riverside County Ordinance 559. No oak or native trees are located on the project site. Therefore, development of the project site would not conflict with local policies or ordinances protecting biological resources.

5.8 Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan

The site is located within the boundaries of the Western Riverside MSHCP. If Western Riverside MSHCP guidelines and requirements are followed, no conflicts are expected.

6.0 Western Riverside County MSHCP Consistency Analysis

6.1 MSHCP Requirements

The project area is located within the Mead Valley Area Plan of the Western Riverside County MSHCP. The project site is not located within a Criteria Cell or Cell Group. A discussion of the applicable Western Riverside County MSHCP requirements follows:

Section 6.1.2 Species Associated with Riparian/Riverine Habitat and Vernal Pools

The project site contains approximately 0.008 acre of habitat consisting of upland vegetated ephemeral stream, that would be considered riparian/riverine areas as defined in Section 6.1.2 of the Western Riverside MSHCP. While the onsite ephemeral drainage feature meets the definition of a riparian/riverine area according to the MSHCP, the drainage does not support suitable riparian habitat with the potential to support riparian/riverine bird species. Further, none of the riparian/riverine bird species listed in Section 6.1.2 of the MSHCP were found within the project site. Due to the lack of suitable riparian habitat on the project site, focused surveys for riparian/riverine bird species listed in Section 6.1.2 of the MSHCP are not warranted.

Implementation of the proposed project will result in impacts to approximately 0.008 acre if riverine resources. Offsite mitigation for impacts to 0.008 acres of upland vegetated ephemeral channel would be provided at a 2:1 ration. An MSHCP Determination of Biological Equivalent or Superior Preservation (DBESP) will be prepared for impacts to 0.008 acre of riverine resources.

Vernal pools are seasonal depressional wetlands that occur under Mediterranean climate conditions of the west coast and in glaciated conditions of northeastern and midwestern states. They are covered by shallow water for variable periods from winter to spring but may be completely dry most of the summer and fall. Vernal pools are usually associated with hard clay layers or bedrock, which helps keep water in the pools. Vernal pools and seasonal depressions usually are dominated by hydrophytic plans, hydric soils, and evidence of hydrology.

The entire site was evaluated for the presence of habitat capable of supporting branchiopods. The site was evaluated as described in the USFWS Survey Guidelines for the Listed Large Branchiopods (May 31, 2016). The project area is primarily comprised of sandy loams. The onsite soils do not allow for water pooling on the site for any significant length of time after rain events. No vernal pools, swales, or vernal pool mimics such as ditches, borrow pits, cattle troughs, or cement culverts with signs of pooling water were found on the site. In addition, the site does not contain areas that showed signs of ponding water, hydrophytic vegetation, or soils typical of vernal pools that would be suitable for large branchiopods.

Section 6.1.3 Sensitive Plant Species

The project site is not located within the Western Riverside County MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) pursuant to Section 6.1.3 of the MSHCP. Therefore, the NEPSSA requirements are not applicable to the project.

Section 6.1.4 Urban/Wildlands Interface Guidelines

The project site is not located within or adjacent to a Western Riverside County MSHCP Conservation Area; therefore, the project site is not required to address Section 6.1.4 of the Western Riverside County MSHCP.

Section 6.3.2 Additional Surveys and Procedures

The project site is not located within the Western Riverside County MSHCP Additional survey areas for amphibians, mammals, or any special linkage areas. In addition, the project site is not located within the Western Riverside County MSHCP Criteria Area Plant Species Survey Area (CAPSSA) pursuant to Section 6.3.2 of the Western Riverside County MSHCP. However, the project site is located within the Western Riverside County MSHCP Additional survey area for burrowing owl.

The habitat assessment conducted on the site found that the project site does provide suitable burrows/nesting opportunities for burrowing owl. Therefore, focused surveys for this species were conducted on the project site in March and April 2021 (Appendix E). Well-drained soils, rock outcrops, debris piles, and evidence of fossorial mammals were observed on the site. Approximately 56 suitable burrows were identified and recorded. However, burrowing owl signs such as molted feathers, pellets, prey remains, or whitewash were not found. Further, no burrowing owl were observed on the project site. Based on the absence of burrowing owl and burrowing owl evidence within the study area, it can be concluded that the study area is not currently in use by burrowing owl.

However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding project activities. If BUOW are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance. If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

7.0 Recommendations

Implementation of the following measures will mitigate any potential impacts resulting from project activities.

Burrowing Owl

- Due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding project activities.

- If BUOW are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance.

- If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

Nesting Birds

- It is recommended that vegetation removal be conducted during the non-nesting season for migratory birds to avoid direct impacts. The migratory bird season is between February 1 and September 15.

- If vegetation removal will occur during the migratory bird nesting season, between February 1 and September 15, it is recommended that pre-construction nesting bird surveys be performed within three days prior to vegetation removal.

- If active nests are found during nesting bird surveys, they shall be flagged and a 200-foot buffer shall be fenced around the nests.

- A biological monitor shall visit the site once a week during ground disturbing activities to ensure all fencing is in place and no sensitive species are being impacted

Drainages

- CDFW jurisdiction and waters of the State are regulated by the state gavernments under a no-net-loss policy. All impacts are considered significant and should be avoided to the greatest extent possible. Unavoidable and authorized impacts would require mitigation through habitat creation, restoration or enhancement as determined through consultation with the regulatory agencies during the permitting process.

- The proposed impacts to 0.008 acres of CDFW jurisdicitoin would require a 1602 Streambed Alteration Agreement from the CDFW. The proposed 0.008 acre of impacts to waters of the State would require waste discharge requirements (WDR) under Porter-Cologne from the Santa Ana RWQCB.

- Implementation of the proposed project will result in impacts to approximately 0.008 acre of MSHCP riverine resources. An MSHCP DBESP will be prepared for impacts to 0.008 acre of riverine resources.

8.0 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 05-25-2020 Signed _____

PROJECT MANAGER

Fieldwork Performed By:

Hallie Hernandez

_____

ASSOCIATE BIOLOGIST

Shawn Gatchel-Hernandez

_____

PRINCIPAL REGULATORY SPECIALIST

9.0 References

California Department of Fish and Wildlife (CDFW), Natural Diversity Database (CNDDB). Accessed September 2021. California Department of Fish and Wildlife, Sacramento, California.

Garrett, K. and J. Dunn, 1981. Birds of Southern California. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.

Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. A Check-list of the Amphibians, Reptiles, Birds and Mammals of California. California Wildlife Habitat Relationship System, California Department of Fish and Game, Sacramento, California.

Grinnell, J., 1933. Review of the Recent Mammal Fauna of California. University of California Publications in Zoology, 40:71-234.

Hall, E. R., 1981. The Mammals of North America, Volumes I and II. John Wiley and Sons, New York, New York.
Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.

Ingles, L. G., 1965. Mammals of the Pacific States. Stanford University Press, Stanford, California.

Jameson, jr., E. W. and H. J. Peters. California Mammals. University of California Press, Berkeley, Los Angeles, London. 403 pp.

List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.

Munz, P.A., 1974. A Flora of Southern California. University of California Press, Berkeley, California.

Peterson, R. 1990 *A Field Guide to Western Birds*. Houghton Mifflin Company, Boston, MA.

Riverside County Integrated Project (RCIP) 2003 Final Multiple Species Habitat Conservation Plan (MSHCP). Riverside, CA.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens 2009 *A Manual of California Vegetation, 2nd edition*. California Native Plant Society Press, Sacramento, CA.

U.S Fish and Wildlife Service, 2014. Endangered and Threatened Wildlife and Plants. https://www.fws.gov/endangered/species/us-species.html. Accessed September 2021.

USGS (United States Geological Survey). 2021. Sunnymead, California, Quadrangle. 7.5 Minute Series (topographic map).

Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed September 2021.

Western Riverside County Multiple Species Habitat Conservation Plan. *Burrowing Owl Instructions for Western Riverside Multiple Species Habitat Conservation Plan.*

Western Riverside County Multiple Species Habitat Conservation Plan. Section *6.0 MSHCP Implementing Structure.*

WRCRCA (Western Riverside County Regional Conservation Authority). 2021a. WRCRCA MSHCP Information Tool. Accessed from: https://www.wrc-rca.org/rcamaps/. Accessed September 2021.

WRCRCA. 2021b. Western Riverside County Multiple Species Habitat Conservation Plan. Accessed online at: http://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/. Accessed September 2021.

FIGURES

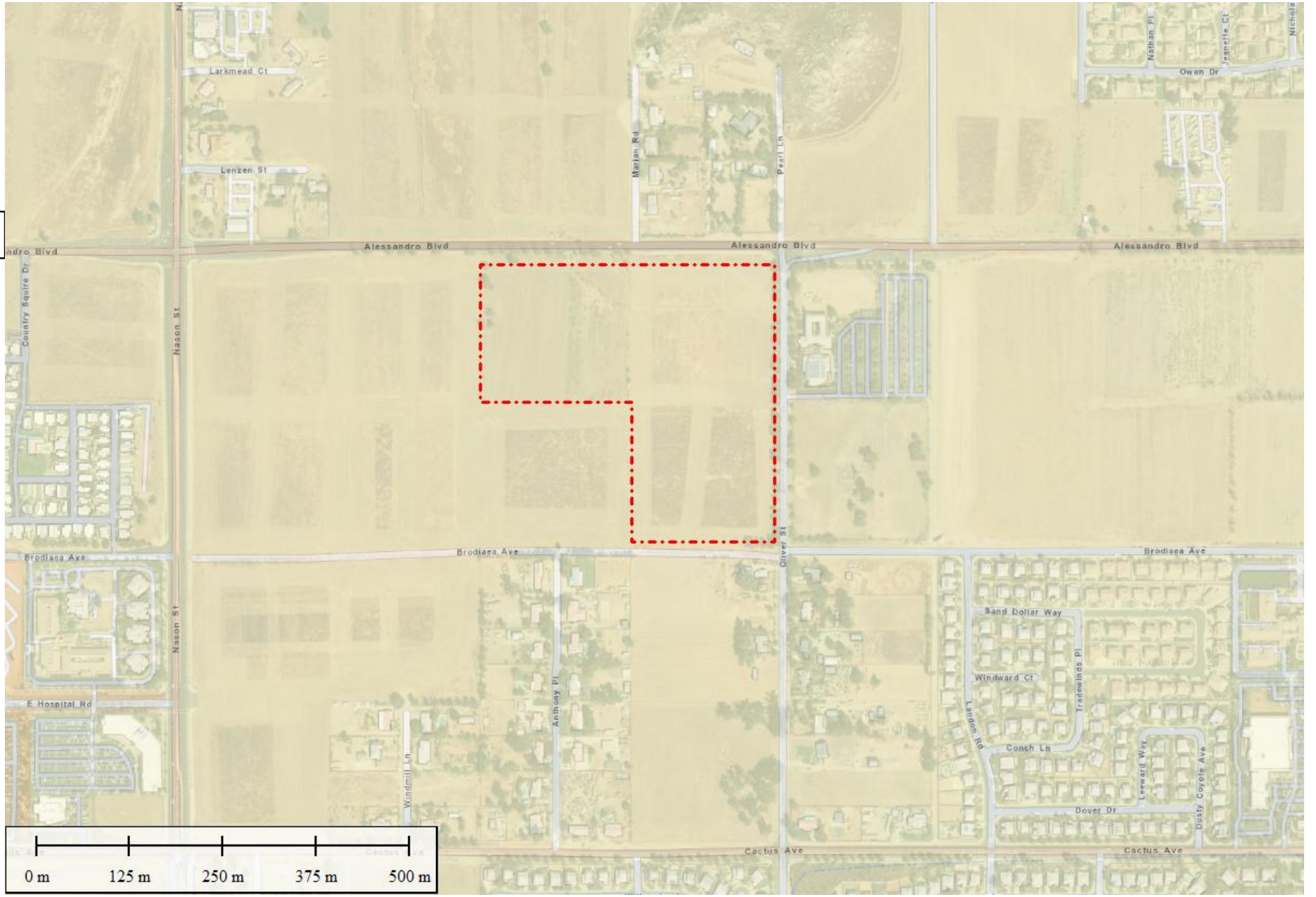


Figure 1
Location Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

N

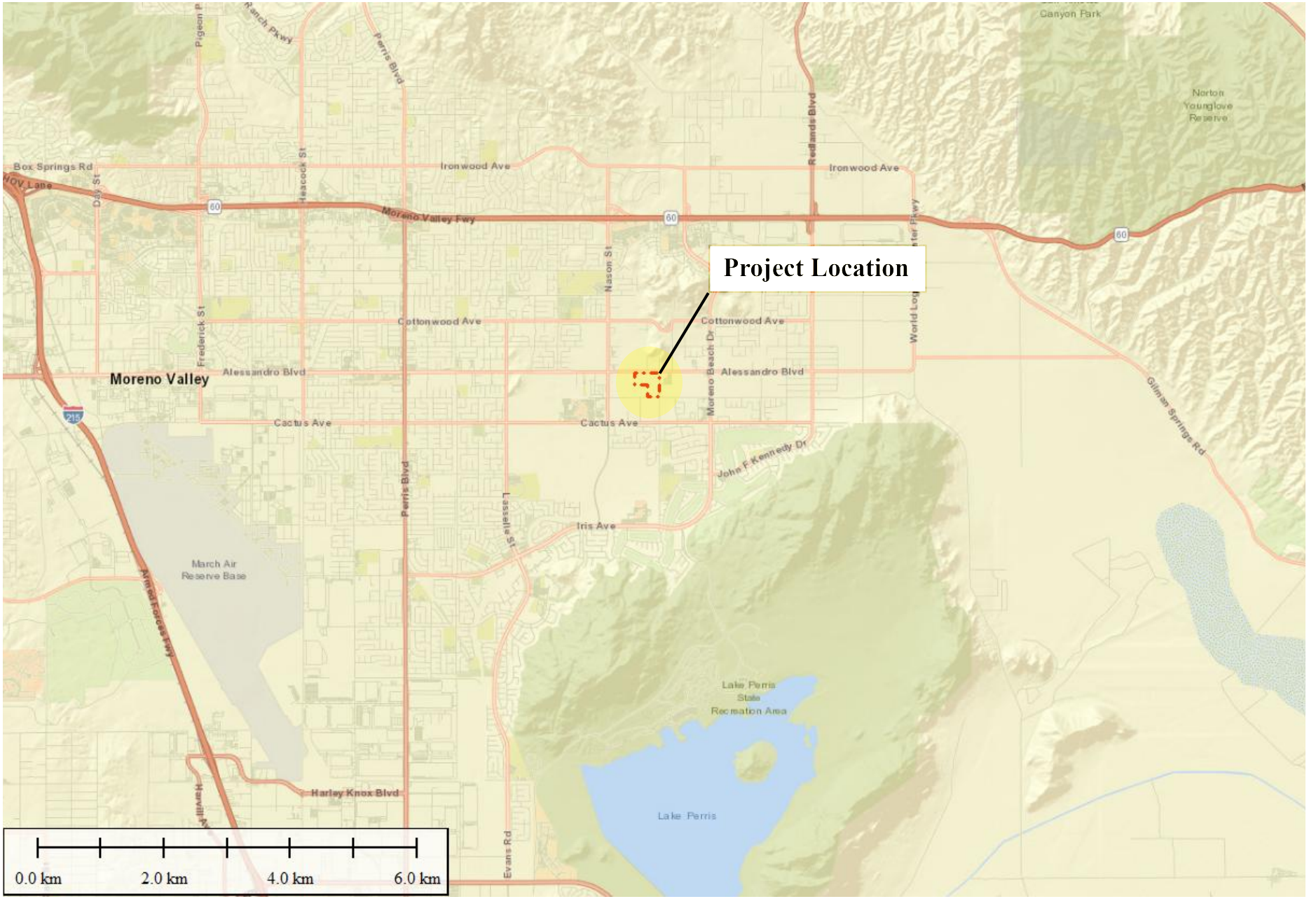


Figure 2
Vicinity Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

IN THE CITY OF MORENO VALLEY, COUNATY OF RIVERSIDE, STATE OF CALIFORNIA
TENTATIVE TRACT MAP 38236

AUGUST 2021

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 · Fax:(951) 688-0599

PREPARATION DATE : AUGUST 2021
REVISED DATE :

OWNER

APN 486-260-005 & 486-260-009
GRANITE CAPITAL LLC
11370 MORENO BEACH DRIVE
MORENO VALLEY, CA 92555
APN 486-260-003 & 486-260-004
VALLEY CHRISTIAN CHURCH OF THE BRETHEREN IN CHRIST
26755 ALESSANDRO BOULEVARD
MORENO VALLEY, CA 92555-3902

UTILITY PURVEYORS

WATER:	EASTERN MUNICIPAL WATER DISTRICT
SEWER:	EASTERN MUNICIPAL WATER DISTRICT
GAS:	SOUTHERN CALIFORNIA GAS COMPANY
ELECTRICITY:	CITY OF MORENO VALLEY
TELEPHONE:	VERIZON
CATV:	ADELPHIA

ASSESSORS PARCEL NUMBER

486-260-003, 486-260-004, 486-260-005 & 486-260-009

LEGEND

PROP DOMESTIC WATER
PROPOSED SEWER
TRACT BOUNDARY
OLD TRACT BOUNDARY
PHASING BOUNDARY
A.D.A ACCESS RAMP
PROPOSED BLOCK WALL
FAULT SETBACK LINE

SD = STORM DRAIN	SW = SIDEWALK
TC = TOP OF CURB	( ) = EXISTING ELEVATION
FS = FINISH SURFACE	C&G = CURB AND GUTTER
SWR = SEWER	S.F. = SQUARE FEET
CL = CENTER LINE	FS = FINISH SURFACE
FG = FINISHED GROUND	FH = FIRE HYDRANT
WTR= WATER	TW = TOP OF WALL
P/L = PROPERTY LINE	TF = TOP OF FOOTING
R/W = RIGHT OF WAY	FL= FLOW LINE
A.R. = A.D.A ACCESS RAMP	T.B.R. = TO BE REMOVED

EARTHWORK QUANTITIES

CUT: _ CY FILL: _ CY IMPORT: _ CY
THE QUANTITY SHOWN ABOVE IS FOR DISCUSSION PURPOSES ONLY.

TENTATIVE TRACT SUMMARY

TOTAL AREA GROSS:	26.7 ACRES
EXISTING ZONING:	DC
PROPOSED ZONING:	DC
EXISTING LAND USE:	SUBURBAN RESIDENTIAL
PROPOSED LAND USE:	SUBURBAN RESIDENTIAL
EXISTING SURROUNDING LAND USE:	RESIDENTIAL AGRICULTURE SUBURBAN RESIDENTIAL
EXISTING SURROUNDING ZONING:	RA-2, R-3, R-5

BENCHMARK

IVF 52
BRASS DISK AT THE NW CORNER OF ALESSANDRO BLVD. AND REDLANDS BLVD. 170.0 FEET NORTH OF ALESSANDRO BLVD.; 43.0 FEET WEST OF REDLANDS BLVD; 2.0 FEET SE OF POWER POLE #21599 C.W.T.; 1.0 FEET NORTH OF A MARKER POST, A BRASS DISK SET IN THE TOP OF A CONCRETE POST AND MARKED "IVF 52 1993" ELEVATION: 1603.71 NAVD 1988

BASIS OF BEARINGS

"THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, CCS83, ZONE 6, BASED LOCALLY ON CONTROL STATIONS "P482", "P478", AND "SBCC" NAD 83(NSRS2011) EPOCH 2010.00 AS SHOWN HEREON. ALL BEARINGS SHOWN ON THIS MAP ARE GRID. QUOTED BEARINGS AND DISTANCES FROM REFERENCE MAPS OR DEEDS ARE AS SHOWN PER THAT RECORD REFERENCE. ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS SPECIFIED OTHERWISE. GRID DISTANCES, MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCE BY A COMBINATION FACTOR OF 0.99993579. CALCULATIONS ARE MADE AT 1"IP TAGGED "LS 5174", DOWN 0.2' IN WELL PER TRACT 36882, MB 454/37-39 WITH COORDINATES OF:
N: 2277362.55000000, E: 6280631.21000000
USING AN ELEVATION OF 1565.533.

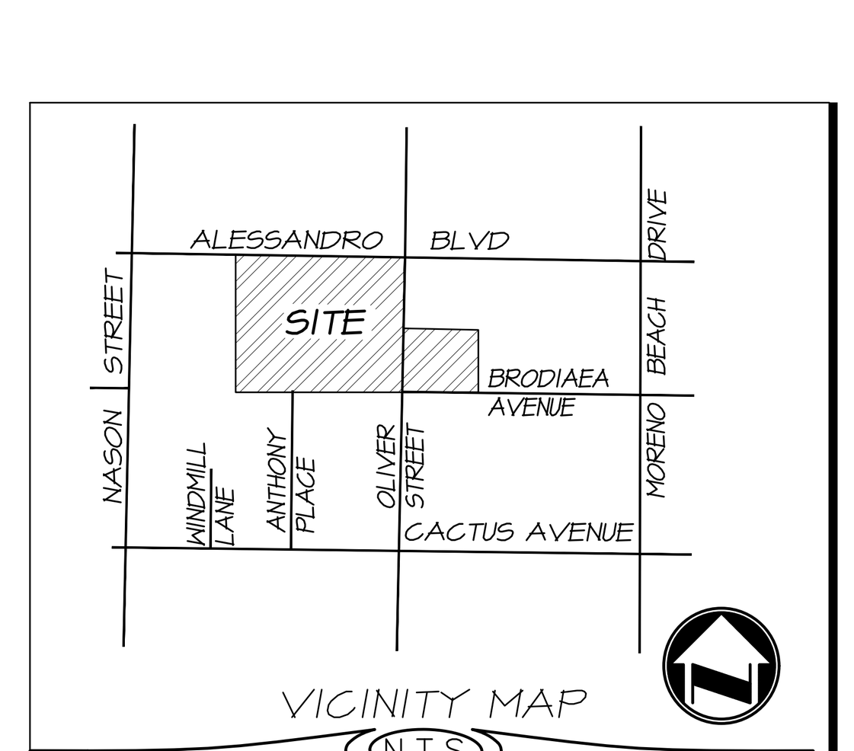
TOPOGRAPHY SOURCE

TOPOGRAPHY COMPILED PHOTOGRAMETRICALLY BY INLAND AERIAL SURVEY INC. ON 05-14-20 AND 03-26-21

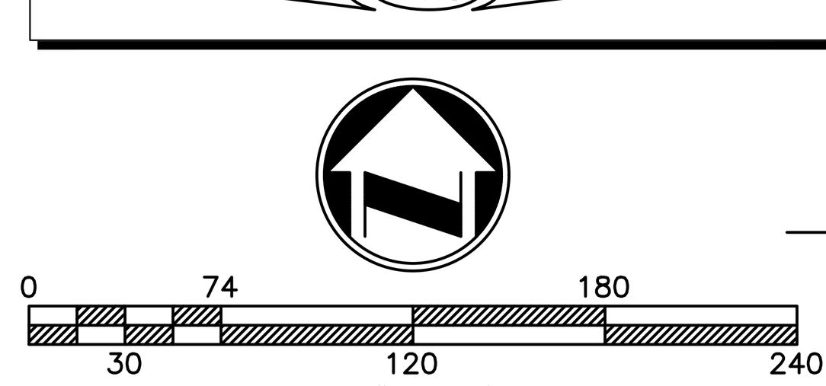
RESIDENTIAL

LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA
1	4,494	38	2,800	75	2,906	112	2,800	149	3,059	186	3,861
2	2,806	39	2,800	76	2,906	113	2,800	150	3,545	187	3,751
3	2,805	40	2,800	77	3,238	114	2,800	151	4,426	188	3,650
4	2,805	41	2,893	78	3,071	115	2,800	152	4,032	189	3,611
5	2,805	42	3,401	79	3,238	116	2,800	153	3,828	190	3,872
6	2,805	43	3,401	80	3,661	117	2,847	154	3,138	191	3,648
7	2,805	44	3,401	81	3,166	118	2,847	155	2,978	192	3,697
8	2,805	45	3,401	82	3,179	119	2,814	156	2,871	193	3,548
9	2,805	46	3,401	83	3,179	120	3,669	157	2,817	194	3,761
10	2,805	47	2,836	84	3,166	121	3,491	158	2,808	195	3,714
11	2,805	48	2,830	85	3,661	122	3,382	159	2,808	196	3,714
12	2,805	49	2,733	86	3,818	123	3,487	160	2,807	197	3,769
13	2,805	50	3,464	87	3,228	124	2,949	161	2,807	198	4,245
14	2,816	51	2,830	88	3,819	125	2,948	162	2,807	199	3,705
15	3,563	52	2,830	89	3,419	126	2,957	163	2,807	200	3,603
16	2,800	53	2,830	90	3,345	127	2,916	164	2,806	201	3,603
17	2,802	54	2,830	91	3,209	128	2,876	165	4,616	202	4,149
18	3,522	55	2,830	92	3,066	129	2889	166	5,306	203	4,489
19	2,802	56	2,830	93	2,943	130	2888	167	3,803	204	4,251
20	2,802	57	2,830	94	2,898	131	2888	168	3,784		
21	2,802	58	3,239	95	3,491	132	2888	169	4,050		
22	2,802	59	3,367	96	3,587	133	2888	170	4,004		
23	2,802	60	3,446	97	3,453	134	2,838	171	3,722		
24	2,802	61	3260	98	2,810	135	2887	172	3,832		
25	2,802	62	3260	99	2,824	136	3394	173	4,766		
26	3,395	63	4,188	100	2,840	137	3,395	174	3,720		
27	3,238	64	3260	101	2,822	138	2887	175	3,680		
28	2,801	65	3260	102	2800	139	2807	176	3,653		
29	2,805	66	3260	103	2800	140	2887	177	3,639		
30	2,807	67	3268	104	2,832	141	2887	178	3,638		
31	2,801	68	3549	105	2800	142	2887	179	4,508		
32	3,235	69	2800	106	3232	143	2887	180	4,858		
33	3,386	70	2800	107	2800	144	2876	181	3,834		
34	2,800	71	2916	108	2813	145	2886	182	3,914		
35	2,800	72	2910	109	2817	146	2908	183	4,198		
36	2,800	73	2905	110	2800	147	2875	184	4,153		
37	2,800	74	2906	111	3232	148	2890	185	4,153		

MIN. LOT SIZE = 2,800 S.F.
SUBDIVISION DENSITY= 0.44 DU/ACRE



VICINITY MAP
N.T.S.



SCALE: 1" = 60'

ENGINEER

adkan ENGINEERS
6879 AIRPORT DRIVE
RIVERSIDE, CA. 92504
951-688-0241

APPLICANT

D.R. HORTON
2280 WARDLOW., STE. 100
CORONA, CA 92878

PROJECT NOTES

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS PLAN. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS DRAWING.
2. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, HE/SHE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
3. 2010 THOMAS BROS. MAP BOOK: PAGE 718, GRID C-6
4. SITE IS LOCATED IN LOW LIQUEFACTION AREA AND IS SUSCEPTIBLE TO SUBSIDENCE.
5. A PORTION OF LAND IS SUBJECT TO TO OVERFLOW INUNDATION OR FLOOD HAZARD
6. PROJECT IS NOT LOCATED IN A HIGH FIRE AREA.
7. ALL IMPROVEMENTS SHALL BE PER SCHEDULE "A" SUBDIVISION ORDINANCE 460.
8. NO SUBSURFACE SEPTIC SEWAGE DISP #2560SAL IS INTENDED.
9. THIS MAP DOES NOT INCLUDE THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
10. THIS PROJECT IS LOCATED IN RIVERSIDE COUNTY ORDINANCE NO. 655, ZONE B REGULATING LIGHT POLLUTION
11. PROJECT IS LOCATED IN FLOOD ZONE X AND FLOOD ZONE A PER FEMA PANEL 06065C0710G.
12. NO KNOWN EXISTING WELLS ON OR AROUND THE PROPERTY.
13. PROJECT LOCATION IS NOT IN A FAULT ZONE OR FAULT LINE.
14. SITE IS LOCATED IN A HIGH SENSITIVITY PALEONTOLOGICAL AREA
15. SITE IS LOCATED WITHIN THE MORENO VALLEY UNIFIED SCHOOL DISTRICT

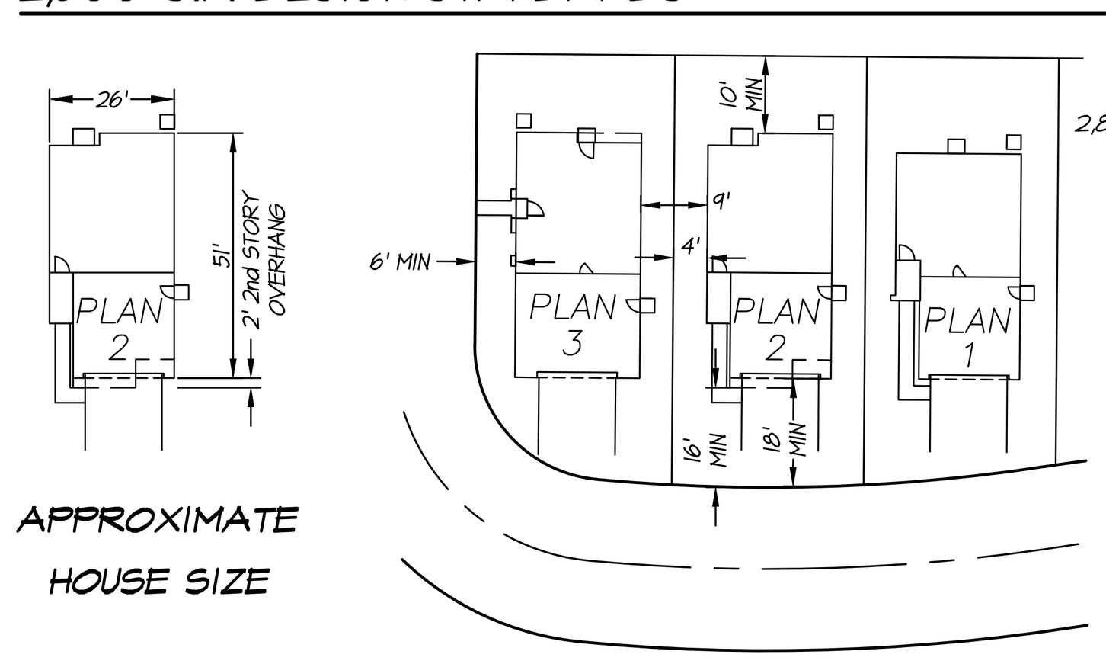
LEGAL DESCRIPTION

APN 486-260-003:
THE WESTERLY 6 ACRES OF LOT 2 IN BLOCK 118, AS SHOWN BY MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANYS LANDS, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CA

APN 486-260-004:
LOT 2 IN BLOCK 118 AS SHOWN BY MAP No. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF RECORDS OF SAN BERNARDINO COUNTY, CA.

APN 486-260-005 & 486-260-009:
LOT 1 AND 8 IN BOOK 118 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP IN BOOK 11, PAGE 10 OF MAPS, SAN BERNARDINO COUNTY RECORDS.

2,800 S.F. DESIGN STANDARDS

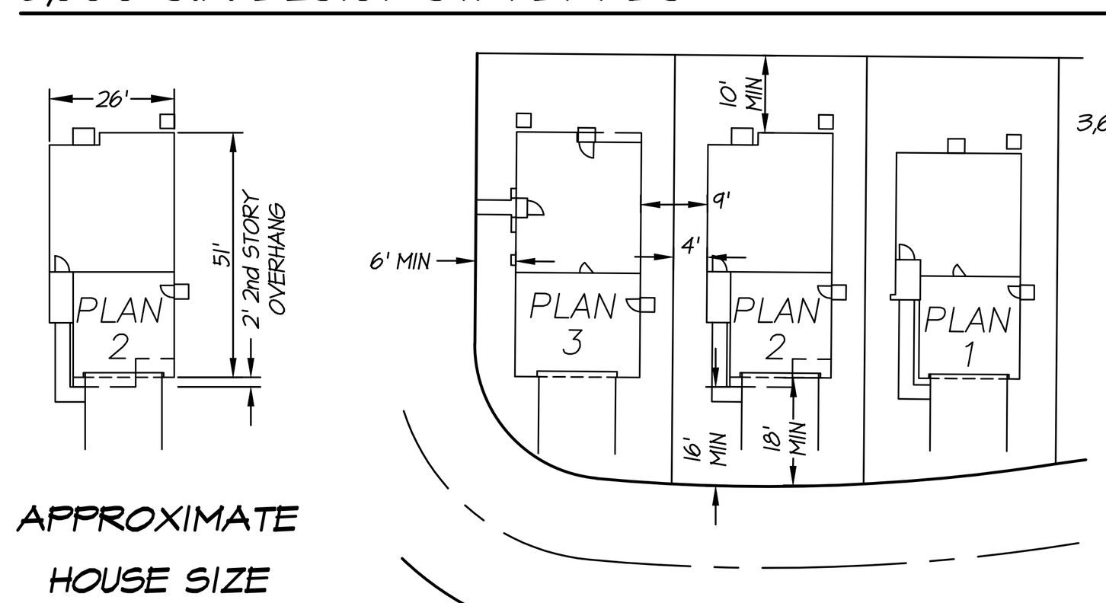


APPROXIMATE HOUSE SIZE

SETBACKS

2,800 S.F SETBACKS
FRONT YARD:...............18' FIRST STORY
16' SECOND STORY
SIDE YARD:..........................4' MINIMUM
9' AGGREGATE
REAR YARD:.......................10' MINIMUM
CORNER LOT SIDE ENTRY:.....6' MINIMUM

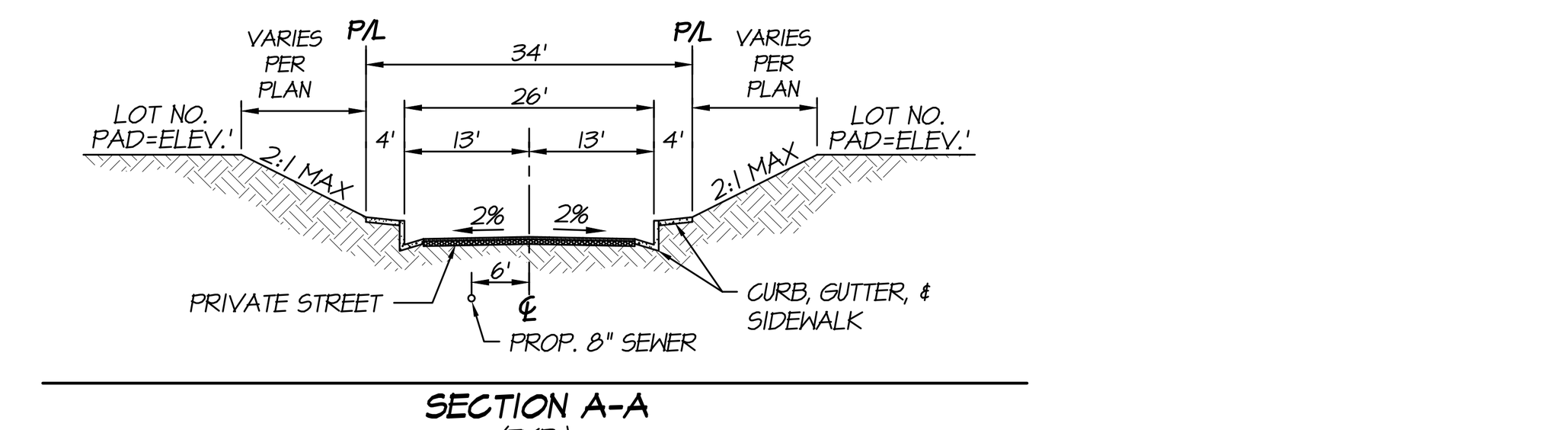
3,600 S.F. DESIGN STANDARDS



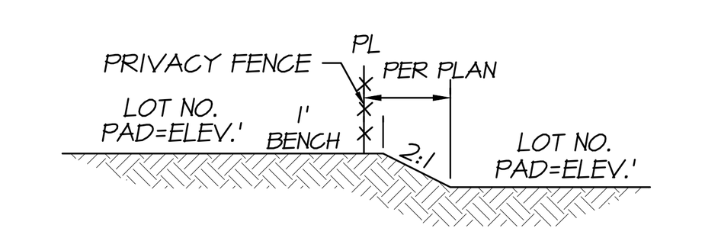
APPROXIMATE HOUSE SIZE

SETBACKS

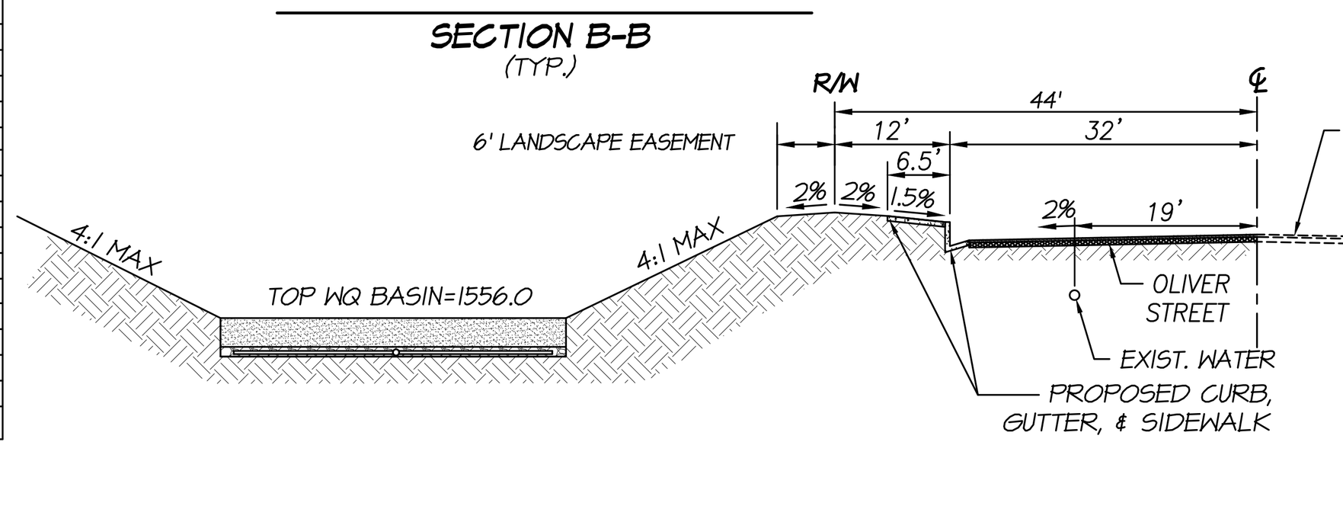
3,600 S.F SETBACKS
FRONT YARD:...............18' FIRST STORY
16' SECOND STORY
SIDE YARD:..........................4' MINIMUM
9' AGGREGATE
REAR YARD:.......................10' MINIMUM
CORNER LOT SIDE ENTRY:.....6' MINIMUM



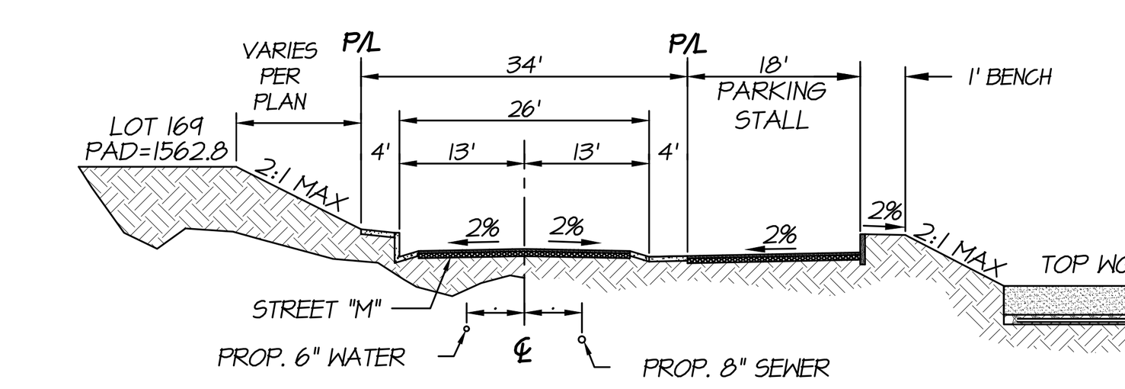
SECTION A-A
(TYP.)



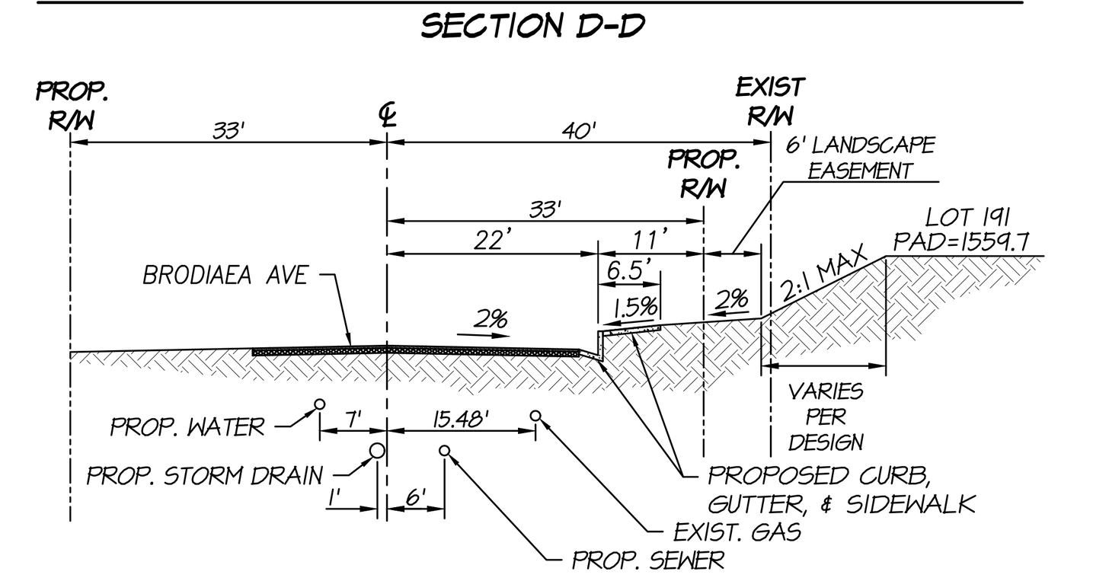
SECTION B-B
(TYP.)



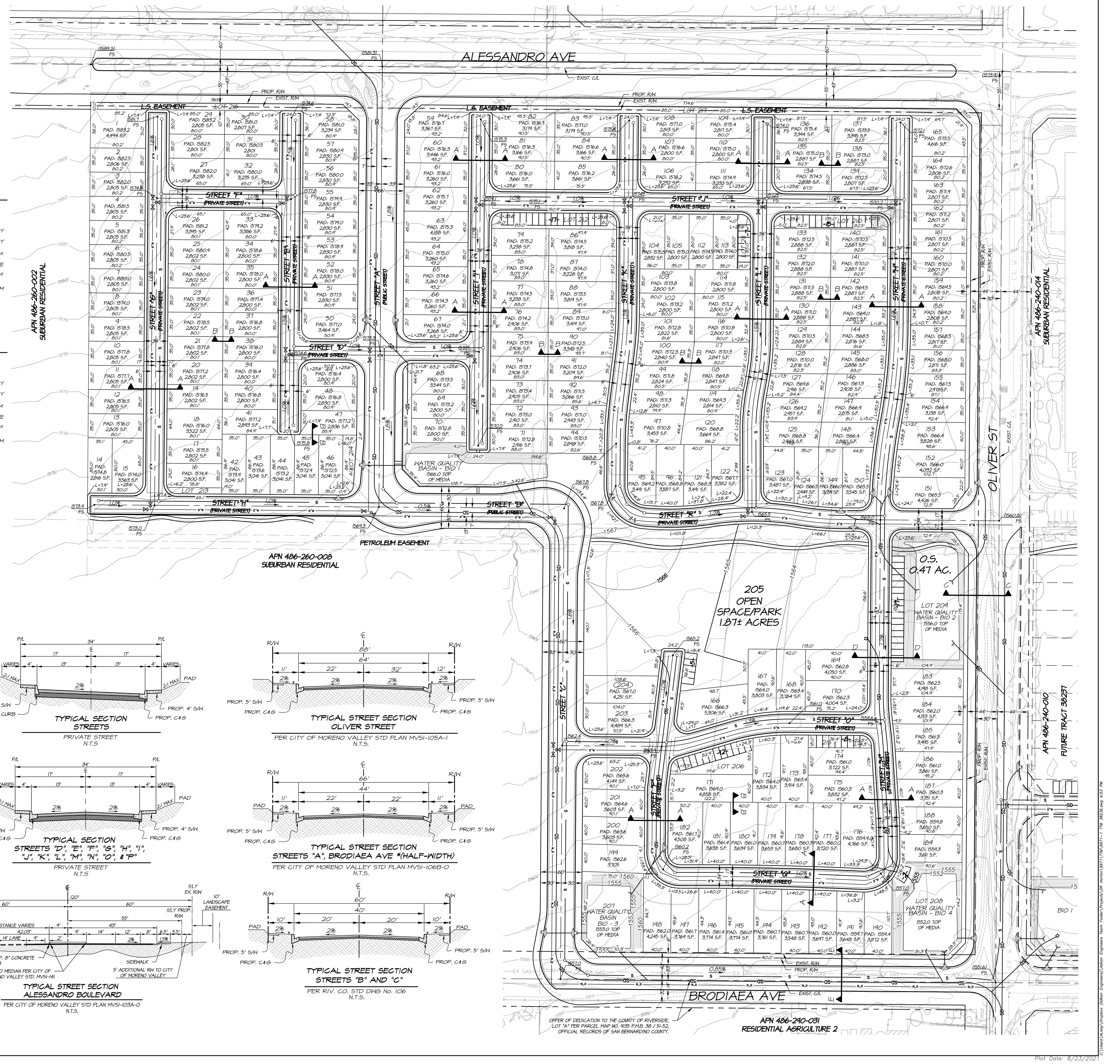
SECTION C-C



SECTION D-D



SECTION E-E



Plot Date: 8/23/2021

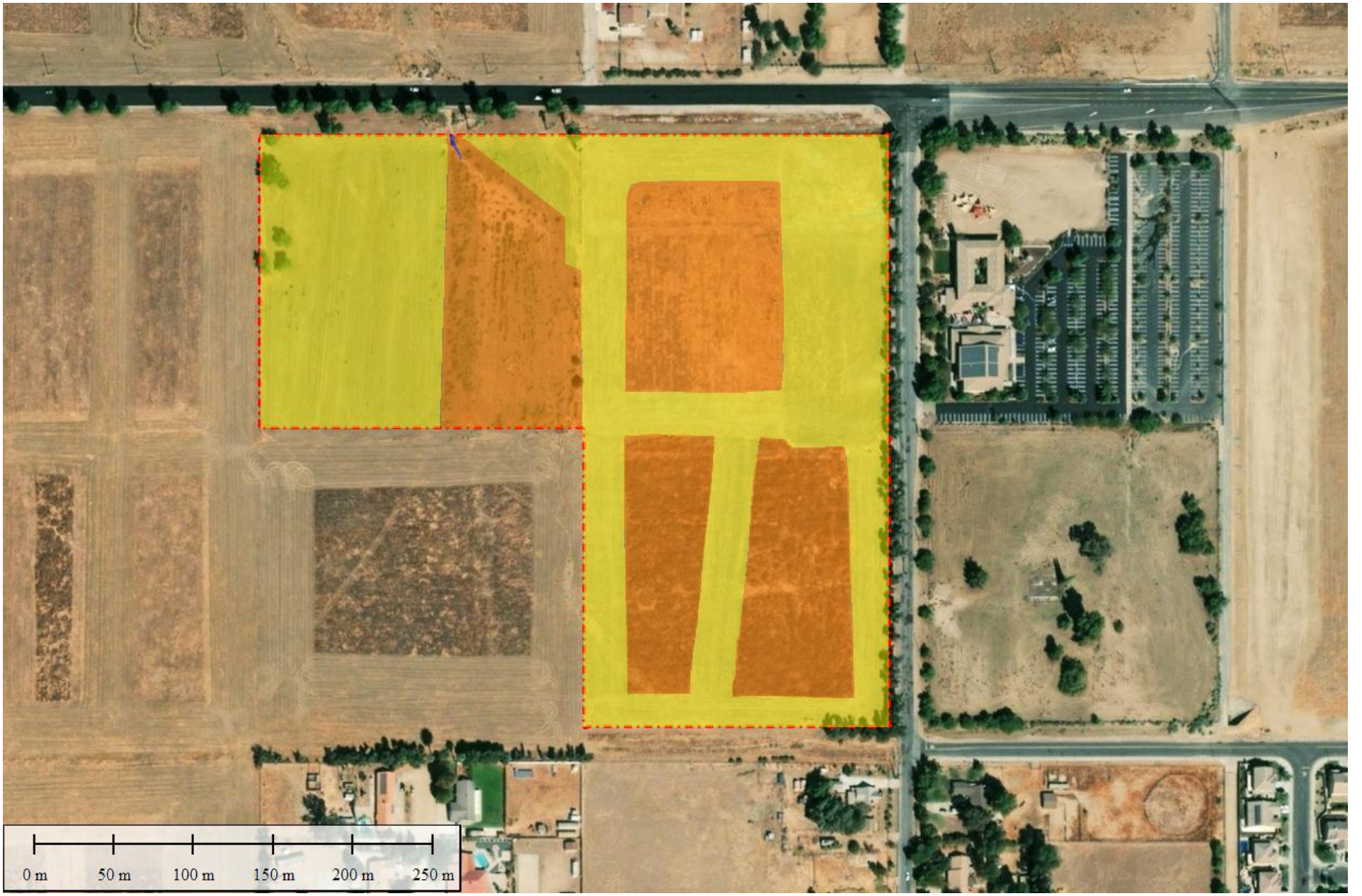


Figure 4

Habitat Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

APPENDIX A

Species List

Plant List

Ambrosia acanthicarpa	Flat-Spine Burr-Ragweed
Brassica sp.	Mustard sp.
Bromus sp.	Bromus sp.
Chenopodium murale	Nettle leaved goosefoot
Chloris virgata	Feathery Rhodes-grass
Cucurbita palmata	Coyote gourd
Datura stramonium	Jimsonweed
Erigeron canadensis	Canadian horseweed
Helianthus annuus	Common sunflower
Heterotheca grandiflora	Telegraph weed
Kali tragus	Russian thistle
Nerium oleander	Oleander
Olea europaea	Olive tree
Parkinsonia aculeata	Jerusalem thorn
Phacelia cicutaria	Caterpillar Phacelia
Salsola tragus	Tumbleweed
Schinus molle	Peruvian pepper tree
Solanum elaeagnifolium	Silverleaf nightshade
Stephanomeria pauciflora	Brownplume wire lettuce
Tribulus terrestris	Puncture vine
Washingtonia robusta	Mexican fan palm

Animal List

Calypte anna	Anna's hummingbird
Corvus corax	Common raven
Haemorhous mexicanus	House finch
Mimus polyglottos	Northern mockingbird
Sayornis saya	Say’s Phoebe
Tyrannus verticalis	Western kingbird

APPENDIX B

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	None	None	1B.1	Chaparral | Coastal scrub | Desert dunes	Chaparral, coastal scrub, desert dunes.	Sandy areas. -60-1570 m.	No suitable habitat is present on site. **This species is not present.**
Allium marvinii	Yucaipa onion	Monocots	None	None	1B.2	Chaparral	Chaparral.	In openings on clay soils. 850-1070 m.	No suitable habitat is present on site. **This species is not present.**
Allium munzii	Munz's onion	Monocots	Endangered	Threatened	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Pinon & juniper woodlands | Valley & foothill grassland	Chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland.	Heavy clay soils; grows in grasslands & openings within shrublands or woodlands. 375-1040 m.	No suitable habitat is present on site. **This species is not present.**
Arenaria paludicola	marsh sandwort	Dicots	Endangered	Endangered	1B.1	Freshwater marsh | Marsh & swamp | Wetland	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	None	None	1B.1	Alkali playa | Meadow & seep | Wetland	Meadows and seeps, playas.	Lake margins, alkaline sites. 75-350 m.	No suitable habitat is present on site. **This species is not present.**
Astragalus pachypus var. jaegeri	Jaeger's milk-vetch	Dicots	None	None	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland.	Dry ridges and valleys and open sandy slopes; often in grassland and oak-chaparral. 365-1040 m.	No suitable habitat is present on site. **This species is not present.**
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Dicots	Endangered	None	1B.1	Alkali playa | Valley & foothill grassland | Vernal pool | Wetland	Playas, valley and foothill grassland, vernal pools.	Alkaline areas in the San Jacinto River Valley. 35-460 m.	No suitable habitat is present on site. **This species is not present.**
Atriplex parishii	Parish's brittlescale	Dicots	None	None	1B.1	Alkali playa | Chenopod scrub | Meadow & seep | Vernal pool | Wetland	Vernal pools, chenopod scrub, playas.	Usually on drying alkali flats with fine soils. 4-1420 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	None	None	1B.2	Coastal bluff scrub | Coastal scrub	Coastal bluff scrub, coastal scrub.	Alkaline soil. 0-480 m.	No suitable habitat is present on site. **This species is not present.**
Berberis nevinii	Nevin's barberry	Dicots	Endangered	Endangered	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Riparian scrub	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes. 90-1590 m.	No suitable habitat is present on site. **This species is not present.**
Brodiaea filifolia	thread-leaved brodiaea	Monocots	Threatened	Endangered	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	Chaparral | Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	No suitable habitat is present on site. **This species is not present.**
Canyon Live Oak Ravine Forest	Canyon Live Oak Ravine Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. **This species is not present.**
Carex comosa	bristly sedge	Monocots	None	None	2B.1	Coastal prairie | Freshwater marsh | Marsh & swamp | Valley & foothill grassland | Wetland	Marshes and swamps, coastal prairie, valley and foothill grassland.	Lake margins, wet places; site below sea level is on a Delta island. -5-1010 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Caulanthus simulans	Payson's jewelflower	Dicots	None	None	4.2	Chaparral | Coastal scrub	Chaparral, coastal scrub.	Frequently in burned areas, or in disturbed sites such as streambeds; also on rocky, steep slopes. Sandy, granitic soils. 90-2200 m.	No suitable habitat is present on site. **This species is not present.**
Centromadia pungens ssp. laevis	smooth tarplant	Dicots	None	None	1B.1	Alkali playa | Chenopod scrub | Meadow & seep | Riparian woodland | Valley & foothill grassland | Wetland	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.	Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	No suitable habitat is present on site. **This species is not present.**
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	Endangered	Endangered	1B.2	Coastal dunes | Marsh & swamp | Salt marsh | Wetland	Marshes and swamps, coastal dunes.	Limited to the higher zones of salt marsh habitat. 0-10 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	None	None	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	No suitable habitat is present on site. **This species is not present.**
Chorizanthe polygonoides var. longispina	long-spined spineflower	Dicots	None	None	1B.2	Chaparral | Coastal scrub | Meadow & seep | Ultramafic | Valley & foothill grassland | Vernal pool	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.	Gabbroic clay. 30-1630 m.	No suitable habitat is present on site. **This species is not present.**
Chorizanthe xanti var. leucotheca	white-bracted spineflower	Dicots	None	None	1B.2	Coastal scrub | Mojavean desert scrub | Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans).	Sandy or gravelly places. 365-1830 m.	No suitable habitat is present on site. **This species is not present.**
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	None	None	2B.2	Marsh & swamp | Wetland	Marshes and swamps (freshwater).	Freshwater marsh. 15-280 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Dodecahema leptoceras	slender-horned spineflower	Dicots	Endangered	Endangered	1B.1	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	No suitable habitat is present on site. **This species is not present.**
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Dicots	Endangered	Endangered	1B.1	Chaparral | Coastal scrub	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	No suitable habitat is present on site. **This species is not present.**
Galium californicum ssp. primum	Alvin Meadow bedstraw	Dicots	None	None	1B.2	Chaparral | Lower montane coniferous forest	Chaparral, lower montane coniferous forest.	Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils. 1460-1830 m.	No suitable habitat is present on site. **This species is not present.**
Harpagonella palmeri	Palmer's grapplinghook	Dicots	None	None	4.2	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland. 20-955 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	None	None	1A	Freshwater marsh | Marsh & swamp | Salt marsh | Wetland	Marshes and swamps (coastal salt and freshwater).	35-1525 m.	No suitable habitat is present on site. **This species is not present.**
Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	No suitable habitat is present on site. **This species is not present.**
Imperata brevifolia	California satintail	Monocots	None	None	2B.1	Chaparral | Coastal scrub | Meadow & seep | Mojavean desert scrub | Riparian scrub | Wetland	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub.	Mesic sites, alkali seeps, riparian areas. 3-1495 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	Alkali playa | Marsh & swamp | Salt marsh | Vernal pool | Wetland	Coastal salt marshes, playas, vernal pools.	Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	No suitable habitat is present on site. **This species is not present.**
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	None	None	4.3	Chaparral | Coastal scrub	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	No suitable habitat is present on site. **This species is not present.**
Lycium parishii	Parish's desert-thorn	Dicots	None	None	2B.3	Coastal scrub | Sonoran desert scrub	Coastal scrub, Sonoran desert scrub.	-3-570 m.	No suitable habitat is present on site. **This species is not present.**
Malacothamnus parishii	Parish's bush-mallow	Dicots	None	None	1A	Chaparral | Coastal scrub	Chaparral, coastal sage scrub.	In a wash. 305-455 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Monardella macrantha ssp. hallii	Hall's monardella	Dicots	None	None	1B.3	Broadleaved upland forest | Chaparral | Cismontane woodland | Lower montane coniferous forest | Valley & foothill grassland	Broadleafed upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland.	Dry slopes and ridges in openings. 700-1800 m.	No suitable habitat is present on site. **This species is not present.**
Monardella pringlei	Pringle's monardella	Dicots	None	None	1A	Coastal scrub	Coastal scrub.	Sandy hills. 300-400 m.	No suitable habitat is present on site. **This species is not present.**
Myosurus minimus ssp. apus	little mousetail	Dicots	None	None	3.1	Valley & foothill grassland | Vernal pool | Wetland	Vernal pools, valley and foothill grassland.	Alkaline soils. 20-640 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Nama stenocarpa	mud nama	Dicots	None	None	2B.2	Marsh & swamp | Wetland	Marshes and swamps.	Lake shores, river banks, intermittently wet areas. 15-815 m.	No suitable habitat is present on site. **This species is not present.**
Nasturtium gambelii	Gambel's water cress	Dicots	Endangered	Threatened	1B.1	Brackish marsh | Freshwater marsh | Marsh & swamp | Wetland	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	No suitable habitat is present on site. **This species is not present.**
Navarretia fossalis	spreading navarretia	Dicots	Threatened	None	1B.1	Alkali playa | Chenopod scrub | Marsh & swamp | Vernal pool | Wetland	Vernal pools, chenopod scrub, marshes and swamps, playas.	San Diego hardpan and San Diego claypan vernal pools; in swales & vernal pools, often surrouded by other habitat types. 15-850 m.	No suitable habitat is present on site. **This species is not present.**
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	None	None	1A	Riparian woodland	Riparian woodland.	Salix swales in riparian habitats. 65-300 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	None	None		Coastal scrub			No suitable habitat is present on site. **This species is not present.**
Senecio aphanactis	chaparral ragwort	Dicots	None	None	2B.2	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-1020 m.	No suitable habitat is present on site. **This species is not present.**
Sidalcea hickmanii ssp. parishii	Parish's checkerbloom	Dicots	None	Rare	1B.2	Chaparral | Cismontane woodland | Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest.	Disturbed burned or cleared areas on dry, rocky slopes, in fuel breaks & fire roads along the mountain summits. 1095-2135 m.	No suitable habitat is present on site. **This species is not present.**
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	Alkali playa | Chaparral | Coastal scrub | Lower montane coniferous forest | Mojavean desert scrub | Wetland	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 3-2380 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. **This species is not present.**
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. **This species is not present.**
Southern Riparian Forest	Southern Riparian Forest	Riparian	None	None		Riparian forest			No suitable habitat is present on site. **This species is not present.**
Southern Riparian Scrub	Southern Riparian Scrub	Riparian	None	None		Riparian scrub			No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			No suitable habitat is present on site. **This species is not present.**
Southern Willow Scrub	Southern Willow Scrub	Riparian	None	None		Riparian scrub			No suitable habitat is present on site. **This species is not present.**
Sphenopholis obtusata	prairie wedge grass	Monocots	None	None	2B.2	Cismontane woodland | Meadow & seep | Wetland	Cismontane woodland, meadows and seeps.	Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	No suitable habitat is present on site. **This species is not present.**
Streptanthus campestris	southern jewelflower	Dicots	None	None	1B.3	Chaparral | Lower montane coniferous forest | Pinon & juniper woodlands	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Open, rocky areas. 605-2590 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	No suitable habitat is present on site. **This species is not present.**
Texosporium sancti-jacobi	woven-spored lichen	Lichens	None	None	3	Chaparral	Chaparral.	Open sites; in California with Adenostoma fasciculatum, Eriogonum, Selaginella. Found on soil, small mammal pellets, dead twigs, and on Selaginella. 60-870 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Tortula californica	California screw moss	Bryophytes	None	None	1B.2	Chenopod scrub | Valley & foothill grassland	Chenopod scrub, valley and foothill grassland.	Moss growing on sandy soil. 45-750 m.	No suitable habitat is present on site. **This species is not present.**
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	Dicots	None	None	2B.1	Marsh & swamp | Meadow & seep | Riparian forest | Vernal pool | Wetland	Marshes and swamps, riparian forest, meadows and seeps, vernal pools.	Mud flats of vernal lakes, drying river beds, alkali meadows. 5-435 m.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Accipiter cooperii	Cooper's hawk	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	No suitable habitat is present on site. **This species is not present.**
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_EN-Endangered | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Freshwater marsh | Marsh & swamp | Swamp | Wetland	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	No suitable habitat is present on site. **This species is not present.**
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None	CDFW_WL-Watch List	Chaparral | Coastal scrub	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Anniella stebbinsi	Southern California legless lizard	Reptiles	None	None	CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Broadleaved upland forest | Chaparral | Coastal dunes | Coastal scrub	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive | WBWG_H-High Priority	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Aquila chrysaetos	golden eagle	Birds	None	None	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | CDFW_WL-Watch List | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern		Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	No suitable habitat is present on site. **This species is not present.**
Artemisiospiza belli belli	Bell's sage sparrow	Birds	None	None	CDFW_WL-Watch List | USFWS_BCC-Birds of Conservation Concern	Chaparral | Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Asio otus	long-eared owl	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Cismontane woodland | Great Basin scrub | Riparian forest | Riparian woodland | Upper montane coniferous forest	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	No suitable habitat is present on site. **This species is not present.**
Aspidoscelis hyperythra	orange-throated whiptail	Reptiles	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern | USFS_S-Sensitive	Chaparral | Cismontane woodland | Coastal scrub	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None	CDFW_SSC-Species of Special Concern		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	Ground may be firm soil, sandy, or rocky.	No suitable habitat is present on site. **This species is not present.**
Athene cunicularia	burrowing owl	Birds	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	No suitable habitat is present on site. **This species is not present.**
Buteo regalis	ferruginous hawk	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Great Basin grassland | Great Basin scrub | Pinon & juniper woodlands | Valley & foothill grassland	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats.	Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	BLM_S-Sensitive | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Great Basin grassland | Riparian forest | Riparian woodland | Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No suitable habitat is present on site. **This species is not present.**
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None	CDFW_SSC-Species of Special Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Coastal scrub	Southern California coastal sage scrub.	Wrens require tall opuntia cactus for nesting and roosting.	No suitable habitat is present on site. **This species is not present.**
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None	AFS_TH-Threatened | IUCN_VU-Vulnerable	Aquatic | South coast flowing waters	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Ceratochrysis longimala	Desert cuckoo wasp	Insects	None	None					No suitable habitat is present on site. **This species is not present.**
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Chaparral | Coastal scrub	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No suitable habitat is present on site. **This species is not present.**
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered	BLM_S-Sensitive | NABCI_RWL-Red Watch List | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Coleonyx variegatus abbotti	San Diego banded gecko	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Chaparral | Coastal scrub	Coastal & cismontane Southern California.	Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	No suitable habitat is present on site. **This species is not present.**
Crotalus ruber	red-diamond rattlesnake	Reptiles	None	None	CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Chaparral | Mojavean desert scrub | Sonoran desert scrub	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No suitable habitat is present on site. **This species is not present.**
Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	None	None	USFS_S-Sensitive		Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams.	Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Diplectrona californica	California diplectronan caddisfly	Insects	None	None		Aquatic			No suitable habitat is present on site. **This species is not present.**
Dipodomys merriami parvus	San Bernardino kangaroo rat	Mammals	Endangered	Candidate Endangered	CDFW_SSC-Species of Special Concern	Coastal scrub	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	No suitable habitat is present on site. **This species is not present.**
Dipodomys stephensi	Stephens' kangaroo rat	Mammals	Endangered	Threatened	IUCN_EN-Endangered	Coastal scrub | Valley & foothill grassland	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Elanus leucurus	white-tailed kite	Birds	None	None	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern	Cismontane woodland | Marsh & swamp | Riparian woodland | Valley & foothill grassland | Wetland	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	No suitable habitat is present on site. **This species is not present.**
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered	NABCI_RWL-Red Watch List	Riparian woodland	Riparian woodlands in Southern California.		No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Emys marmorata	western pond turtle	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | USFS_S-Sensitive	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast stan	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Eremophila alpestris actia	California horned lark	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Marine intertidal & splash zone communities | Meadow & seep	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	No suitable habitat is present on site. **This species is not present.**
Eugnosta busckana	Busck's gallmoth	Insects	None	None		Coastal dunes | Coastal scrub			No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Eumops perotis californicus	western mastiff bat	Mammals	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | WBWG_H-High Priority	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	No suitable habitat is present on site. **This species is not present.**
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		Chaparral | Coastal scrub	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Falco columbarius	merlin	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Estuary | Great Basin grassland | Valley & foothill grassland	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches.	Clumps of trees or windbreaks are required for roosting in open country.	No suitable habitat is present on site. **This species is not present.**
Gila orcuttii	arroyo chub	Fish	None	None	AFS_VU-Vulnerable | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Aquatic | South coast flowing waters	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Haliaeetus leucocephalus	bald eagle	Birds	Delisted	Endangered	BLM_S-Sensitive | CDF_S-Sensitive | CDFW_FP-Fully Protected | IUCN_LC-Least Concern | USFS_S-Sensitive | USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest | Oldgrowth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	No suitable habitat is present on site. **This species is not present.**
Icteria virens	yellow-breasted chat	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Riparian forest | Riparian scrub | Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Lanius ludovicianus	loggerhead shrike	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest | Desert wash | Joshua tree woodland | Mojavean desert scrub | Pinon & juniper woodlands | Riparian woodland | Sonoran desert scrub	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	No suitable habitat is present on site. **This species is not present.**
Lasiurus xanthinus	western yellow bat	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_H-High Priority	Desert wash	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Roosts in trees, particularly palms. Forages over water and among trees.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Laterallus jamaicensis coturniculus	California black rail	Birds	None	Threatened	BLM_S-Sensitive | CDFW_FP-Fully Protected | IUCN_NT-Near Threatened | NABCI_RWL-Red Watch List | USFWS_BCC-Birds of Conservation Concern	Brackish marsh | Freshwater marsh | Marsh & swamp | Salt marsh | Wetland	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Leptonycteris yerbabuenae	lesser long-nosed bat	Mammals	Delisted	None	CDFW_SSC-Species of Special Concern | IUCN_VU-Vulnerable | WBWG_H-High Priority	Mojavean desert scrub | Sonoran desert scrub | Upper Sonoran scrub	Arid regions such as desert grasslands and shrub land. Suitable day roosts (caves & mines) and suitable concentrations of food plants (columnar cacti & agaves) are critical resources. No maternity roosts known from California; may only be vagrant.	Caves and mines are used as day roosts. Caves, mines, rock crevices, trees and shrubs, and abandoned buildings are used as night roosts for digesting meals. Nectar, pollen, and fruit eating bat; primarily feeding on agaves, saguaro, and organ pipe cactus.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	No suitable habitat is present on site. **This species is not present.**
Neolarra alba	white cuckoo bee	Insects	None	None			Known only from localities in Southern California.	Cleptoparasitic in the nests of perdita bees.	No suitable habitat is present on site. **This species is not present.**
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | WBWG_M-Medium Priority	Joshua tree woodland | Pinon & juniper woodlands | Riparian scrub | Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	No suitable habitat is present on site. **This species is not present.**
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	Endangered	None	AFS_EN-Endangered	Aquatic | South coast flowing waters	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Onychomys torridus ramona	southern grasshopper mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Chenopod scrub	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	No suitable habitat is present on site. **This species is not present.**
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No suitable habitat is present on site. **This species is not present.**
Plegadis chihi	white-faced ibis	Birds	None	None	CDFW_WL-Watch List | IUCN_LC-Least Concern	Marsh & swamp | Wetland	Shallow freshwater marsh.	Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	No suitable habitat is present on site. **This species is not present.**
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None	CDFW_SSC-Species of Special Concern | NABCI_YWL-Yellow Watch List	Coastal bluff scrub | Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Rana muscosa	southern mountain yellow-legged frog	Amphibians	Endangered	Endangered	CDFW_WL-Watch List | IUCN_EN-Endangered | USFS_S-Sensitive	Aquatic	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014.	Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Insects	Endangered	None		Interior dunes	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties.	Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	No suitable habitat is present on site. **This species is not present.**
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	None	None	AFS_TH-Threatened | CDFW_SSC-Species of Special Concern | USFS_S-Sensitive	Aquatic | South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	No suitable habitat is present on site. **This species is not present.**
Salvadora hexalepis virgultea	coast patch-nosed snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Brushy or shrubby vegetation in coastal Southern California.	Require small mammal burrows for refuge and overwintering sites.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC-Species of Special Concern | USFWS_BCC-Birds of Conservation Concern	Riparian forest | Riparian scrub | Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No suitable habitat is present on site. **This species is not present.**
Spea hammondii	western spadefoot	Amphibians	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_NT-Near Threatened	Cismontane woodland | Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Spinus lawrencei	Lawrence's goldfinch	Birds	None	None	IUCN_LC-Least Concern | NABCI_YWL-Yellow Watch List | USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest | Chaparral | Pinon & juniper woodlands | Riparian woodland	Nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding.	Closely associated with oaks.	No suitable habitat is present on site. **This species is not present.**
Streptocephalus woottoni	Riverside fairy shrimp	Crustaceans	Endangered	None	IUCN_EN-Endangered	Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub.	Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Taxidea taxus	American badger	Mammals	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Alkali marsh | Alkali playa | Alpine | Alpine dwarf scrub | Bog & fen | Brackish marsh | Broadleaved upland forest | Chaparral | Chenopod scrub | Cismontane woodland | Closed-cone coniferous forest | Coastal bluff scrub | Coastal dunes | Coastal prairie |	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No suitable habitat is present on site. **This species is not present.**
Thamnophis hammondii	two-striped gartersnake	Reptiles	None	None	BLM_S-Sensitive | CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern | USFS_S-Sensitive	Marsh & swamp | Riparian scrub | Riparian woodland | Wetland	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	No suitable habitat is present on site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered	IUCN_NT-Near Threatened | NABCI_YWL-Yellow Watch List	Riparian forest | Riparian scrub | Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No suitable habitat is present on site. **This species is not present.**
Xanthocephalus xanthocephalus	yellow-headed blackbird	Birds	None	None	CDFW_SSC-Species of Special Concern | IUCN_LC-Least Concern	Marsh & swamp | Wetland	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.	No suitable habitat is present on site. **This species is not present.**

APPENDIX C

Existing disturbed areas on the site.

View of onsite ephemeral drainage.

Ornamental trees along the site boundary.

Hernandez Environmental Services

Disturbed habitat on project site.

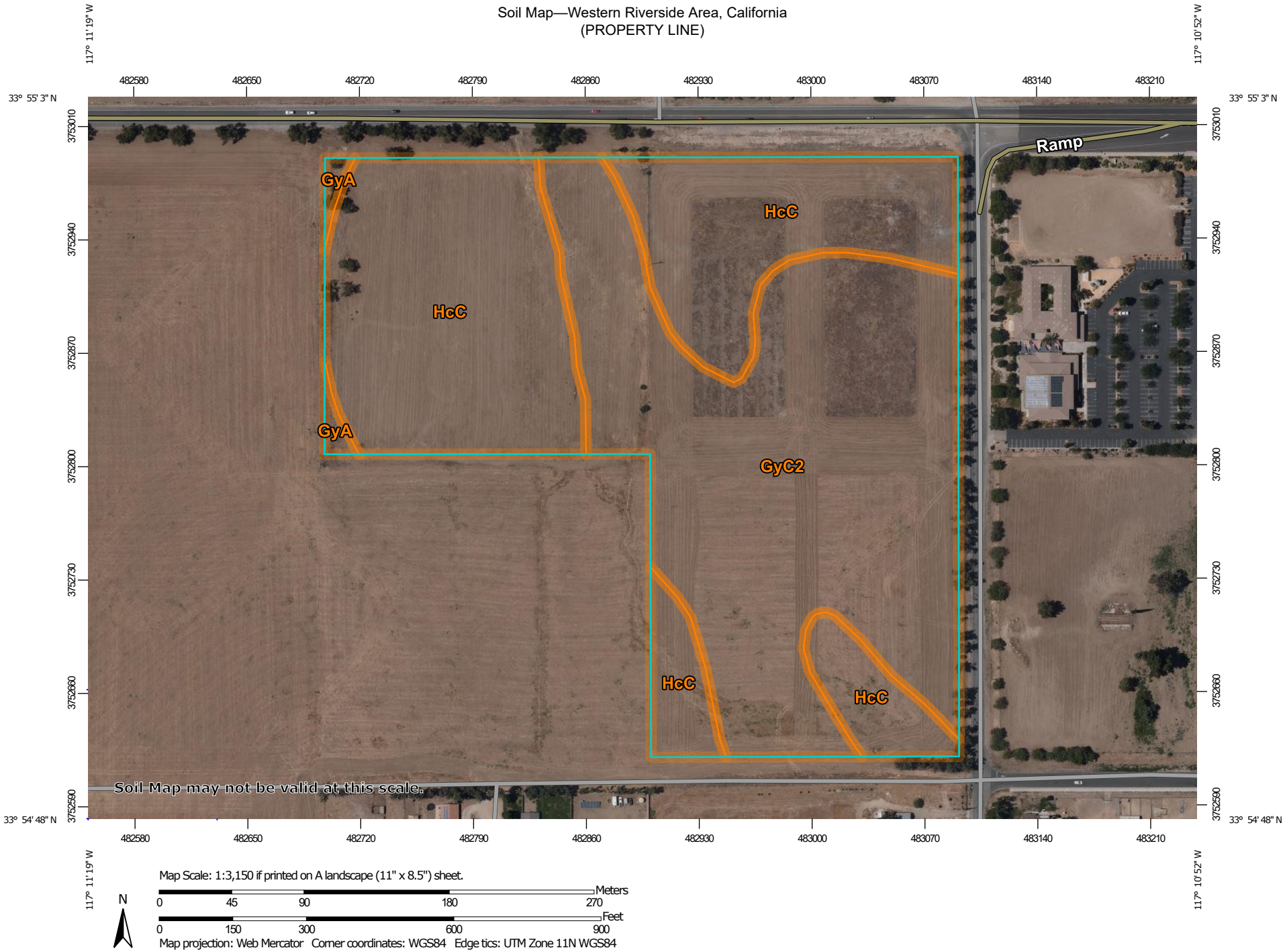
Ruderal habitat within southern portion of the site.

Potentially suitable burrowing owl burrow complex.

Hernandez Environmental Services

APPENDIX D

Soil Map—Western Riverside Area, California
(PROPERTY LINE)



Map Scale: 1:3,150 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 13, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 25, 2019—Jun 25, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GyA	Greenfield sandy loam, 0 to 2 percent slopes	0.2	0.9%
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	13.8	51.5%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	12.7	47.6%
Totals for Area of Interest		**26.7**	**100.0%**

APPENDIX E

Memorandum

Date: September 30, 2021

To: Jeremy Krout EPD Solutions, Inc.

From: Juan J. Hernandez, Principal Biologist

Subject: Focused Burrowing Owl Survey Report for Assessor's Parcel Numbers 486-260-003, 486-260-004, 486-260-005, and 486-260-009 located in the City of Moreno Valley, Riverside County, California.

This memorandum provides the methods and results of a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) burrowing owl (*Athene cunicularia*) (BUOW) survey for Assessor's Parcel Numbers (APNs) 486-260-003, 486-260-004, 486-260-005, and 486-260-009 located within the City of Moreno Valley, Riverside County, California. The project proposes construction of a single-family residential development. The project will result in impacts to the entire 26.74-acre site. Refer to Figure 3.

Project Location

The approximate 26.74-acre project site is located southwest of the intersection of Alessandro Boulevard and Oliver Street in Riverside County, California (Figures 1 and 2). The site consists of Riverside County APNs 486-260-003, 486-260-004, 486-260-005, and 486-260-009. Specifically, the project site is located within Township 3 South, Range 3 West in Section 15 of the *Sunnymead* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33˚54'58.3226" North and 117˚11'04.2157" West. Refer to Figures 1 and 2.

The study area included APNs 486-260-003, 486-260-004, 486-260-005, and 486-260-009 and a 150-meter (500-foot) buffer around the site, where accessible (Figure 4).

Project Contact Information

Owner/Applicant: Jeremy Krout
EPD Solutions, Inc.
2 Park Plaza Suite 1120
Irvine, CA 92614

Principal Investigator: Juan J. Hernandez
Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530
(909) 772-9009

Field Survey Methods

HES implemented the three steps as described in the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area*. The "General Biological Assessment and Western Riverside MSHCP Consistency Analysis" prepared for the project, determined that focused surveys for BUOW would be required due to recorded historic observations near the site and the presence of suitable habitat documented during the July 30, 2021 habitat assessment. In accordance with the *Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area*, focused burrow and focused BUOW surveys (Part A and Part B, respectively) were conducted on four separate days during the breeding season: July 30, August 5, August 12, and August 23. Survey times, weather, and sunrise/sunset information is described in Table 1 below.

Table 1. Survey Information

Survey	Date	Survey Start Time	Sunrise/Sunset	Weather
1	July 30, 2021	0730 hours	0559 hours 1951 hours	70 degrees Fahrenheit, clear, winds 0-1 miles per hour from the north
2	August 5, 2021	0700 hours	0604 hours 1945 hours	75 degrees Fahrenheit, clear, winds 0-1 miles per hour from the northwest
3	August 12, 2021	O700 hours	0609 hours 1938 hours	70 degrees Fahrenheit, clear, winds 0-1 miles per hour from the north.
4	August 23, 2021	O730 hours	0617 hours 1925 hours	63 degrees Fahrenheit, 100% cloud coverage, winds 0-1 miles per hour from the east.

Surveys were conducted from one hour before sunrise to two hours after sunrise or two hours before sunset to one hour after sunset and during weather that was conducive to observing owls outside their burrows and detecting BUOW sign. The surveys were not conducted during rain, high winds (> 20 miles per hour), dense fog, or temperatures above 90 degrees Fahrenheit. Surveys involved walking through potentially suitable habitat within the survey area.

The pedestrian survey transects were spaced approximately 30 to 50 feet apart to allow 100 percent visual coverage of the ground surface. Special attention was paid to those habitat areas that appeared to provide suitable habitat for BUOW. Where permission to access the buffer areas could not be obtained, the biologist visually inspects adjacent habitats with binoculars.

All encountered burrows or structure entrances were checked for the presence of BUOW, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement. Natural or man-made structures and debris piles that could support BUOW were also surveyed. The locations of all suitable BUOW habitat, potential burrows, BUOW sign, and any BUOW observed was recorded and mapped with a handheld Global Positioning System (GPS) unit.

All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Binoculars were used to aid in the identification of observed wildlife. Photographs were taken to document existing conditions within the survey area.

Results

The project site consists of vacant, disturbed lands with evidence of mowing for fuel management. The project site contains three different habitat types: ruderal, disturbed areas, and ephemeral stream. The dominant species on site are brownplume wire lettuce (*Stephanomeria pauciflora*), common sunflower (*Helianthus annuus*), telegraph weed (Heterotheca grandiflora), brome grass (*Bromus spp.*), and stinknet (*Oncosiphon piluliferum*). Soils at the project site are classified as Greenfield sandy loam (GyA), 0 to 2 percent slopes, Greenfield sandy loam (GyC2), 2 to 8 percent slopes, eroded and Hanford coarse sandy loam (HcC), 2 to 8 percent slopes, eroded. The project site is flat with elevation ranges from 1,512 feet above mean sea-level (AMSL) to 1,552 feet AMSL.

The habitat assessment conducted on July 30, 2021 found that the project site does provide suitable burrows/nesting opportunities for BUOW. Evidence of ground squirrels and ground squirrel activities was observed and approximately 11 suitable burrows were identified and recorded on the project site. BUOW signs such as molted feathers, cast pellets, and excrement found on rock outcroppings were not found. No BUOW were observed on the project site.

Based on the absence of BUOW and BUOW evidence (i.e., scat, pellets, and feathers) within the study area, it can be concluded that the study area is not in use by BUOW.

Recommendations

It is recommended that the following measures be implemented to ensure that potential impacts to BUOW are less than significant:

- Due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project activities (e.g. vegetation clearing, clearing and grubbing, tree

removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding project activities.

- If burrowing owl are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance.
- If ground-disturbing activities occur but the site is left undisturbed for more than 30 days, a pre-construction survey will again be necessary to ensure burrowing owl has not colonized the site since it was last disturbed. If burrow owl is found, the same coordination described above will be necessary.

Certification

I hereby certify that the statements furnished above and in the attached exhibits present 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 30, 2021

Juan J. Hernandez
Principal Biologist

Enclosures:

Figure 1: Project Location Map
Figure 2: Project Vicinity Map
Figure 3: Project Plans
Figure 4: Survey Area Map
Figure 5: Results Map
Appendix A: Site Photographs

FIGURES

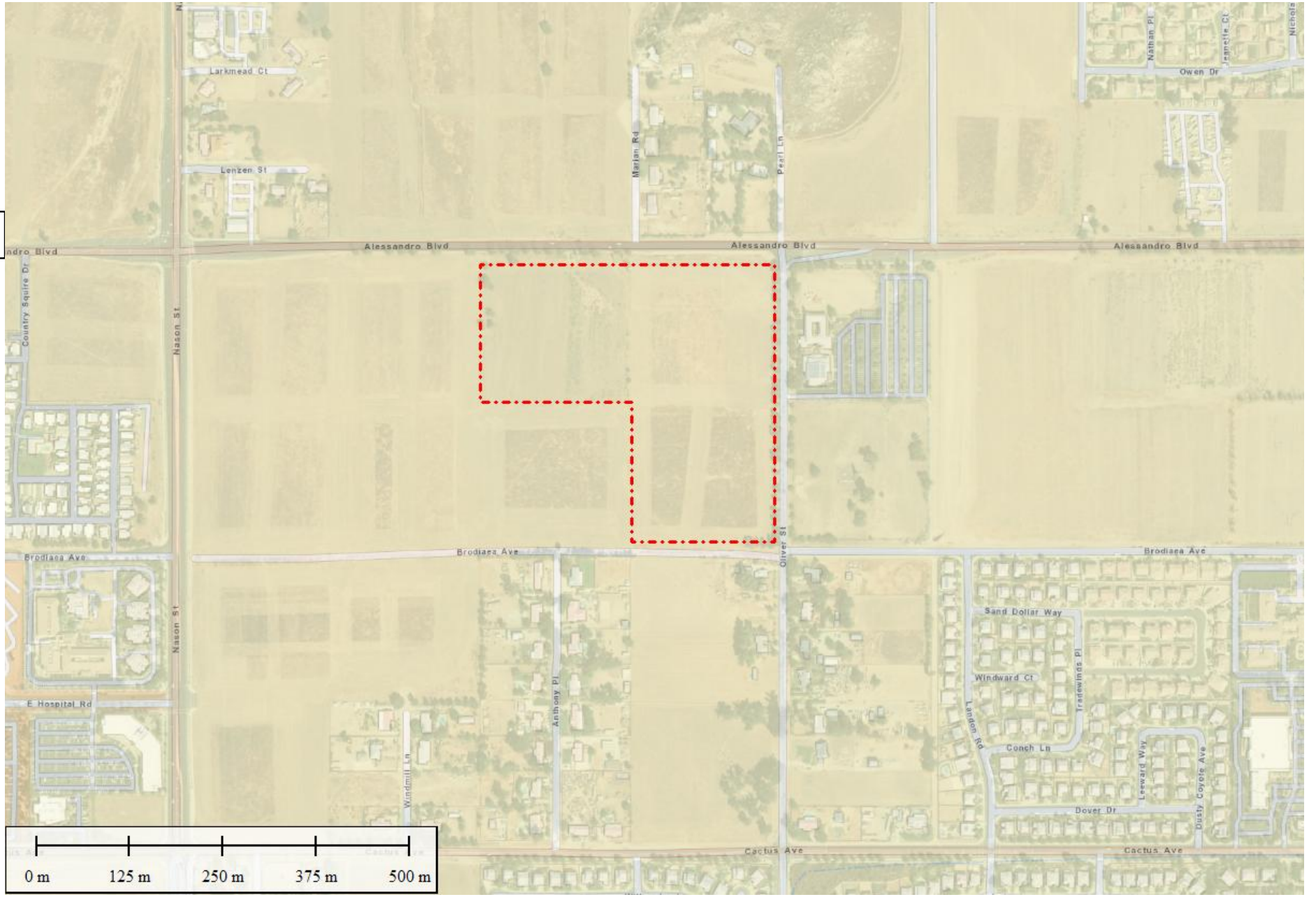


Figure 1
Location Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

N

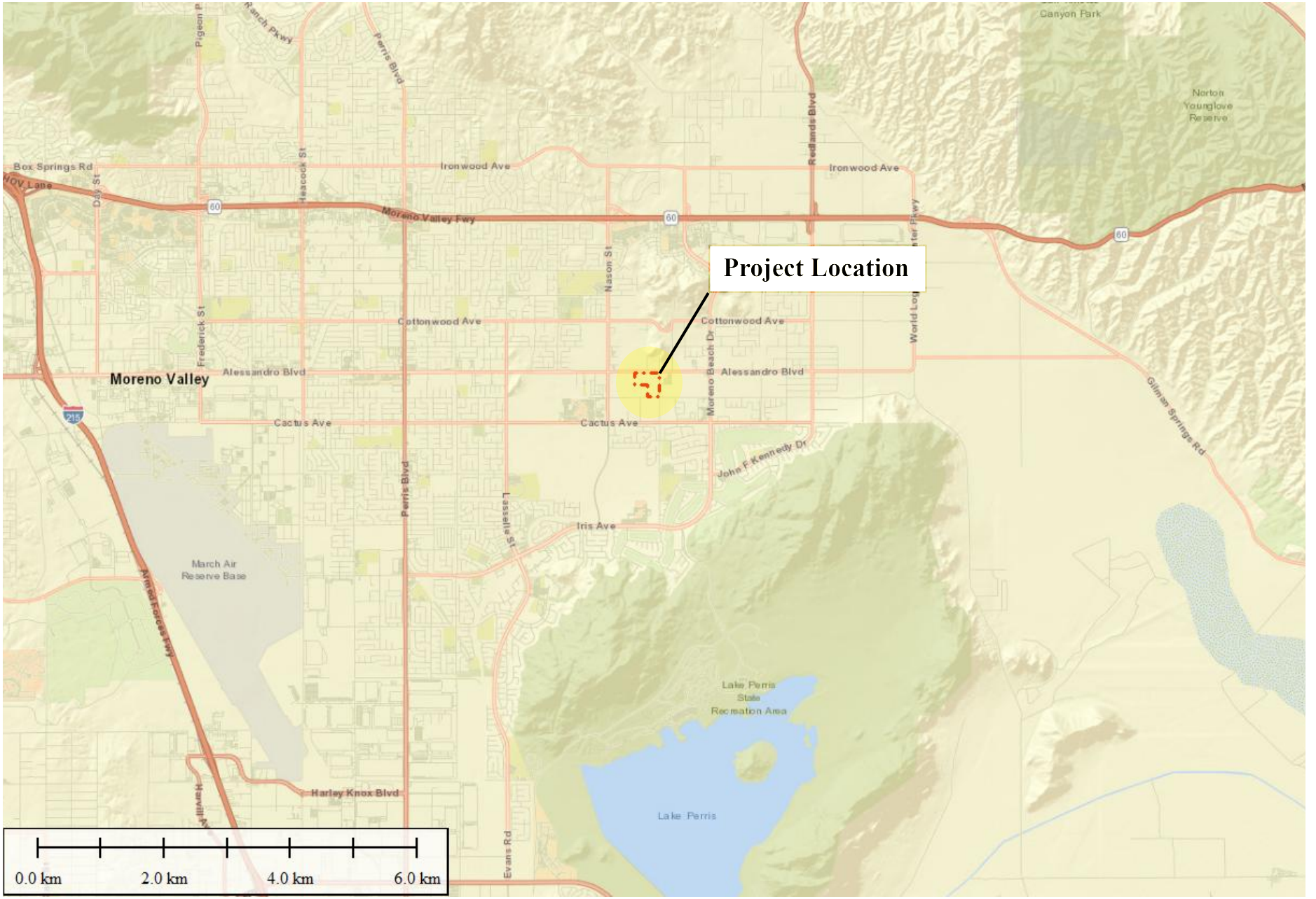


Figure 2
Vicinity Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

IN THE CITY OF MORENO VALLEY, COUNATY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP 38236

AUGUST 2021

PLANS PREPARED BY:
adkan ENGINEERS
Civil Engineering · Surveying · Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 · Fax:(951) 688-0599

PREPARATION DATE : AUGUST 2021
REVISED DATE :

OWNER

APN 486-260-005 & 486-260-009
GRANITE CAPITAL LLC
11370 MORENO BEACH DRIVE
MORENO VALLEY, CA 92555
APN 486-260-003 & 486-260-004
VALLEY CHRISTIAN CHURCH OF THE BRETHEREN IN CHRIST
26755 ALESSANDRO BOULEVARD
MORENO VALLEY, CA 92555-3902

UTILITY PURVEYORS

WATER:	EASTERN MUNICIPAL WATER DISTRICT
SEWER:	EASTERN MUNICIPAL WATER DISTRICT
GAS:	SOUTHERN CALIFORNIA GAS COMPANY
ELECTRICITY:	CITY OF MORENO VALLEY
TELEPHONE:	VERIZON
CATV:	ADELPHIA

ASSESSORS PARCEL NUMBER

486-260-003, 486-260-004, 486-260-005 & 486-260-009

LEGEND

PROP DOMESTIC WATER
PROPOSED SEWER
TRACT BOUNDARY
OLD TRACT BOUNDARY
PHASING BOUNDARY
A.D.A ACCESS RAMP
PROPOSED BLOCK WALL
FAULT SETBACK LINE

SD = STORM DRAIN	SW = SIDEWALK
TC = TOP OF CURB	( ) = EXISTING ELEVATION
FS = FINISH SURFACE	C&G = CURB AND GUTTER
SWR = SEWER	S.F. = SQUARE FEET
CL = CENTER LINE	FS = FINISH SURFACE
FG = FINISHED GROUND	FH = FIRE HYDRANT
WTR= WATER	TW = TOP OF WALL
P/L = PROPERTY LINE	TF = TOP OF FOOTING
R/W = RIGHT OF WAY	FL= FLOW LINE
A.R. = A.D.A ACCESS RAMP	T.B.R. = TO BE REMOVED

EARTHWORK QUANTITIES

CUT: _ CY FILL: _ CY IMPORT: _ CY
THE QUANTITY SHOWN ABOVE IS FOR DISCUSSION PURPOSES ONLY.

TENTATIVE TRACT SUMMARY

TOTAL AREA GROSS:	26.7 ACRES
EXISTING ZONING:	DC
PROPOSED ZONING:	DC
EXISTING LAND USE:	SUBURBAN RESIDENTIAL
PROPOSED LAND USE:	SUBURBAN RESIDENTIAL
EXISTING SURROUNDING LAND USE:	RESIDENTIAL AGRICULTURE SUBURBAN RESIDENTIAL
EXISTING SURROUNDING ZONING:	RA-2, R-3, R-5

BENCHMARK

IVF 52
BRASS DISK AT THE NW CORNER OF ALESSANDRO BLVD. AND REDLANDS BLVD. 170.0 FEET NORTH OF ALESSANDRO BLVD.; 43.0 FEET WEST OF REDLANDS BLVD; 2.0 FEET SE OF POWER POLE #21599 C.W.T.; 1.0 FEET NORTH OF A MARKER POST, A BRASS DISK SET IN THE TOP OF A CONCRETE POST AND MARKED "IVF 52 1993"
ELEVATION: 1603.71 NAVD 1988

BASIS OF BEARINGS

"THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, CCS83, ZONE 6, BASED LOCALLY ON CONTROL STATIONS "P482", "P478", AND "SBCC" NAD 83(NSRS2011) EPOCH 2010.00 AS SHOWN HEREON. ALL BEARINGS SHOWN ON THIS MAP ARE GRID. QUOTED BEARINGS AND DISTANCES FROM REFERENCE MAPS OR DEEDS ARE AS SHOWN PER THAT RECORD REFERENCE. ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS SPECIFIED OTHERWISE. GRID DISTANCES, MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCE BY A COMBINATION FACTOR OF 0.99993579. CALCULATIONS ARE MADE AT 1"IP TAGGED "LS 5174", DOWN 0.2' IN WELL PER TRACT 36882, MB 454/37-39 WITH COORDINATES OF:
N: 2277362.55000000, E: 6280631.21000000
USING AN ELEVATION OF 1565.533.

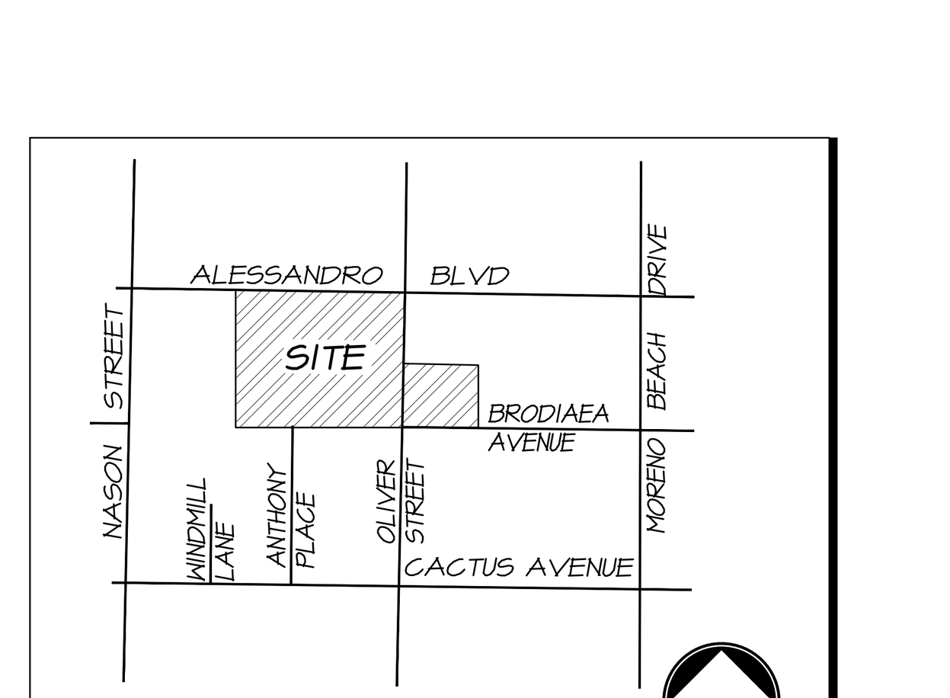
TOPOGRAPHY SOURCE

TOPOGRAPHY COMPILED PHOTOGRAMETRICALLY BY INLAND AERIAL SURVEY INC. ON 05-14-20 AND 03-26-21

RESIDENTIAL

LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA
1	4,494	38	2,800	75	2,906	112	2,800	149	3,059	186	3,861
2	2,806	39	2,800	76	2,906	113	2,800	150	3,545	187	3,751
3	2,805	40	2,800	77	3,238	114	2,800	151	4,426	188	3,650
4	2,805	41	2,893	78	3,071	115	2,800	152	4,032	189	3,611
5	2,805	42	3,401	79	3,238	116	2,800	153	3,828	190	3,872
6	2,805	43	3,401	80	3,661	117	2,847	154	3,138	191	3,648
7	2,805	44	3,401	81	3,166	118	2,847	155	2,978	192	3,697
8	2,805	45	3,401	82	3,179	119	2,814	156	2,871	193	3,548
9	2,805	46	3,401	83	3,179	120	3,669	157	2,817	194	3,761
10	2,805	47	2,836	84	3,166	121	3,491	158	2,808	195	3,774
11	2,805	48	2,830	85	3,661	122	3,382	159	2,808	196	3,774
12	2,805	49	2,733	86	3,818	123	3,487	160	2,807	197	3,769
13	2,805	50	3,464	87	3,228	124	2,949	161	2,807	198	4,245
14	2,816	51	2,830	88	3,819	125	2,948	162	2,807	199	3,705
15	3,563	52	2,830	89	3,419	126	2,957	163	2,807	200	3,603
16	2,800	53	2,830	90	3,345	127	2,916	164	2,806	201	3,603
17	2,802	54	2,830	91	3,209	128	2,876	165	4,616	202	4,149
18	3,522	55	2,830	92	3,066	129	2889	166	5,306	203	4,489
19	2,802	56	2,830	93	2,943	130	2888	167	3,803	204	4,251
20	2,802	57	2,830	94	2,898	131	2888	168	3,784		
21	2,802	58	3,239	95	3,491	132	2888	169	4,050		
22	2,802	59	3,367	96	3,587	133	2888	170	4,004		
23	2,802	60	3,446	97	3,453	134	2,838	171	3,722		
24	2,802	61	3260	98	2,810	135	2887	172	3,832		
25	2,802	62	3260	99	2,824	136	3394	173	4,766		
26	3,395	63	4,188	100	2,840	137	3,395	174	3,720		
27	3,238	64	3260	101	2,822	138	2887	175	3,680		
28	2,801	65	3260	102	2800	139	2807	176	3,653		
29	2,805	66	3260	103	2800	140	2887	177	3,639		
30	2,807	67	3268	104	2,832	141	2887	178	3,638		
31	2,801	68	3549	105	2800	142	2887	179	4,508		
32	3,235	69	2800	106	3232	143	2887	180	4,858		
33	3,386	70	2800	107	2800	144	2876	181	3,834		
34	2,800	71	2916	108	2813	145	2886	182	3,914		
35	2,800	72	2910	109	2817	146	2908	183	4,198		
36	2,800	73	2905	110	2800	147	2875	184	4,153		
37	2,800	74	2906	111	3232	148	2890	185	4,153		

MIN. LOT SIZE = 2,800 S.F.
SUBDIVISION DENSITY= 0.44 DU/ACRE



VICINITY MAP (N.T.S.)

SCALE: 1" = 60'

ENGINEER

adkan ENGINEERS
6879 AIRPORT DRIVE
RIVERSIDE, CA. 92504
951-688-0241

APPLICANT

D.R. HORTON
2280 WARDLOW., STE. 100
CORONA, CA 92878

PROJECT NOTES

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS PLAN. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS DRAWING.
2. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, HE/SHE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
3. 2010 THOMAS BROS. MAP BOOK: PAGE 718, GRID C-6
4. SITE IS LOCATED IN LOW LIQUEFACTION AREA AND IS SUSCEPTIBLE TO SUBSIDENCE.
5. A PORTION OF LAND IS SUBJECT TO TO OVERFLOW INUNDATION OR FLOOD HAZARD
6. PROJECT IS NOT LOCATED IN A HIGH FIRE AREA.
7. ALL IMPROVEMENTS SHALL BE PER SCHEDULE "A" SUBDIVISION ORDINANCE 460.
8. NO SUBSURFACE SEPTIC SEWAGE DISP #2560SAL IS INTENDED.
9. THIS MAP DOES NOT INCLUDE THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
10. THIS PROJECT IS LOCATED IN RIVERSIDE COUNTY ORDINANCE NO. 655, ZONE B REGULATING LIGHT POLLUTION
11. PROJECT IS LOCATED IN FLOOD ZONE X AND FLOOD ZONE A PER FEMA PANEL 06065C0710G.
12. NO KNOWN EXISTING WELLS ON OR AROUND THE PROPERTY.
13. PROJECT LOCATION IS NOT IN A FAULT ZONE OR FAULT LINE.
14. SITE IS LOCATED IN A HIGH SENSITIVITY PALEONTOLOGICAL AREA
15. SITE IS LOCATED WITHIN THE MORENO VALLEY UNIFIED SCHOOL DISTRICT

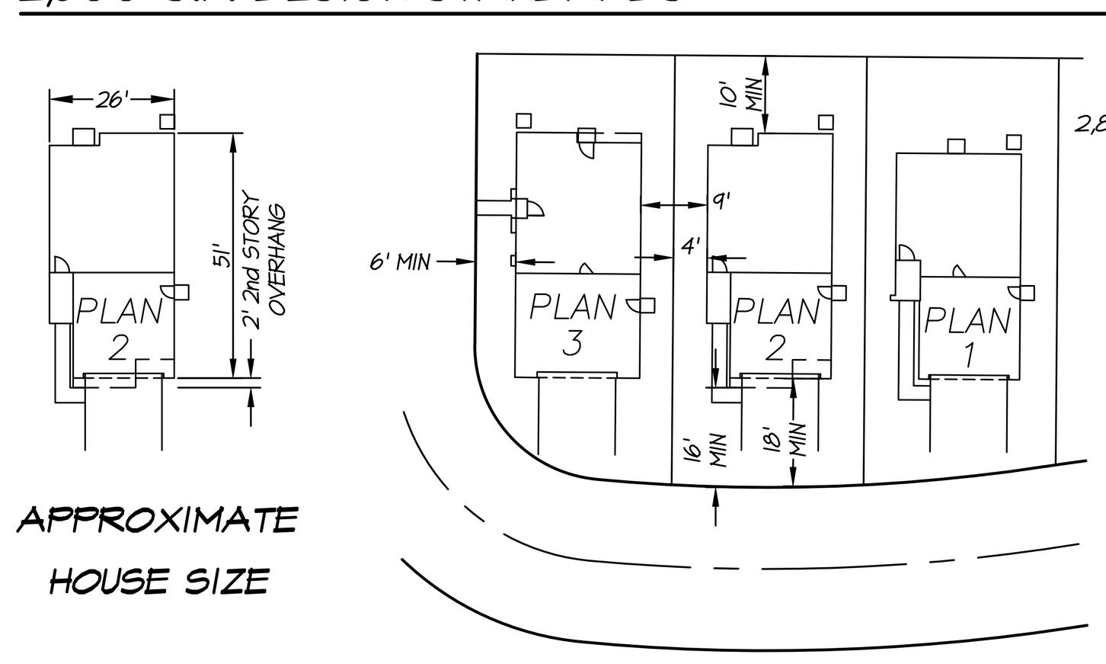
LEGAL DESCRIPTION

APN 486-260-003:
THE WESTERLY 6 ACRES OF LOT 2 IN BLOCK 118, AS SHOWN BY MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANYS LANDS, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CA

APN 486-260-004:
LOT 2 IN BLOCK 118 AS SHOWN BY MAP No. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF RECORDS OF SAN BERNARDINO COUNTY, CA.

APN 486-260-005 & 486-260-009:
LOT 1 AND 8 IN BOOK 118 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP IN BOOK 11, PAGE 10 OF MAPS, SAN BERNARDINO COUNTY RECORDS.

2,800 S.F. DESIGN STANDARDS

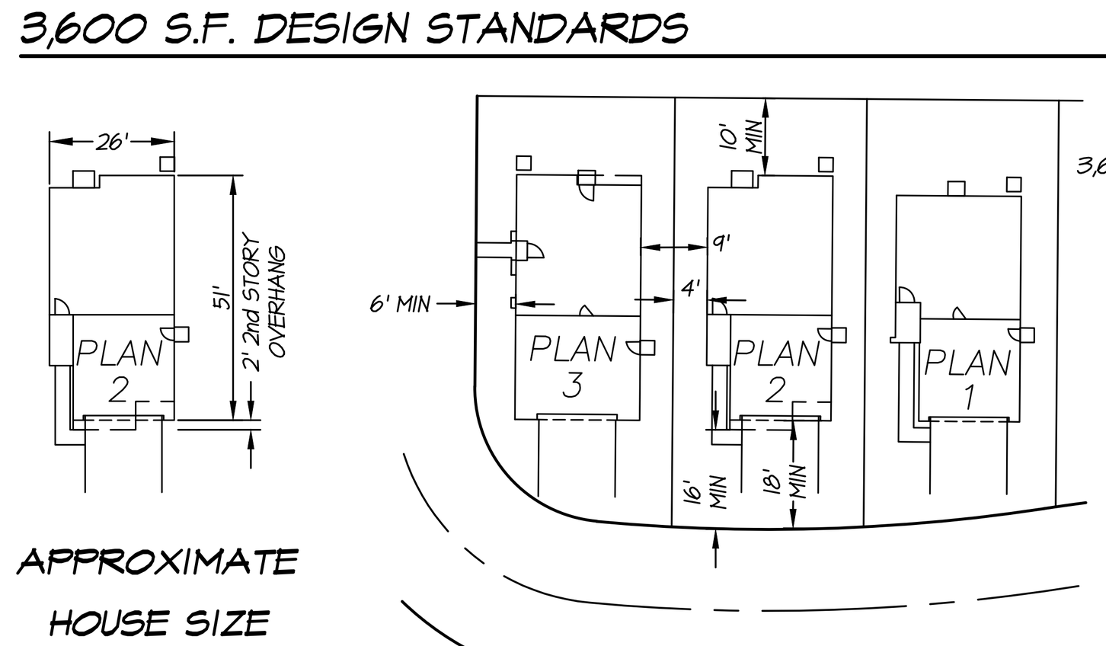


APPROXIMATE HOUSE SIZE

SETBACKS

2,800 S.F SETBACKS
FRONT YARD:...............18' FIRST STORY
16' SECOND STORY
SIDE YARD:..........................4' MINIMUM
9' AGGREGATE
REAR YARD:.......................10' MINIMUM
CORNER LOT SIDE ENTRY:.....6' MINIMUM

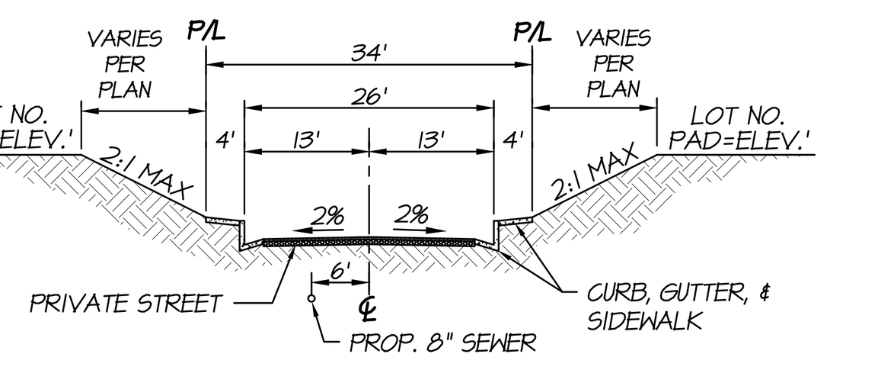
3,600 S.F. DESIGN STANDARDS



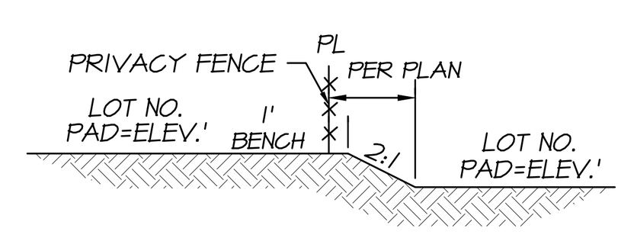
APPROXIMATE HOUSE SIZE

SETBACKS

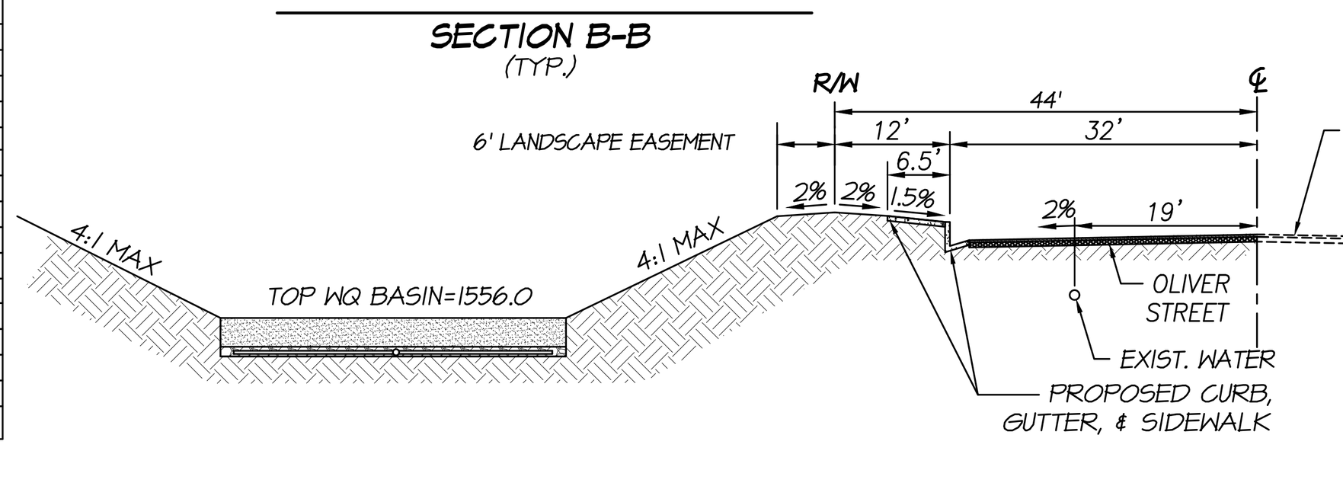
3,600 S.F SETBACKS
FRONT YARD:...............18' FIRST STORY
16' SECOND STORY
SIDE YARD:..........................4' MINIMUM
9' AGGREGATE
REAR YARD:.......................10' MINIMUM
CORNER LOT SIDE ENTRY:.....6' MINIMUM



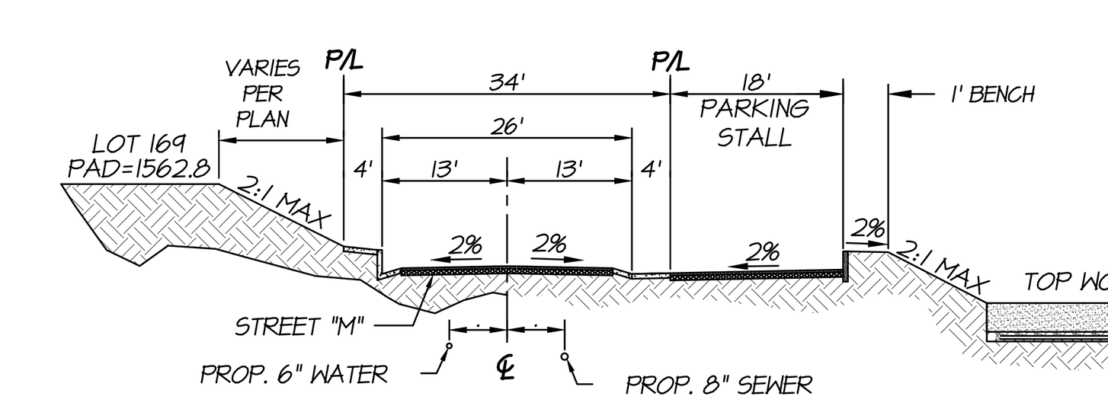
SECTION A-A (TYP.)



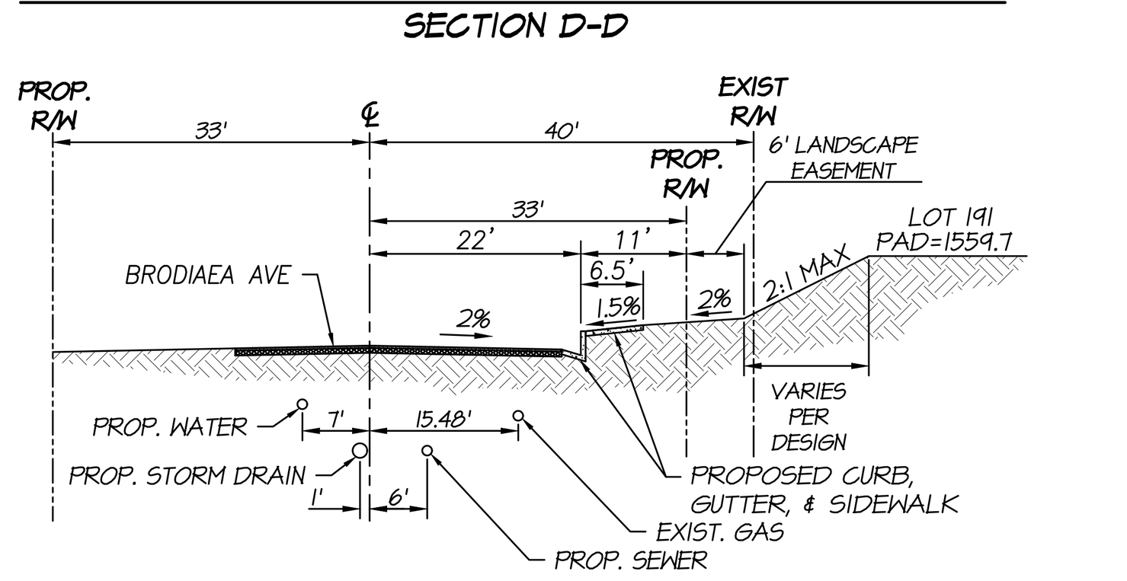
SECTION B-B (TYP.)



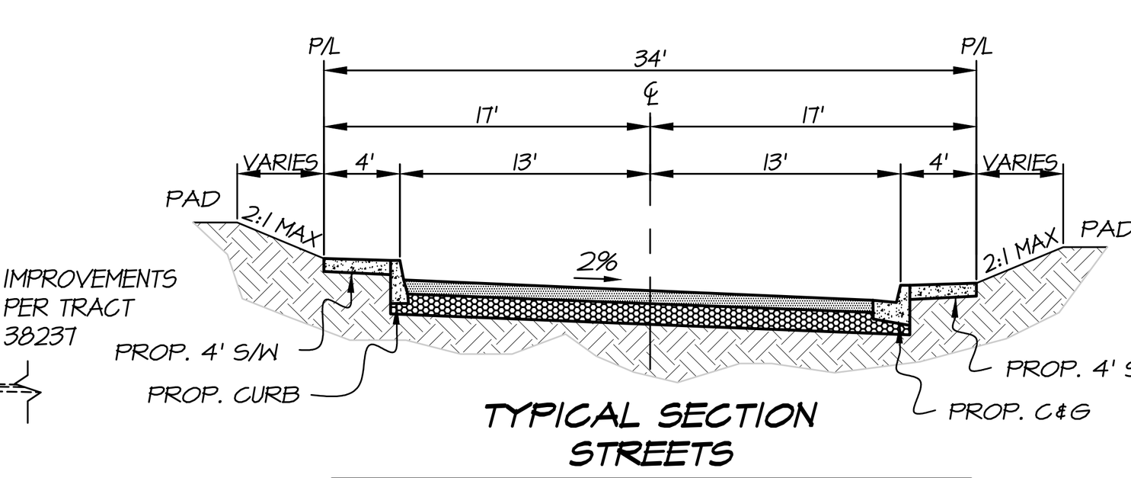
SECTION C-C



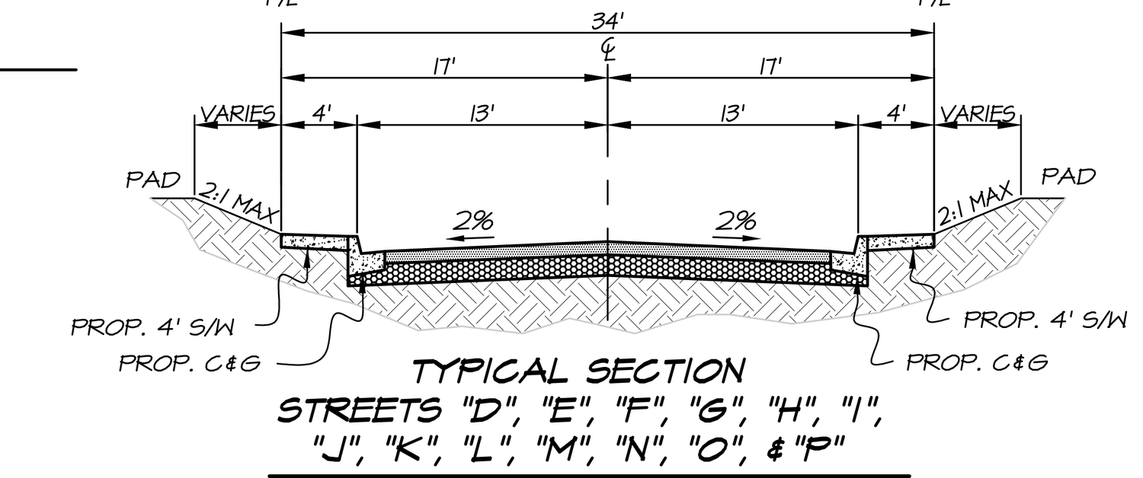
SECTION D-D



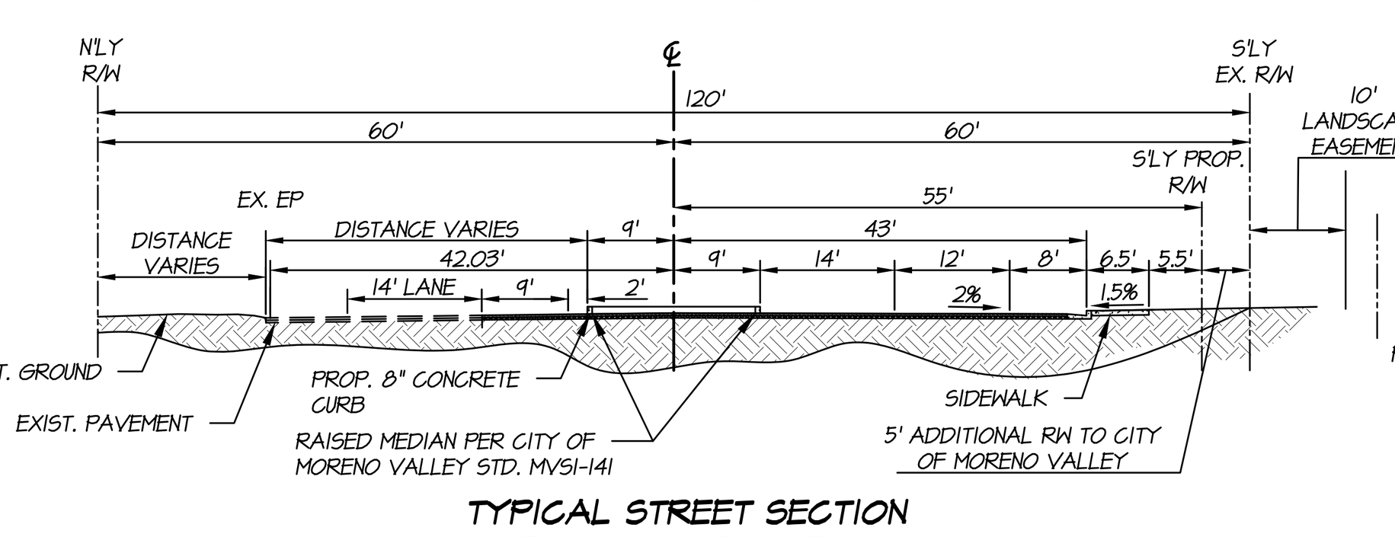
SECTION E-E



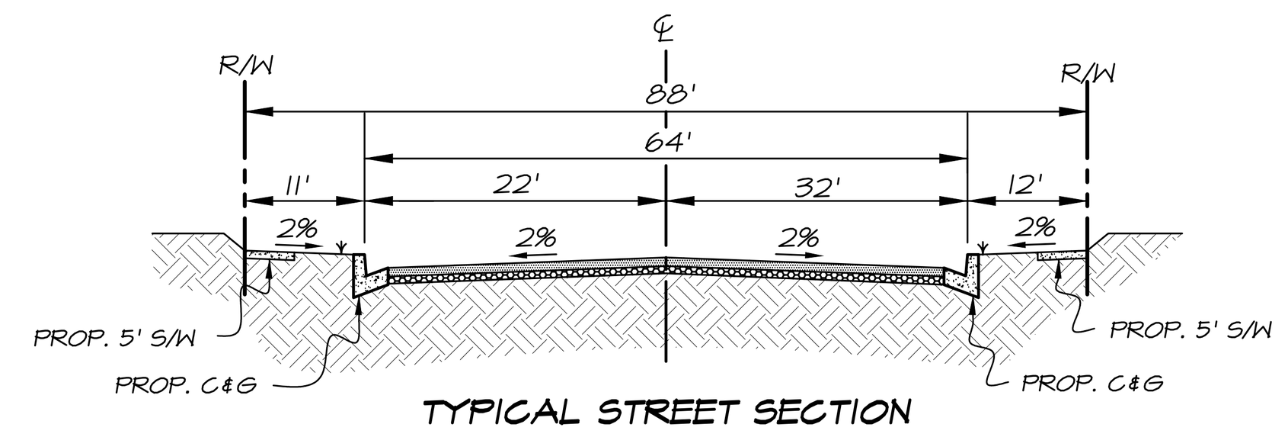
TYPICAL SECTION STREETS
PRIVATE STREET
N.T.S



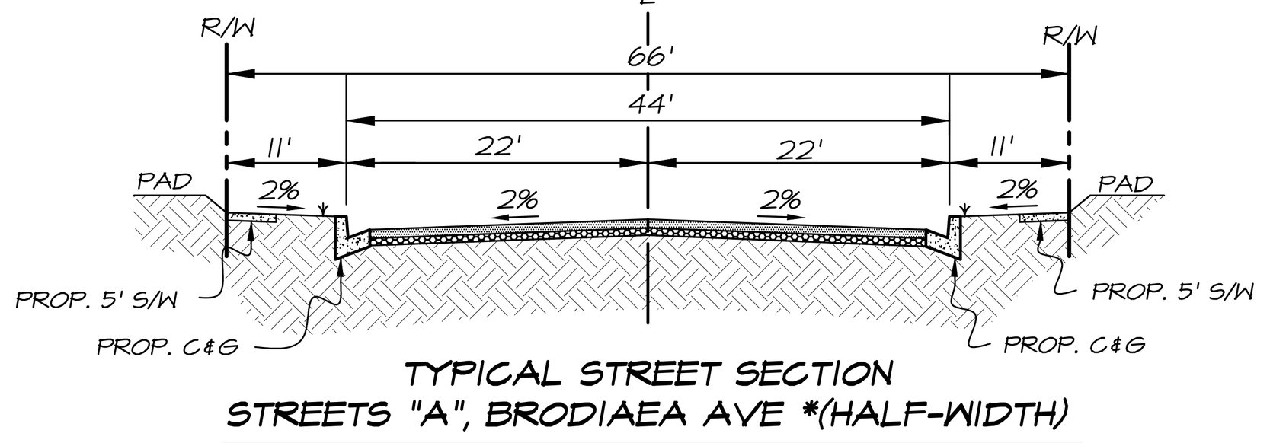
TYPICAL SECTION STREETS "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", & "P"
PRIVATE STREET
N.T.S



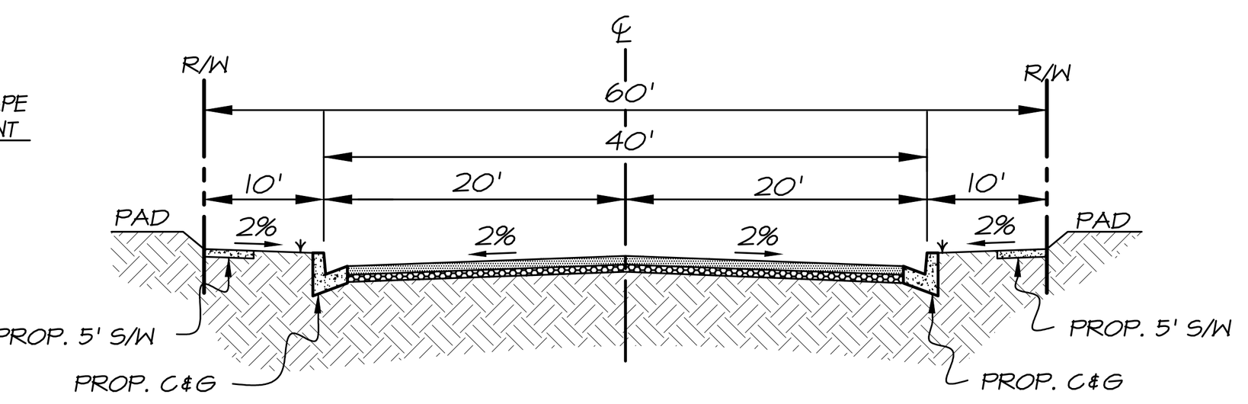
TYPICAL STREET SECTION ALESSANDRO BOULEVARD
PER CITY OF MORENO VALLEY STD PLAN MVSI-103A-0
N.T.S.



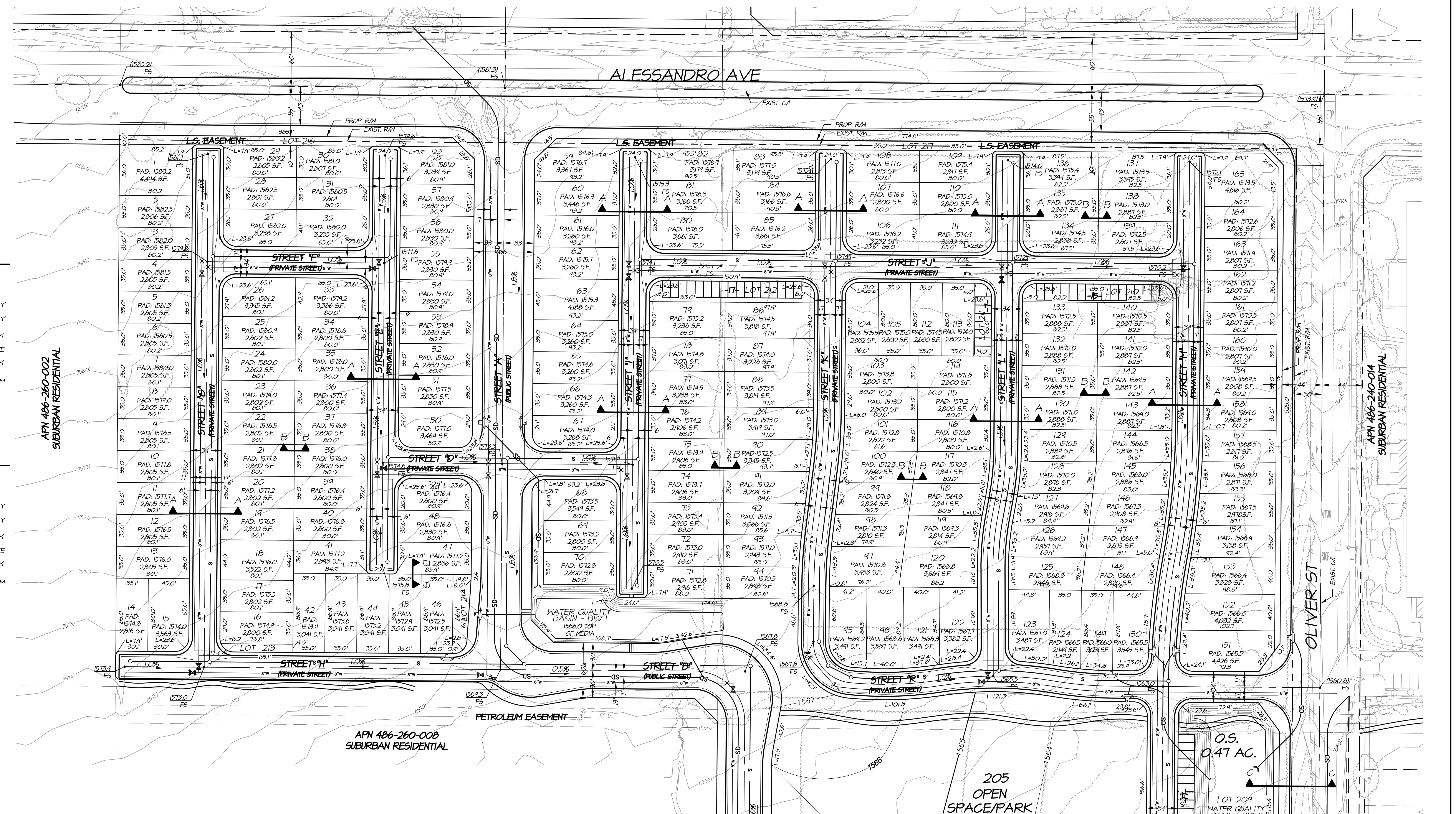
TYPICAL STREET SECTION OLIVER STREET
PER CITY OF MORENO VALLEY STD PLAN MVSI-105A-1
N.T.S.

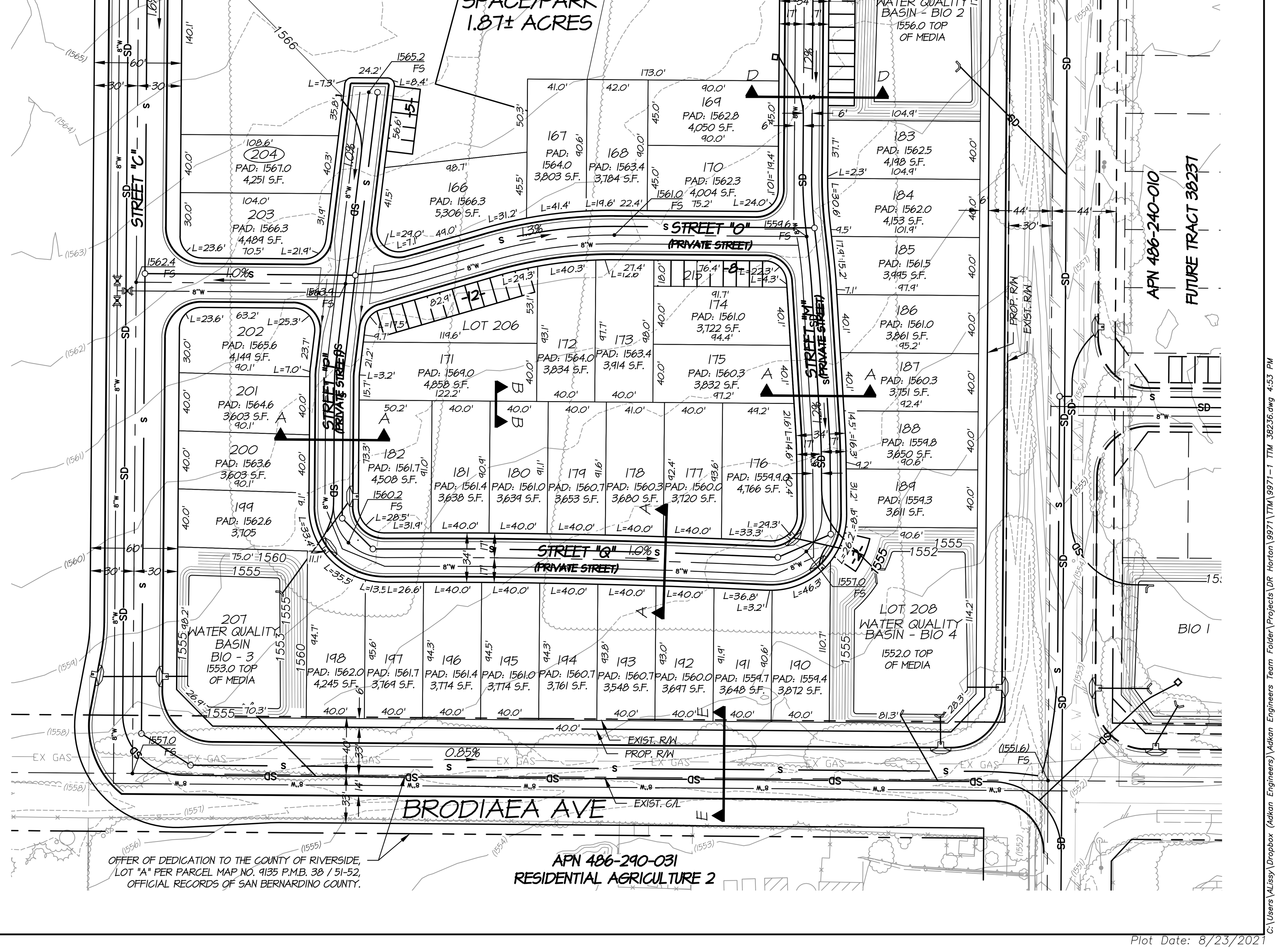


TYPICAL STREET SECTION STREETS "A", BRODIAEA AVE *(HALF-WIDTH)
PER CITY OF MORENO VALLEY STD PLAN MVSI-106B-0
N.T.S.



TYPICAL STREET SECTION STREETS "B" AND "C"
PER RIV. CO. STD DWG No. 106
N.T.S.





Plot Date: 8/23/2021

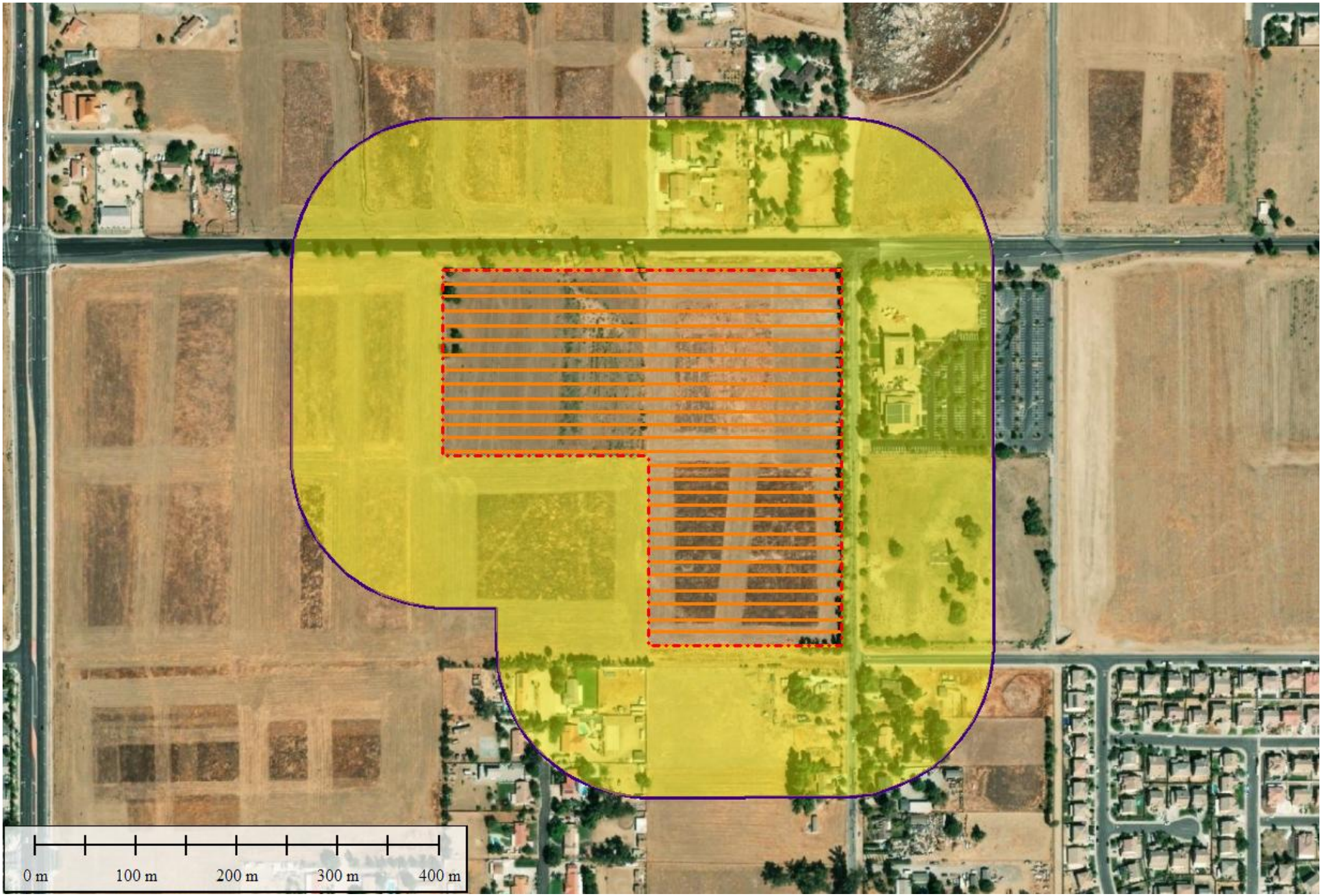


Figure 4

BUOW Survey Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

150 Meter (500 Foot) Buffer Area

Area viewed with binoculars

N

Hernandez Environmental Services

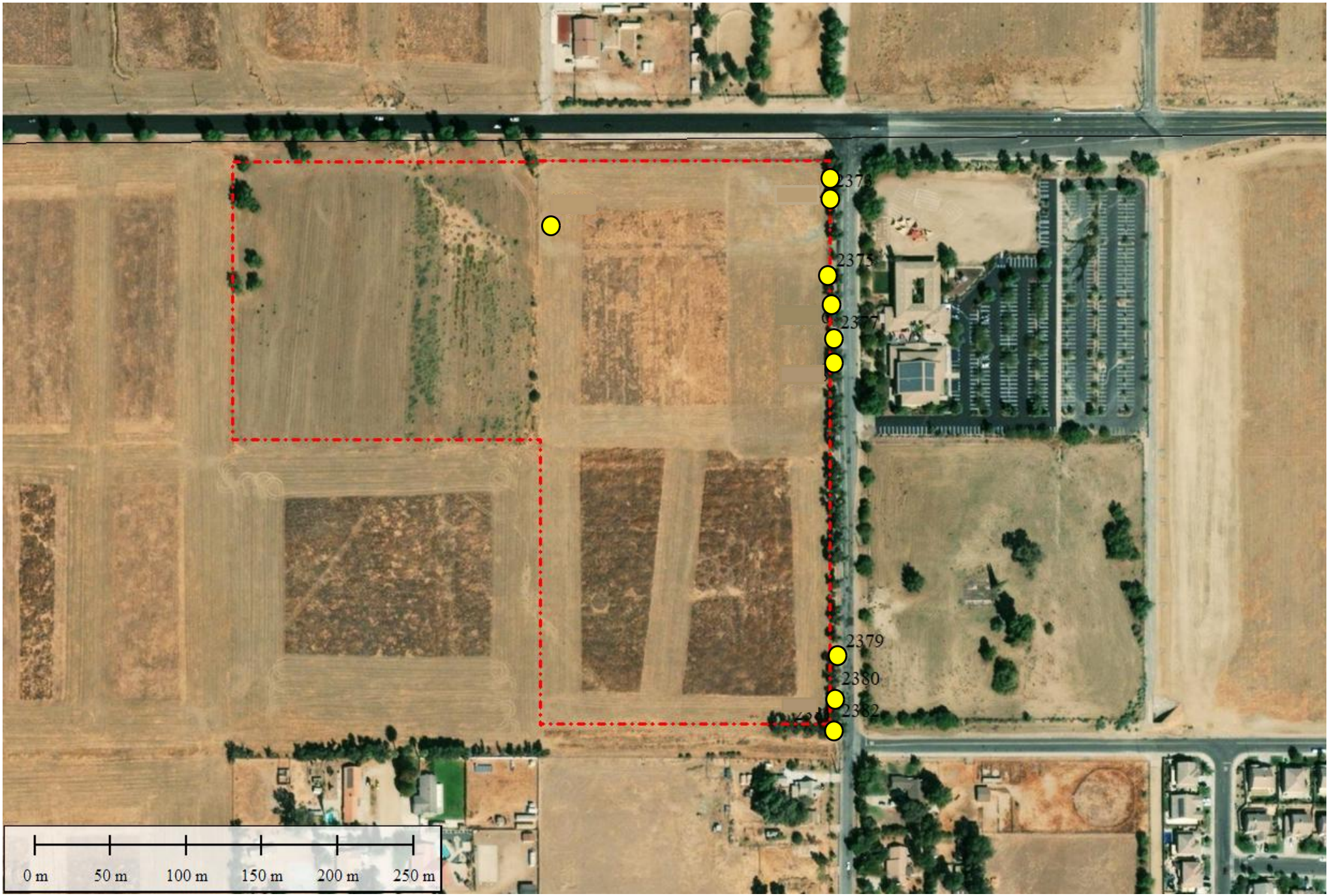


Figure 5

BUOW Results Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

Inactive burrows

N

Hernandez Environmental Services

APPENDIX A

Eastern border of site where majority of potentially suitable burrows were found.

Ruderal habitat within eastern portion of the site.

Potentially suitable burrowing owl burrow complex.

Hernandez Environmental Services

APPENDIX F

JURISDICTIONAL DELINEATION
FOR
ASSESSOR PARCEL NUMBERS
486-260-003, 486-260-004, 486-260-005, and 486-260-009

CITY OF MORENO VALLEY
COUNTY OF RIVERSIDE, CALIFORNIA

Prepared for:
EPD Solutions, Inc.
2 Park Plaza Suite 1120
Irvine, CA 92614

Prepared by:
Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530

SEPTEMBER 2021

Table of Contents

FIGURES

APPENDICES

1.0 Introduction

Hernandez Environmental Services (HES) was contracted to prepare a Jurisdictional Delineation (JD) for an approximately 26.74-acre project site consisting of Assessor's Parcel Numbers (APNs) 486-260-003, 486-260-004, 486-260-005, and 486-260-009. The site is located southwest of the intersection of Alessandro Boulevard and Oliver Street within the City of Moreno Valley, Riverside County, California.

1.1 Purpose

The purpose of this JD is to:

- Determine if any state or federal jurisdictional waters are present within the project site boundaries;
- Quantify any impacts to jurisdictional waters due to the proposed project, if possible;
- Determine if the project will require state or federal permits for impacts to jurisdictional waters; and,
- Recommend mitigation measures to offset impacts to state or federal jurisdictional waters.

1.2 Site Location

The approximate 26.74-acre project site is located southwest of the intersection of Alessandro Boulevard and Oliver Street in Riverside County, California (Figures 1 and 2). The site consists of Riverside County APNs 486-260-003, 486-260-004, 486-260-005, and 486-260-009. Specifically, the project site is located within Township 3 South, Range 3 West in Section 15 of the *Sunnymead* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude coordinates for the project site are 33˚54'58.3226" North and 117˚11'04.2157" West.

1.3 Project Description

The proposed project includes the construction of 204 single-family residential units. The project also includes approximately 1.87 acres of open space, internal streets, water quality basins, and infrastructure and existing roadway improvements (Figure 3). The project will result in impacts to the entire 26.74-acre site.

2.0 Regulatory Background

2.1 California Department of Fish and Wildlife Lake and Streambed Alteration Agreement

The California Department of Fish and Wildlife (CDFW) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the California Fish and Game Code (F&GC), requires that the CDFW be consulted if a proposed

development project has the potential to detrimentally effect a stream and thereby wildlife resources that depend on a stream for continued viability (F&GC Division 2, Chapter 5, section 1600-1616). A Section 1602 Lake or Streambed Alteration Agreement is required, should the CDFW determine that the proposed project may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste or other materials that could pass into any river, stream or lake.

For the purposes of clarification, a stream is defined by CDFW as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators." The historic hydrologic regime is defined as circa 1800 to the present (CDFW 2010).

2.2 United States Army Corps of Engineers Clean Water Act 404 Permit

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under Section 404 of the CWA, the United States Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into WUS, including wetlands. Section 404 requires a permit from the USACE or authorized state for the discharge of dredged or fill material into WUS, including wetlands.

On April 21, 2020, U.S. Environmental Protection Agency (EPA) and the USACE published the Navigable Waters Protection Rule in the Federal Register to finalize a revised definition of WUS under the CWA. The rule became effective on June 22, 2020. In this final rule, the agencies interpret the term WUS to encompass the following:

- The territorial seas and traditional navigable waters;
- perennial and intermittent tributaries that contribute surface water flow to such waters;
- certain lakes, ponds, and impoundments of jurisdictional waters; and,
- wetlands adjacent to other jurisdictional waters.

The final rule specifically clarifies that "waters of the United States" do not include the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;

- diffuse stormwater runoff and directional sheet flow over upland;
- ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- prior converted cropland;
- artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;
- water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
- groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- waste treatment systems.

For purposes of Section 404 of the CWA, the lateral limits of jurisdiction over non-tidal WUS extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. Under 33 CFR 328.3(e), the USACE defines the term OHWM 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 soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

According to the EPA and USACE, "wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Water saturation (hydrology) largely determines how the soil develops and the types of plant and animal communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants (hydrophytes) and promote the development of characteristic wetland (hydric) soils. The EPA and the Corps use the 1987 Corps of Engineers Wetlands Delineation Manual and Regional Supplements to define wetlands for the CWA Section 404 permit program. To qualify for wetlands status, vegetation, soils, and hydrologic parameters must all be met.

For the purposes of this section, the term "fill" is defined as material placed in waters of the

United States where the material has the effect of:

- Replacing any portion of a WUS with dry land; or
- Changing the bottom elevation of any portion of a WUS.

Examples of such fill material include, but are not limited to rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in the WUS. The term fill material does not include trash or garbage.

The definition of "discharge of dredged material" is defined as any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the WUS. The term includes, but is not limited to, the following:

- The addition of dredged material to a specified discharge site located in WUS;
- The runoff or overflow, associated with a dredging operation, from a contained land or water disposal area; and
- Any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into WUS which is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

The term discharge of dredged material does not include the following:

- Discharges of pollutants into WUS resulting from the onshore subsequent processing of dredged material that is extracted for any commercial use (other than fill). These discharges are subject to section 402 of the CWA even though the extraction and deposit of such material may require a permit from the Corps or applicable State.
- Activities that involve only the cutting or removing of vegetation above the ground (e.g., mowing, rotary cutting, and chain-sawing) where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil material.
- Incidental fallback.

2.3 Regional Water Quality Control Board Clean Water Act /Porter-Cologne Act

The State Water Resources Control Board (State Water Board) and the Regional Water Quality Control Boards (RWQCB) (collectively Water Boards) have the authority to regulate discharges of dredged or fill material to waters of the state under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). CWA Section 401 water quality certifications are issued to applicants for a federal license or permit for activities that may result

in a discharge into WUS, including but not limited to the discharge or dredged or fill material (as defined in Section 2.2 above). Waste discharge requirements under Porter-Cologne are issued for discharges of dredged or fill material to waters of the state.

In accordance with Porter-Cologne (Water Code, § 13000 et seq.), the Water Boards are authorized to regulate discharges of waste, which includes discharges of dredged or fill material, that may affect the quality of waters of the state. The Water Code defines waters of the state broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state." Waters of the state includes all WUS. On April 2, 2019, the State Water Board adopted State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), which contained a wetland definition and wetland delineation procedures. The Procedures state that "an area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation." The following wetlands are waters of the state:

1. Natural wetlands;
2. Wetlands created by modification of a surface water of the state;
3. Artificial wetlands that meet any of the following criteria:
    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state;
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape;
    d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
        i. Industrial or municipal wastewater treatment or disposal,
        ii. Settling of sediment,
        iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,

iv. Treatment of surface waters,

v. Agricultural crop irrigation or stock watering,

vi. Fire suppression,

vii. Industrial processing or cooling,

viii. Active surface mining – even if the site is managed for interim wetlands functions and values,

ix. Log storage,

x. Treatment, storage, or distribution of recycled water, or

xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits);

xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

3.0 Methodology

3.1 Literature Review

Prior to the site visit, a literature review was conducted to aid in determining the potential for the presence of drainages, wetlands and riparian vegetation on the project site. Project background documents, topographic maps, satellite imaging, soils maps, and land use maps were examined to establish an accurate project site location, project description, potential for onsite drainages and wetlands, records of on-site vegetation, watershed, soils, and surrounding land uses.

3.2 Field Survey

On August 5, 2021, HES biologists conducted a field survey of the approximate 26.74-acre project site. Field surveys were conducted to delineate jurisdictional drainages and wetland resources associated with jurisdictional drainages. Global Positioning System (GPS) waypoints were taken to delineate specific state or federal waters and any other information that would be useful for the assessment of the project site.

Jurisdictional drainages were identified by looking for features such as a bed, bank or channel. Where riparian vegetation was present, the drip line of the outer edge of the vegetation was used as the measuring criteria. Furthermore, the presence of an OHWM was recorded. Where the presence of an OHWM was evident, a measurement was taken for the width of the OHWM and the measurement was recorded. Where changes in plant community composition were apparent,

the area was examined for the possibility of wetlands. Whether or not adjacent to WUS, the potential wetland area was evaluated for the presence of the three wetland indicators: hydrology, hydric soils and hydrophytic vegetation.

4.0 Results

4.1 Environmental Setting

The proposed 26.74-acre project site consists of undeveloped disturbed land. The project site is relatively flat and characterized by ruderal habitat dominated by non-native vegetation. One non-continuous ephemeral stream was found onsite and generally flows north to southeast for approximately 58 feet. Elevations on the site range from approximately 1,512 to 1,552 feet above mean sea level. Surrounding land uses include Alessandro Boulevard and single-family residences to the north, Oliver Street and Discovery Christian Church to the east, and vacant undeveloped land to the south and west.

4.2 Existing Hydrological Features

The 26.74-acre project area contains one unnamed ephemeral stream dominated by upland plant species. The ephemeral enters the northern project site boundary from a culvert that directs urban runoff from north of the project site onto the site. The stream flows from north to southeast for approximately 58 linear feet where it stops and a bed, bank, and channel are not present and cannot be delineated.

4.3 Soils

The U.S. Department of Agriculture Natural Resources Conservation District's Web Soil Survey was consulted and indicates that the project site contains three soil types, Greenfield sandy loam (GyA), 0 to 2 percent slopes, Greenfield sandy loam (GyC2), 2 to 8 percent slopes, eroded; and Hanford coarse sandy loam (HcC), 2 to 8 percent slopes, eroded. Refer to Appendix A, *Soils Map*.

No soils classified as hydric were found to occur on the project site area.

4.4 Vegetation

The onsite ephemeral stream is dominated by upland vegetation. The dominant species observed within and around the banks of the stream include jimsonweed (*Datura wrightii*), common sunflower (*Helianthus annuus*), and shortpod mustard (*Hirschfeldia incana*).

4.5 Hydrology

The ephemeral stream is located within the Santa Ana River Basin, the San Jacinto Valley Hydrologic Unit, Perris Hydrologic Area, and Perris Valley Subarea (4802.11). The project area contains an unnamed ephemeral stream does not connect to any jurisdictional stream upstream or downstream and is an isolated drainage feature.

4.6 Existing Wetlands

The project site contains no wetlands or vernal pools as defined by the 1987 Corps of Engineers Wetland Delineation Manual.

4.7 California Department of Fish and Wildlife Jurisdiction

The project site contains approximately 0.008 acre (58 linear feet) of ephemeral stream that would be considered CDFW jurisdictional (Figure 4). The banks of the drainages are dominated by Johnsongrass and common sunflower.

The proposed residential development will result in impacts to approximately 0.008 acre (58 linear feet) of CDFW jurisdictional ephemeral stream (Figure 6). Impacts to this drainage feature will require the submittal of a Notification of Lake of Streambed Alteration pursuant to Fish and Game Code Section 1602.

4.8 Waters of the United States

A tributary, lake, pond, or impoundment of a jurisdictional water meets the definition of a WUS if it contributes surface water flow directly or indirectly to a traditional navigable water or territorial sea in a typical year. For a surface water channel like a river, stream, or ditch to meet the definition of WUS, the channel must be perennial or intermittent (i.e., flowing continuously year-round or flowing continuously during certain times of the year and more than in direct response to a single precipitation event) in a typical year. Under the Navigable Waters Protection Rule, ephemeral features and other excluded artificial and natural features are not jurisdictional and do not become jurisdictional even if they episodically convey surface water from upstream relatively permanent jurisdictional waters to downstream jurisdictional waters in a typical year, and thereby help maintain the jurisdictional status of the upstream waters.

Based upon this guidance, the onsite ephemeral stream is not considered jurisdictional WUS, which are regulated by the USACE Sections 404 and 401 of the CWA.

4.9 Regional Water Quality Control Board Jurisdiction

The project site contains approximately 0.008 acre (58 linear feet) of ephemeral stream that would be considered waters of the state subject to Porter-Cologne (Figure 5).

The proposed residential development will result in impacts to approximately 0.008 acre (58 linear feet) of waters of the state located on the site (Figure 7). Impacts to this drainage feature will require the application for waste discharge requirements (WDR) under Porter-Cologne from the Santa Ana RWQCB.

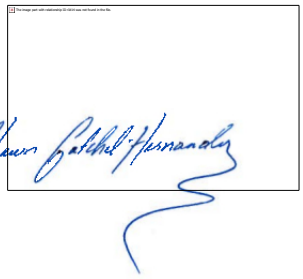
5.0 Recommendation

The proposed project will impact approximately 0.008 acre of CDFW jurisdiction and waters of the state. These impacts will require the project to obtain a Section 1602 Streambed Alteration Agreement from CDFW and a WDR from the Santa Ana Regional Water Quality Control Board.

The project will mitigate 0.008 acre of impacts to CDFW jurisdictional waters and waters of the State by the purchase of mitigation at a 2:1 ratio from an agency-approved mitigation bank.

6.0 Certification

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



DATE 09-30-2021 SIGNED _____

Project Manager

Fieldwork Performed By:

Elizabeth Gonzalez

Associate Biologist

Sarah Vasquez

Associate Biologist

7.0 References

California Department of Fish and Wildlife. 2010. A Review of Stream Processes and Forms in Dryland Watersheds. Prepared by Kris Vyverberg, Conservation Engineering.

California Department of Fish and Wildlife. 2013. Fish and Game Code of California.

California Regional Water Quality Control Board, San Diego Region. 2016. Water Quality Control Plan for the San Diego Basin. San Diego, California.

Department of the Army. 1986 (Nov 13). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. Federal Register 51(219):41206-41206.

Department of the Army. 2000 (Mar 9). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. Federal Register 65(47):12818-12899.

Department of the Army. 2002 (Jan 15). 33 CFR Parts 320 Through 330, Regulatory Programs of the Corps of Engineers; Final Rule. Federal Register 67(10):20020-2095.

Hickman, J.C. 1993. The Jepson Manual: Higher Plants of California. University of California Press. Berkeley, California.

Holland, R.F. 1986 (updated 1996). Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program. California Department of Fish and Game. Sacramento, California.

Munz, P.A. 1974 A Flora of Southern California. University of California Press. Berkeley, California.

Reed, P.B. 1988. National List of Plant Species That Occur in Wetlands: California (Region 0). National wetlands Inventory, US Fish and Wildlife Biological Report 88 (26.9).

Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. Sacramento, California.

United States Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Corps of Engineers Waterways Experiment Station. Vicksburg, Mississippi.

United States Army Corps of Engineers. 2006. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Ed, J.S. Wakely, R.W.

United States Geological Survey. *Sunnymead*, California 7.5-Minute Topographic Quadrangle Map. Department of the Interior. U.S. Government Printing Office. Washington, D.C.

Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed September 2021.

FIGURES

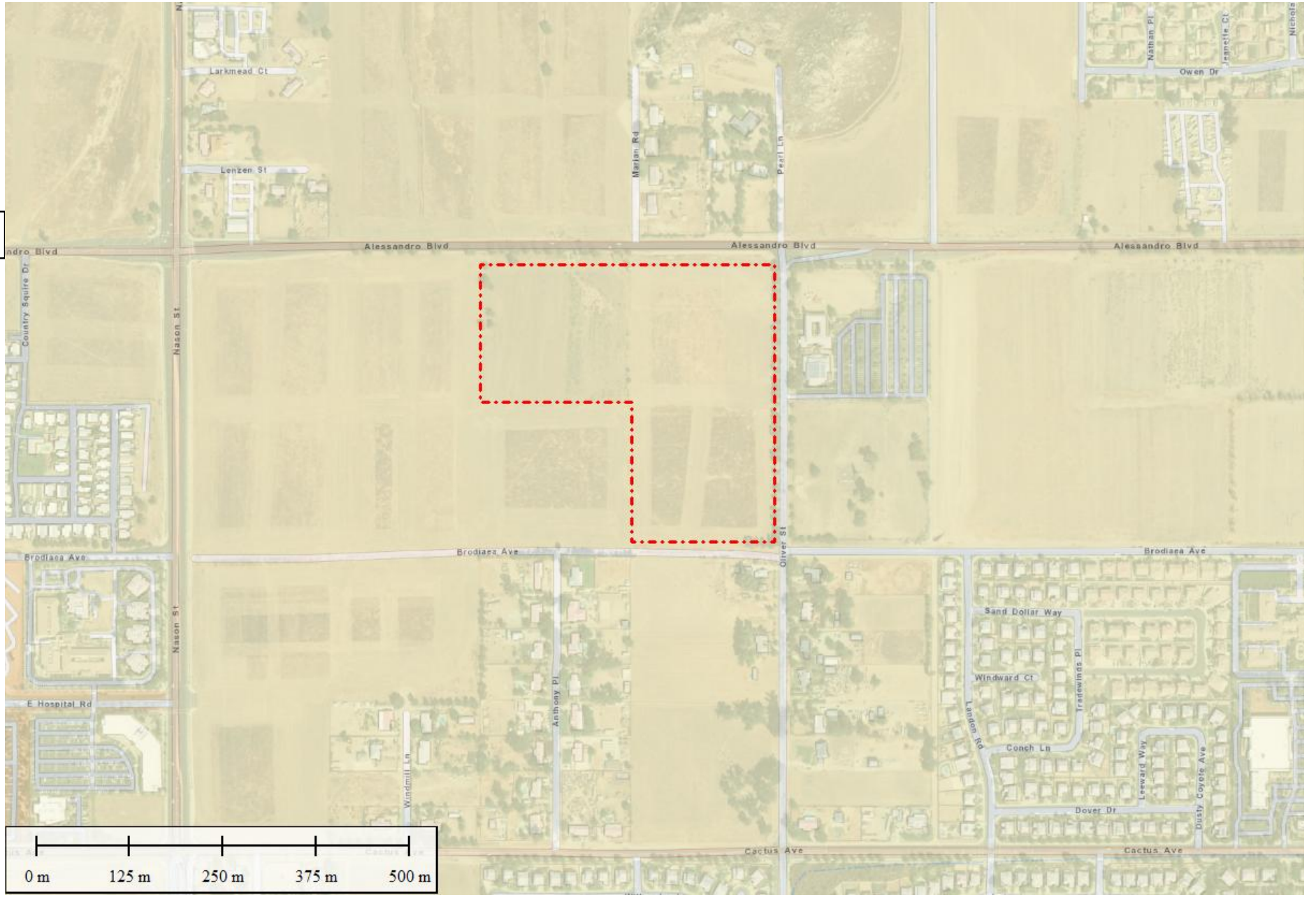


Figure 1
Location Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

N

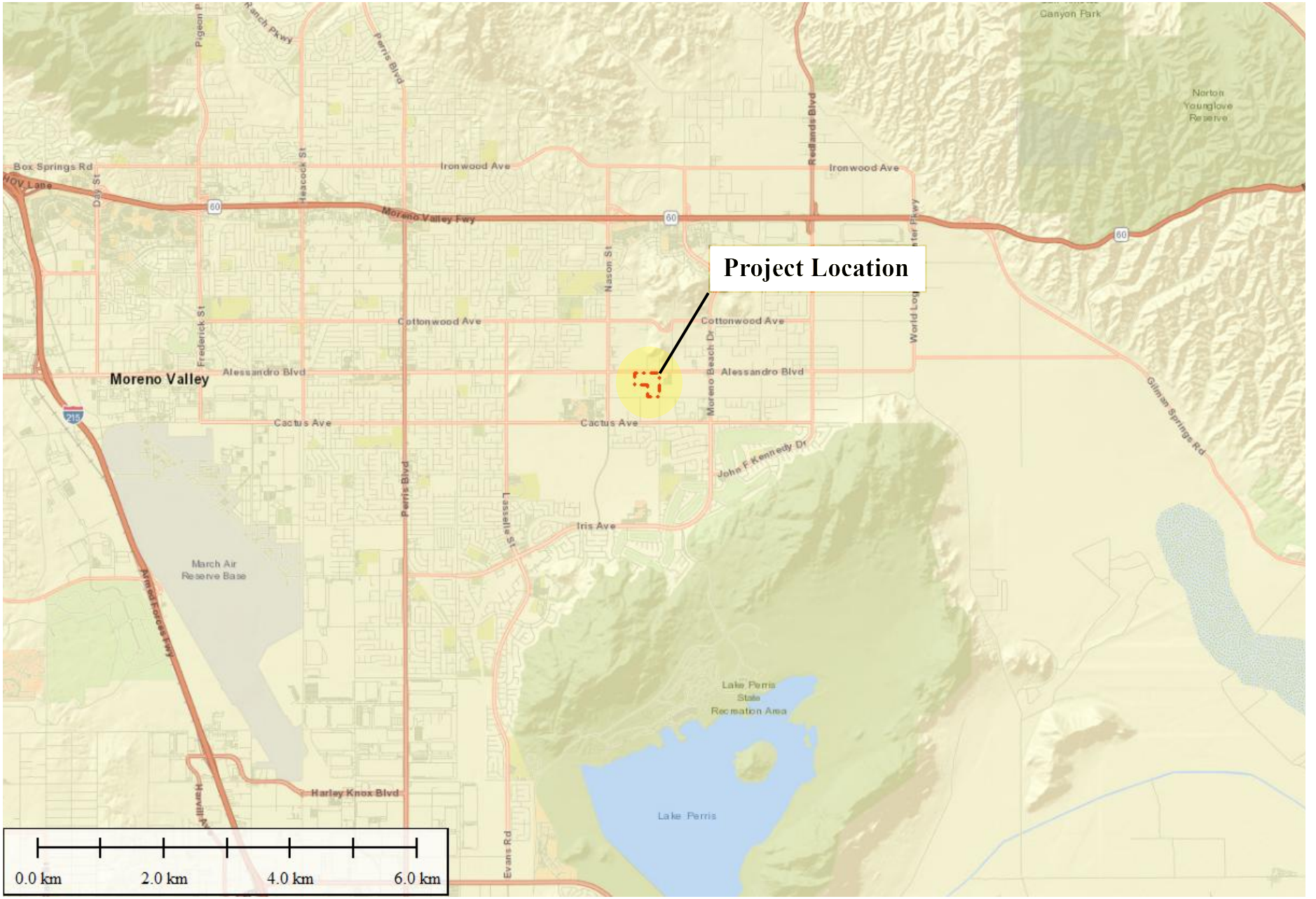


Figure 2
Vicinity Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

IN THE CITY OF MORENO VALLEY, COUNATY OF RIVERSIDE, STATE OF CALIFORNIA

TENTATIVE TRACT MAP 38236

AUGUST 2021

PLANS PREPARED BY: adkan ENGINEERS
Civil Engineering - Surveying - Planning
6879 Airport Drive, Riverside, CA 92504
Tel:(951) 688-0241 - Fax:(951) 688-0599

PREPARATION DATE : AUGUST 2021
REVISED DATE :

OWNER

APN 486-260-005 & 486-260-009
GRANITE CAPITAL LLC
11370 MORENO BEACH DRIVE
MORENO VALLEY, CA 92555
APN 486-260-003 & 486-260-004
VALLEY CHRISTIAN CHURCH OF THE BRETHEREN IN CHRIST
26755 ALESSANDRO BOULEVARD
MORENO VALLEY, CA 92555-3902

ENGINEER

adkan ENGINEERS
6879 AIRPORT DRIVE
RIVERSIDE, CA. 92504
951-688-0241

APPLICANT

D.R. HORTON
2280 WARDLOW., STE. 100
CORONA, CA 92878

UTILITY PURVEYORS

WATER:	EASTERN MUNICIPAL WATER DISTRICT
SEWER:	EASTERN MUNICIPAL WATER DISTRICT
GAS:	SOUTHERN CALIFORNIA GAS COMPANY
ELECTRICITY:	CITY OF MORENO VALLEY
TELEPHONE:	VERIZON
CATV:	ADELPHIA

ASSESSORS PARCEL NUMBER

486-260-003, 486-260-004, 486-260-005 & 486-260-009

LEGEND

PROP DOMESTIC WATER
PROPOSED SEWER
TRACT BOUNDARY
OLD TRACT BOUNDARY
PHASING BOUNDARY
A.D.A ACCESS RAMP
PROPOSED BLOCK WALL
FAULT SETBACK LINE

SD = STORM DRAIN	SW = SIDEWALK
TC = TOP OF CURB	( ) = EXISTING ELEVATION
FS = FINISH SURFACE	C&G = CURB AND GUTTER
SWR = SEWER	S.F. = SQUARE FEET
CL = CENTER LINE	FS = FINISH SURFACE
FG = FINISHED GROUND	FH = FIRE HYDRANT
WTR= WATER	TW = TOP OF WALL
P/L = PROPERTY LINE	TF = TOP OF FOOTING
R/W = RIGHT OF WAY	FL= FLOW LINE
A.R. = A.D.A ACCESS RAMP	T.B.R. = TO BE REMOVED

EARTHWORK QUANTITIES

CUT: _ CY FILL: _ CY IMPORT: _ CY
THE QUANTITY SHOWN ABOVE IS FOR DISCUSSION PURPOSES ONLY.

TENTATIVE TRACT SUMMARY

TOTAL AREA GROSS:	26.7 ACRES
EXISTING ZONING:	DC
PROPOSED ZONING:	DC
EXISTING LAND USE:	SUBURBAN RESIDENTIAL
PROPOSED LAND USE:	SUBURBAN RESIDENTIAL
EXISTING SURROUNDING LAND USE:	RESIDENTIAL AGRICULTURE SUBURBAN RESIDENTIAL
EXISTING SURROUNDING ZONING:	RA-2, R-3, R-5

BENCHMARK

IVF 52
BRASS DISK AT THE NW CORNER OF ALESSANDRO BLVD. AND REDLANDS BLVD. 170.0 FEET NORTH OF ALESSANDRO BLVD.; 43.0 FEET WEST OF REDLANDS BLVD; 2.0 FEET SE OF POWER POLE #21599 C.W.T.; 1.0 FEET NORTH OF A MARKER POST, A BRASS DISK SET IN THE TOP OF A CONCRETE POST AND MARKED "IVF 52 1993"
ELEVATION: 1603.71 NAVD 1988

BASIS OF BEARINGS

"THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, CCS83, ZONE 6, BASED LOCALLY ON CONTROL STATIONS "P482", "P478", AND "SBCC" NAD 83(NSRS2011) EPOCH 2010.00 AS SHOWN HEREON. ALL BEARINGS SHOWN ON THIS MAP ARE GRID. QUOTED BEARINGS AND DISTANCES FROM REFERENCE MAPS OR DEEDS ARE AS SHOWN PER THAT RECORD REFERENCE. ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS SPECIFIED OTHERWISE. GRID DISTANCES, MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCE BY A COMBINATION FACTOR OF 0.99993579. CALCULATIONS ARE MADE AT 1"IP TAGGED "LS 5174", DOWN 0.2' IN WELL PER TRACT 36882, MB 454/37-39 WITH COORDINATES OF:
N: 2277362.55000000, E: 6280631.21000000
USING AN ELEVATION OF 1565.533.

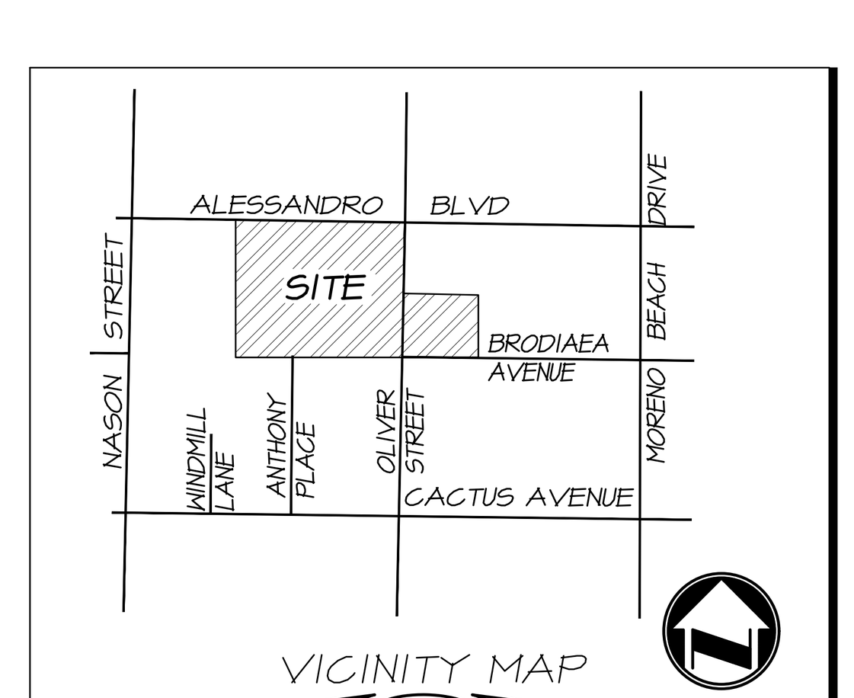
TOPOGRAPHY SOURCE

TOPOGRAPHY COMPILED PHOTOGRAMETRICALLY BY INLAND AERIAL SURVEY INC. ON 05-14-20 AND 03-26-21

RESIDENTIAL

LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA
1	4,494	38	2,800	75	2,906	112	2,800	149	3,059	186	3,861
2	2,806	39	2,800	76	2,906	113	2,800	150	3,545	187	3,751
3	2,805	40	2,800	77	3,238	114	2,800	151	4,426	188	3,650
4	2,805	41	2,893	78	3,071	115	2,800	152	4,032	189	3,611
5	2,805	42	3,401	79	3,238	116	2,800	153	3,828	190	3,872
6	2,805	43	3,401	80	3,661	117	2,847	154	3,138	191	3,648
7	2,805	44	3,401	81	3,166	118	2,847	155	2,978	192	3,697
8	2,805	45	3,401	82	3,179	119	2,814	156	2,871	193	3,548
9	2,805	46	3,401	83	3,179	120	3,669	157	2,817	194	3,761
10	2,805	47	2,836	84	3,166	121	3,491	158	2,808	195	3,774
11	2,805	48	2,830	85	3,661	122	3,382	159	2,808	196	3,774
12	2,805	49	2,733	86	3,818	123	3,487	160	2,807	197	3,769
13	2,805	50	3,464	87	3,228	124	2,949	161	2,807	198	4,245
14	2,816	51	2,830	88	3,819	125	2,948	162	2,807	199	3,705
15	3,563	52	2,830	89	3,419	126	2,957	163	2,807	200	3,603
16	2,800	53	2,830	90	3,345	127	2,916	164	2,806	201	3,603
17	2,802	54	2,830	91	3,209	128	2,876	165	4,616	202	4,149
18	3,522	55	2,830	92	3,066	129	2889	166	5,306	203	4,489
19	2,802	56	2,830	93	2,943	130	2888	167	3,803	204	4,251
20	2,802	57	2,830	94	2,898	131	2888	168	3,784		
21	2,802	58	3,239	95	3,491	132	2888	169	4,050		
22	2,802	59	3,367	96	3,587	133	2888	170	4,004		
23	2,802	60	3,446	97	3,453	134	2,838	171	3,722		
24	2,802	61	3260	98	2,810	135	2887	172	3,832		
25	2,802	62	3260	99	2,824	136	3394	173	4,766		
26	3,395	63	4,188	100	2,840	137	3,395	174	3,720		
27	3,238	64	3260	101	2,822	138	2887	175	3,680		
28	2,801	65	3260	102	2800	139	2807	176	3,653		
29	2,805	66	3260	103	2800	140	2887	177	3,639		
30	2,807	67	3268	104	2,832	141	2887	178	3,638		
31	2,801	68	3549	105	2800	142	2887	179	4,508		
32	3,235	69	2800	106	3232	143	2887	180	4,858		
33	3,386	70	2800	107	2800	144	2876	181	3,834		
34	2,800	71	2916	108	2813	145	2886	182	3,914		
35	2,800	72	2910	109	2817	146	2908	183	4,198		
36	2,800	73	2905	110	2800	147	2875	184	4,153		
37	2,800	74	2906	111	3232	148	2890	185	4,153		

MIN. LOT SIZE = 2,800 S.F.
SUBDIVISION DENSITY= 0.44 DU/ACRE



VICINITY MAP (N.T.S.)

SCALE: 1" = 60'

PROJECT NOTES

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS PLAN. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS DRAWING.
2. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, HE/SHE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
3. 2010 THOMAS BROS. MAP BOOK: PAGE 718, GRID C-6
4. SITE IS LOCATED IN LOW LIQUEFACTION AREA AND IS SUSCEPTIBLE TO SUBSIDENCE.
5. A PORTION OF LAND IS SUBJECT TO TO OVERFLOW INUNDATION OR FLOOD HAZARD
6. PROJECT IS NOT LOCATED IN A HIGH FIRE AREA.
7. ALL IMPROVEMENTS SHALL BE PER SCHEDULE "A" SUBDIVISION ORDINANCE 460.
8. NO SUBSURFACE SEPTIC SEWAGE DISP #2560SAL IS INTENDED.
9. THIS MAP DOES NOT INCLUDE THE ENTIRE CONTIGUOUS OWNERSHIP OF THE LAND DIVIDER.
10. THIS PROJECT IS LOCATED IN RIVERSIDE COUNTY ORDINANCE NO. 655, ZONE B REGULATING LIGHT POLLUTION
11. PROJECT IS LOCATED IN FLOOD ZONE X AND FLOOD ZONE A PER FEMA PANEL 06065C0710G.
12. NO KNOWN EXISTING WELLS ON OR AROUND THE PROPERTY.
13. PROJECT LOCATION IS NOT IN A FAULT ZONE OR FAULT LINE.
14. SITE IS LOCATED IN A HIGH SENSITIVITY PALEONTOLOGICAL AREA
15. SITE IS LOCATED WITHIN THE MORENO VALLEY UNIFIED SCHOOL DISTRICT

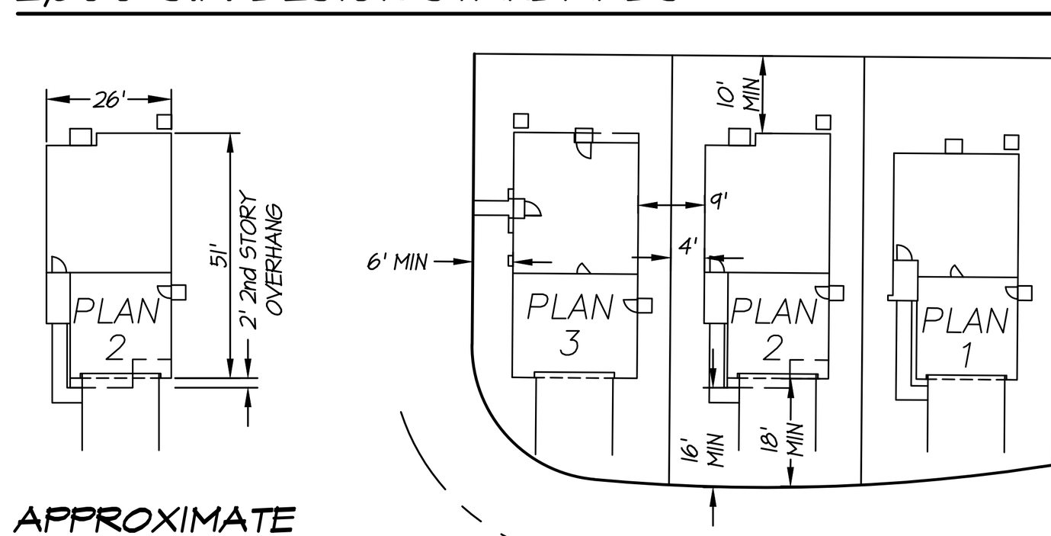
LEGAL DESCRIPTION

APN 486-260-003:
THE WESTERLY 6 ACRES OF LOT 2 IN BLOCK 118, AS SHOWN BY MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANYS LANDS, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CA

APN 486-260-004:
LOT 2 IN BLOCK 118 AS SHOWN BY MAP No. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF RECORDS OF SAN BERNARDINO COUNTY, CA.

APN 486-260-005 & 486-260-009:
LOT 1 AND 8 IN BOOK 118 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP IN BOOK 11, PAGE 10 OF MAPS, SAN BERNARDINO COUNTY RECORDS.

2,800 S.F. DESIGN STANDARDS

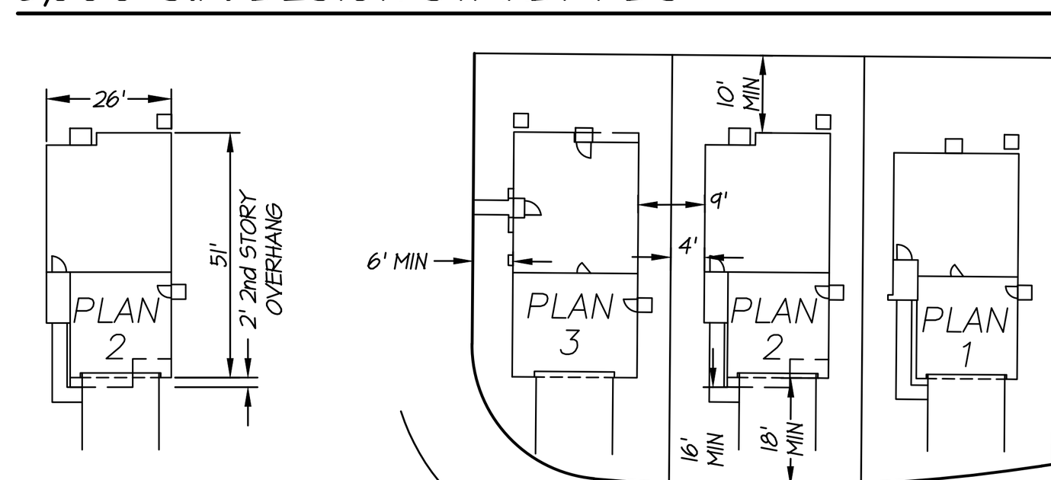


APPROXIMATE HOUSE SIZE

SETBACKS

2,800 S.F SETBACKS
FRONT YARD:...............18' FIRST STORY
16' SECOND STORY
SIDE YARD:...............4' MINIMUM
9' AGGREGATE
REAR YARD:...............10' MINIMUM
CORNER LOT SIDE ENTRY:.....6' MINIMUM

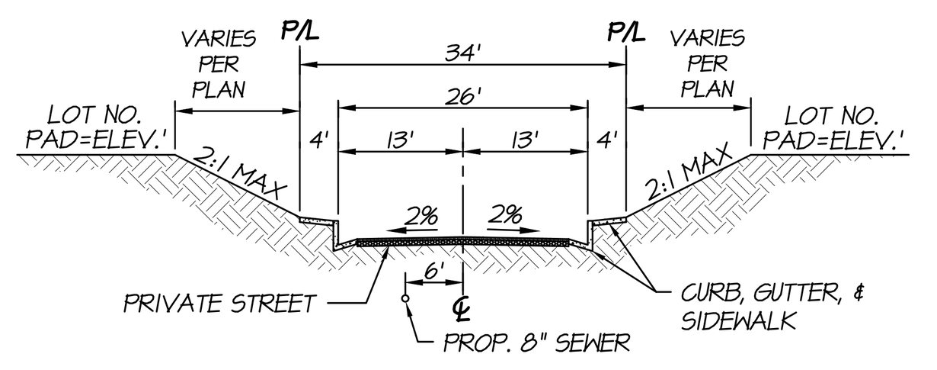
3,600 S.F. DESIGN STANDARDS



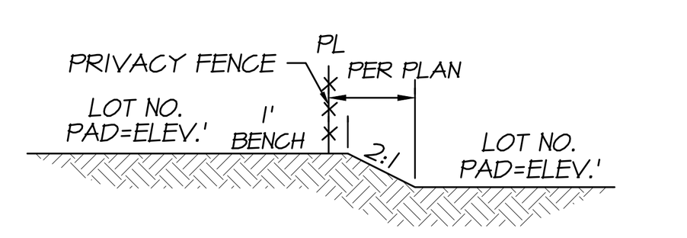
APPROXIMATE HOUSE SIZE

SETBACKS

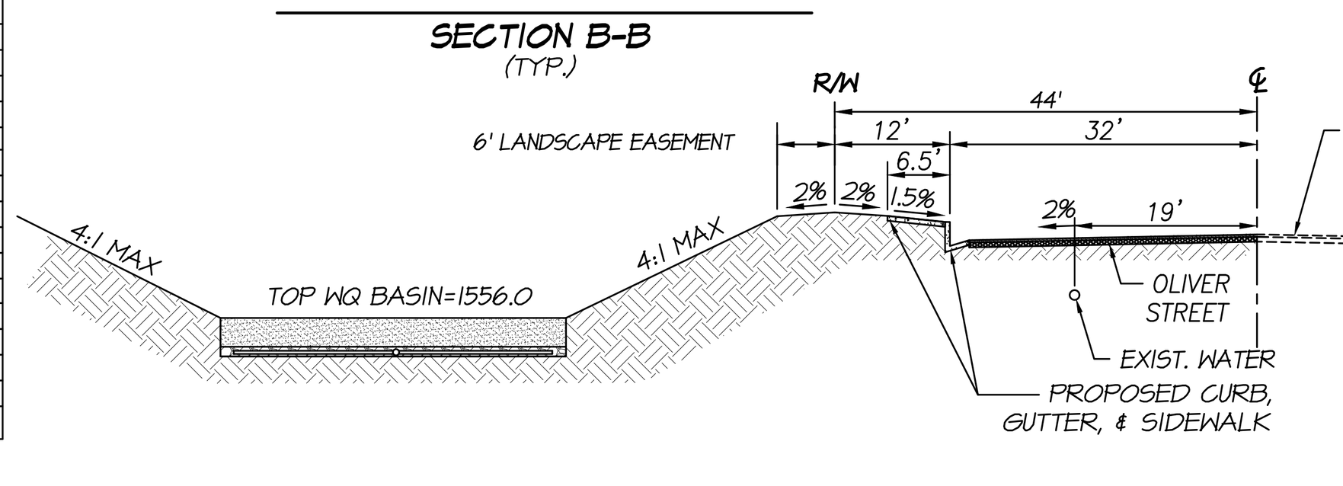
3,600 S.F SETBACKS
FRONT YARD:...............18' FIRST STORY
16' SECOND STORY
SIDE YARD:...............4' MINIMUM
9' AGGREGATE
REAR YARD:...............10' MINIMUM
CORNER LOT SIDE ENTRY:.....6' MINIMUM



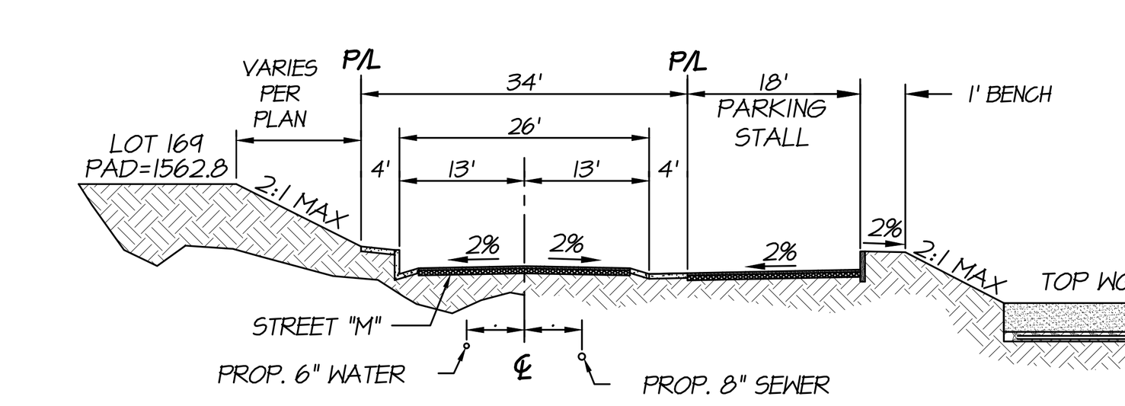
SECTION A-A (TYP.)



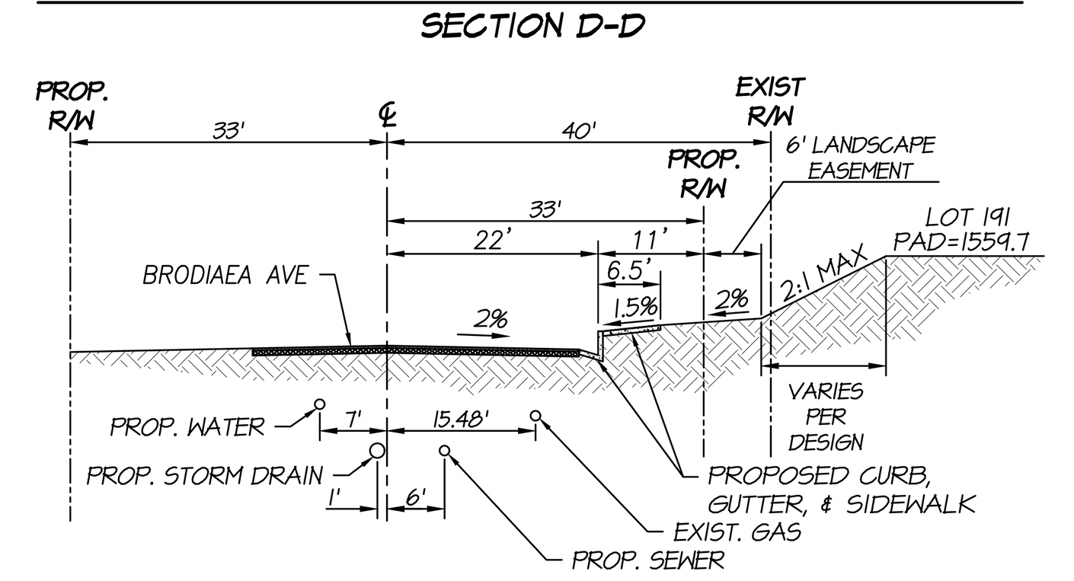
SECTION B-B (TYP.)



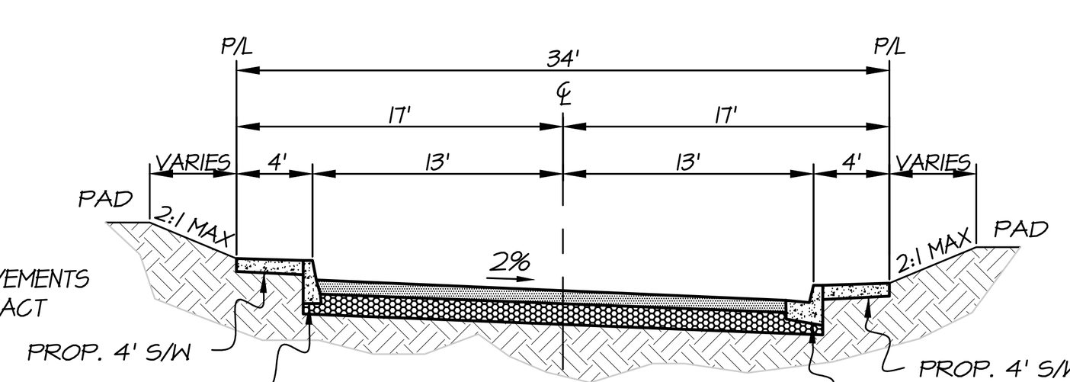
SECTION C-C



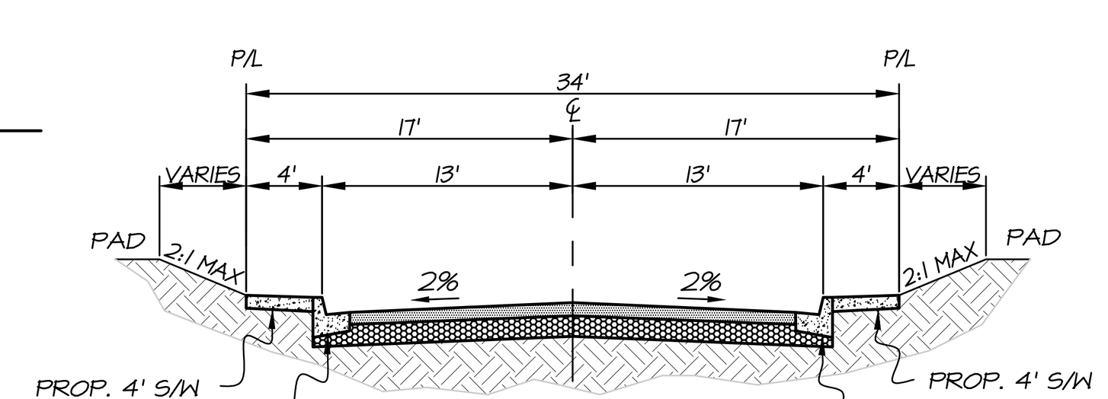
SECTION D-D



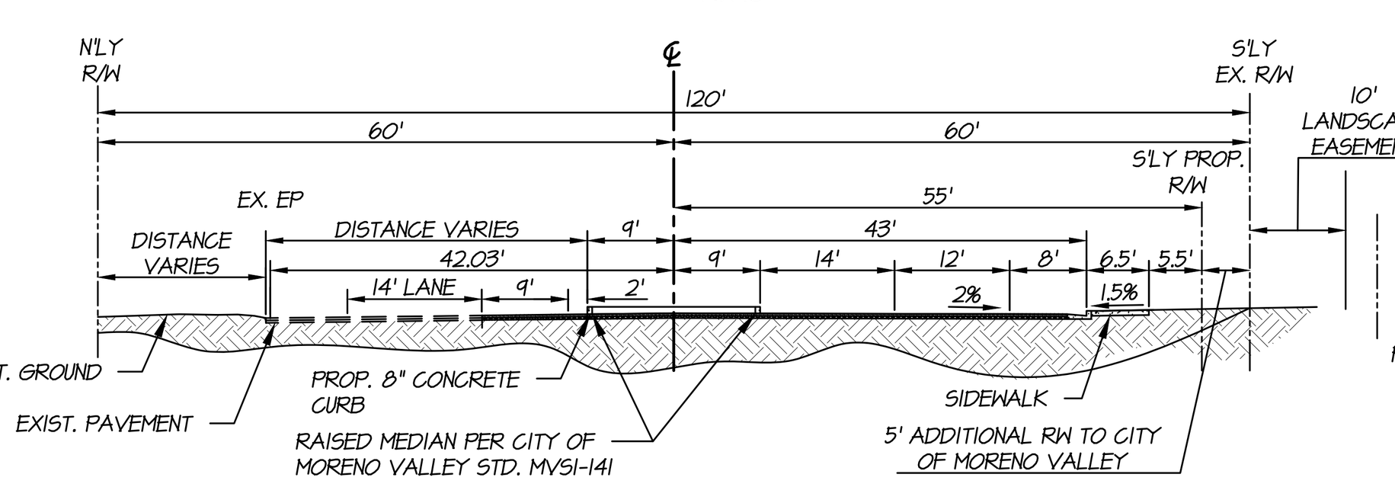
SECTION E-E



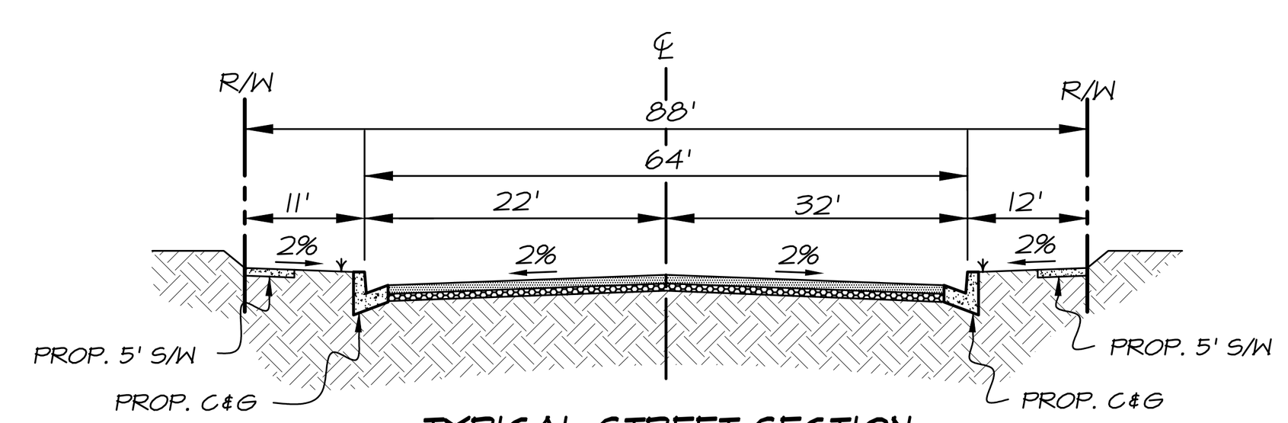
TYPICAL SECTION STREETS
PRIVATE STREET
N.T.S



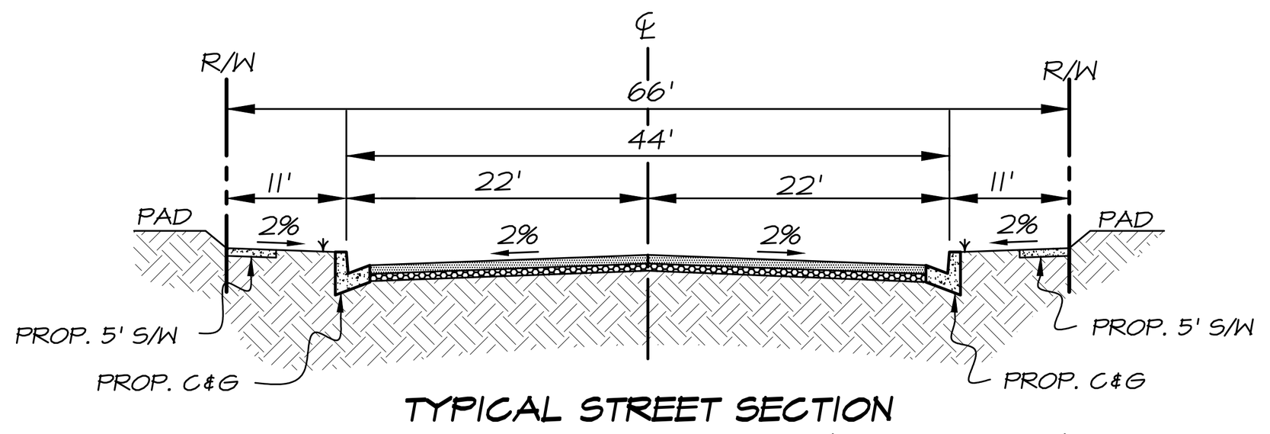
TYPICAL SECTION STREETS "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", & "P"
PRIVATE STREET
N.T.S



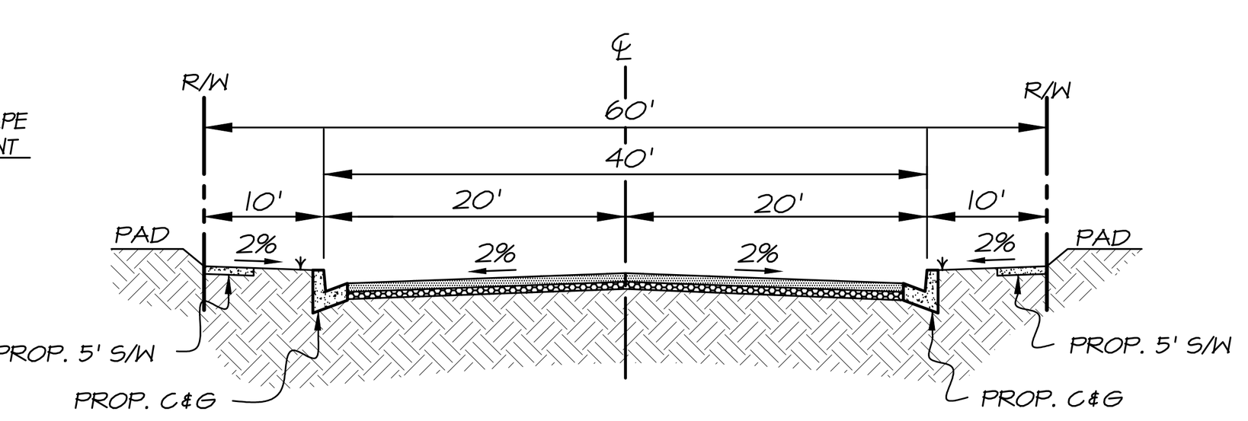
TYPICAL STREET SECTION ALESSANDRO BOULEVARD
PER CITY OF MORENO VALLEY STD PLAN MVSI-103A-0
N.T.S.



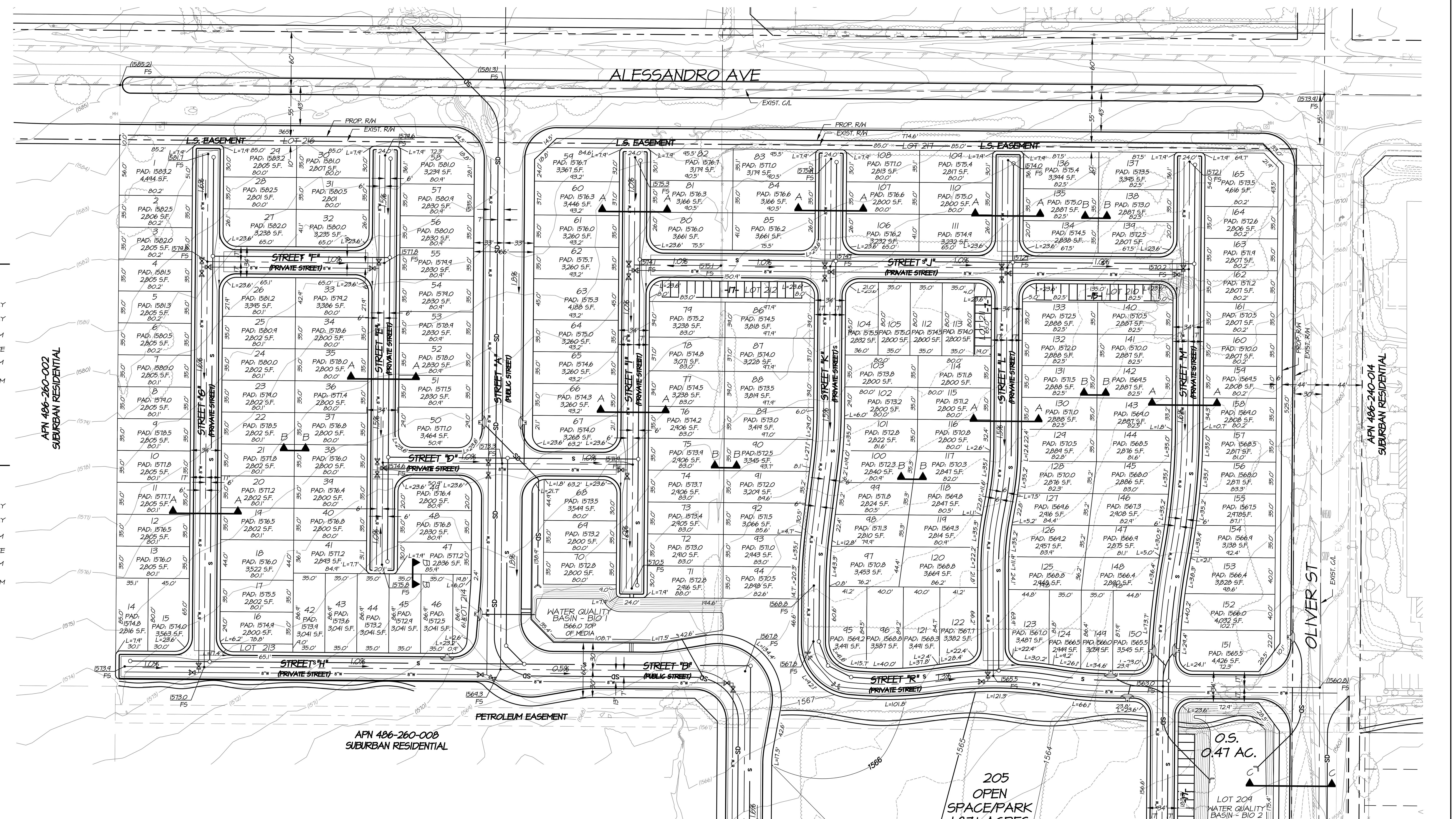
TYPICAL STREET SECTION OLIVER STREET
PER CITY OF MORENO VALLEY STD PLAN MVSI-105A-1
N.T.S.



TYPICAL STREET SECTION STREETS "A", BRODIAEA AVE *(HALF-WIDTH)
PER CITY OF MORENO VALLEY STD PLAN MVSI-106B-0
N.T.S.



TYPICAL STREET SECTION STREETS "B" AND "C"
PER RIV. CO. STD DWG No. 106
N.T.S.



OFFER OF DEDICATION TO THE COUNTY OF RIVERSIDE, LOT "A" PER PARCEL MAP NO. 4135 P.M.B. 38 / 51-52, OFFICIAL RECORDS OF SAN BERNARDINO COUNTY.

Plot Date: 8/23/2021

Figure 4
CDFW Jurisdiction Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Figure 5

Waters of the State Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

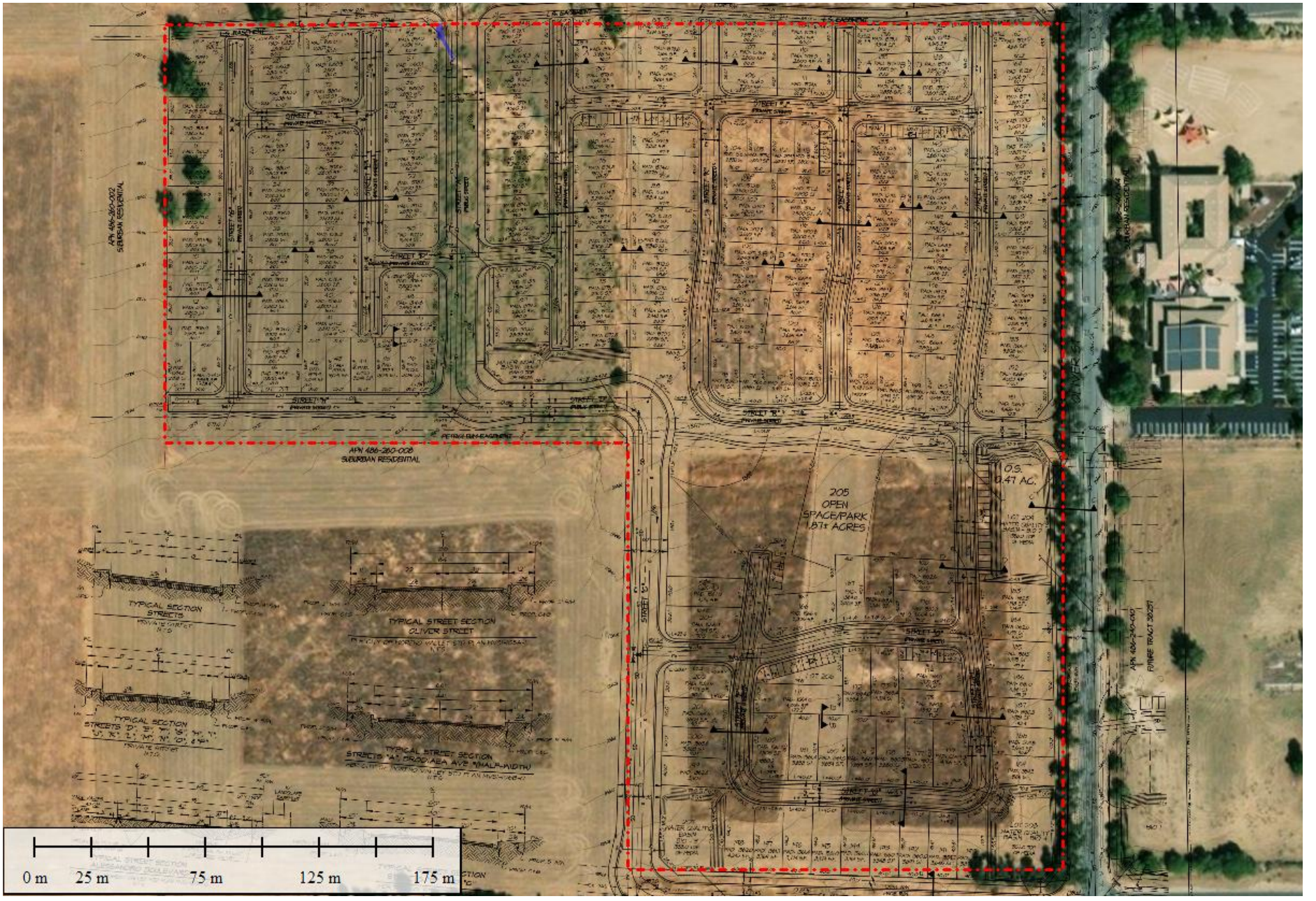


Figure 6

CDFW Jurisdiction Impacts Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

Legend

Project Site Boundary

Upland Vegetated Ephemeral Stream Impacts (0.008 Acre)

N

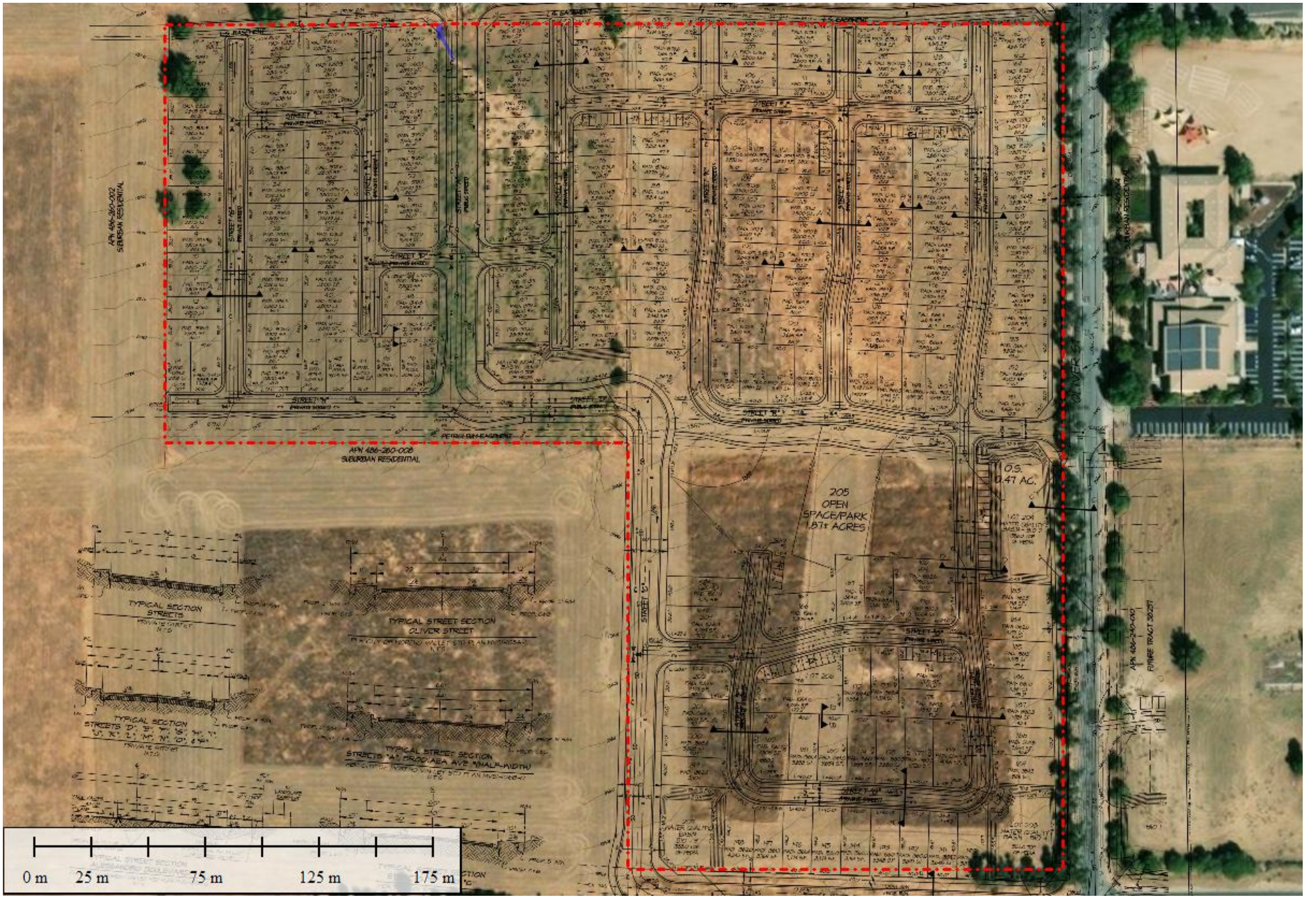


Figure 7

Waters of the State Impacts Map
Valley & Whitney
City of Moreno Valley
Riverside County, California

APPENDIX A

View of northern most portion of the upland vegetated ephemeral stream habitat near northern border of the site.

View of southern most portion of the upland vegetated ephemeral stream habitat from the east.

View of beginning of upland vegetated ephemeral stream on site along northern border from the south.

Hernandez Environmental Services

View of Jimsonweed along upland vegetated ephemeral stream.

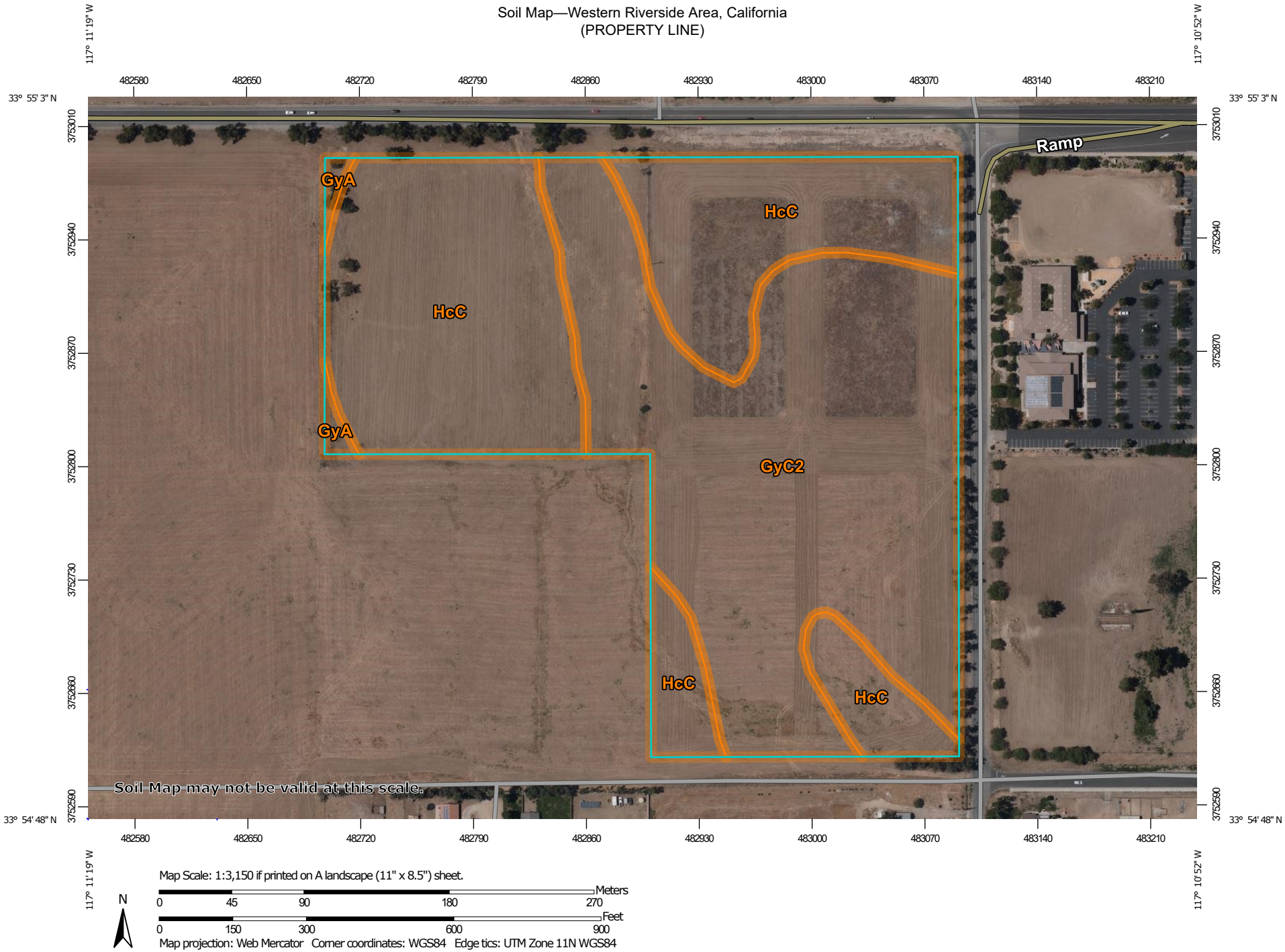
View of ruderal habitat along west side of ephemeral stream from the southwest.

View of ruderal habitat within eastern portion of the site to the east of the ephemeral stream.

Hernandez Environmental Services

APPENDIX B

Soil Map—Western Riverside Area, California
(PROPERTY LINE)



Map Scale: 1:3,150 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 13, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 25, 2019—Jun 25, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GyA	Greenfield sandy loam, 0 to 2 percent slopes	0.2	0.9%
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	13.8	51.5%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	12.7	47.6%
Totals for Area of Interest		**26.7**	**100.0%**