

## **Appendix B1 – Biological Resources Assessment and Jurisdictional Delineation**

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February 25, 2020

Mohamad T Younes  
Inland Communities Corporation  
Terracina Recovery, LLC  
6430 W Sunset Blvd, Suite 460  
Los Angeles, CA 90028

RE: Biological Resources Assessment and Jurisdictional Delineation  
Tentative Tract Map No. 20320  
Terracina Recovery, Reservoir Road and South Wabash Avenue  
City of Redlands, CA

Dear Mohamad:

Jericho Systems, Inc. (Jericho) is pleased to provide this letter report that details the results of a general Biological Resources Assessment (BRA) for the Tentative Tract Map (TTM) Number 20320 associated with the Terracina Recovery Project (Project) located adjacent north of the intersection at Wabash Avenue and Reservoir Road in Redlands, California. This BRA includes habitat suitability assessments for nesting birds, sensitive birds such as Burrowing owl (*Athene cunicularia*) [BUOW], California gnatcatcher (*Poliophtila californica*) [CAGN], raptors, small mammals such as the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) [SBKR], and San Diego Pocket mouse (*Chaetodipus fallax fallax*) [SDPM], and a Jurisdictional Waters Delineation (JD).

This report is designed to address potential Project related effects on designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA), or species designated as sensitive by the California Department of Fish and Wildlife (CDFW), or the California Native Plant Society (CNPS). Attention was focused sensitive species known to occur locally. This report also addresses resources protected under the Migratory Bird Treaty Act, federal Clean Water Act (CWA) regulated by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) respectively; and Section 1602 of the California Fish and Game Code (FCG) administered by the CDFW.

## **SITE LOCATION**

The Project site is located north of Reservoir Road and north of the I-10 Freeway in the City of Redlands, County of San Bernardino County within Assessor's Parcel Numbers (APNs) 0299-213-11, 12, 13, 14 & 21; 0174-281-13, 33, 34 & 35) surrounding Wabash Avenue. The Project site can be found on the Redlands U.S. Geological Survey (USGS) 7.5-minute series quadrangle within Section 36 Township 1 South Range 3 West and Section 31 Township 1 South Range 2 West.

## ENVIRONMENTAL SETTING

The Project site is in the southern portion of Reservoir Canyon, which is located on the western end of the Crafton Hills in the City of Redlands, approximately three (3) miles south of the Santa Ana River. The subject parcels are primarily undeveloped with low density residential and is bounded on the west and north by residential development and the south by Reservoir Road. The east portion of the property is connected with more undeveloped land on adjacent property.

The City of Redlands is subject to both seasonal and annual variations in temperature and precipitation. The local climatic conditions in the project area are characterized by warm summers, mild winters, infrequent rainfall, and dry humidity. The average annual temperature is 65°, ranging between 38 and 98°. The rainy season begins in November and continues through March, with the quantity and frequency of rain varying from year to year. The average annual rainfall is approximately 12 inches.

According to the U.S. Environmental Protection Agency (EPA) Regional map, the project site is located in the Inland Valleys Ecoregion. An Ecoregion is a regional area that has similar ecosystems in terms of type, quality, and quantity of environmental resources. The Inland Valleys Ecoregion consists of alluvial fans and basin floors immediately south of the San Gabriel and San Bernardino Mountains of Southern California and includes the San Jacinto and Perris Valleys toward the south. This ecoregion includes some floodplains along the Santa Ana River. The soil moisture regime is xeric which is characterized by long periods of drought in the summer. Historically, vegetation in this Ecoregion included Riversidean coastal sage scrub, valley grasslands, and riparian woodlands. Currently, much of this Ecoregion, including the project site and surrounding vicinity is heavily urbanized.

Hydrologically, the project site is located within the Reservoir Hydrologic Sub-Area (HSA 801.55) which comprises a 7,552-acre drainage area within the larger Upper Santa Ana Watershed (HUC 180702030506). Site elevations vary with the rolling topography, but highest elevation can be found at the peaks on the eastern side of the project at ~1,990 ft. above sea level and lowest can be found in the valleys at ~1,750 ft. above sea level on the western side of the project.

## METHODS

As stated above, the objective of this document is to determine whether the Project area supports special status or otherwise sensitive species and/ or their habitat, and to address the potential effects associated with the Proposed project on those resources. The species and habitats addressed in this document are based on database information and field investigation.

Prior to conducting the field study, species and habitat information was gathered from the reports related to the specific project and relevant databases for the *Redlands* and *Yucaipa* (due to the site's proximity of less than 3 miles from the quad) USGS quadrangles to determine which species and/or habitats would be expected to occur on site. These sources include:

- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USFWS Information for Planning and Consultation System (IPaC);
- California Natural Diversity Database (CNDDB) *Rarefind 5*;
- CNDDB Biogeographic Information and Observation System (BIOS);
- California Native Plant Society Electronic Inventory (CNPSEI) database;
- Calflora Database;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey;
- USFWS National Wetland Inventory;

- Environmental Protection Agency (EPA) Water Program “My Waters” data layers
- USFWS Designated Critical Habitat Maps

Jericho biologist Christian Nortal conducted a general biological resources assessment on December 1, 2019, with an emphasis on special-status species known to occur in the area. Mr. Nortal has advanced degrees in biology and many years of experience surveying biological resources within Southern California. Mr. Nortal conducted the systematic and comprehensive survey during calm weather, between the hours of 9:30 a.m. and 12:30 p.m. Weather conditions during the survey consisted of cloudy skies with temperatures ranging from 48 degrees Fahrenheit (° F) to 57° F and variable <5 mph wind.

Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species observed, expected wildlife usage of the site was determined per known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species surveys was to identify potential habitat for special status wildlife within the project area.

Disturbance characteristics and all animal sign encountered on the site are recorded in the results section. The site was also evaluated for the presence of jurisdictional waters, i.e. waters of the U.S. as regulated by the USACE and RWQCB, and/or streambed and associated riparian habitat as regulated by the CDFW. Evaluation of potential federal jurisdiction followed the regulations set forth in 33CFR part 328 and the USACE guidance documents and evaluation of potential State jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds (CDFW, 2010).

## RESULTS

The database searches were conducted within a 3-mile radius of the Project and identified 77 sensitive species (29 plant, 38 vertebrates, 2 invertebrate) and 8 sensitive habitats within *Redlands* and *Yucaipa* USGS 7.5-minute series quadrangles. A full summary of these results is outlined in the attached Table 1. The database searches indicated the presence of State- and/or federally listed threatened or endangered species within the vicinity of the project site. No USFWS-designated Critical Habitats are on site; the closest Critical Habitats are for southwestern willow flycatcher approximately 2.4 miles southwest of the Project site and San Bernardino kangaroo rat approximately 2.7 miles northeast of the Project site.

Soils on site consist of Cienega-Rock outcrop complex, 30 to 50 percent slopes, MLRA 20 (CR), Hanford course sandy loam, 2 to 9 percent slopes (HaC), Ramona sandy loam, 2 to 9 percent slopes, MLRA 19 (RmC), and Ramona sandy loam, 15 to 30 percent slopes, eroded (RmE2).

### *Plants*

Habitat on site consists almost entirely of invasive grassland with patches of highly disturbed sage scrub in the center of the western portion scattered around utility access roads near Wabash Avenue. Nonnative tree species can be found in tree lines and sporadically throughout the property. Native species observed on site include telegraph weed (*Heterotheca grandiflora*), California buckwheat (*Eriogonum fasciculatum*), bricklebrush (*Encelia farinosa*), common phacelia (*Phacelia distans*), common sunflower (*Helianthus annuus*), and common fiddleneck (*Amsinckia intermedia*).

Of these native plants found on the Project site and in the immediate local vicinity, the following list of native species are appropriate for seeding the fire control zones of the Project site. Telegraph weed (*Heterotheca grandiflora*), California buckwheat (*Eriogonum fasciculatum*), bricklebrush (*Encelia farinosa*), common phacelia (*Phacelia distans*), common sunflower (*Helianthus annuus*), common



fiddleneck (*Amsinckia intermedia*), California sagebrush (*Artemisia Californica*), scalebroom (*Lepidospartum squamatum*) and white sage (*Salvia apiana*).

The non-native vegetation present within the project area consists of primarily of wild oat (*Avena fatua*) and tocalote (*Centaurea mellitensis*) with red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), redstem filaree (*Erodium cicutarium*), and summer mustard (*Hirschfeldia incana*) also present. Trees on site are nonnative and species were limited to tree-of-heaven (*Ailanthus altissima*), Mexican fan palm (*Washingtonia robusta*), and red gum (*Eucalyptus camaldulensis*).

### *Wildlife*

Wildlife species observed or otherwise detected on site during the surveys included: mourning dove (*Zenaida macroura*), California towhee (*Melospiza fusca*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), killdeer (*Charadrius vociferus*), red-tailed hawk (*Buteo jamaicensis*), and desert cottontail (*Sylvilagus audubonii*).

Active small mammal burrows were found throughout the dense grassland on the parcels east of Wabash Avenue. Below is a discussion of sensitive species documented within a 3-mile radius of the Project site.

### San Bernardino Kangaroo Rat (SBKR)

The SBKR is one of several kangaroo rat species in its range. The Dulzura kangaroo rat (*Dipodomys simulans*), the Pacific kangaroo rat (*D. agilis*) and the Stephens kangaroo rat (*D. stephensi*) can occur in areas occupied by the SBKR, but these other species have a wider habitat range. The habitat of the SBKR is confined to primary and secondary alluvial fan scrub habitats, with sandy soils deposited by fluvial (water) rather than aeolian (wind) processes. Burrows are dug in loose soil, usually near or beneath shrubs. SBKR, are confined to inland valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams and drainage. Most of these drainages have been historically altered as a result of flood control efforts and the resulting increased use of river resources, including mining, off-road vehicle uses and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the SBKR. The past habitat losses and potential future losses prompted the emergency listing of the SBKR as an endangered species.

The closest documented occurrence of SBKR to the Project site is approximately 2.7 miles north of the Project site. The required habitat type and elements such as alluvial fan processes do not occur on or adjacent to the Project site. The dense grass load renders the Project site unsuitable for SBKR. No further investigation is warranted, and no further discussion is made in this document regarding SBKR.

### San Diego Pocket Mouse (SDPM)

The SDPM is one of two pocket mice found in this area of San Bernardino County. Both the SDPM and Los Angeles pocket mouse occupy similar habitats, but the San Diego pocket mouse has a wider range extending into south into San Diego County. The habitat of the SDPM includes a wide variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. This area includes a vast range of elevations, extending from sea level along the Pacific coast to around 1400 m in the mountains of southwest California and Baja California. SDPM forages in low-growing vegetation or rocky outcroppings and requires sandy soils to dig their burrows. The SDPM is listed as a Critical Species of Concern by the CDFW.

Habitat on site is of marginal quality and the species has been documented approximately 0.25 mile east of the Project site. Potential for this species to occur is moderate.

*California gnatcatcher (CAGN)*

CAGN is a federally listed Threatened Species year-round residents of the CSS vegetative community in southern California. It is a small thrush-like songbird approximately 4 to 5 inches in length with dark, blue-gray plumage above and gray-white plumage below. Nest building begins during the second or third week of March. The range and distribution of the CAGN is closely aligned with coastal scrub vegetation below approximately 500 m (1,500 ft) asl. This vegetation is typified by low 3 feet, shrub and sub-shrub species that are often drought deciduous. The coastal scrub plant communities that overlap the range of the gnatcatcher include Venturan, Diegan, and Riversidean coastal sage scrub communities, and Martirian and Vizcainan coastal succulent scrub communities. The density of CAGN is highest in high-quality habitat and decreased as habitat quality decreased.

As late as the mid-1940s the CAGN was considered locally common and by the mid-1960s, a noticeable decline had begun. The CAGN was listed as Threatened in 1992. According to the "Final Critical Habitat mapping Unit #12" for San Bernardino County. The Project site is not located within designated critical habitat for the CAGN. The closest documented occurrence of CAGN to the Project site is approximately 3.1 miles north/northeast of the Project site. The required habitat structure and elements do not occur on or adjacent to the Project site. All elevations on site are above 1,500 ft and coastal scrub on site is of very low quality. The site does not provide suitable habitat for CAGN. No further investigation is warranted, and no further discussion is made in this document regarding CAGN.

*Burrowing owl (BUOW)*

BUOW are known to occur locally within suitable habitat areas. BUOW is a ground-dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW depends on the presence of mammal burrows, i.e. ground squirrel burrows to provide shelter from predators, inclement weather and to provide a nesting place. They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. They feed primarily on insects but will also take small rodents, birds, and reptiles. They are active during the day and night, generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. The BUOW is not listed under the State or Federal Endangered Species Act but is considered both a State and federal SSC. The BUOW is protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5).

Per the definition provided in the 2012 CDFG Staff Report on Burrowing Owl Mitigation, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey."

The Project site does not contain potentially suitable habitat for this species for the following reasons:

- *Vegetation is tall and dense where small mammal burrows occur.*
- *Open areas lack suitable burrows and most soils are compacted and not friable*

No evidence of BUOW was found in the survey area. No BUOW individuals, BUOW burrows or BUOW pellets, feathers or whitewash were observed during survey. Therefore, BUOW are currently absent from the site. Further investigation is not recommended or warranted.

### *Nesting Birds and Raptors*

The site is suitable for use by raptors. The Project site and immediate surrounding areas contain habitat suitable for nesting birds in general, including the shrubs on site. Nesting birds are protected under the MBTA which provides protection for nesting birds that are both residents and migrants whether they are considered sensitive by resource agencies. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW administers the MBTA. CDFW's authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

### *Jurisdiction Waters*

There are no drainages on site. No aspect of the site presents any evidence of jurisdictional waters. None of the following indicators are present on site: riparian vegetation, facultative, facultative wet or obligate wet vegetation, harrow marks, sand bars shaped by water, racking, rilling, destruction of vegetation, defined bed and bank, distinct line between vegetation types, clear natural scour line, meander bars, mud cracks, staining, silt deposits, litter- organic debris. No jurisdictional waters occur on site.

## **CONCLUSIONS AND RECOMMENDATIONS**

### *Nesting Birds*

The vegetation on site does have a potential to support nesting birds. Therefore, to reduce the potential impacts to nesting birds, the following is recommended:

Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required.

If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

Please do not hesitate to contact me at 909-915-5900 should you have any questions or require further information.

Sincerely,

A handwritten signature in black ink, appearing to read "Shay Lawrey". The signature is fluid and cursive, with the first name "Shay" being more prominent than the last name "Lawrey".

Shay Lawrey, President  
Ecologist/Regulatory Specialist

Attachments:

- Attachment A – Table of Documented Occurrences
- Attachment B – Figures
- Attachment C – Site Photos

Mohamad T Younes  
BRA/JD – Terracina Recovery – Wabash Avenue and Reservoir Road  
February 25, 2020

**ATTACHMENT A – SPECIES  
POTENTIAL TO OCCUR  
TABLE**

### Attachment A – Species Potential to Occur

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
<b>Plants</b>				
<i>Ambrosia pumila</i>	San Diego ambrosia	Endangered None G1 S1 1B.1	Chaparral, coastal scrub, valley and foothill grassland in sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools, 3-580 m.  Grows in Garretson gravelly fine sandy loams when found in floodplains, and in Las Posas loam when on watershed margins.	Neither of the soil types are found on site. Disturbance in coastal scrub on site is not superficial (graded roads and paths). Potential to occur is low.
<i>Arenaria paludicola</i>	marsh sandwort	Endangered Endangered G1 S1 1B.1	Marshes and swamps, grows up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil, 3-170 m.	There is no wetland habitat on site. Potential to occur is low.
<i>Artemisia palmeri</i>	San Diego sagewort	None None G3? S3? 4.2	Chaparral, Coastal scrub, Riparian forest, Riparian scrub, Riparian woodland, sandy, mesic soils, 15-915 m.	Coastal scrub on site is of low quality and provides marginal habitat. Potential to occur is low-moderate.
<i>Berberis nevini</i>	Nevin's barberry	Endangered Endangered G1 S1 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, N-facing slopes or in low grade sandy washes, 90-1590 m.	Coastal scrub on site is south facing on slopes and the majority of the property is invasive grassland. Potential to occur is low.
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	None None G4 S4 4.2	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.	Habitat on site is potentially suitable for this species. Potential to occur is moderate.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	None None G3G4T2 S2 1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also, in disturbed places, 5-1170 m.	Grassland habitat on site is potentially suitable for this species and the closest occurrence documented is approximately 4 miles southwest. Potential to occur is moderate.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	Endangered Endangered G4?T1 S1 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat, 0-10 m.	Wetland habitat is not on site. Potential to occur is low.
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	None None G3 S3 4.2	Chaparral, Coastal scrub, lower montane coniferous forest, alluvial fan, granitic, 300-1900 m.	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None None G3T2 S2 1B.1 BLM Sensitive USFS Sensitive	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.	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	None None G4T3 S3 1B.2 BLM Sensitive USFS Sensitive	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans). Sandy or gravelly places. 365-1830 m.	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Convolvulus simulans</i>	small-flowered morning-glory	None None G4 S4 4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland, clay soils, serpentinite seeps, 30-740 m	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	None None G5T4? SH 2B.2	Freshwater marsh. 15-280 m.	Wetland habitat is not on site. Potential to occur is low.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Endangered Endangered G1 S1 1B.1	Found on washes and floodplains in chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Washes are not on site. Potential to occur is low.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
			Flood deposited terraces and washes. Alluvial fans- associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	Endangered Endangered G4T1 S1 1B.1	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	There are no terraces or washes on site. Potential to occur is low.
<i>Imperata brevifolia</i>	California satintail	None None G4 S3 2B.1 USFS Sensitive	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 3-1495 m.	Wetland habitat is not on site. Potential to occur is low.
<i>Juglans californica</i>	Southern California black walnut	None None G4 S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland, 50-900 m	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Juncus duranii</i>	Duran's rush	None None G3 S3 4.3	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest, 1768-2804 m	Seeps/meadows are not on site. Potential to occur is low.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	None None G5T3 S3 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m.	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated Humboldt lily	None None G4T4? S4? 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland openings, 30-1800 m	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate.
<i>Malacothamnus parishii</i>	Parish's bush-mallow	None None GXQ SX	Chaparral, coastal sage scrub. In a wash, 305-455 m.	There are no washes on site. Potential to occur is low.



Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		1A		
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	None None G5T3 S3 1B.3 USFS Sensitive	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland. Dry slopes and ridges in openings, 700-1800 m.	Elevation on site occurs below where this species is found. Potential to occur is low.
<i>Muilla coronata</i>	crowned muilla	None None G3 S3 4.2	Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland, 670-1960 m.	Elevation on site is below where this species is found. Potential to occur is low.
<i>Piperia leptopetala</i>	narrow-petaled rein orchid	None None G4 S4 4.3	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest, 380-2225 m.	Habitat required for this species is not present on site. Potential to occur is low.
<i>Ribes divaricatum</i> var. <i>parishii</i>	Parish's gooseberry	None None G5TX SX 1A	Riparian woodland Salix swales in riparian habitats, 65-300 m.	Riparian woodland is not present on site. Potential to occur is low.
<i>Rupertia rigida</i>	Parish's rupertia	None None G4 S4 4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Pebble (Pavement) plain, Valley and foothill grassland, 700-2500 m.	This species occurs at elevations higher than the project site. Potential to occur is low.
<i>Senecio astephanus</i>	San Gabriel ragwort	None None G3 S3 4.3	Coastal bluff scrub, Chaparral, rocky slopes, 400-1500 m.	Coastal bluff or chaparral habitat are not on site. Potential to occur is low.
<i>Sidalcea hickmanii</i> ssp. <i>parishii</i>	Parish's checkerbloom	None Rare G3T1 S1 1B.2	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.	Species occurs at elevations higher than the project site. Potential to occur is low.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		BLM Sensitive USFS Sensitive		
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	None None G4 S2 2B.2 USFS Sensitive	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m.	Alkali springs are not present on site. Potential to occur is low.
<i>Streptanthus campestris</i>	southern jewelflower	None None G3 S3 1B.3 BLM Sensitive USFS Sensitive	Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Open, rocky areas. 605-2590 m.	Species occurs at elevations higher than the project site. Potential to occur is low.
<b>Birds</b>				
<i>Accipiter cooperii</i>	Cooper's hawk	None None G5 S4 CDFW Watch List IUCN Least Concern	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	Tree lines for nesting are on site. Potential to occur is moderate.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None None G5T3 S3 CDFW Watch List	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Sage scrub on site is degraded and would provide marginal habitat at best. Potential to occur is moderate-low.
<i>Athene cunicularia</i>	burrowing owl	None None G4 S3 BLM Sensitive CDFW Species of Special Concern IUCN Least Concern USFWS Birds of Conservation Concern	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.	Open habitat on site primarily has compacted soils and burrows on site are not in this area. Potential to occur is low.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
<i>Buteo swainsoni</i>	Swainson's hawk	None Threatened G5 S3 BLM Sensitive IUCN Least Concern USFWS Birds of Conservation Concern	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.	Species only occurs in area during migration. Potential to occur is low.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Threatened Endangered G5T2T3 S1 BLM Sensitive NABCI RWL-Red Watch List USFS Sensitive USFWS BCC-Birds of Conservation Concern	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 grapes.	Riparian habitat is not on site. Potential to occur is low.
<i>Elanus leucurus</i>	white-tailed kite	None None G5 S3S4 BLM Sensitive CDFW Fully Protected IUCN Least Concern	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.	The project site occurs outside of the species' known range. Potential to occur is low.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	Endangered Endangered G5T2 S1 NABCI Red Watch List	Riparian woodlands in Southern California.	Riparian habitat does not occur on site. Potential to occur is low.
<i>Eremophila alpestris actia</i>	California horned lark	None None G5T4Q S4 CDFW Watch List IUCN 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.	Grassland habitat and barren habitat is present on site. Potential to occur is moderate.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
<i>Icteria virens</i>	yellow-breasted chat	None None G5 S3 CDFW Species of Special Concern IUCN Least Concern	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.	Riparian habitat is not present on site. Potential to occur is low.
<i>Lanius ludovicianus</i>	loggerhead shrike	None None G4 S4 CDFW Species of Special Concern IUCN Least Concern USFWS Birds of Conservation Concern	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.	Open country with perches is present on site. Potential to occur is moderate.
<i>Poliophtila californica</i>	coastal California gnatcatcher	Threatened None G4G5T2Q S2 CDFW Species of Special Concern NABCI Yellow Watch List	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.	Disturbed sage scrub is present on site may provide marginally suitable habitat. Potential to occur is moderate-low.
<i>Setophaga petechia</i>	yellow warbler	None None G5 S3S4 CDFW Species of Special Concern USFWS Birds of Conservation Concern	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.	Riparian habitat is not present on site. Potential to occur is low.
<i>Vireo bellii pusillus</i>	least Bell's vireo	Endangered Endangered G5T2 S2 IUCN Near Threatened NABCI Yellow Watch List	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.	Riparian habitat is not present on site. Potential to occur is low.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
<b>Mammals</b>				
<i>Antrozous pallidus</i>	pallid bat	None None G5 S3 BLM Sensitive CDFW Species of Special Concern IUCN Least Concern USFS Sensitive WBWG High Priority	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.	Open, dry habitat is present on site. Many different potential roost sites exist in the property. Potential to occur is moderate.
<i>Chaetodipus fallax</i>	northwestern San Diego pocket mouse	None None G5T3T4 S3S4 CDFW Species of Special Concern	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Sandy-loam soils and small mammal burrows are on site and degraded sage scrub may provide marginally suitable habitat. Potential to occur is moderate.
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	Endangered Candidate Endangered G5T1 S1 CDFW Species of Special Concern	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Alluvial processes are not on site. Potential to occur is low.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	Endangered Threatened G2 S2 IUCN Endangered	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.	The site is outside of the species' geographic range. Potential to occur is low.
<i>Eumops perotis californicus</i>	western mastiff bat	None None G5T4 S3S4 BLM Sensitive CDFW Species of Special Concern WBWG High Priority	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.	Buildings in surrounding properties and loose bark in red gum trees may provide roosting habitat for this species. Potential to occur is moderate.
<i>Lasiurus xanthinus</i>	western yellow bat	None None	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Mexican fan palm trees are present on site. Potential to occur is moderate.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		G5 S3 CDFW Species of Special Concern IUCN Least Concern WBWG High Priority	Roosts in trees, particularly palms. Forages over water and among trees.	
<i>Leptonycteris yerbabuenae</i>	lesser long-nosed bat	Delisted None G4 S1 CDFW Species of Special Concern IUCN Vulnerable WBWG High Priority	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.	This species does not occur further north than San Diego County. Potential to occur is low.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None None G5T3T4 S3S4 CDFW Species of Special Concern	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.	Dense/moderate canopies are not present on the project site. Potential to occur is low.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	None None G4 S3 CDFW Species of Special Concern IUCN Least Concern WBWG Medium Priority	Variety of arid areas in Southern California; pine-juniper woodlands, Joshua tree woodland, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Desert habitat with rocky areas and high cliffs are not on site. Potential to occur is low.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	None None G5T1T2 S1S2	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Sandy-loam soils are on site; degraded coastal scrub and annual grasslands are on site. Potential to occur is moderate.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		CDFW Species of Special Concern	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	
<i>Taxidea taxus</i>	American badger	None None G5 S3 CDFW Species of Special Concern IUCN Least Concern	Alkali marsh Alkali playa 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 Coastal scrub Desert dunes Desert wash Freshwater marsh Great Basin grassland Great Basin scrub Interior dunes Ione formation Joshua tree woodland Limestone Lower montane coniferous forest Marsh & swamp Meadow & seep Mojavean desert scrub Montane dwarf scrub North coast coniferous forest Old growth Pavement plain Redwood Riparian forest Riparian scrub Riparian woodland Salt marsh Sonoran desert scrub Sonoran thorn woodland Ultramafic Upper montane coniferous forest Upper Sonoran scrub Valley & foothill grassland 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.	Species is a habitat generalist. Surveys did not find burrows suitable for badger, but habitat is suitable. Potential to occur is moderate.
<b>Reptiles</b>				
<i>Anniella stebbinsi</i>	southern California legless lizard	None None G3 S3 CDFW Species of Special Concern USFS Sensitive	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.	Soil under trees may contain enough moisture to provide habitat for this species. Potential to occur is moderate.
<i>Arizona elegans occidentalis</i>	California glossy snake	None None		Grassland with loose, sandy-loam soils are on site. Potential to occur is moderate.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		G5T2 S2 CDFW 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.	
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	None None G5 S2S3 CDFW Watch List IUCN Least Concern USFS Sensitive	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.	Areas of degraded coastal sage may provide marginally suitable habitat for this species. Potential to occur is moderate-low.
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	None None G5T5 S3 CDFW 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.	Species is a habitat generalist. Potential to occur is moderate.
<i>Crotalus ruber</i>	red-diamond rattlesnake	None None G4 S3 CDFW Species of Special Concern USFS Sensitive	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.	Dense, annual vegetation and rodent burrows are on site. Potential to occur is moderate.
<i>Diadophis punctatus modestus</i>	San Bernardino ringneck snake	None None G5T2T3 S2? USFS 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.	Vegetated areas on site are not near streams. Potential to occur is low.
<i>Phrynosoma blainvillii</i>	coast horned lizard	None None G3G4 S3S4	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Species is a habitat generalist. Potential to occur is moderate.



Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		BLM Sensitive CDFW Species of Special Concern IUCN Least Concern	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	None None G5T4 S2S3 CDFW Species of Special Concern	Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites.	Degraded coastal scrub on site may provide marginally suitable habitat. Potential to occur is moderate-low.
<i>Thamnophis hammondi</i>	two-striped gartersnake	None None G4 S3S4 BLM Sensitive CDFW Species of Special Concern IUCN Least Concern USFS Sensitive	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.	Aquatic habitat is not on site. Potential to occur is low.
<b>Amphibians</b>				
<i>Rana muscosa</i>	southern mountain yellow-legged frog	Endangered Endangered G1 S1 CDFW Watch List IUCN Endangered USFS Sensitive	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.	Aquatic habitat is not on site. Potential to occur is low.
<i>Spea hammondi</i>	western spadefoot	None None G3 S3 BLM Sensitive CDFW Species of Special Concern IUCN Near Threatened	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Grassland habitat is not on site; vernal pools are not on site. Potential to occur is low.
<b>Fish</b>				

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
<i>Catostomus santaanae</i>	Santa Ana sucker	Threatened None G1 S1 AFS Threatened IUCN Vulnerable	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	Aquatic habitat is not on site. Potential to occur is none.
<i>Oncorhynchus mykiss irideus pop. 10</i>	steelhead - southern California DPS	Endangered None G5T1Q S1 AFS Endangered	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.	Aquatic habitat is not on site. Potential to occur is none.
<i>Rhinichthys osculus</i> ssp. 3	Santa Ana speckled dace	None None G5T1 S1 AFS Threatened CDFW Species of Special Concern USFS Sensitive	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.	Aquatic habitat is not on site. Potential to occur is none.
<b>Insects</b>				
<i>Bombus crotchii</i>	Crotch bumble bee	None Candidate Endangered G3G4 S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico, coastal scrub with small mammal burrows. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Coastal scrub with small mammal burrows is on site. Species has potential to occur.
<i>Carolella busckana</i>	Busck's gallmoth	None None G1G3 SH	Coastal scrub dunes.	Coastal scrub dunes are not on site. Potential to occur is low.
<b>Habitats</b>				
<i>Canyon Live Oak Ravine Forest</i>	Canyon Live Oak Ravine Forest	None None G3	Riparian forest	Riparian habitat is not on site. Potential to occur is none.

Scientific Name	Common Name	Federal Listing State Listing Other Listings	Habitat	Potential To Occur
		S3.3		
<i>Southern Coast Live Oak Riparian Forest</i>	Southern Coast Live Oak Riparian Forest	None None G4 S4	Riparian forest	Riparian habitat is not on site. Potential to occur is none.
<i>Southern Cottonwood Willow Riparian Forest</i>	Southern Cottonwood Willow Riparian Forest	None None G3 S3.2	Riparian forest	Riparian habitat is not on site. Potential to occur is none.
<i>Southern Riparian Forest</i>	Southern Riparian Forest	None None G4 S4	Riparian forest	Riparian habitat is not on site. Potential to occur is none.
<i>Southern Riparian Scrub</i>	Southern Riparian Scrub	None None G3 S3.2	Riparian scrub	Riparian habitat is not on site. Potential to occur is none.
<i>Southern Sycamore Alder Riparian Woodland</i>	Southern Sycamore Alder Riparian Woodland	None None G4 S4	Riparian woodland	Riparian habitat is not on site. Potential to occur is none.
<i>Southern Willow Scrub</i>	Southern Willow Scrub	None None G3 S2.1	Riparian scrub	Riparian habitat is not on site. Potential to occur is none.
<i>Riversidian Alluvial Fan Sage Scrub</i>	Riversidian Alluvial Fan Sage Scrub	None None G1 S1.1	Coastal scrub	Degraded coastal scrub is on site- scalebroom ( <i>Lepidospartum squamatum</i> ), the indicator species for this habitat association was not detected during field surveys.

## Coding and Terms

E = Endangered    T = Threatened    C = Candidate    FP = Fully Protected    SSC = Species of Special Concern    R = Rare

**State Species of Special Concern:** An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code.

**Global Rankings (Species or Natural Community Level):**

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.

G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.

G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.

G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

G5 = Secure – Common; widespread and abundant.

**Subspecies Level:** Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa*. The T-rank refers only to the global condition of ssp. *phaea*.

**State Ranking:**

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.

S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.

S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.

S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.

S5 = Secure – Common, widespread, and abundant in the State.

**California Rare Plant Rankings (CNPS List):**

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.

1B = Plants rare, threatened, or endangered in California and elsewhere.

2A = Plants presumed extirpated in California, but common elsewhere.

2B = Plants rare, threatened, or endangered in California, but more common elsewhere.

3 = Plants about which more information is needed; a review list.

4 = Plants of limited distribution; a watch list.

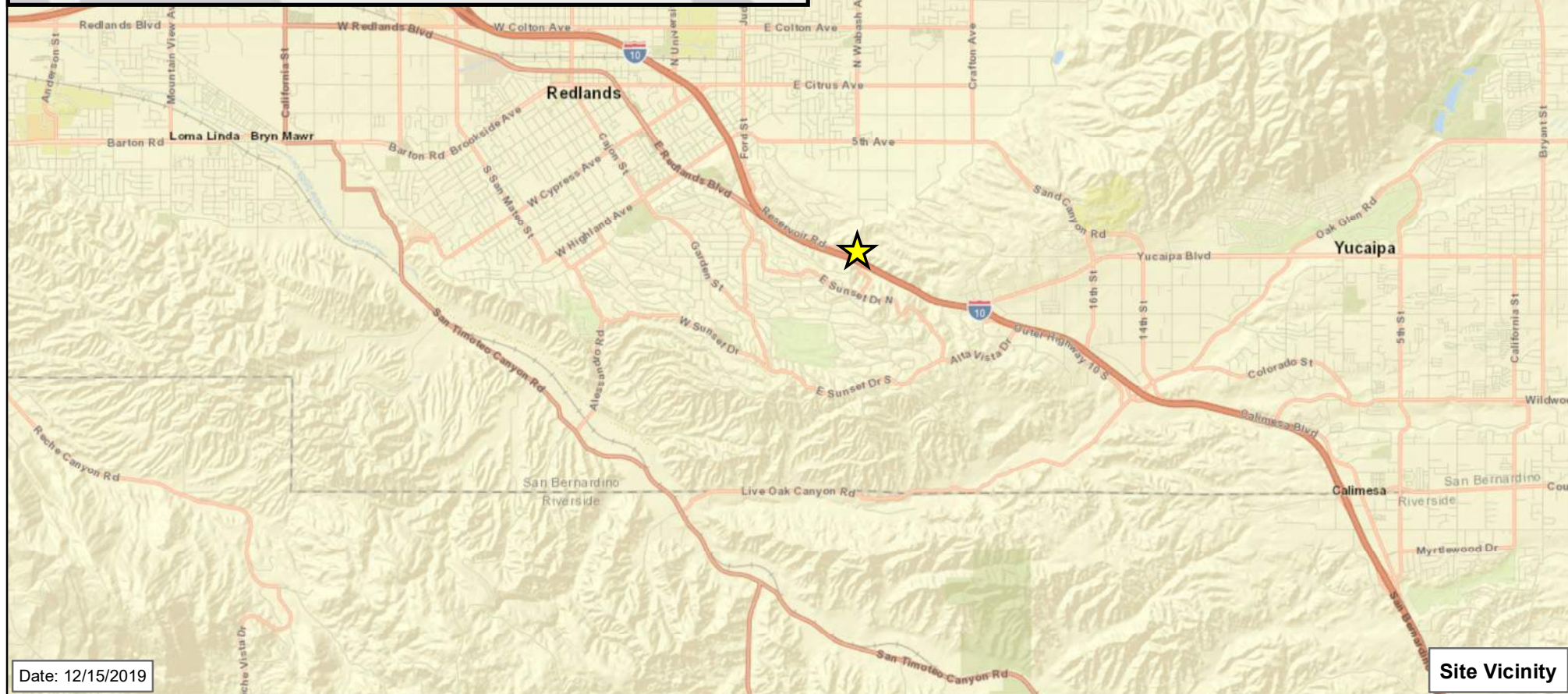
**Threat Ranks:**

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

**ATTACHMENT B**  
**FIGURES**



Date: 12/15/2019

0 0.75 1.5 3 4.5 6 Miles

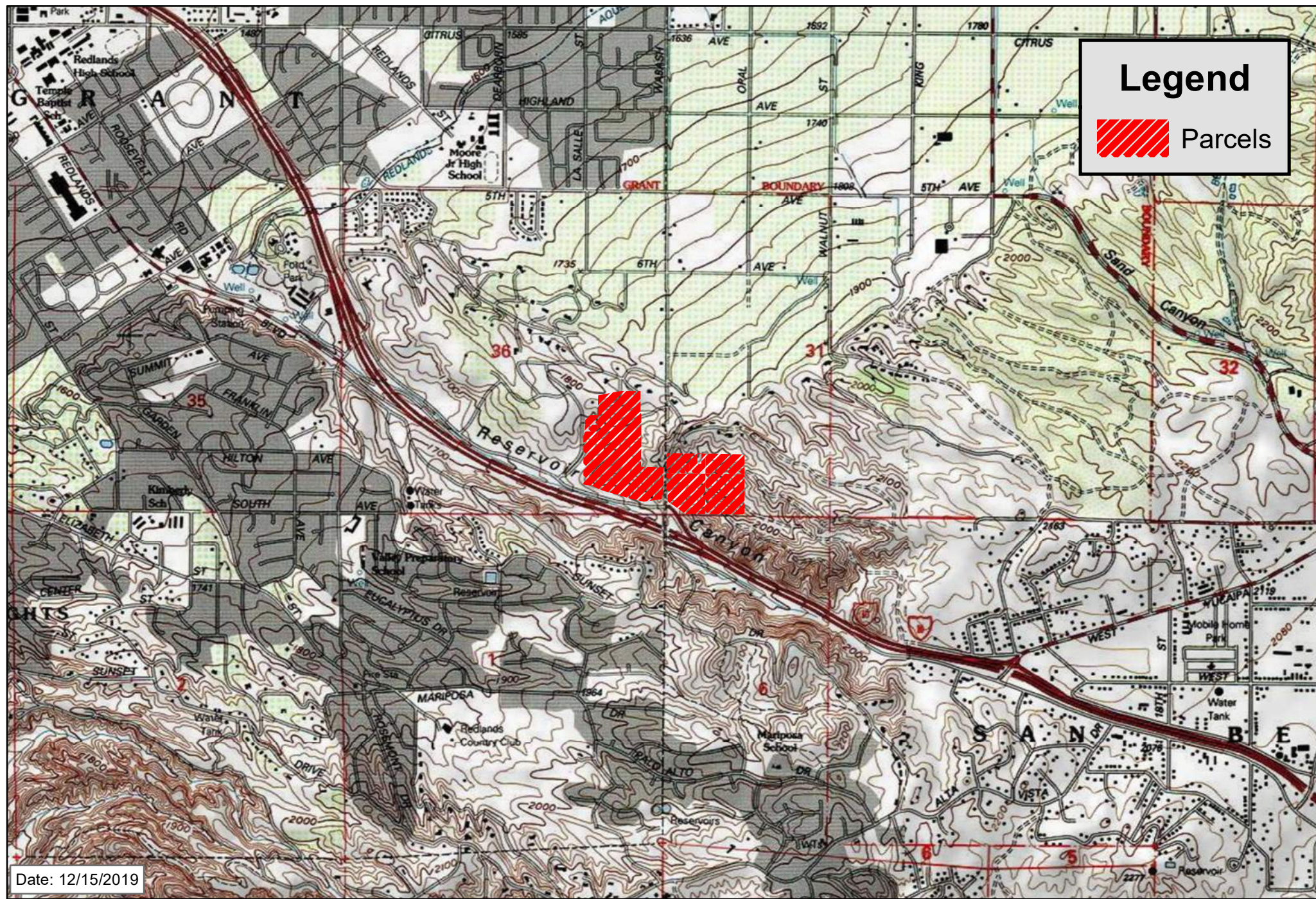


**Figure 1 - Regional Overview  
Site Vicinity**

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

**Terracina Recovery  
Wabash Ave & Reservoir Rd  
Redlands, CA**





## Legend

 Parcels

Date: 12/15/2019

0 0.175 0.35 0.7 1.05 1.4 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

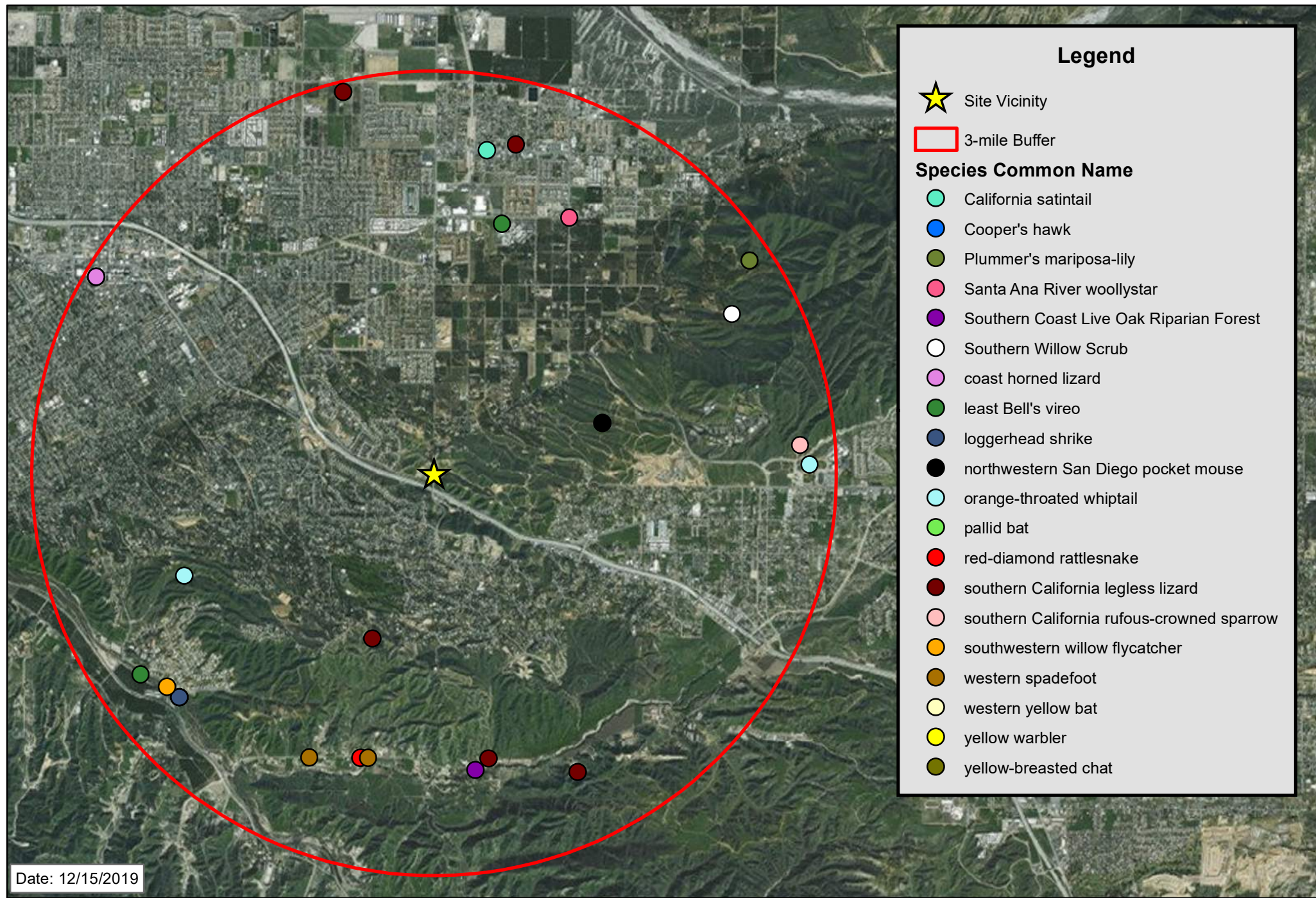


1 inch = 2,000 feet

## Figure 2- Site Location

Terracina Recovery  
Wabash Ave & Reservoir Rd  
Redlands, CA





0 0.45 0.9 1.8 2.7 3.6 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



1 inch = 4,842 feet

**Figure 3- 3-mile CNDDDB Occurrences**

Terracina Recovery  
Wabash Ave & Reservoir Rd  
Redlands, CA



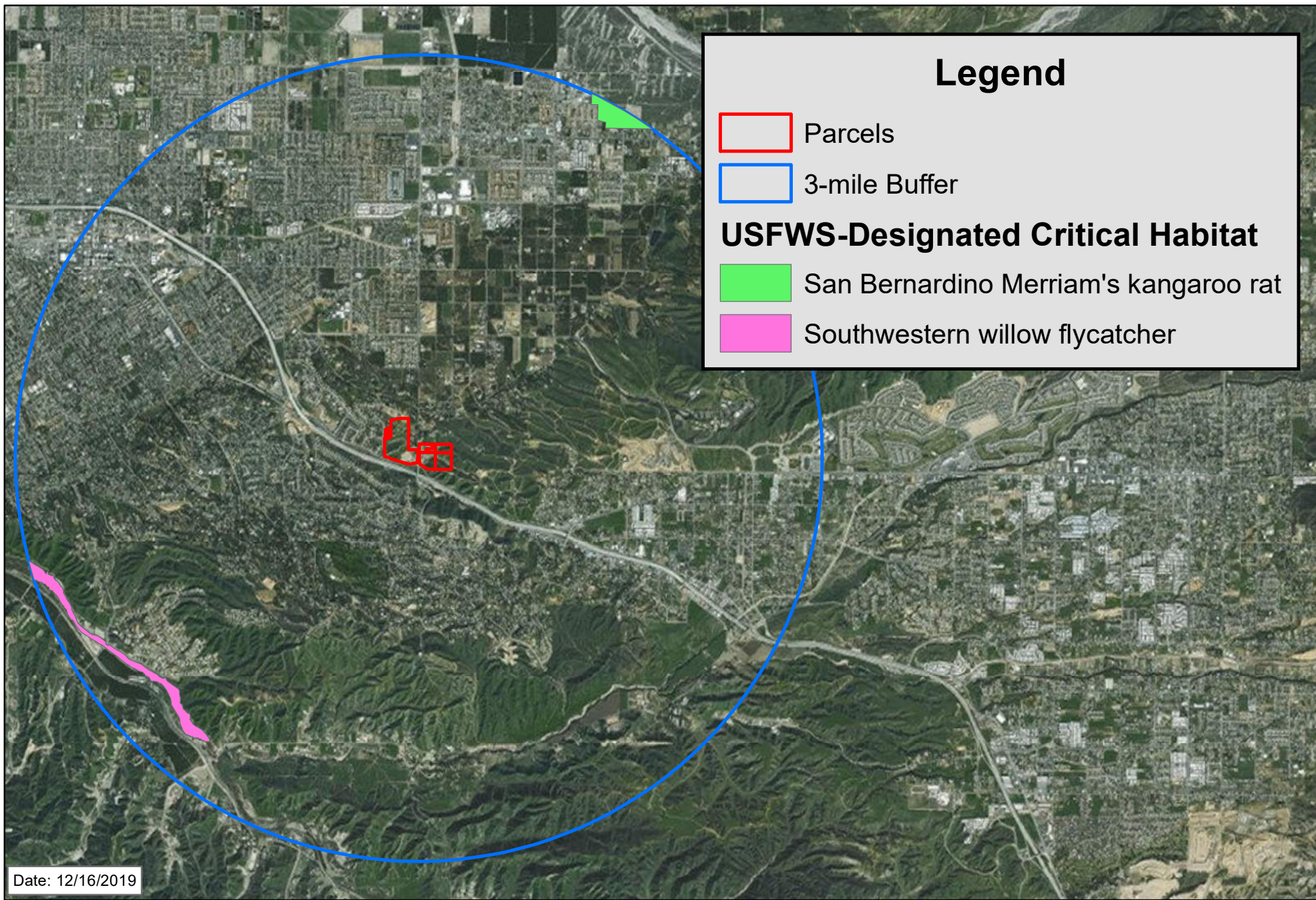


1 inch = 565 feet

**Figure 4- Soils**

Terracina Recovery  
Wabash Ave & Reservoir Rd  
Redlands, CA

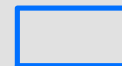




## Legend



Parcels



3-mile Buffer

### USFWS-Designated Critical Habitat



San Bernardino Merriam's kangaroo rat



Southwestern willow flycatcher

Date: 12/16/2019

0 0.45 0.9 1.8 2.7 3.6 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



1 inch = 4,853 feet

**Figure 5- USFWS Designated Critical Habitat**

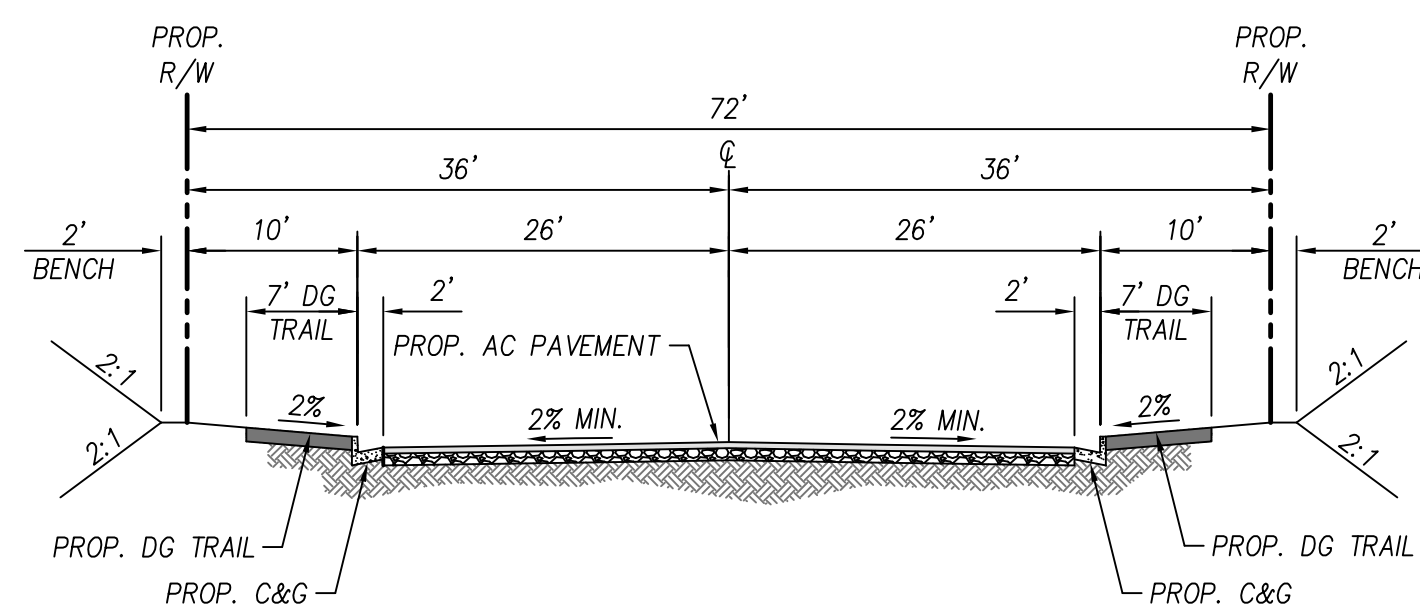
Terracina Recovery  
Wabash Ave & Reservoir Rd  
Redlands, CA



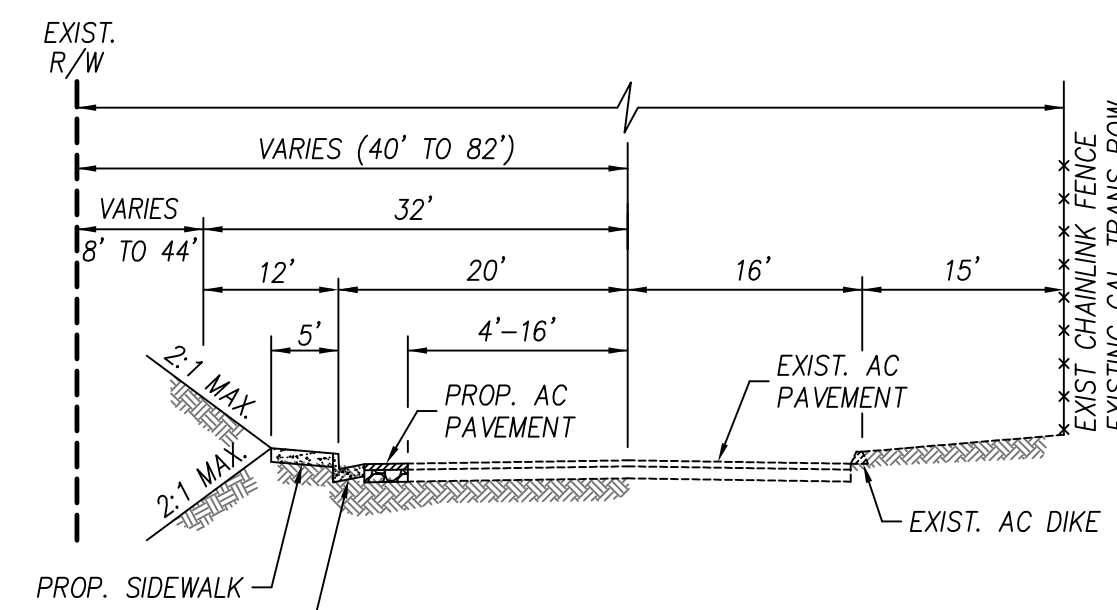




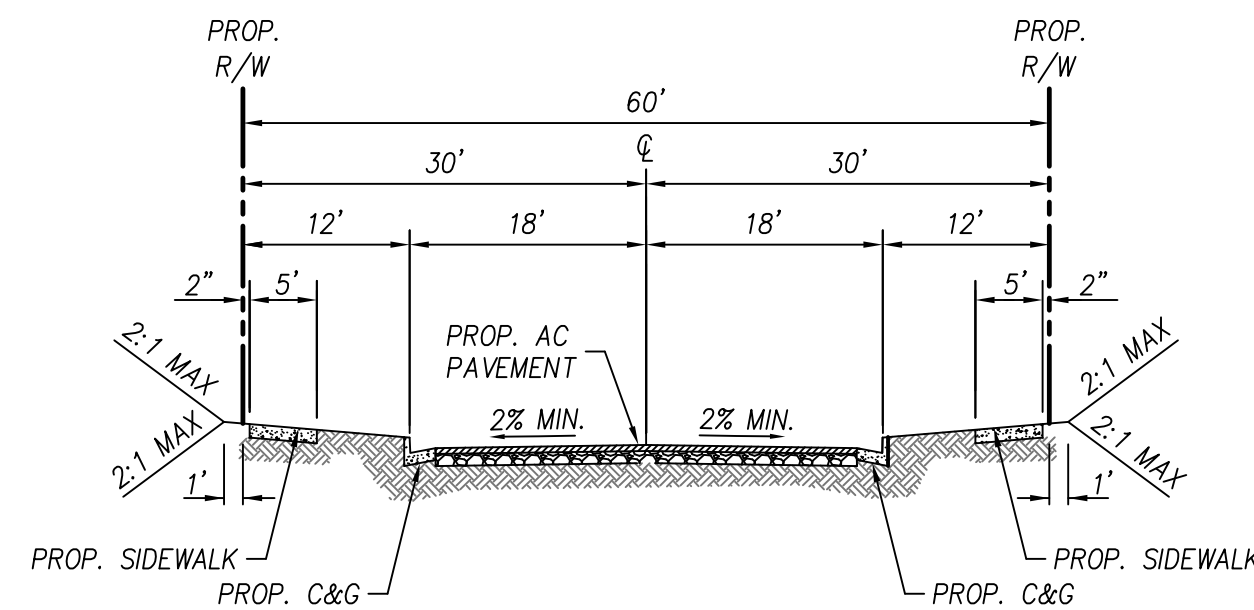
**TENTATIVE TRACT MAP NO. 20320**  
IN THE CITY OF REDLANDS, COUNTY OF SAN BERNARDINO ESTATE OF CALIFORNIA  
BEING A SUBDIVISION OF LOT 8, AND A PORTION OF LOTS 7 AND 9 OF BLOCK 27 OF CRAFTON TRACT, M.B. 3/14  
AND A PORTION OF THE EAST HALF OF THE SOUTHEAST 1/4 OF SECTION 36, T1S, R3W, S.B.M.  
AGUILAR CONSULTING INC.  
FEBRUARY, 2020



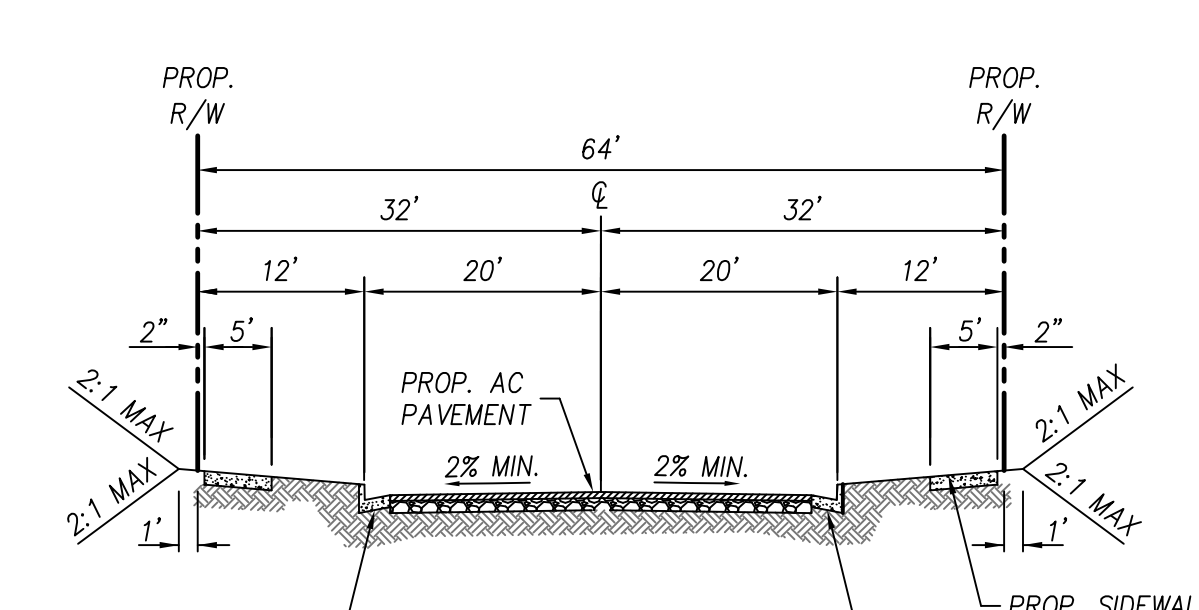
**WABASH AVENUE**  
FROM RESERVOIR ROAD TO STA 66+80.75 (PUBLIC)  
N.T.S.



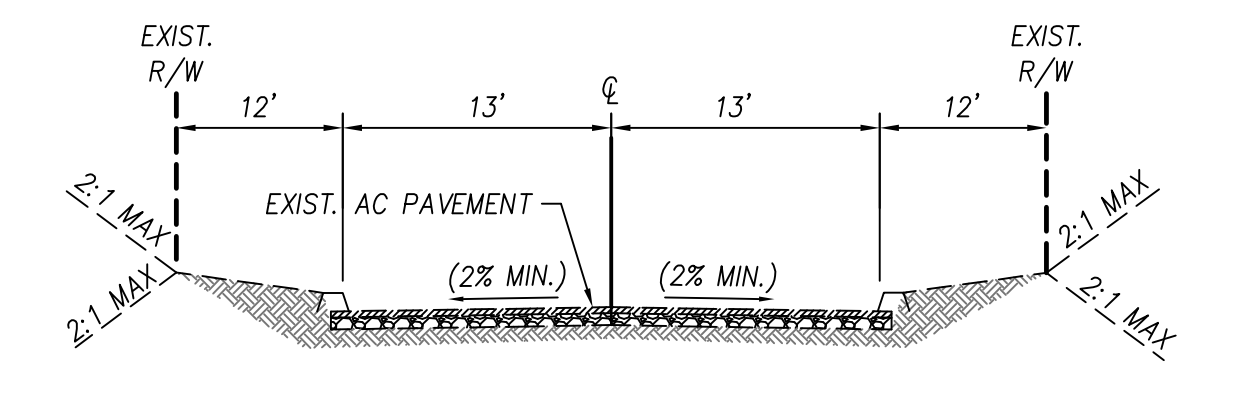
**RESERVOIR ROAD**  
N.T.S.



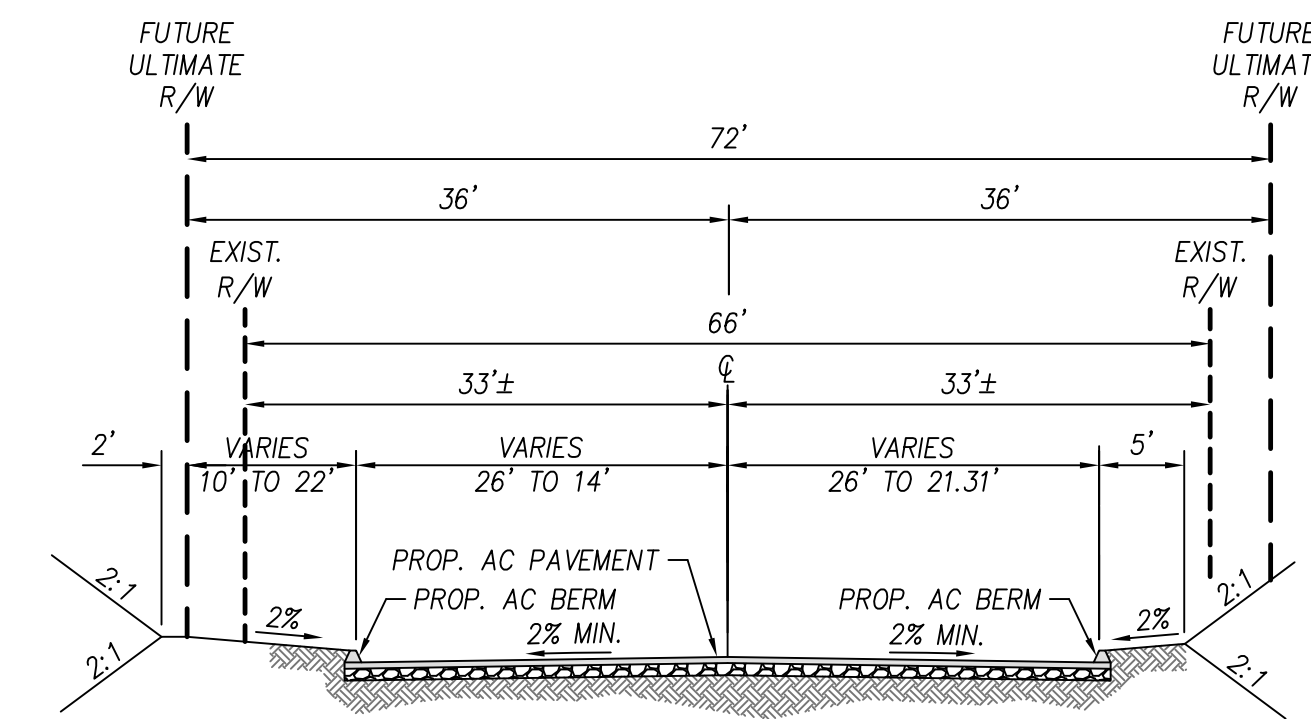
**LOCAL STREETS**  
(STREET A,B,C,D,E,F,H&I)  
N.T.S.



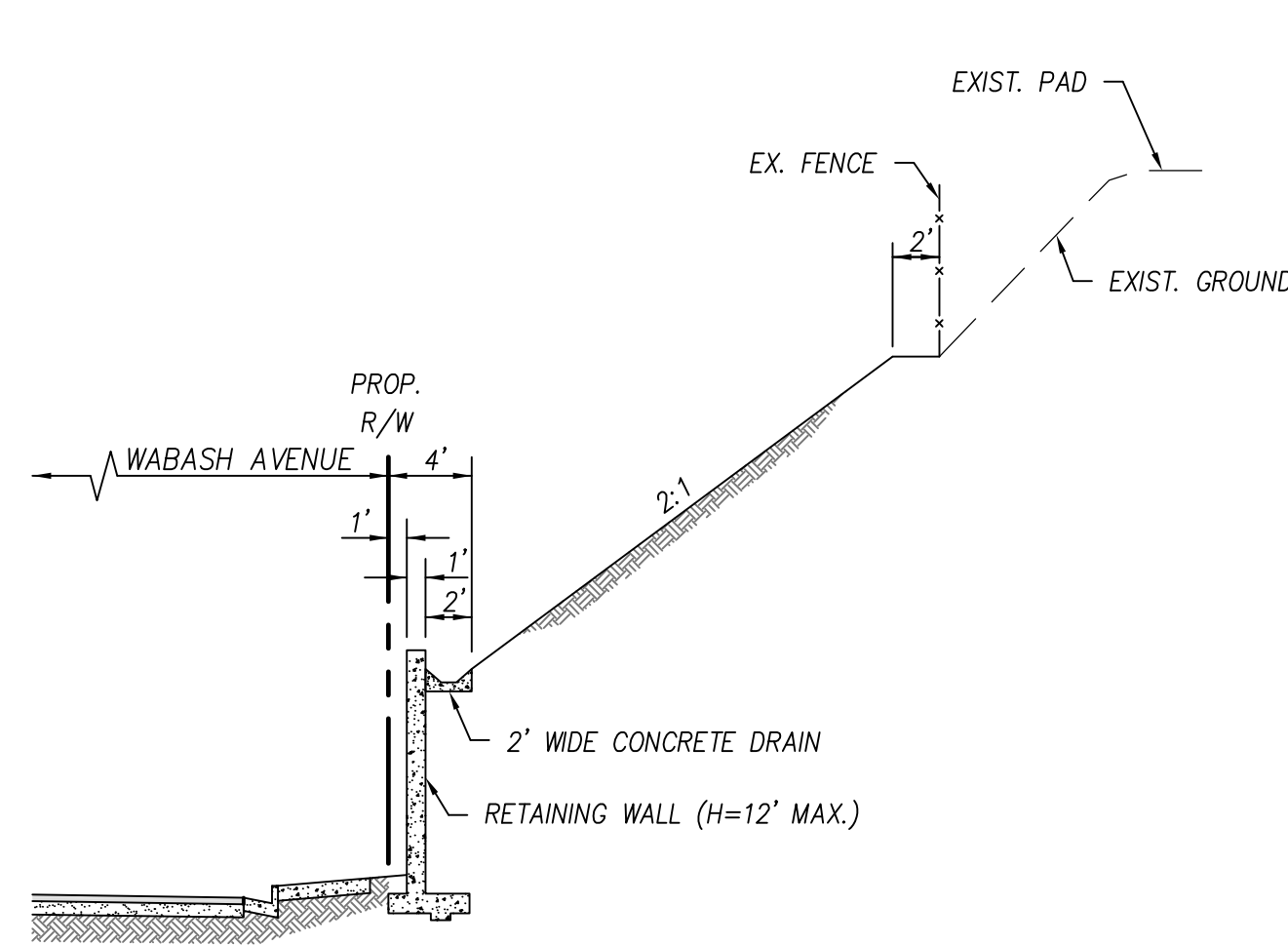
**LOCAL STREETS**  
(STREET G)  
N.T.S.



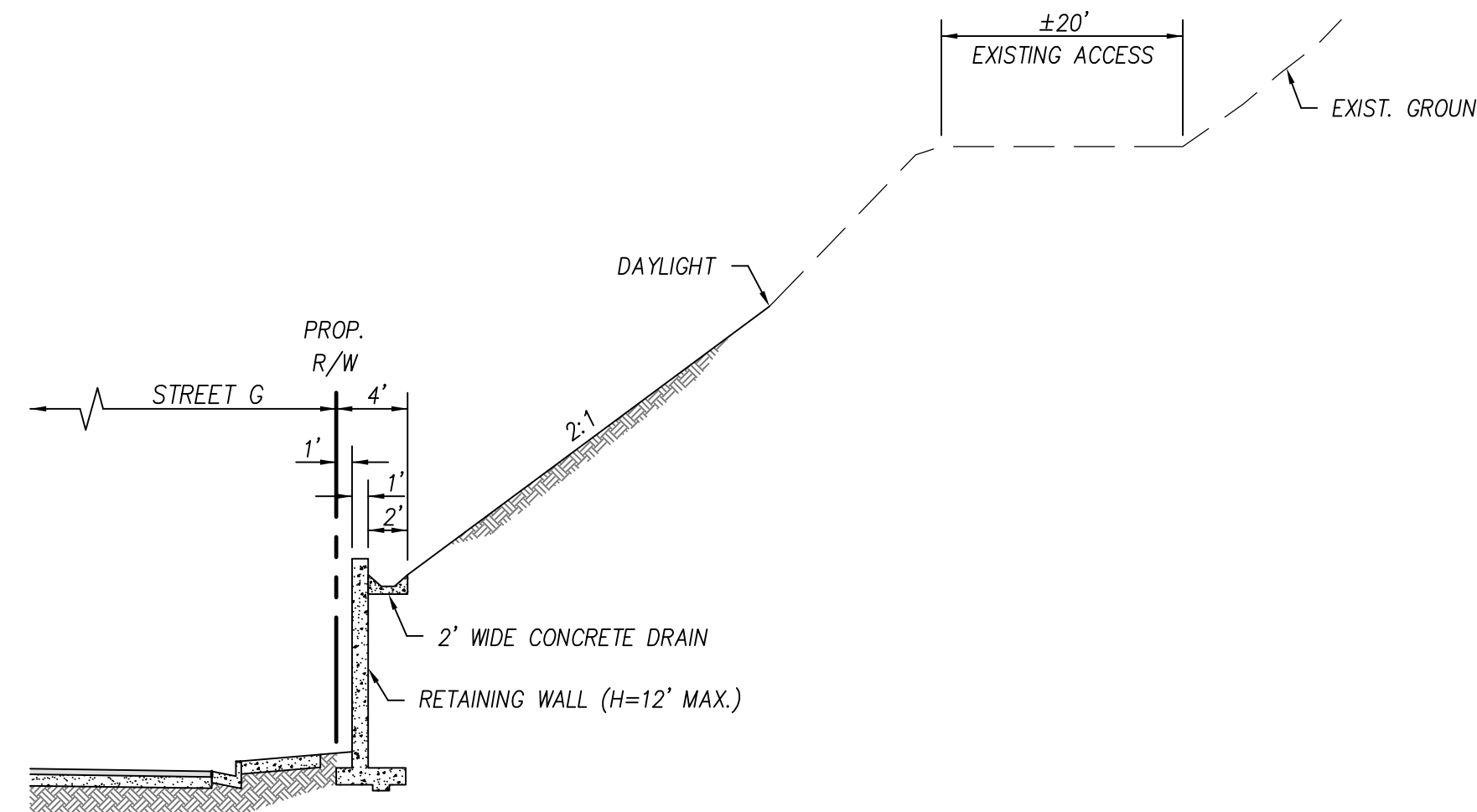
**OLD WABASH AVENUE**  
FROM SOUTH OF RESERVOIR ROAD TO RESERVOIR ROAD  
STA 78+50.00 TO GOING NORTH  
N.T.S.



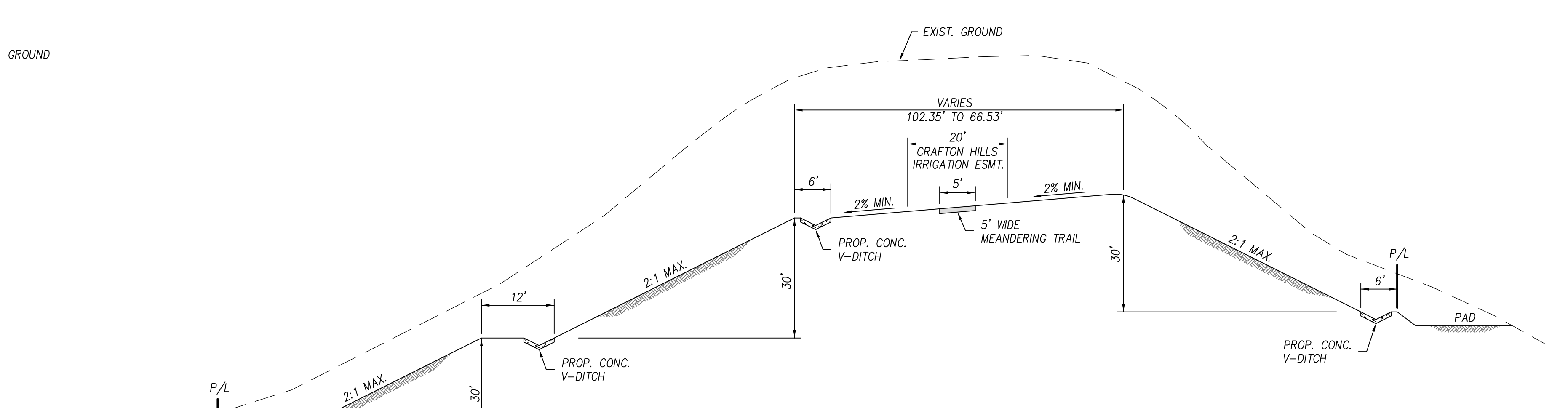
**WABASH AVENUE**  
STA 66+80.75 TO STA 68+20.75 (PUBLIC)  
N.T.S.



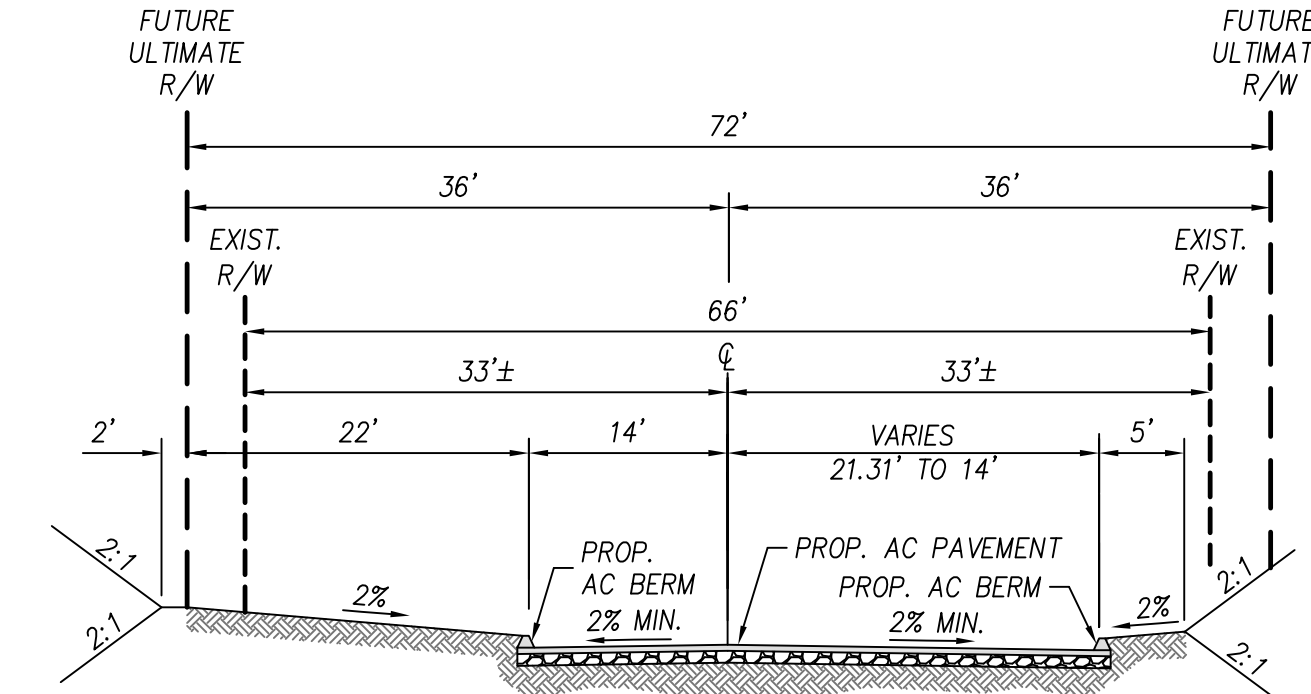
**SECTION "A-A"**  
N.T.S.



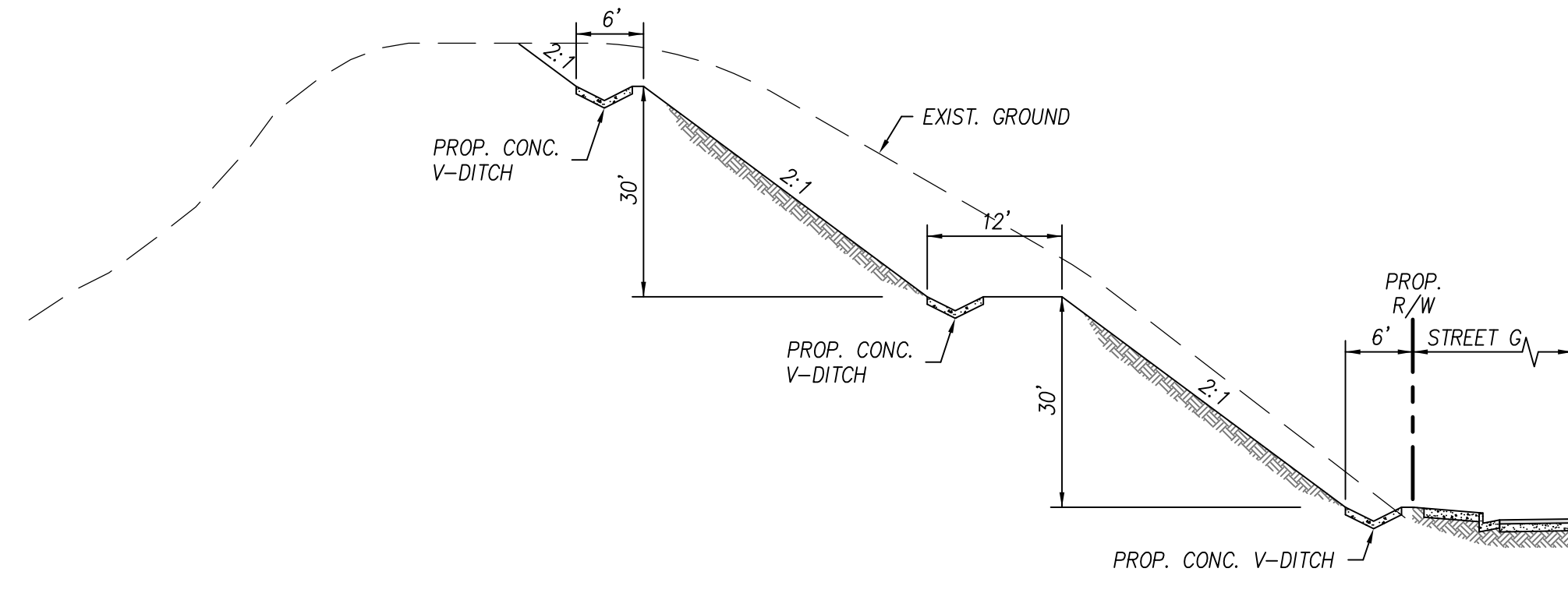
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N.T.S.



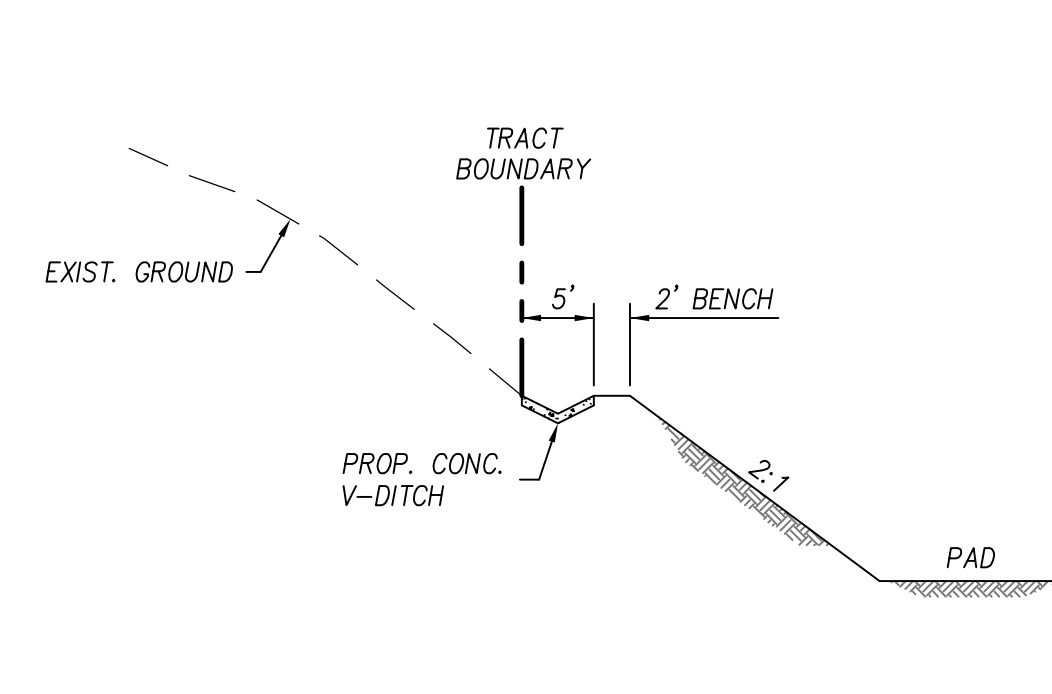
**SECTION "C-C"**  
N.T.S.



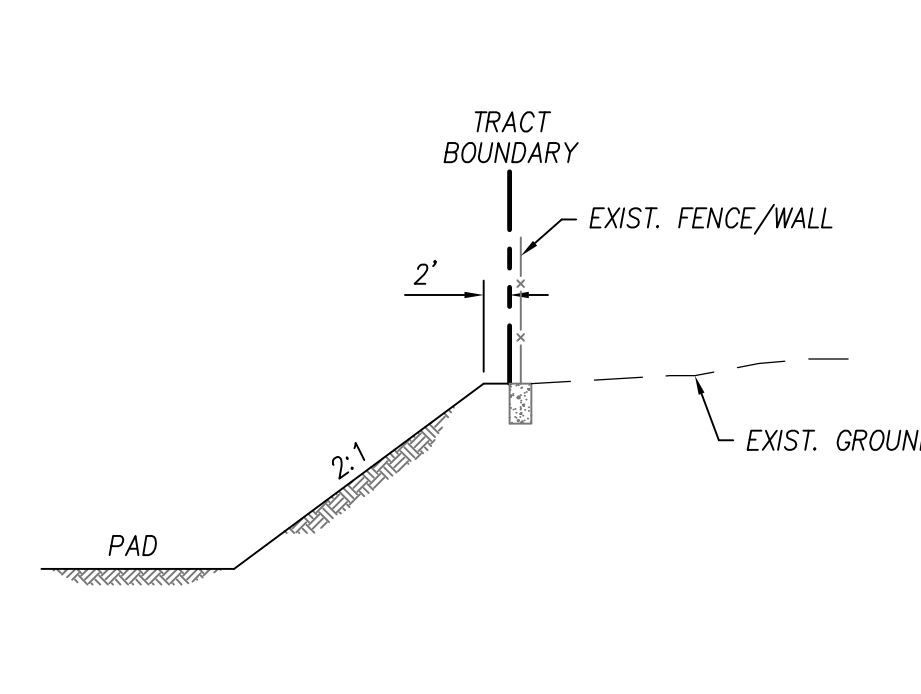
**WABASH AVENUE**  
STA 68+20.75 TO STA 70+40.75 (PUBLIC)  
N.T.S.



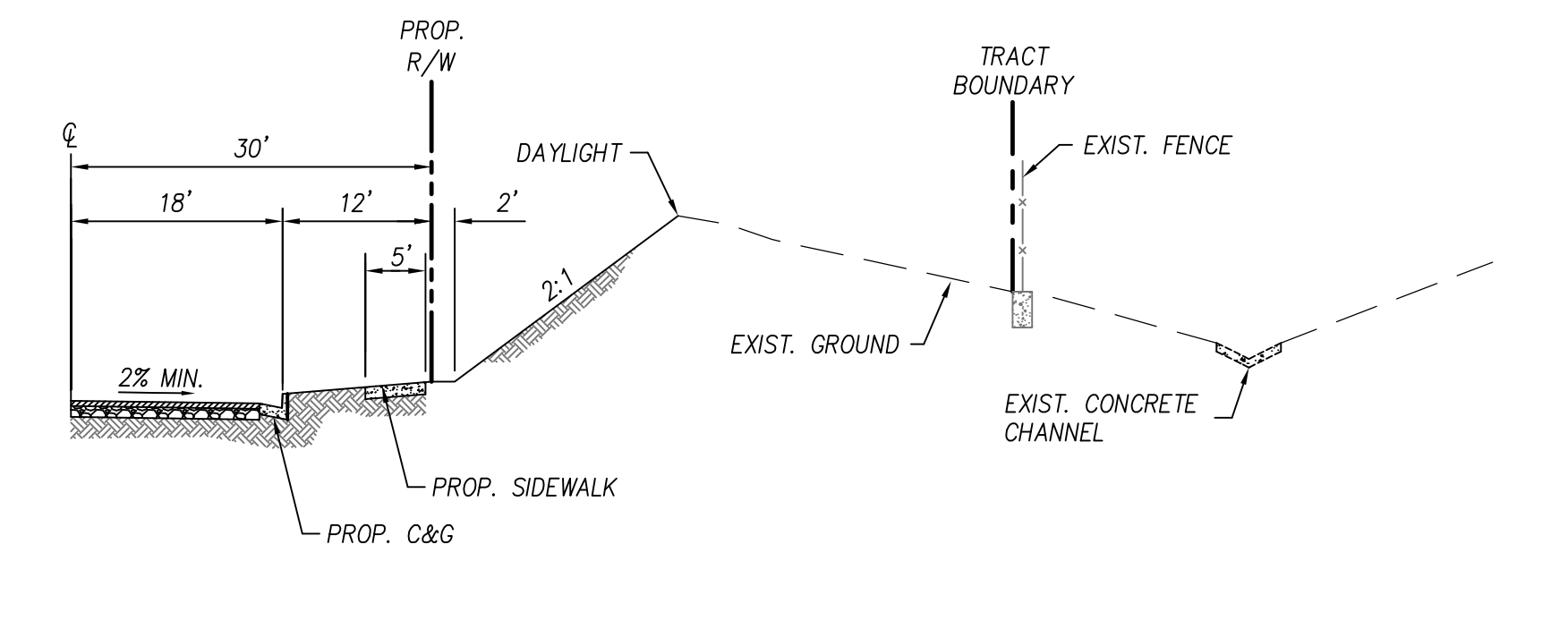
**SECTION "D-D"**  
N.T.S.



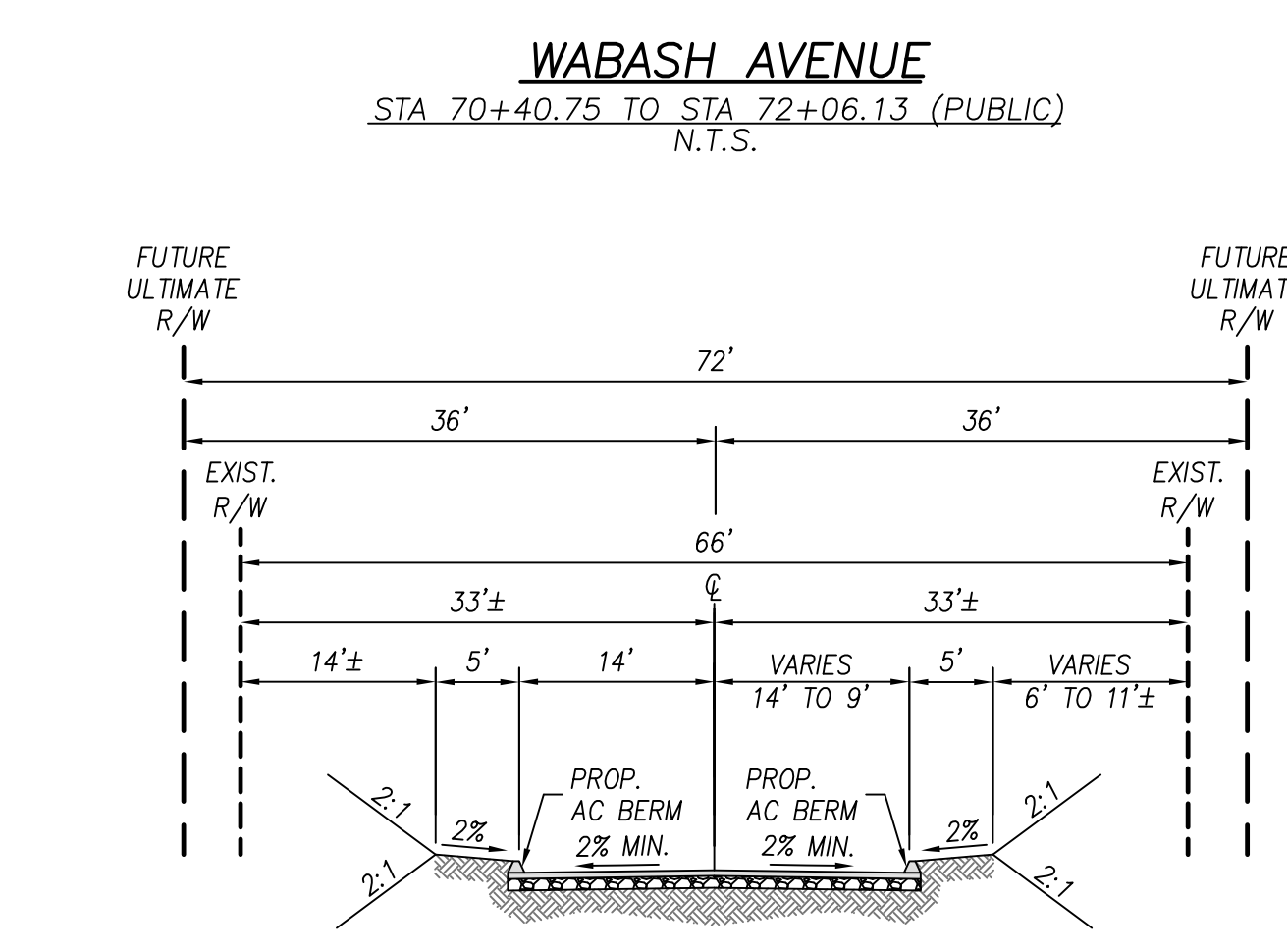
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N.T.S.



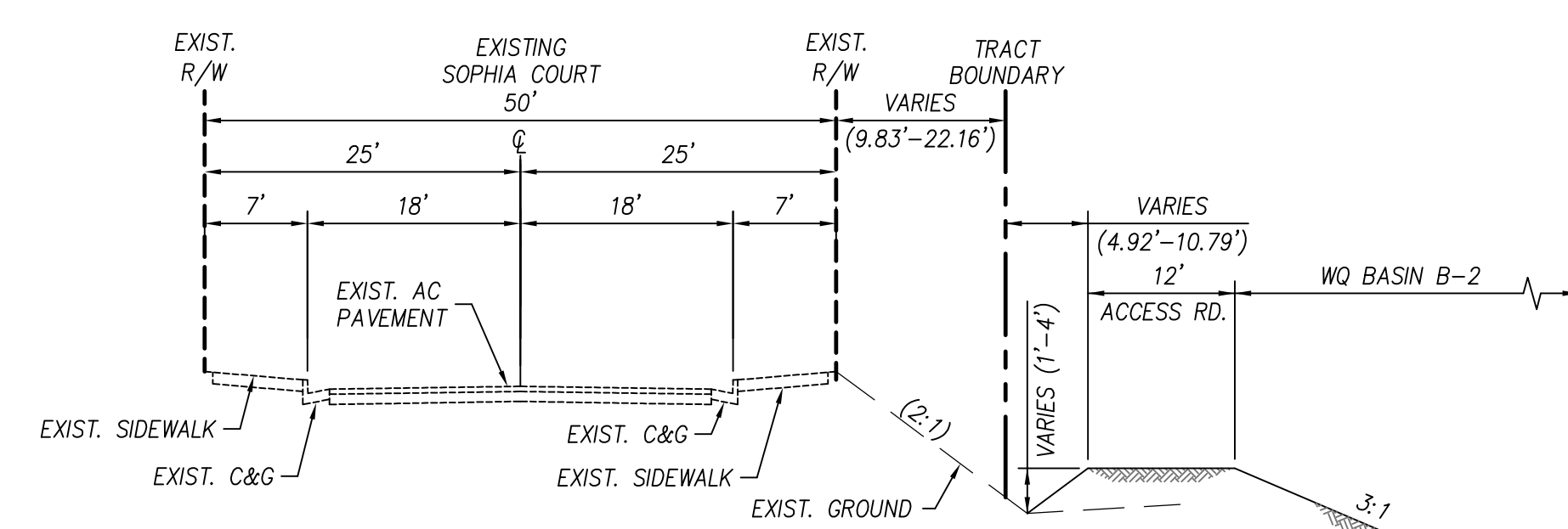
**SECTION "F-F"**  
N.T.S.



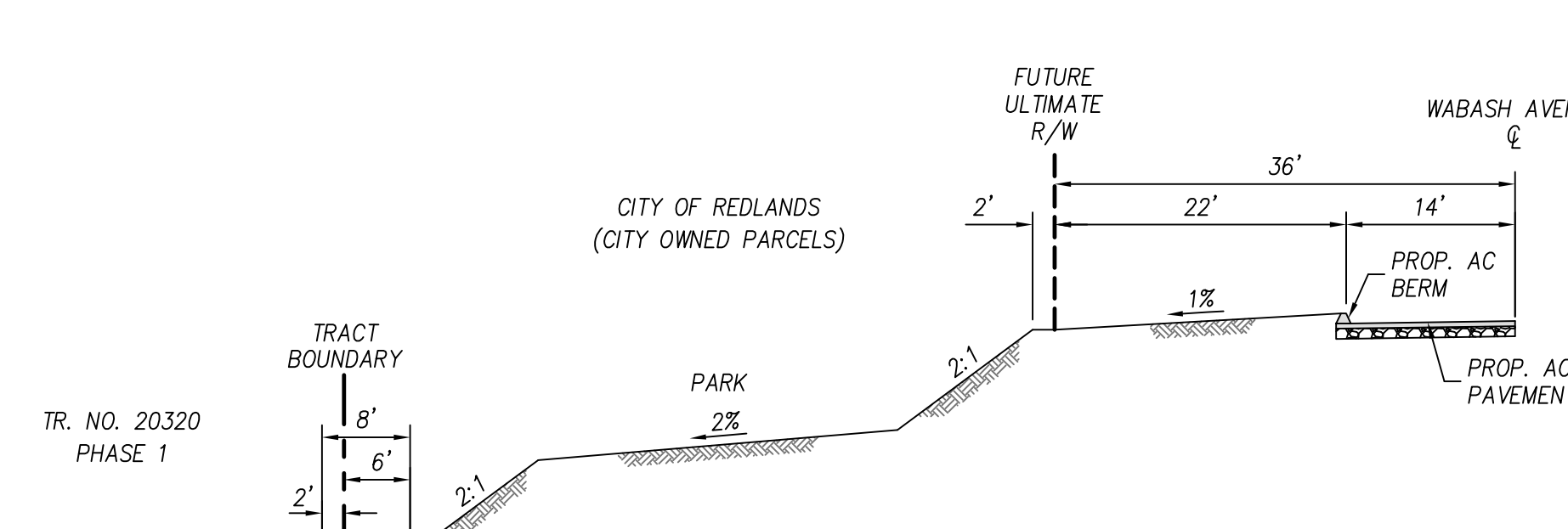
**SECTION "G-G"**  
N.T.S.



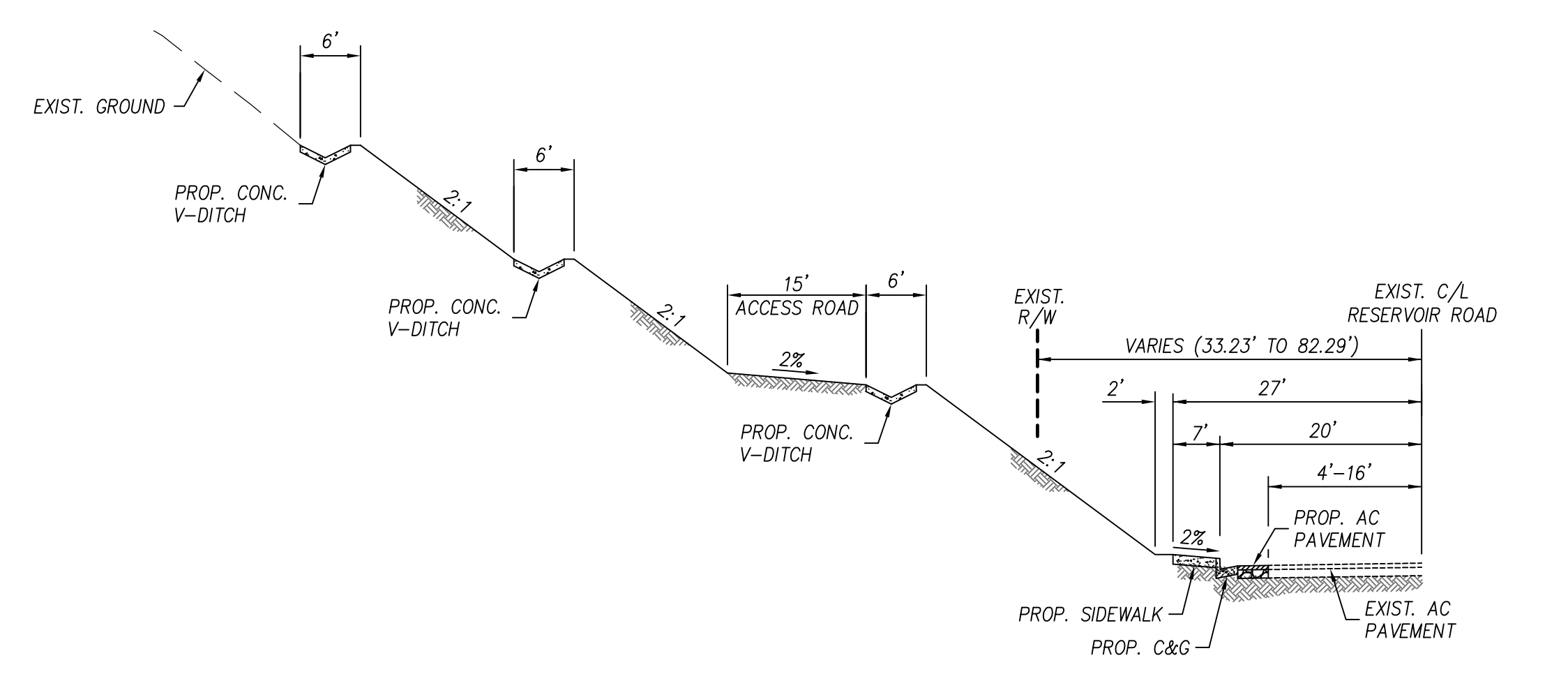
**WABASH AVENUE**  
STA 70+40.75 TO STA 72+06.13 (PUBLIC)  
N.T.S.



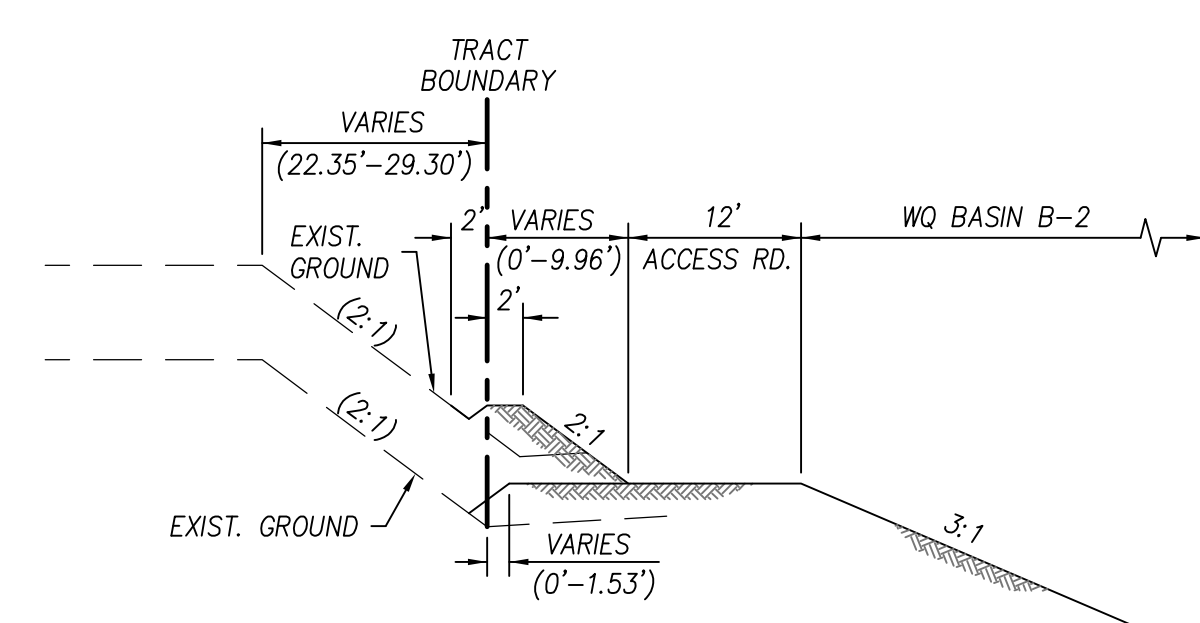
**SECTION "H-H"**  
N.T.S.



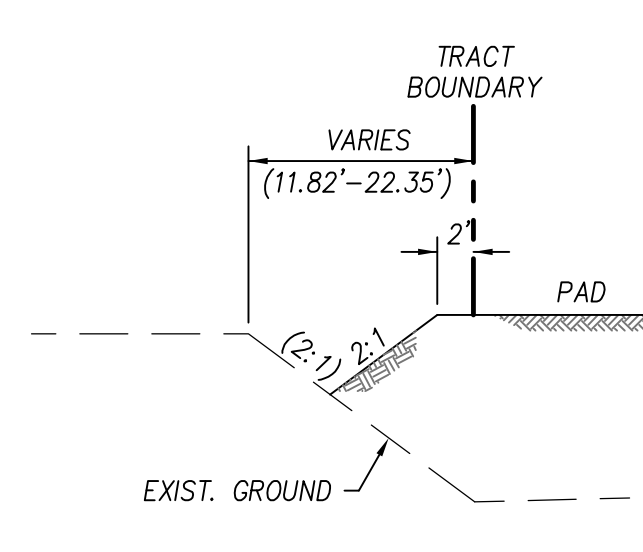
**SECTION "I-I"**  
N.T.S.



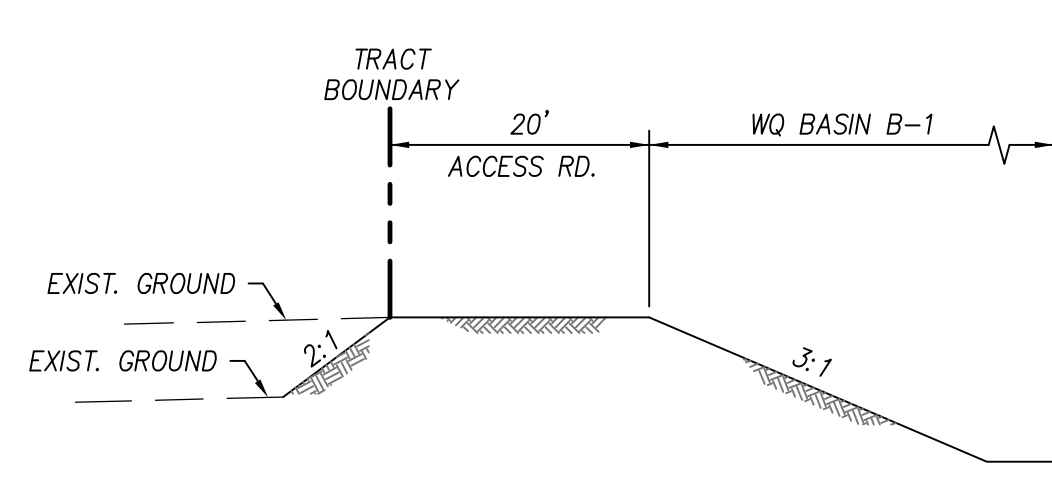
**SECTION "J-J"**  
N.T.S.



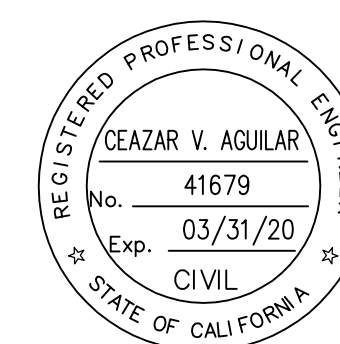
**SECTION "K-K"**  
N.T.S.



**SECTION "L-L"**  
N.T.S.



**SECTION "M-M"**  
N.T.S.



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**TENTATIVE TRACT MAP NO. 20320**  
CITY OF REDLANDS

DATE: 02/2020  
SHEET 2  
OF 2  
PROJECT NO.

Mohamad T Younes  
BRA/JD – Terracina Recovery – Wabash Avenue and Reservoir Road  
February 25, 2020

**ATTACHMENT C**  
**SITE PHOTOS**





**Photo 1.** West-facing view on the western portion of the property. Buckingham Drive is at the base of the hills.



**Photo 2.** North-facing view on the western portion of the property. Low-density residential/agriculture is visible in adjacent northern properties.



**Photo 3.** South-facing view on the western portion of the property. The I-10 Freeway is visible in the background.



**Photo 4.** East-facing view on Buckingham Drive showing the hills of the property.





**Photo 5.** View of Buckingham Drive from the entrance of a utilities access road on the western edge of the property.



**Photo 6.** Access road for utilities maintenance starting from Buckingham Drive.





**Photo 7.** North-facing view showing the powerline going through annual grassland.



**Photo 8.** Coastal scrub on the southern portion of the property, west of Wabash Avenue. Access roads for utility and the I-10 freeway are visible in the background.



**Photo 9.** Degraded coastal scrub between graded access roads and work pads.



**Photo 10.** North-facing view of Wabash Avenue within the parcel boundaries.





**Photo 11.** East-facing view from Wabash Avenue showing the eastern parcels of the property. Property is composed of annual grassland with stands of red gum trees.



**Photo 12.** South-eastern portion of the property, facing east. Property is primarily annual grassland with red gum stand and utility access roads. A juvenile tree of heaven is visible in the foreground.



**Photo 13.** South-facing view of Wabash Avenue. The I-10 freeway is visible in the background.