Appendix D. Simi Valley Double Track and Platform Project Biological Resources Technical Report

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METROLINK

Biological Resources Technical Report

Simi Valley Double Track and Platform Project

March 2021

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Contents

Tables

Figures

Appendices

Acronyms

CAGN	Coastal California gnatcatcher
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNPS	California Native Plant Society
CP	control point
CRPR	California Rare Plant Rank
CWA	Clean Water Act
FESA	Federal Endangered Species Act
JD	jurisdictional determination
JSA	jurisdictional study area
LBVI	Least Bell's vireo
MBTA	Migratory Bird Treaty Act
MP	mile post
Project	Simi Valley Double Track and Platform Project
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SCRRA	Southern California Regional Rail Authority
SSC	species of special concern
SWFL	Southwestern willow flycatcher
UPRR	Union Pacific Railroad
U.S.	United States
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VCL	Ventura County Line

1 Introduction

At the request of the Southern California Regional Rail Authority (SCRRA), HDR conducted a general biological survey, vegetation mapping, habitat assessment, focused surveys, and jurisdictional delineation for the proposed Simi Valley Double Track and Platform Project (Project) in Simi Valley, Ventura County, California (Figure 2-1). The purpose of this report is to document the existing biological conditions within the Project study area, which includes the Project footprint and adjacent areas and a 500-foot buffer, pursuant to federal, state, and local regulatory requirements.

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2 Project Description

2.1 Project Overview

SCRRA is proposing the Simi Valley Double Track and Platform Project to improve safety at the Simi Valley Station and to increase operational capacity on Metrolink's Ventura County Line (VCL). The Project includes at-grade crossing improvements and the construction of new rail infrastructure. The Project would occur primarily within existing railroad right-of-way (ROW) owned by SCRRA and Union Pacific Railroad (UPRR) from Sequoia Avenue east to the Arroyo Simi Railroad Bridge just south of Stearns Street in the City of Simi Valley, California. The Project would add 2.20 miles of main track and increase the passenger capacity at the Simi Valley Station by adding an additional platform and pedestrian undercrossing. In addition, an existing signal at Sycamore Drive would be relocated, and a new signal would be installed approximately 2,000 feet west of Erringer Road.

The objectives of the Project are to improve safety by adding pedestrian safety features and improve reliability by allowing more efficient train operations; allow for an hourly bidirectional service, a half-hourly regional train to dispatch in the peak direction, and an hourly express train in the peak direction along Metrolink's VCL, which operates on the Ventura Subdivision between Moorpark and Los Angeles Union Station; and include at-grade crossing improvements at Sequoia Avenue, Tapo Canyon Road, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive in support of the city's future application with the Federal Railroad Administration for quiet zone status along the alignment.

2.2 Goals and Objectives

The Project includes the following objectives:

- Objective 1: Improve safety and reliability of the existing rail system
- Objective 2: Increase operational capacity of the existing VCL passenger rail system and increase passenger capacity at the Simi Valley Station
- Objective 3: Implement infrastructural improvements that will support the city's future applications to the Federal Railroad Administration for quiet zone status along the alignment

2.3 Project Location

For the purposes of the environmental impact report, SCRRA defined a Project study area, which comprises the Project's physical footprint along the approximately 2.20-mile segment of SCRRA's Ventura Subdivision with a 500-foot buffer. The Project study area begins at its western terminus at Sequoia Avenue and ends east of Hidden Ranch Drive, just west of the Arroyo Simi Railroad Bridge, within the City of Simi Valley. Figure 2-1 shows the regional location of the Project. Figure 2-2 shows the Project's location in southern Simi Valley, the extent of the proposed improvements, and the Project study area. The Project study area is part of the Simi Land Grant on the United States Geological Survey (USGS) *Simi Valley East, California* 7.5-minute series topographical quadrangle. As shown on Figure 2-2, the Project is located between Mile Post (MP) 436.20 and MP 438.40.

2.4 Project Components

As shown on Figure 2-3 (Sheet 1 through 9), the Project would include construction of a new side platform (south of the existing platform) and pedestrian underpass at the existing Simi Valley Station, the construction of a second main track along a 2.20-mile stretch of Metrolink's existing Ventura Subdivision from MP 436.20 to MP 438.40, and the implementation of two new control points (CP) at MP 436.30 (CP Sequoia) and MP 438.40 (CP Arroyo) (Figure 2-3). New intermediate signals would be installed at MP 433.96, MP 435.13, and MP 437.30. Additionally, Project improvements would include supplemental safety measures at the existing grade crossings at Sequoia Avenue, Tapo Canyon Street, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive, which would support future applications by the city to the Federal Railroad Administration for quiet zone status along the alignment.[1] Existing wet and dry utilities (above and below grade) within the Project study area would also be protected in place or relocated pending final engineering design and final placement of the proposed infrastructure.

2.4.1 Physical Improvements

The Project would include multiple improvements to the existing Simi Valley Station, including construction of a second platform, a supporting pedestrian undercrossing (or underpass), and passenger emergency egress to enhance passenger safety. The existing platform would also be reconfigured to remove the curvature within the existing platform to the north side of the main line tracks. In conjunction with these station improvements, SCRRA proposes the installation of approximately 2.20 miles of new main track within existing rail ROW, new railroad signals and positive train control towers, and related supplemental safety measures at existing at-grade crossings. These improvements are described in more detail below.

Track and Civil

SCRRA proposes the construction of an approximately 2.20-mile segment of second mainline track, from Barnes Street in the west to Hidden Ranch Road in the east, to enhance operational capacity on Metrolink's VCL. The track improvements are described in further detail below:

- Approximately 900 feet of the main track would be reprofiled east of CP Sequoia.
- West of Tapo Street (to Barnes Street), a new second track would be placed within SCRRA ROW. The new track would be constructed north of the existing main line track and would connect to the existing track east of Tapo Street to form Main Track 1.
- Approximately 900 feet of existing track between East Los Angeles Avenue and Tapo Street would be shifted to accommodate the new tracks tying into the existing track. In addition, an existing UPRR spur track between East Los Angeles Avenue and Tapo Street, within SCRRA ROW, would be shifted to accommodate the second track on the north side.

[1] Upon completion of the Project, the City of Simi Valley would be required to complete the Quiet Zone Creation Process in accordance with the regulations, policies, and procedures established by the Federal Railroad Administration in its Train Horn Final Rule, as amended on August 17, 2006 (49 Code of Federal Regulations Part 222).

- Approximately 1,400 feet of existing track would be shifted between East Los Angeles Avenue to Simi Valley Station to accommodate the installation of a second track south of the existing track, within UPRR ROW. These two main tracks are shown and labeled as MT-1 and MT-2 on Figure 2-3 (Sheets 3 through 6). The new track on the south side of the ROW would connect to the existing track just east of Tapo Street, such that the new track east of Tapo Street and existing track west of Tapo Street form Main Track 2.

At the Simi Valley Station, the existing and proposed station platforms would be shifted eastward to maintain approximately 19-foot track centers for 150 feet beyond the platforms to accommodate the inter-track fence. The 19-foot track spacing through station limits would avoid placing track curvature within Hidden Ranch Drive, avoid the need to obtain more ROW through the station, and maintain clearance from the Arroyo Simi Bike Path. The 780-foot length of the existing platform would be maintained, and the new platform would be a minimum of 680 feet. The existing track alignment would be maintained at four of the at-grade crossings (Sequoia Avenue, Tapo Canyon Street, Tapo Street, and East Los Angeles Avenue), but the track alignment would be shifted approximately 6 inches south at the Hidden Ranch Drive crossing to eliminate curvature between the platform and the crossing.

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Figure 2-1. Regional Location

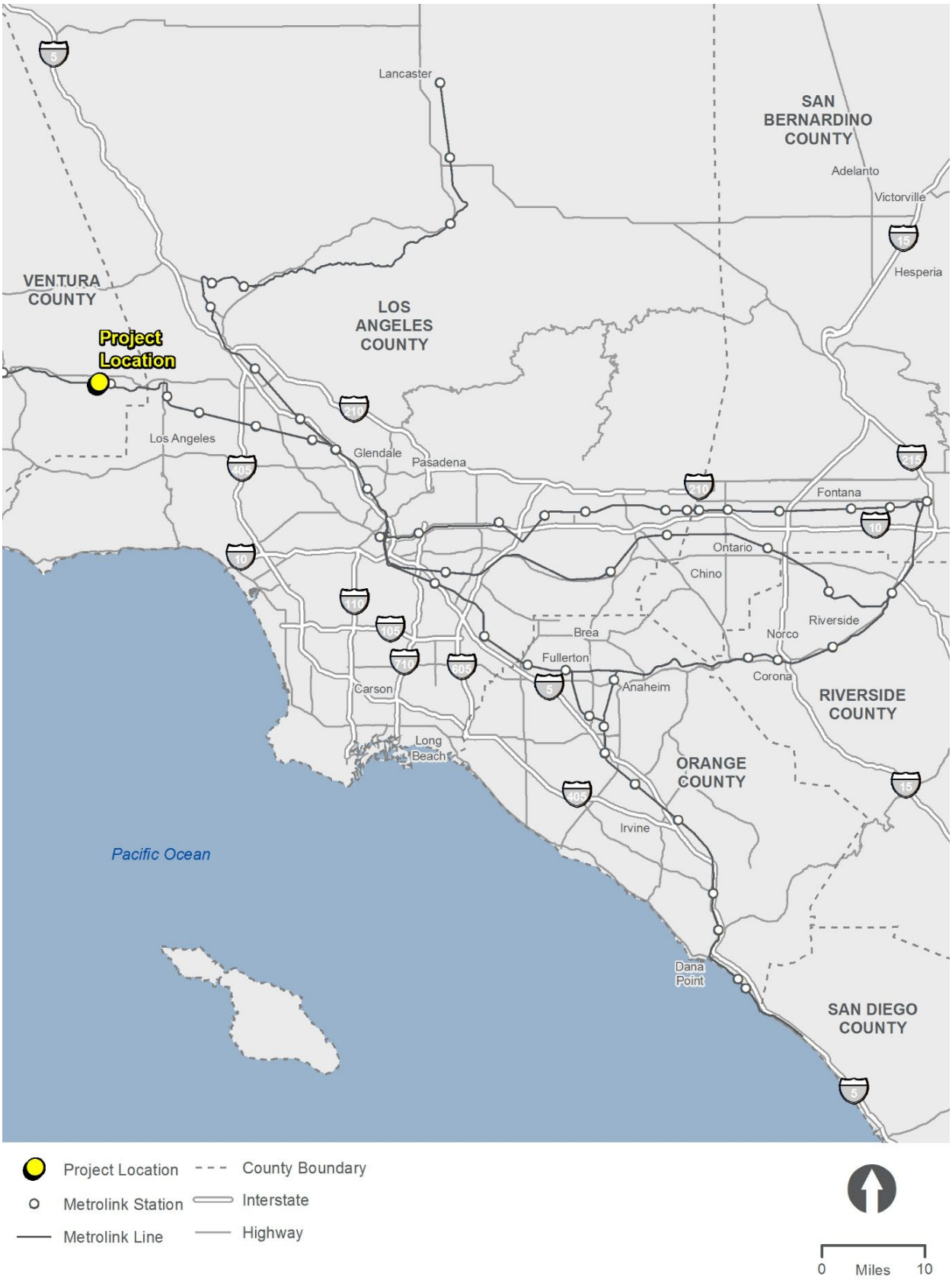

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Figure 2-2. Project Location

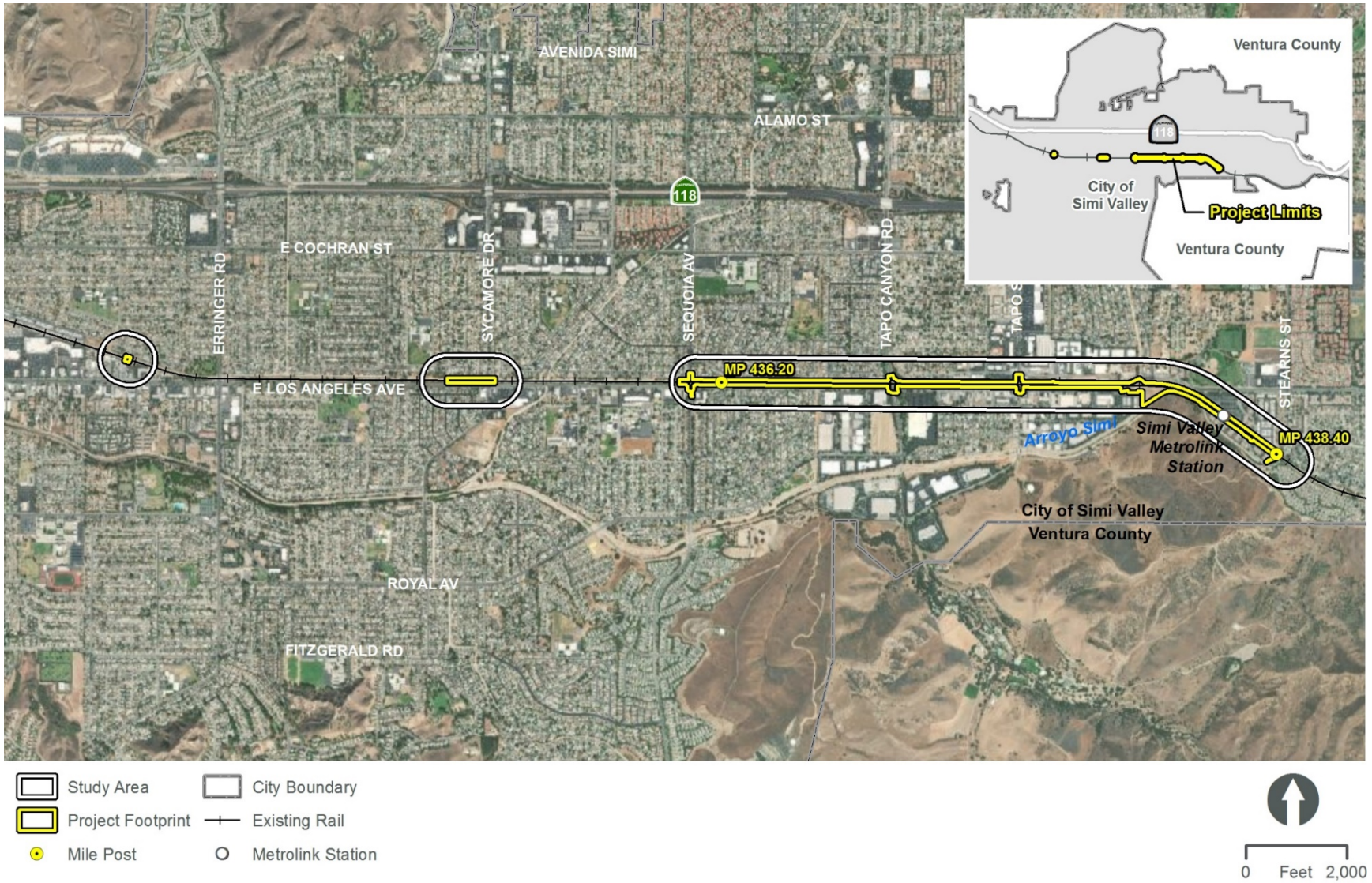

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Figure 2-3. Project Detail Map

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Figure 2-3. Project Detail Map

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Figure 2-3. Project Detail Map

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Figure 2-3. Project Detail Map

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Figure 2-3. Project Detail Map

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Figure 2-3. Project Detail Map

(Sheet 6 of 9)

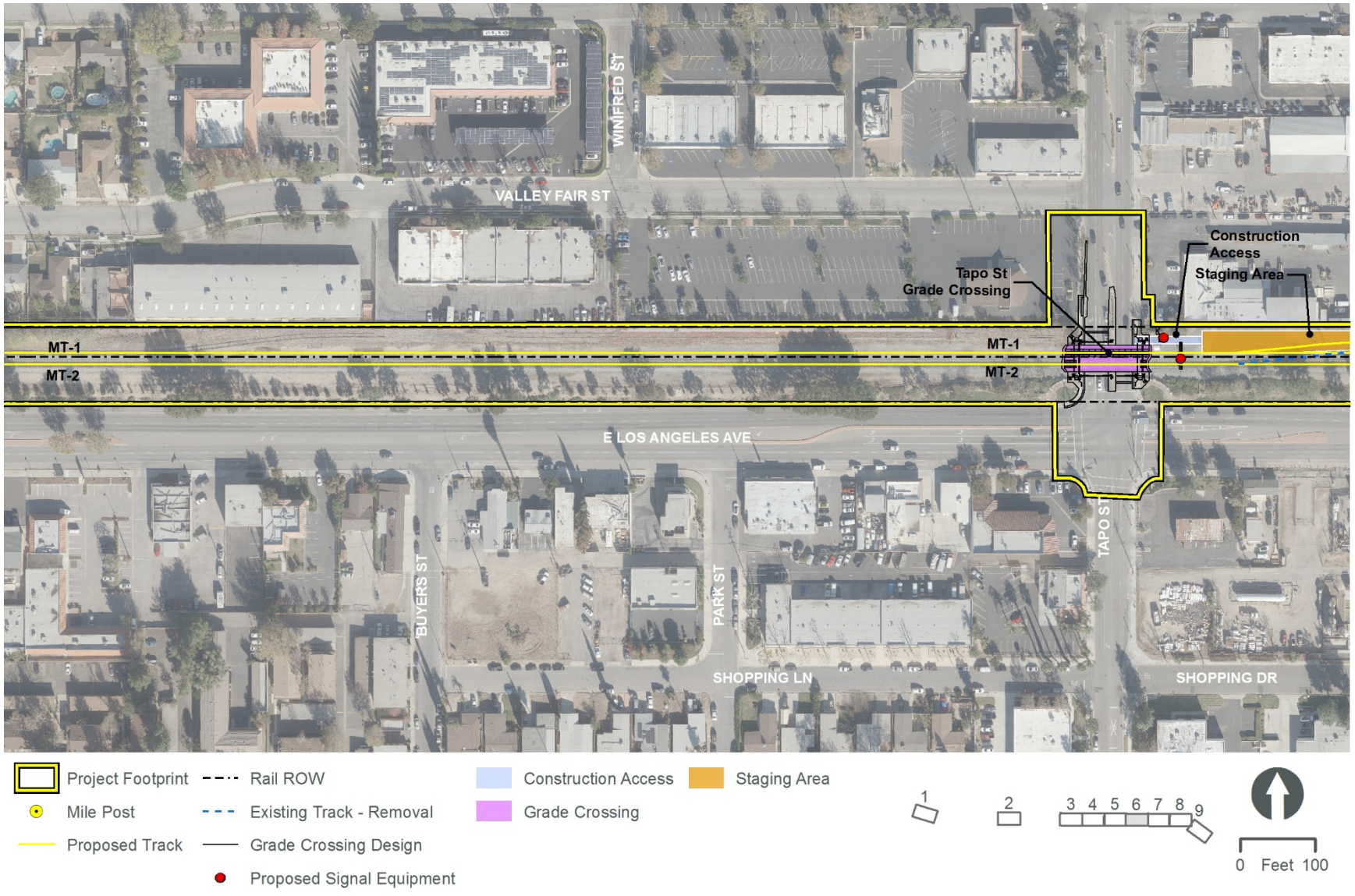

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Figure 2-3. Project Detail Map

(Sheet 7 of 9)

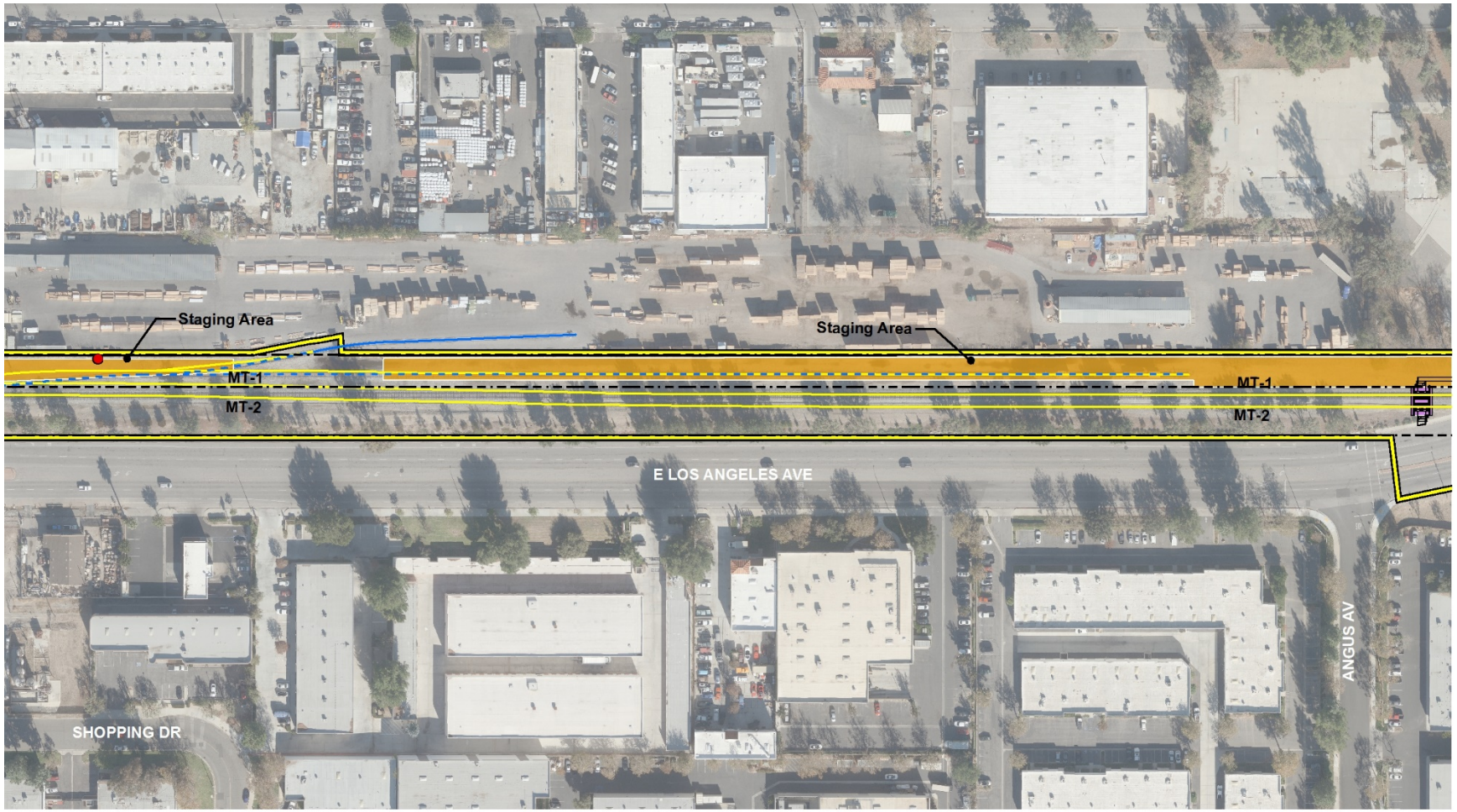

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Figure 2-3. Project Detail Map

(Sheet 8 of 9)

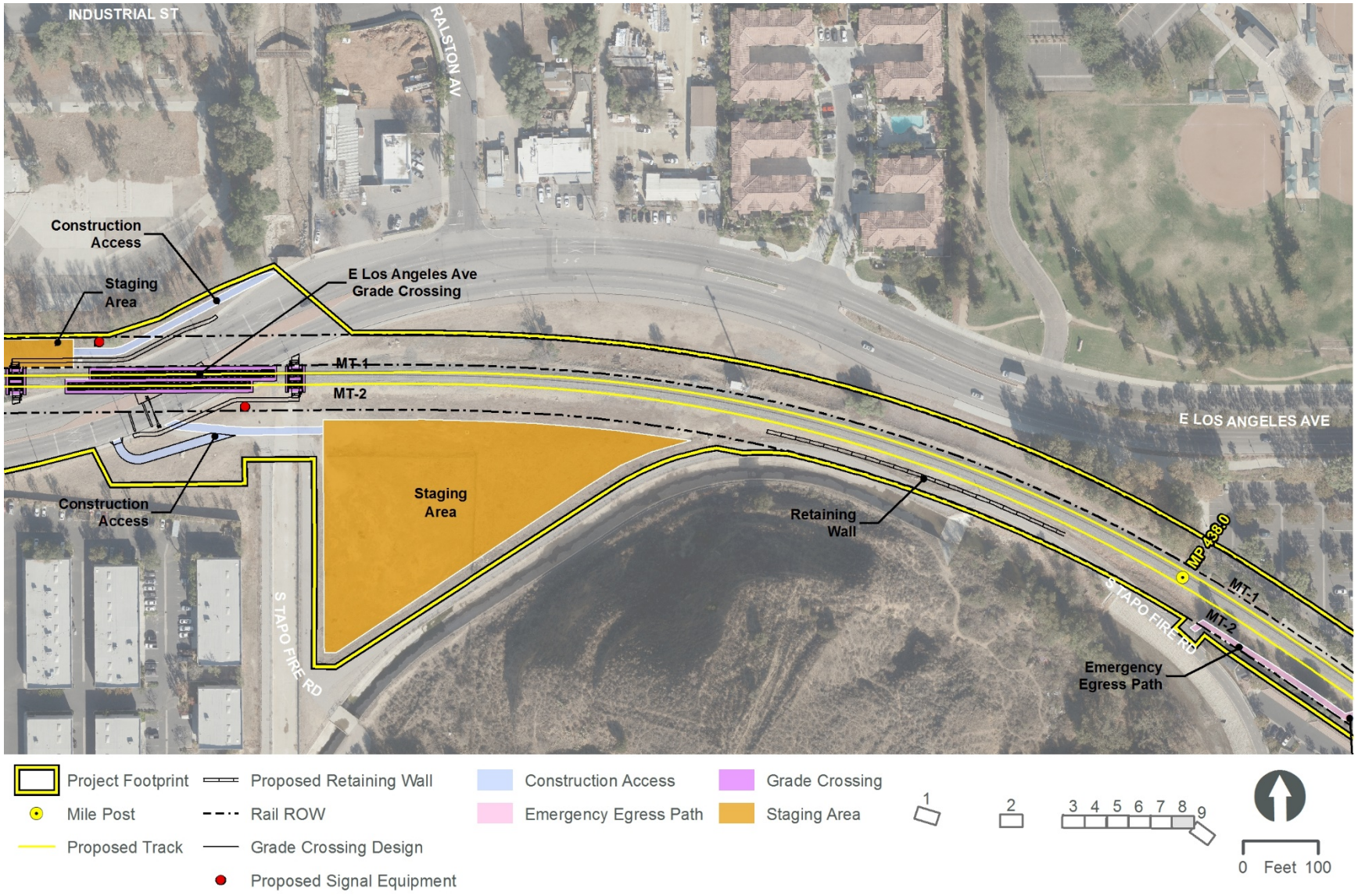

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Figure 2-3. Project Detail Map

(Sheet 9 of 9)

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At-Grade Crossings

The Project would include improvements and related supplemental safety measures at existing at-grade crossings within the Project study area to facilitate future quiet zone implementation. These at-grade crossing improvements would generally include the accommodation of the second mainline track and related ancillary improvements, except for at the Sequoia at-grade crossing, where a second track would not be constructed. These improvements would include sidewalk and pavement reconstruction; installation of pedestrian gates and warning signals; roadway restriping; pedestrian channelization; construction, of or modification to, a raised roadway median; and installation/modification of the roadway gates. Each at-grade crossing is further described below.

- **Sequoia Avenue.** The improvements at Sequoia Avenue include those described above, except a second mainline track crossing would not be constructed. A new railroad signal house would also be installed at this location.
- **Tapo Canyon Street.** In addition to the improvements described above, a new signal house would also be constructed at Tapo Canyon Street.
- **Tapo Street.** In addition to the improvements described above, a new signal house would also be constructed at Tapo Street.
- **East Los Angeles Avenue.** In addition to the improvements described above, a new signal house would also be constructed at East Los Angeles Avenue. Additionally, the existing access roads leading from the Arroyo Simi Bike Path would be modified to accommodate the proposed pedestrian improvements and the existing retaining wall located in the southeast quadrant would be reconstructed.
- **Hidden Ranch Drive.** In addition to the improvements described above, a new signal house would also be constructed at Hidden Ranch Drive.

Railroad Signals and Communications

The track improvements would require new track panels, signals, and warning devices at the existing at-grade crossings. At Sequoia Avenue, Tapo Canyon Road, and Tapo Street, the presignals on the southwest quadrants would be located outside of the exit gates to improve visibility for southbound traffic approaching the tracks. Additional safety improvements would include adding flashers to the warning devices for vehicles turning onto Tapo Canyon Road from East Los Angeles Avenue. Maintenance access to the new signal houses would also be added.

The Project would include two new CPs. At the western limit of the new track, CP Sequoia would be installed approximately 0.20 mile east of Sequoia Avenue. CP Arroyo would be installed directly west of Arroyo Simi. The existing signal at Tapo Street would be modified to accommodate the second track. In order to account for the proximity to the new CP Sequoia, the existing signal at Sycamore Drive would be relocated approximately 700 feet west. To reduce headway times to CP Strathern, an additional signal would be added approximately 2,000 feet west of Erringer Road.

At each new signal site, the following improvements would be installed:

- 6-foot by 8-foot signal house with a security fence
- Wayside signal
- 40-foot positive train control antenna tower

- 200-amp Southern California Edison power meter pedestal
- Underground railroad fiber optic cable with vault

Simi Valley Station Enhancements

The existing Simi Valley Station consists of one side platform on the north side of the main line track with custom passenger canopies, a ticket vending machine, and an at-grade parking lot north of the platform. The existing path of travel to the station extends south from a bus stop at the platform entrance and from the adjacent parking lot. Station access would remain unchanged under the Project.

The Project would change the existing platform configuration by demolishing approximately 250 feet of the curved portion of the platform on the west end of the station. To maintain the 780-foot length of the existing platform, the remaining platform would be extended approximately 95 feet to the west and 155 feet to the east, so that the entire length of the platform is along tangent track (i.e., where the track is not curved). At the east end of the station, a pedestrian underpass would be installed with ramp and stair access. The new underpass would provide access to a new, second platform on the south side of the main line tracks, which would be a minimum of 680 feet long.

The Project would match the existing platform amenities (canopies, seating, signage, and lighting), and would include aesthetic treatments to the ramps, stairs, and underpass walls and ceiling. The Project would implement crime prevention through environmental design principles, which would include natural surveillance, natural access control, territorial reinforcement, and maintenance. The proposed station improvements would also meet National Fire Protection Association standards by providing passengers egress capabilities to vacate the platform within 4 minutes and to reach a point of safety within 6 minutes.

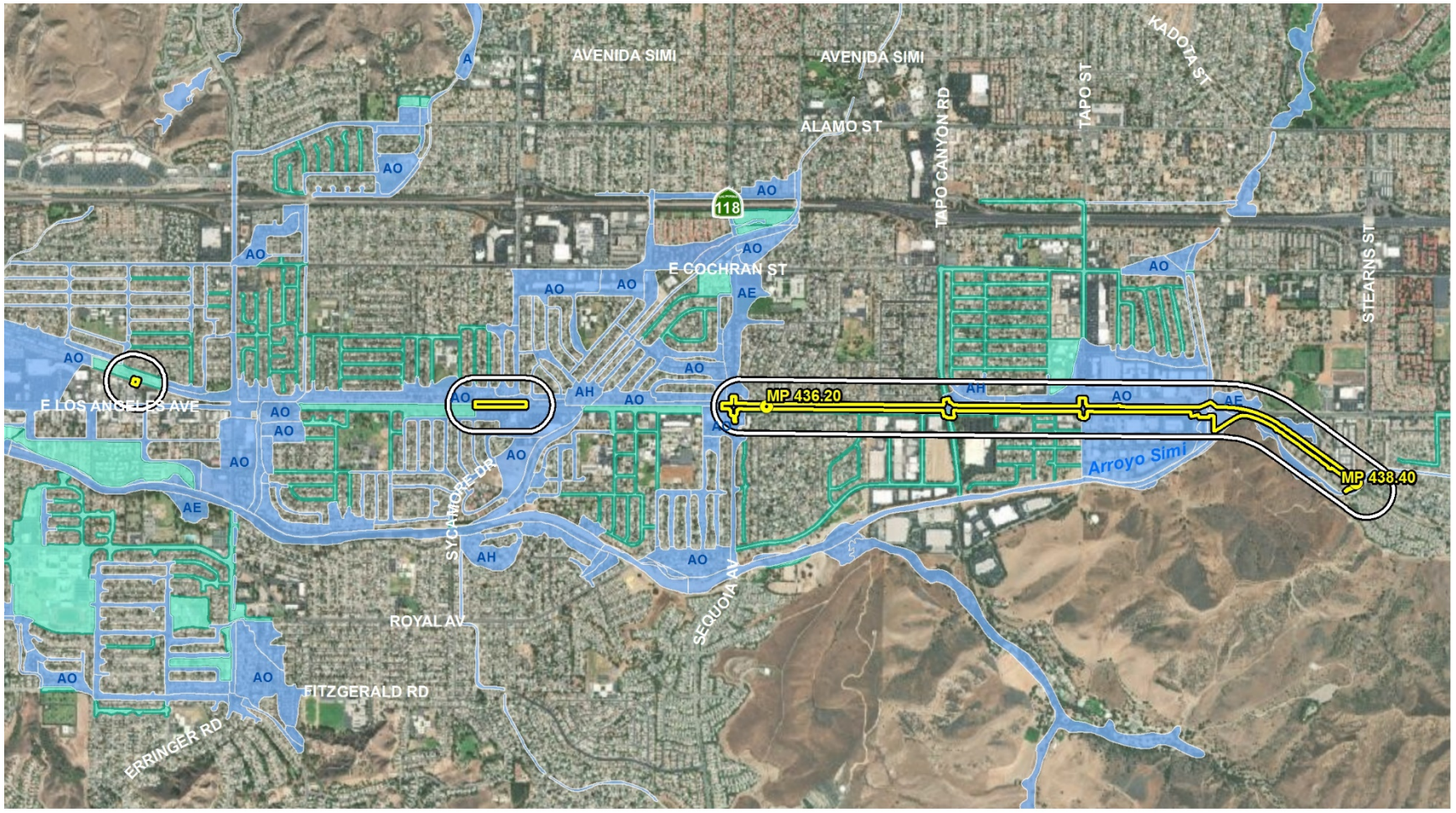
Drainage Improvements

The Project would include the following drainage improvements:

- Underdrains at the at-grade crossings where ditches are infeasible, and between the tracks at the platforms with the subgrade sloping toward the underdrain
- Trackside ditches between at-grade crossings
- Storm drain extensions or encasements where existing drainage systems intersect the proposed track infrastructure
- A new pump station at the low point of the pedestrian underpass at Simi Valley Station

Portions of the Project study area overlap with areas mapped by the Federal Emergency Management Agency as having a 1 percent annual chance of flood hazard with a potential for shallow flooding (Figure 2-4). The proposed drainage improvements would be coordinated with the City of Simi Valley to provide the new track infrastructure with adequate flood protection and to maintain existing drainage patterns to the extent practical throughout the Project study area.

Figure 2-4. Federal Emergency Management Agency Flood Hazard Map



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Structures

The Project would construct a new pedestrian underpass, stairs, and ramps at the Simi Valley Station. The design of the pedestrian underpass would be in accordance with the most recent SCRRA design criteria manual. The proposed structure type is a precast concrete box structure, composed of sections, selected to minimize construction track windows (i.e., minimize impacts on train schedules). The internal dimensions of the proposed structure would be 14 feet wide by 9 feet, 10 inches high. The depth of cover (i.e., amount of fill between the structure and the tracks) would be minimized to facilitate construction and maintenance of the structure, as well as to reduce the length of approach ramps and the number of stairs needed to reach the station platform. The design of the approach ramp retaining wall would be in accordance with the most recent SCRRA design criteria manual.

Utilities

Utilities within the Project study area include gas lines, electrical power lines, communications/fiber optic lines, and municipal water and sewer pipes. The Project would result in multiple utility conflicts, and impacted utilities would either be protected in place, extended, or relocated. Specifically, the Project may require relocation or casing extensions for the following utilities:

- Crimson Pipeline gasoline pipeline (6- to 12-inch pipeline) at East Los Angeles Avenue and Topo Canyon Road
- Southern California Edison electrical transmission and distribution (above and below ground) lines at Sequoia Avenue, East Los Angeles Avenue, Goddard Avenue, and Hidden Ranch Drive
- City of Simi Valley sewer and potable water lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Canyon Road, and Hidden Ranch Drive
- Southern California Gas natural gas lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Street, Arroyo lane, and Hidden Ranch Drive
- Golden State Water Company potable water lines at Sequoia Street, Goddard Avenue, Hietter Avenue, Tapo Street, and East Los Angeles Avenue
- Fiber optic cables parallel to the ROW owned by the following communications companies:
    - Lumen Technologies (formerly CenturyLink)
    - Verizon
    - AT&T
    - Sprint
    - Wilshire Communication
    - Charter Communications

Potholing would be implemented in conjunction with final design to verify the locations of all existing utilities within the Project study area and to determine which utilities would be protected in place and which utilities would require relocation or abandonment.

Right-of-Way

The majority of proposed improvements (including the proposed pedestrian underpass at the Simi Valley Station) would be constructed within the railroad ROW (Figure 2-3, Sheet 1 through 9).The northern 40 feet of ROW are owned by SCRRA, while the southern 60 feet are owned by UPRR. The ramp and stair access from the undercrossing to the new platform would extend south of the existing UPRR ROW and require acquisition of a portion of the adjacent multifamily parcel.

Roadway improvements would generally be located outside of the railroad ROW and within the City of Simi Valley's roadway ROW. Improvements at Hidden Ranch Drive would require acquisition of portions of two adjacent multifamily parcels at the southern and western corners of the crossing. Additionally, potential sidewalk crossing improvements that would extend into unimproved areas of private properties near Hidden Ranch Drive would require temporary construction easements in order to access the proposed CP Arroyo area.

To connect with the Arroyo Simi Bike Path, the egress path from the new platform may also extend south of the ROW onto the Ventura County Flood Control District's property, or it could extend further west to connect to the bike path within UPRR ROW. Final ROW needs would be confirmed during final design.

2.4.2 Construction

Project construction would begin as early as April 2022 and last for approximately 19 months. The work would be accomplished over four phases, beginning with construction of the pedestrian underpass and new platform at the station, and ending with reconstruction of 250 feet of the existing station platform. Construction may involve multiple crews working simultaneously and would include equipment such as track stabilizers, excavators, front-end loaders, rubber-tired dozers, cranes, haul trucks, and water trucks.

Construction would generally proceed in the following four phases over the 19-month construction schedule:

- Phase 1:
    - A number of third-party utility lines would be relocated in order to make way for the improvements of the Project. These utilities include fiber optic lines that run parallel to the Project study area, as well as many crossing utilities, such as water, gas, electric, and others. The relocations are due to the addition of a second main track, added second platform, inadequate depth underneath the rail, or insufficient casing length that spans the entire railroad ROW.
- Phase 2:
    - Construct structures, including the pedestrian underpass and new platform at Simi Valley Station and the retaining wall near the Arroyo Simi Bike Path
    - Construct track work, including the new main track (Main Track 1) outside of grade crossing limits and new turnouts, while maintaining service on the existing track
    - Construct signal houses, signal foundations, grade crossing warning devices and associated conduits

- Phase 3:
  - Construct track and roadway improvements at the at-grade crossings
  - Transfer rail service onto the newly constructed Main Track 1; take the existing track out of service for the second main track (Main Track 2) improvements
  - Finish installing signals at new CP Sequoia and CP Arroyo
- Phase 4:
  - Construct Main Track 2 track and upgrade existing from timber to concrete ties
  - Activate Main Track 2 track into service
  - Remove and reconstruct 250 feet of the existing Simi Valley Station platform and finish upgrading any remaining timber ties to concrete ties

Material and equipment imports and construction personnel would access the Project study area via walking points from the nearest fence access or staging area. Potential construction access points and staging areas have been identified within the ROW and are shown on Figure 2-3 (Sheets 3, 6, 7, 8, and 9). An additional staging area outside the ROW was identified between East Los Angeles Avenue and Arroyo Simi, as shown on Figure 2-3. The final construction staging area locations would be confirmed during design development.

Construction activities would be scheduled during time frames that allow for exclusive track occupancy by construction crews to minimize effects on Metrolink operations. To the greatest extent possible, construction activities would be scheduled during the daytime; however, nighttime work would be required to maximize construction work windows. The Project would also include weekend work when Metrolink service is reduced.

Prior to construction, coordination would be needed with regard to the bike trail and potential temporary construction closures. Dewatering is expected to be necessary during construction of the pedestrian underpass at the station and would be completed in accordance with applicable regulations.

2.4.3 Operation

The Project would improve safety and reliability on the VCL and at the Simi Valley Station and adds capacity to accommodate growth of Metrolink commuter train operations through the Project study area. The Project would install safety improvements at four grade crossings and create a new 2.20-mile double track segment through southern Simi Valley, which would reduce the distance of single-track territory through the Project study area. Passenger trains running along the Ventura Subdivision on the Metrolink VCL would be able to use this double track segment to pass uninterrupted through the Project study area rather than idling at the nearest location with two tracks, waiting for trains in the opposite direction to cross the single-track segment.

Project operation is projected to start in 2025. The Project would also provide faster, more frequent, and more reliable service by increasing on-time performance. As the population of Southern California increases, it is likely that additional passenger rail service would be added to the Metrolink VCL in the future to ease traffic congestion on freeways and local streets.

With Project implementation, as well as completion of the other VCL projects, Metrolink service would increase, providing up to 48 revenue trains per day on the VCL (Table 2-1).

Table 2-1. 2019 Schedules and Proposed Service Schedules: Ventura County Line

Schedule	Existing Service (2019)			Proposed Service (2025)		
	To Los Angeles[a]	From Los Angeles[a]	All	To Los Angeles[a]	From Los Angeles[a]	All
Weekday	16	17	33	24	24	48
Saturday	0	0	0	1[b]	1[b]	2[b]
Sunday	0	0	0	0	0	0

Notes:

[a] VCL trains to or from Los Angeles originate or terminate in Ventura, Moorpark, Chatsworth, or Burbank. Future service includes trains originating and terminating in Van Nuys.

[b] VCL Saturday service would operate between April and October only.

VCL=Ventura County Line

3 Regulatory Framework

3.1 Federal Regulations

3.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were formally listed during the environmental review process. Procedures for addressing impacts on federally listed species follow two principal pathways, both of which require consultation with the United States Fish and Wildlife Service (USFWS), which administers the FESA for all terrestrial species. The first pathway, a Section 10(a) incidental take permit, applies to situations where a nonfederal governmental entity must resolve potential adverse impacts on species protected under the FESA. The second pathway, a Section 7 consultation, applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 Code of Federal Regulations Part 10, including feathers, or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 Code of Federal Regulations 21).

All raptors and their nests are protected from take or disturbance under the MBTA (16 United States [U.S.] Code, Section 703 et seq.). Golden eagle and bald eagle are also afforded additional protection under the Eagle Protection Act, amended in 1973 (16 U.S. Code, Section 669 et seq.).

3.1.3 Clean Water Act – United States Army Corps of Engineers

Section 404 of the Clean Water Act (CWA) establishes a program for the United States Army Corps of Engineers (USACE) to regulate the discharge of dredge and fill material into waters of the U.S., including wetlands. Activities regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. Either an individual Section 404 permit or authorization to use an existing USACE nationwide permit must be obtained if any portion of an activity would result in dredge or fill impacts on a river or stream that has been determined to be jurisdictional under Section 404 of the CWA. When applying for a permit, a company or organization must show that they would either avoid wetlands where practicable, minimize wetland impacts, or provide compensation for any unavoidable destruction of wetlands.

As of June 22, 2020, the term waters of the U.S. is defined in the USACE regulations at 33 Code of Federal Regulations Part 328.3(a) as:

a. Jurisdictional waters. For purposes of the CWA, 33 U.S. Code 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term waters of the U.S. means:

1. The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
2. Tributaries;
3. Lakes and ponds, and impoundments of jurisdictional waters; and
4. Adjacent wetlands.

b. Non-jurisdictional waters. The following are not waters of the U.S.:

1. Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;
2. Groundwater, including groundwater drained through subsurface drainage systems;
3. Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
4. Diffuse stormwater runoff and directional sheet flow over upland;
5. Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
6. Prior converted cropland;
7. Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
8. Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
9. 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;
10. Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
11. Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
12. Waste treatment systems.

The term ephemeral means surface water flowing or pooling only in direct response to precipitation (e.g., rain or snow fall). The term intermittent means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts). The term perennial means surface water flowing continuously year-round.

When applying for a Section 404 permit, applicants may choose to proceed under the assumption that all drainage features that exhibit an Ordinary High Water Mark within a project footprint are subject to

regulation if a discharge of fill is proposed. This assumption is considered a preliminary jurisdictional determination (JD). Alternatively, applicants may request an approved JD, which is USACE's concurrence that the jurisdictional delineation's findings are correct and is an official USACE determination that jurisdictional aquatic resources are present or absent from the subject site. An approved JD is typically valid for up to five years and allows for the USACE to exclude features that they have reviewed and deemed non-jurisdictional.

The use of a preliminary JD may expedite the permitting process when compared to the approved JD process which requires the JD to be coordinated with the U.S. Environmental Protection Agency.

3.1.4 Clean Water Act – Regional Water Quality Control Board

The Regional Water Quality Control Board (RWQCB) regulates discharge activities into waters pursuant to Section 401(a)(1) of the federal CWA. Section 401 of the CWA specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into navigable waters.

3.2 State Regulations

3.2.1 California Endangered Species Act

Sections 2050 through 2098 of the California Fish and Game Code outline the protection provided to California's rare, endangered, and threatened species. Section 2080 of the Fish and Game Code prohibits the taking of plants and animals listed under the California Endangered Species Act (CESA). Section 2081 established an incidental take permit program for state-listed species. In addition, the Native Plant Protection Act of 1977 (Fish and Game Code Section 1900 et seq.) gives the California Department of Fish and Wildlife (CDFW) authority to designate state endangered, threatened, and rare plants and provides specific protection measures for designated populations.

CDFW has also identified many species of special concern (SSC). Species with this status have limited distribution or the extent of their habitats has been reduced substantially such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during the environmental review process. While they do not have statutory protection, they may be considered rare under the California Environmental Quality Act (CEQA) and are thereby warranted specific protection measures.

3.2.2 Fully Protected Species

CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to California Fish and Game Code Sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of a natural community conservation plan, 2081.7, or a memorandum of understanding for scientific purposes.

3.2.3 Nesting Birds

CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. California Fish and Game Code sections that protect birds,

eggs and nests include Sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey in the order Falconiformes or Strigiformes, or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird as designated in the MBTA).

3.2.4 Lake and Streambed Alteration Program

CDFW regulates water resources under Sections 1600 et seq. of the California Fish and Game Code. CDFW has the authority to grant Streambed Alteration Agreements under Section 1602, which states:

> *An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.*

CDFW jurisdiction includes ephemeral, intermittent and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the watercourse if the stream or lake is vegetated.

Proposed actions that require a Streambed Alteration Agreement may also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

3.2.5 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act requires that each of the nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes federally protected waters as well as areas that meet the definition of waters of the state. Waters of the state are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 401 provided they meet the definition of waters of the state. Mitigation requiring no net loss of wetlands functions and values of waters of the state is typically required by the RWQCB.

3.2.6 California Environmental Quality Act

CEQA requires state and local agencies to identify impacts on the environment that might be caused by their actions. Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) identifies a substantial reduction in numbers of a rare or endangered species as a significant impact. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. For example, plant species that are not federally or state listed but that occur on the California Native Plant Society's (CNPS) California Rare Plant Rank (CRPR) Lists 1B and 2B would also typically be considered under CEQA. Plant populations of species meeting the CRPR List 3 and 4 designations that are locally significant may also warrant consideration under CEQA.

3.2.7 California Public Resources Code Section 21083.4

Per Public Resource Code Section 21083.4, significant impacts on coast live oak (*Quercus agrifolia*) trees greater than 5 inches diameter at breast height would require mitigation consisting of oak woodland conservation, oak woodland restoration, coast live oak planting and management, or payment to the Oak Woodland Conservation Fund.

3.3 Local Regulations

3.3.1 City of Simi Valley General Plan

The *City of Simi Valley General Plan* includes policies relevant to biological resources within Chapter 6, Natural Resources. The General Plan's goals, policies, design criteria, and land use densities reflect the dedication of the community to preserving its ridgelines, open space, and tree-studded hillsides as important natural and visual resources. The policies limit the amount and types of development allowed in these natural areas and guide the character of development that occurs in the hillsides surrounding Simi Valley (City of Simi Valley 2020). These policies include:

Goal NR-1*:* Natural Resource Conservation. Natural resources of importance to the City of Simi Valley and its Planning Area are conserved, enhanced, and protected.

Policy NR-1.1: Open Space Preservation and Buffer Zone. Protect, conserve, and maintain the open space, hillside, and canyon areas that provide a buffer zone around the city's urban form, serve as designated habitat for sensitive species, and provide recreation opportunities for residents and visitors.

Policy NR-1.2: Slope Preservation. In open space areas, uses requiring grading or other alteration of land shall maintain the natural topographic character and ensure that downstream properties and watercourses are not adversely affected by siltation or chemical runoff.

Policy NR-1.6: Open Space for Wildlife Habitat. Preserve open space in its natural form. Prioritize preservation of open space that can support Sensitive, Endangered, and Protected species, as defined by the county, state, and federal governments, as part of a contiguous system that allows the movement of wildlife from one habitat area to another.

Policy NR-1.11: Arroyo Simi. Enhance and conserve the Arroyo Simi and its tributaries as a natural resource for scenic and passive recreational enjoyment by the community.

Goal NR-2: Vegetation and Habitat Preservation. Plant and wildlife habitats are preserved and enhanced and wildlife movement corridors are protected.

Policy NR-2.1: Tree Preservation. Encourage the preservation of trees and native vegetation in development projects. Require that new development utilize creative land planning techniques to preserve any existing healthy, protected trees to the greatest extent possible.

Policy NR-2.2: Wildlife Crossings. Require the installation of wildlife crossing structures by developers or as part of public improvement projects. Minimize artificial night lighting in the vicinity of wildlife crossing structures and adjacent wild lands. Install appropriate wildlife fencing and encourage the growth of woody native vegetation leading up to crossing structures to provide cover and direction and to encourage the use of the crossing structures by wildlife.

Policy NR-2.3: Agency Collaboration. Work with federal, state, and local agencies, such as Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority, Rancho Simi

Recreation and Park District, National Park Service, and other organizations, for guidance on the restoration of riparian communities and vegetative cover at passageways.

Policy NR-2.4: Habitat Connectivity. Ensure that projects within areas identified as regional wildlife corridors are designed and constructed so as to preserve the ability of wildlife to travel through the region.

Policy NR-2.5: Wetland and Sensitive Habitat Mitigation. Conserve wildlife ecosystems, wetlands, and sensitive habitat areas in the following order of protection preference: (1) avoidance; (2) on-site mitigation; and (3) off-site mitigation. Where avoidance is not possible, require provision of replacement habitat through restoration and/or habitat creation to mitigate the loss of wetlands and/or sensitive habitat. Off-site replacement habitat should be at a minimum of 5:1 replacement ratio or as recommended by CDFW.

Policy NR-2.6: Site Assessments. Require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors. Ensure that individual projects incorporate measures to reduce impacts on special-status species, sensitive natural communities, and important wildlife areas and movement corridors according to Simi Valley's environmental review process.

Goal NR-5: Watershed Protection. Local watersheds, water bodies, and groundwater resources, including creeks, reservoirs, and rivers, are protected from pollution and degradation.

Policy NR-5.2: Protect Open Space Areas and Water Resources. Conserve undeveloped open space areas and drainage channels for the purpose of protecting water resources in the city's watershed. For new development and post-development runoff, control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the city's National Pollution Discharge Elimination System Permit.

Policy NR-5.5: Arroyo Simi. Restore and protect the Arroyo Simi as a natural resource that contributes to recharge and filtration capability for the watershed.

3.3.2 City of Simi Valley Municipal Code

In conjunction with the *City of Simi Valley General Plan*, the city has adopted a Municipal Code to implement its general plan framework. The following chapters of the Municipal Code may be applicable to one or more Project components:

- **Chapter 9-32, Hillside Performance Standards**, of the City of Simi Valley Municipal Code regulates development within the city's hillside areas. The city is located among a series of major and minor hills that constitute a significant natural topographical feature of the community as they are visible to all persons traveling the major highway arteries, and also to citizens residing in and around the city. The purposes of the hillside performance standards are to implement the provisions of the General Plan as they relate to the preservation of hillside areas, the promotion of single-family, detached housing in hillside areas, the maintenance of open space, the retention of scenic and recreational resources of the city, and to further enhance the public health, safety, or welfare by regulating development in hillside areas.

- **Chapter 9-38, Tree Preservation, Cutting and Removal,** addresses tree protection and preservation, where possible, in order to protect the health, safety, or welfare of the citizens of the city. This chapter of the municipal code defines protected trees as “all historic trees, all mature native oak trees, or any mature trees which are associated with a proposal for urban development, or are located on a vacant parcel.” It also states the process for obtaining tree removal permits, which are required by the city’s Public Works Department. Mature trees are defined in the City of Simi Valley’s Mature Tree Preservation Ordinance (Ordinance No. 1278) as any living native oak tree that has a diameter of 5 inches or more, or a tree of any other species that has a diameter of 9.5 or more inches as measured 4.5 feet above the root crown.

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4 Survey Methods

4.1 Literature Review

Initial literature reviews were conducted on December 13, 2018 and updated literature searches were conducted on April 9, 2020, and March 15, 2021. A list of special-status plant and animal species that have the potential to occur within the Project study area was prepared using information provided by the USFWS' Information for Planning and Consultation Online System (USFWS 2021), CDFW's California Natural Diversity Database RareFind program (CDFW 2021), and CNPS's Inventory of Rare and Endangered Plants of California (CNPS 2021). The Information for Planning and Consultation search was conducted using a shapefile of the Project study area boundaries. The California Natural Diversity Database and CNPS databases were searched for the nine topographic quadrangles including, and surrounding, the Project study area (*Simi Valley East, Simi Valley West, Piru, Val Verde, Newhall, Oat Mountain, Canoga Park, Calabasas,* and *Thousand Oaks, California*). Appendix A provides the March 2021 database search results.

Additional resources reviewed included USGS topographic maps at a minimum 1:24,000 scale (USGS 2020), USFWS National Wetland Inventory dataset (USFWS 2020b), Natural Resource Conservation Service Soil Mapping (United States Department of Agriculture Natural Resource Conservation Service 2020), and aerial imagery available on Google Earth (Google Earth 2020).

4.2 General Biological Field Surveys and Vegetation Mapping

HDR biologists conducted vegetation mapping and habitat assessments for federally and/or state-listed plant and wildlife species within the Project study area on February 6, 2019, and April 21, 2020. After two new signal locations were added to the Project footprint west of the existing at-grade crossings at Sycamore Drive and Erringer Road, a site visit was conducted on January 20, 2021, to survey the new areas for biological resources.

Vegetation communities were mapped using the classification system methodology and associations described in *A Manual of California Vegetatio*n (Sawyer et al. 2009). This classification system was used to provide consistency with the National Vegetation Classification System and is currently the statewide standard for vegetation mapping (Section 1900 of the California Fish and Game Code).

4.3 Rare Plant Habitat Assessment

The rare plant habitat assessment was conducted by HDR on February 6, 2019. The assessment was conducted in accordance with *CNPS Botanical Survey Guidelines* (CNPS 2001) and *CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). The habitat assessment was floristic in nature—all plant species encountered during the survey were identified to the taxonomic level necessary to determine whether or not they were a special-status plant species. Plant nomenclature follows the Jepson Flora Project (Jepson Flora Project 2020). The Calflora online database (Calflora 2020) was also used to assist with plant identification. Based on the results of the habitat assessment, HDR determined that there was no potential for any state and/or federally listed, or other special-status, plant species to occur in the Project footprint.

4.4 Protocol Wildlife Surveys

Based on the results of the vegetation mapping and habitat assessment, focused surveys were conducted in 2020 for the following federally and/or state-listed wildlife:

- Coastal California gnatcatcher (*Polioptila californica;* CAGN) – federally threatened
- Least Bell's vireo (*Vireo belli pusillus*; LBVI) – federally and state endangered
- Southwestern willow flycatcher (*Empidonax traillii extimus*; SWFL) – federally and state endangered

4.4.1 Coastal California Gnatcatcher

Protocol breeding season surveys for CAGN were conducted during the 2020 survey season. Surveys consisted of 6 site visits each separated by at least 7 days from April 21 to June 18, 2020, per protocol specified in the *Coastal California Gnatcatcher Presence/Absence Survey Guidelines* (USFWS 1997).

4.4.2 Least Bell's Vireo

Protocol surveys for LBVI were conducted during the 2020 survey season. Surveys consisted of 8 site visits separated by at least 10 days from April 10 to July 2, 2020, per protocol specified in the *Least Bell's Vireo Survey Guidelines* (USFWS 2001).

4.4.3 Southwestern Willow Flycatcher

Protocol breeding season surveys for SWFL were conducted during the 2020 survey season. Surveys consisted of 5 site visits separated by at least 5 days from May 26 to July 16, 2020, during the appropriate survey periods, per protocol identified in *A Natural History Summary and Survey Protocol for Southwestern Willow Flycatcher* (USGS 2010).

4.5 Jurisdictional Delineation

A jurisdictional delineation to identify and map all potential drainage features within the jurisdictional study area (JSA) was conducted by HDR biologists on April 21, 2020. After two new signal locations were added to the Project footprint west of the existing at-grade crossings at Sycamore Drive and Erringer Road, a site visit was conducted on January 20, 2021, to survey the new areas for jurisdictional aquatic resources. The JSA is smaller than the overall Project study area and consists of the Project's physical footprint, which includes Metrolink ROW within the Project's MP limits, as well as all temporary construction easements. All potential drainage features in accessible areas within the JSA were investigated on foot. The potential jurisdictional limits of features identified were mapped by hand onto a printed aerial with locational data recorded using a handheld global positioning system unit. Notes were taken at each feature, describing drainage type, substrate type, flow regime, presence or absence of vegetation, and any other pertinent details regarding its local hydrology. All features were later digitized using geographic information system software.

The complete methodology used to conduct the jurisdictional delineation is included in the Jurisdictional Delineation Report (Appendix B). Table 4-1 provides a summary of all biological resources surveys conducted in support of the Project.

Table 4-1. Summary of Survey Dates and Surveyors

Survey Type	Survey Date(s)	Surveyor(s)
Vegetation Mapping	2/6/2019	Sarah Barrera
Rare Plant Habitat Assessment	2/6/2019	Shelly Austin
General Biological Survey	4/21/2020 1/20/2021	Ingrid Eich and Erin Martinelli Erin Martinelli
Jurisdictional Delineation Survey	4/21/2020 1/20/2021	Ingrid Eich and Erin Martinelli Erin Martinelli
CAGN Protocol Surveys	4/21/2020-6/18/2020	Ingrid Eich and Erin Martinelli
LBVI Protocol Surveys	4/10/2020-7/2/2020	Adam Lockyer and Aaron Newton; Ingrid Eich and Erin Martinelli; Andrew Phillips
SWFL Protocol Surveys	5/26/2020-7/16/2020	Andrew Phillips

Notes:
CAGN=Coastal California gnatcatcher; LBVI=Least Bell's vireo; SWFL=Southwestern willow flycatcher

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5 Results

5.1 Environmental Setting

The study area is located in southeast Ventura County, in the City of Simi Valley, a highly urbanized area of the county. The study area is adjacent to the northwestern perimeter of the San Fernando Valley, bordered by the Santa Susana Mountains to the north and the Simi Hills to the east and south. The study area and surrounding areas are developed, and most natural vegetation and drainage features have been removed. The Los Angeles area has a Mediterranean climate, characterized by warm, dry summers and cool, moist winters. Simi Valley in particular is warm and temperate with more rain occurring during winter. The average precipitation within the Project study area is 16 inches per year, and most of the rainfall occurs in January and February (U.S. Climate Data 2021).

5.1.1 Soils

The following soil associations are mapped by the United States Department of Agriculture Soils Survey within the Project study area (Figure 5-1) (United States Department of Agriculture Natural Resource Conservation Service 2020):

- **Anacapa Series**: The Anacapa series consists of deep, well drained soils that formed in alluvium derived predominantly from sedimentary rock sources. Anacapa soils occur on floodplains and alluvial fans with 0 to 9 percent slopes.
- **Camarillo Series**: The Camarillo series consists of very deep, somewhat poorly drained soils that formed in alluvium derived from sedimentary rocks. Camarillo soils are on flood plains with 0 to 2 percent slopes. Camarillo loam is mapped within the Project study area and has a hydric soil rating, but it occurs outside of the Project footprint.
- **Metz Series**: The Metz series consists of deep, well drained soils formed in alluvial material derived mostly from sedimentary rocks. Metz soils occur on floodplains and alluvial fans with 0 to 15 percent slopes. Metz loamy fine sand (0 to 2 percent slopes) soils are mapped within the Project study area.
- **Mocho Series**: The Mocho series consists of very deep, well drained soils that formed in alluvium derived mostly from sandstone and shale rock sources. Mocho soils occur on alluvial fans with 0 to 9 percent slopes. Three Mocho series soils are mapped within the Project study area: Mocho clay loam (0 to 2 percent slopes), Mocho loam (0 to 2 percent slopes), and Mocho loam (2 to 9 percent slopes).
- **Pico Series**: The Pico series consists of deep, well drained soils that formed in alluvium mostly from sedimentary rocks. Pico soils occur on floodplains and alluvial fans with 0 to 9 percent slopes. Pico sandy loam (0 to 2 percent slopes) is mapped within the Project study area.
- **Riverwash**: Riverwash consists of very recent depositions of gravel, sand, and silt alluvium along major streams and their tributaries. Gravel bars make up the majority of these areas. During floods, alluvial areas are subject to repeated deposition, erosion, and shifting of transported material. Riverwash is mapped within the Project study area and has a hydric soil rating.

- **Soper Series:** The Soper series consists of moderately deep, well drained soils that formed in material weathered from conglomerate and sandstone. Soper soils occur on hills and uplands with 15 to 50 percent slopes. Soper gravelly loam (30 to 50 percent slopes) is mapped within the Project study area.
- **Zamora Series**: The Zamora series consists of very deep, well drained soils that formed in alluvium from mixed rocks. Zamora soils occur on alluvial fans, stream terraces, and floodplains.

5.1.2 Hydrology

Simi Valley is located within the Calleguas Creek Watershed. This watershed encompasses approximately 343 square miles, predominantly in southern Ventura County, and is generally 30 miles long and 14 miles wide. The northern boundary is formed by South Mountain and Oak Ridge, the northeastern and eastern boundaries are formed by the Santa Susana Mountains, and the southern boundary is formed by the Simi Hills and Santa Monica Mountains.

The watershed includes Conejo Creek, Arroyo Santa Rosa, Arroyo Simi, Arroyo Las Posas, and Calleguas Creek, as well as Revolon Slough and Mugu Lagoon (Calleguas Municipal Water District 2004). Approximately 50 percent of the watershed is undeveloped open space, 25 percent is agricultural land, and the remaining 25 percent is urban land use (Watersheds Coalition of Ventura County 2006). The upper reach of the watershed includes Simi Valley and Las Posas Valley. The main surface water bodies are the Arroyo Simi, Arroyo Las Posas, and the uppermost reach of Calleguas Creek. Groundwater bodies include the Las Posas Basin, one of the major aquifers within the Fox Canyon Aquifer System, the South Las Posas Basin, and the Simi Valley Basin, the latter two of which are both unconfined groundwater basins.

The watershed has relatively few surface water features. There are no natural lakes or major rivers. The surface waters are primarily arroyos and creeks that have historically carried storm flows and post-storm flows from the upper watershed down to the alluvial valleys and the southeastern portion of the Oxnard Plain (Larry Walker Associates 2004). The major drainage course through the City of Simi Valley is the Arroyo Simi. This major channel drains from the extreme limits of the watershed in the east and northeast, then west through the Las Posas Valley (as Arroyo Las Posas) to the Oxnard Plain (as Calleguas Creek), and finally into the Pacific Ocean through Mugu Lagoon (Ventura County Watershed Protection District 2003). In the eastern half of the valley, the Arroyo Simi traverses close to the base of the hills on the southern edge of the valley, while in the western half it traverses diagonally across the valley to the northwest, reaching the center of the valley, from which it discharges downstream toward Moorpark (City of Simi Valley 1990). Tributaries to Arroyo Simi from the Santa Susana Mountains on the north are, from west to east, Alamos Canyon, Brea Canyon, North Simi Drain, Dry Canyon, Tapo Canyon, Chivo Canyon, and Las Llajas Canyon. Canyons draining the Simi Hills from the south are Sycamore Canyon, Bus Canyon, Erringer Road Drain, Runkle Canyon, Meier Canyon, and Black Canyon in the Santa Susana area (Ventura County Watershed Protection District 2003).

The main hydrologic features within the vicinity of the JSA, as shown on the National Wetland Inventory (Figure 5-2), are Arroyo Simi and the Las Llajas Canyon channel to Arroyo Simi. Las Llajas Canyon channel passes beneath East Los Angeles Avenue and the railroad ROW via a concrete box culvert. Arroyo Simi crosses into the southeastern section of the Project study area but is outside of the Project footprint.

Figure 5-1. United States Department of Agriculture Soils overlaid on United States Geological Survey Topographic Map

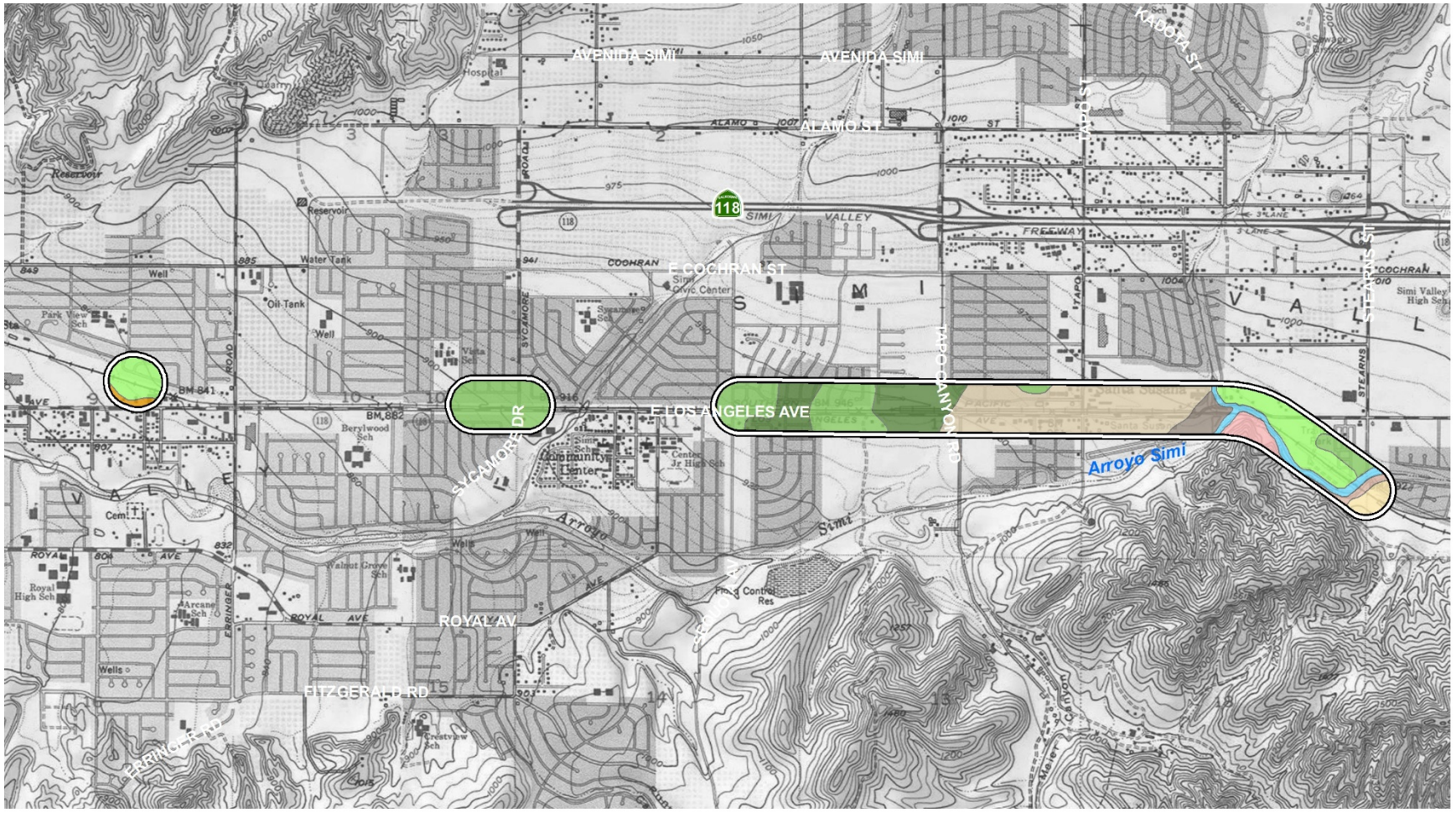

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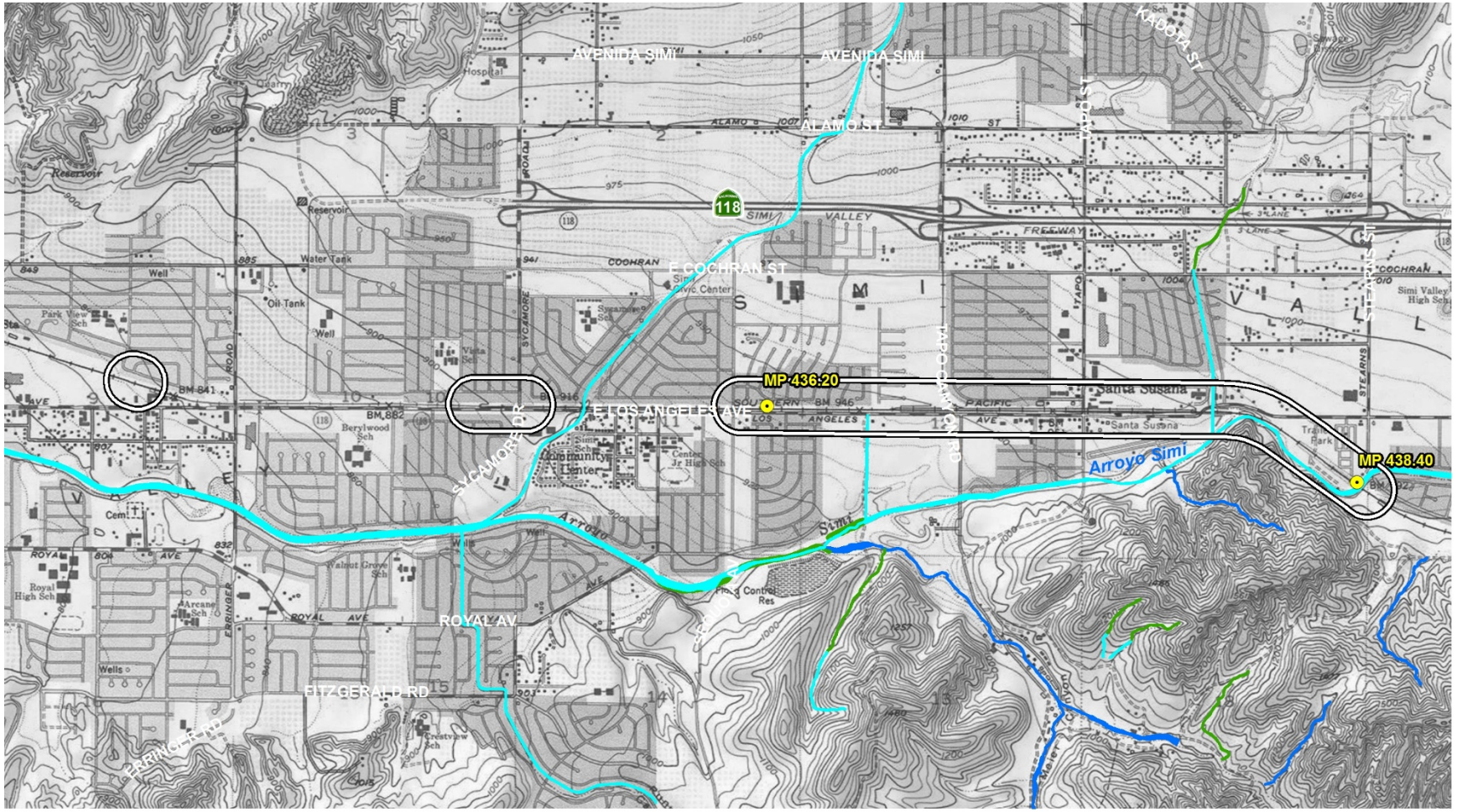
Figure 5-2. National Wetland Inventory Map



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5.1.3 Vegetation Communities and Other Land Cover Types

Vegetation communities and other land cover types in the study area are shown on Figure 5-3. Acreages of vegetation communities and other land cover types in the study area are provided in Table 5-1. Descriptions of vegetation communities and other land cover types are provided below Table 5-1.

Table 5-1. Vegetation Communities and Other Land Cover Types in the Study Area

Vegetation Community or Other Land Cover Type	Area (acres)
Tree-dominated habitats	
Mixed willow riparian forest	1.50
Valley oak woodland	2.72
Native ornamental	1.64
Nonnative Ornamental	1.11
Shrub-dominated habitats	
California sagebrush scrub	9.47
Herbaceous-dominated habitats	
Cattail marsh	2.01
Other land cover types	
Nonvegetated channel	1.39
Disturbed	7.62
Urban/Developed	328.84
Total	**356.28**

Mixed Willow Riparian Forest (*Salix gooddingii* Woodland Alliance and *Salix lasiolepis* Shrubland Alliance)

Mixed willow riparian forest includes a combination of areas dominated by black willow (*Salix gooddingii*) and areas dominated by arroyo willow (*Salix lasiolepis*), or a mix of the two species. The black willow alliance typically occurs on terraces along large rivers, canyons, and along rocky floodplains of small, intermittent streams, seeps, and springs. Trees are less than 30 meters in height, with an open to continuous canopy and shrub layer, and a variable herbaceous layer (Sawyer et al. 2009). The arroyo willow alliance typically occurs primarily along stream banks and benches, slope seeps, and stringers along drainages. Arroyo willow is dominant or co-dominant in the shrub layer with at least five percent relative cover and grows on seasonally or intermittently flooded sites. Trees are less than 10 meters in height, with an open to continuous canopy and a variable herbaceous layer (Sawyer et al. 2009).

Within the Project study area, willow riparian forest covers approximately 1.50 acre.

Valley Oak Woodland (*Quercus lobata* Forest and Woodland Alliance)

Valley oak woodland is dominated by valley oak (*Quercus lobata*) with at least 35 percent relative cover in the tree canopy. This alliance typically occurs in valley bottoms, on lower slopes, and on

summit valleys. Trees are less than 30 meters in height with an open to continuous canopy, an open to intermittent shrub layer, and a grassy herbaceous layer (Sawyer et al. 2009).

Within the Project study area, valley oak woodland occurs on the southern edge of the Project study area and covers approximately 2.72 acres.

Native Ornamental

The Project study area includes small areas of mature, native coast live oak and western sycamore (*Platanus racemosa*) trees that are surrounded by development and serve as ornamental trees. Mature native trees, especially oak trees, may be protected by state regulations and local ordinances and are, therefore, identified separately from nonnative ornamental trees.

Within the Project study area, native trees that serve as ornamental trees occur along the rail ROW, parking lots, and roads, covering approximately 1.64 acre.

Nonnative Ornamental

Areas with ornamental vegetation are typically found near development, along streets, and in parks. This vegetation usually consists of irrigated plants and trees that are not native but may include native species that are intentionally planted.

Within the Project study area, stands of nonnative ornamental trees, including Peruvian pepper trees (*Schinus molle*), are located on the northeast corner of E. Los Angeles Avenue and Tapo Canyon Road, covering approximately 1.11 acre.

California Sagebrush Scrub (*Artemisia californica* Shrubland Alliance)

California sagebrush scrub is dominated by California sagebrush (*Artemisia californica*), which accounts for at least 50 percent relative cover in the shrub layer. This alliance usually occurs on steep slopes that are rarely flooded and on low-gradient deposits along streams. Shrubs are typically less than 2 meters in height, with an intermittent to continuous canopy and an herbaceous layer that is variable both seasonally and annually (Sawyer et al. 2009).

Within the Project study area, California sagebrush scrub occurs primarily in the southern portion of the Project study area and covers approximately 9.47 acres.

Cattail Marsh (Typha angustifolia, domingensis, latifolia Herbaceous Alliance)

Cattail marsh is dominated by one or more species of cattail (*Typha* spp.), with at least 50 percent relative cover in the herbaceous layer. Cattails are rhizomatous and grow in dense colonies forming uniform stands that are not proximally associated with other plants except generally as wetland affiliates. This alliance usually occurs in semi-permanently flooded freshwater or brackish marshes. Herbaceous plants are typically less than 1.5 meters in height, with intermittent to continuous cover (Sawyer et al. 2009).

Within the Project study area, cattail marsh occurs on the southern edge of the Project study area, covering approximately 2.01 acres.

Nonvegetated Channel

Nonvegetated channels are natural or artificial (e.g., concrete-lined) beds in which water flows intermittently and that do not support vegetation. Concrete-lined or unvegetated earthen channels occur within the Project study area, covering approximately 1.39 acre.

Disturbed

Areas labeled disturbed are areas where natural communities have been impacted to the extent that they no longer function naturally. These areas have been previously physically disturbed but continue to retain a soil substrate. Disturbed areas consist of predominantly nonnative weedy and ruderal species. This is not a natural community and generally does not provide habitat for wildlife or special-status species, though exceptions occur. Examples of disturbed areas include areas that have been graded for development or cleared for fuel management, staging areas, off-road vehicle trails, and abandoned home or business lots.

Within the Project study area, disturbed areas occur as vacant lots and the railroad ROW, covering approximately 7.62 acres.

Urban/Developed

Urban/developed land refers to areas that have been manipulated by grading and compacting soils to build infrastructure, such as roads, buildings, parks, fields, etc. These areas have no biological function or value, except that they may provide habitat for nesting birds.

Within the Project study area, paved roads, associated landscaping, and portions of the Metrolink ROW were mapped as urban/developed. Urban/developed habitat occupies approximately 328.84 acres of the Project study area.

Special-status Vegetation Communities

A special-status vegetation community is one that has a state rarity rank of critically imperiled and at very high risk (S1), imperiled and at high risk (S2), or vulnerable and at moderate risk (S3) as determined by the NatureServe Heritage Program Status Ranking system (Faber-Langendoen et al. 2012) or is identified as subject to local, state, or federal regulations (e.g., oak woodland alliance and vegetation communities meeting USACE's three-parameter wetland criteria). Definitions of the state ranks are as follows:

- **S1:** Critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors
- **S2:** Imperiled and at high risk of extinction or elimination due to a very restricted range, very few populations or occurrences, steep declines, or other factors
- **S3:** Vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors

The Project study area supports two special-status vegetation communities: valley oak woodland and black willow thickets, both of which have a state rarity rank of S3.

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area
(Sheet 1 of 7)

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area (Sheet 2 of 7)

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area (Sheet 3 of 7)

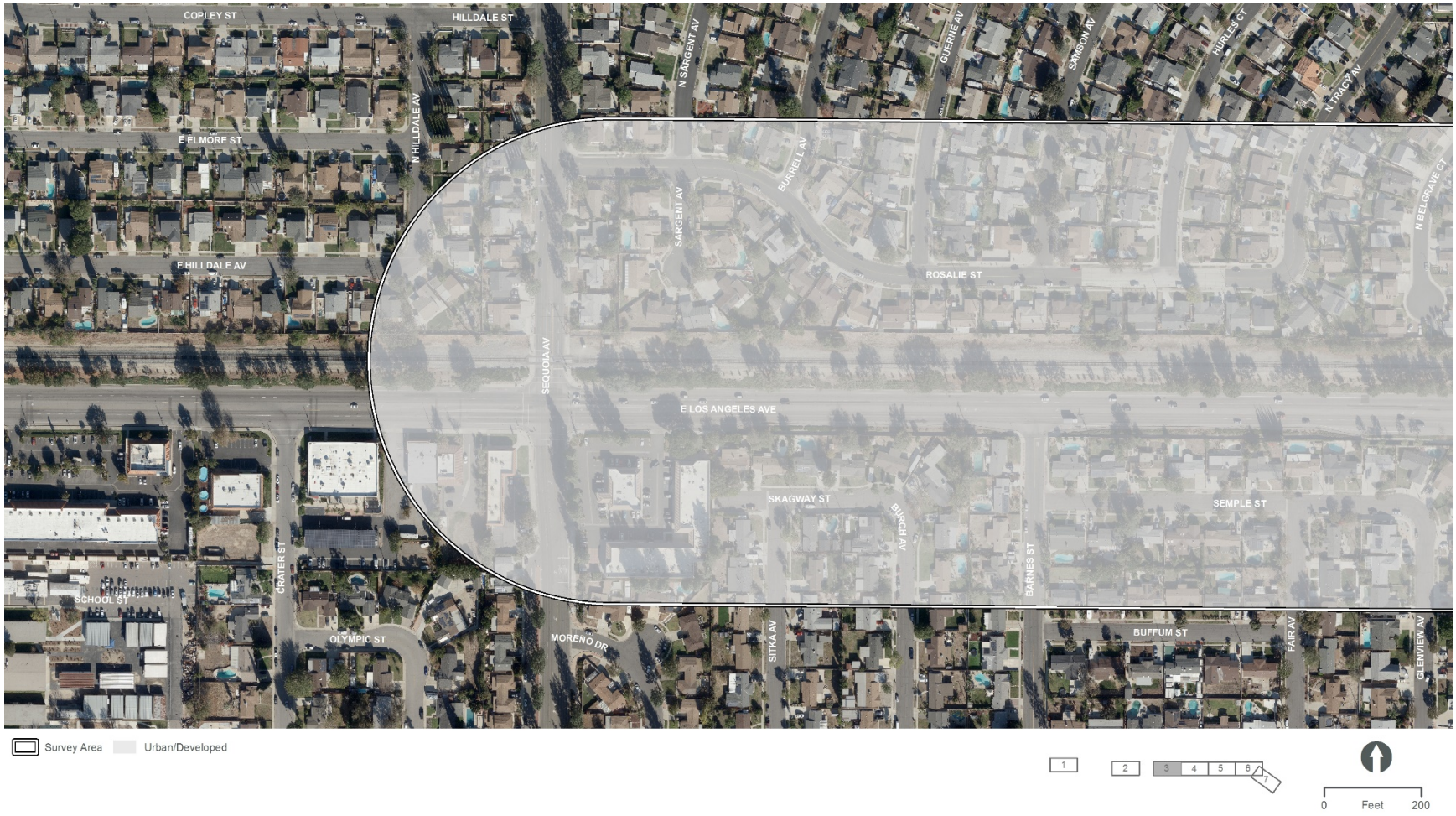

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area (Sheet 4 of 7)

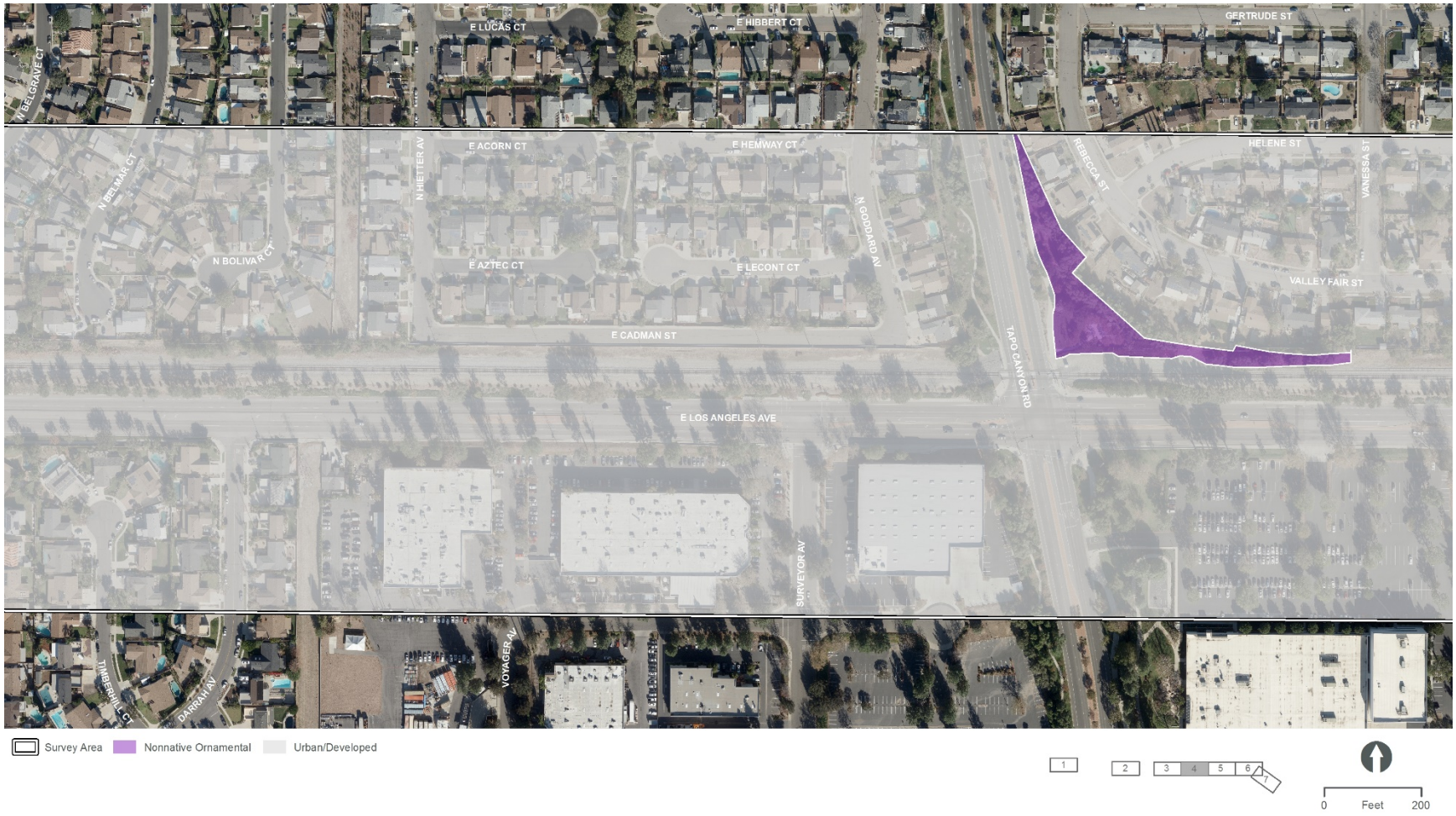

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area (Sheet 5 of 7)

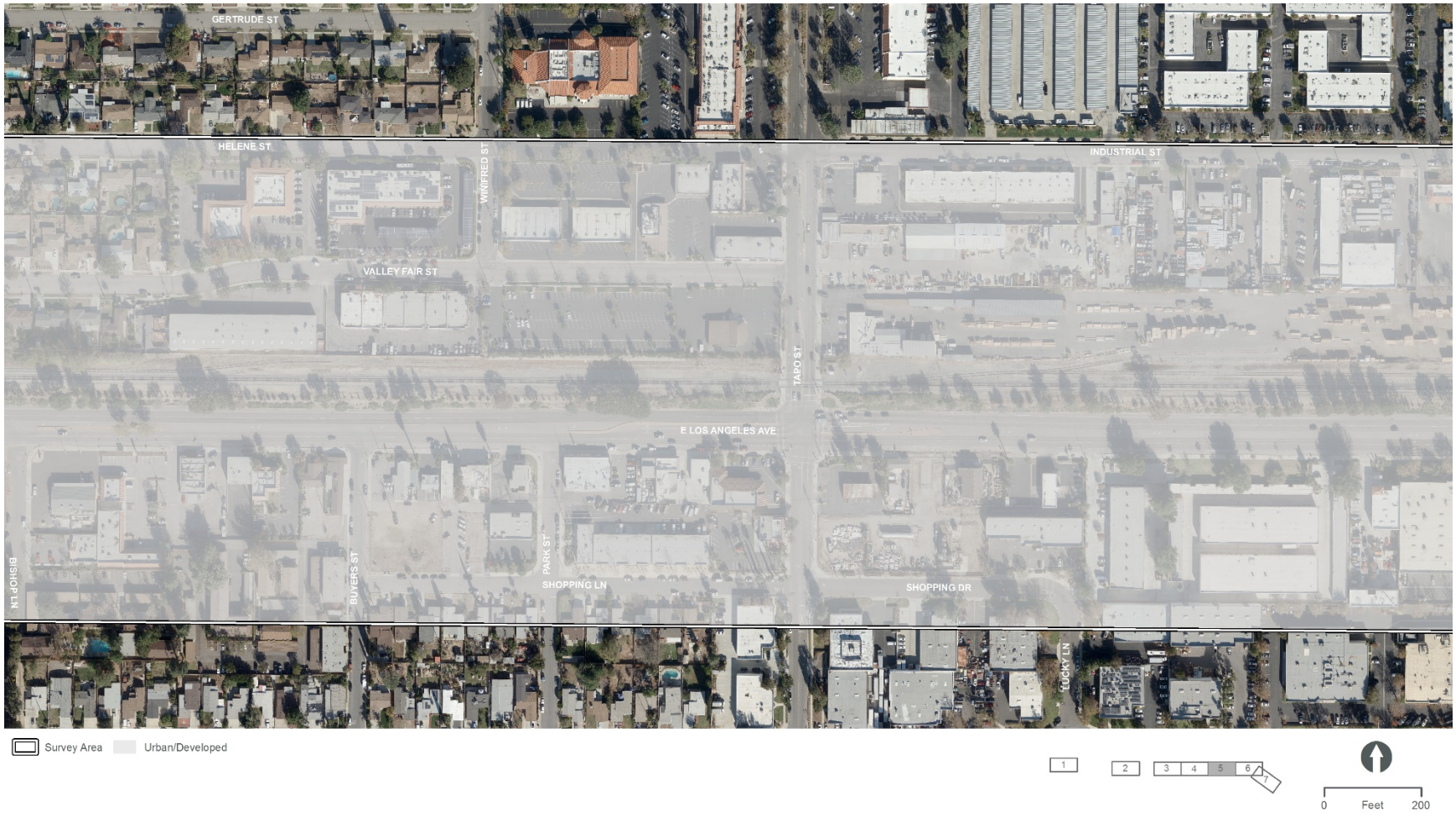

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area (Sheet 6 of 7)

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Figure 5-3. Vegetation Communities and Other Land Cover Types in the Project Study Area (Sheet 7 of 7)

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5.1.4 Plant Species

During the general biological survey and rare plant habitat assessment, all native and naturalized botanical species observed were recorded (Appendix C). Based on the results of this survey, 75 vascular plant species were documented within the Project study area. The species detected are representative of the vegetation communities located within the Project study area. Special-status botanical species observed or with the potential to occur within the Project study area are discussed in Section 6.2.

Common plant species observed during the field survey include Peruvian pepper tree, Maltese star-thistle (*Centaurea melitensis*), sow thistle (*Sonchus* spp.), black mustard (*Brassica nigra*), ripgut grass (*Bromus diandrus*), California sagebrush (*Artemisia californica*), and valley oak (*Quercus lobata*). A list of all plant species observed in the Project study area is provided in Appendix C.

Federally and/or State-Listed Plant Species

Based on the literature search, of the 55 special-status vascular plant species evaluated for potential to occur within the study area, 15 are federally and/or state listed. Details for these special-status plant species, including habitat, life form, blooming period, and potential to occur within the study area are provided in Appendix D.

The majority of the Project study area is surrounded by urban and developed areas that would not support federally and/or state-listed plant species. A portion of the Project study area located outside of the Project footprint contains California sagebrush scrub, which has the potential to support one state-listed rare plant species: Santa Susana tarplant (*Deinandra minthornii*). The other 14 federally and/or state-listed plant species identified from the literature search are not expected to occur due to a lack of suitable habitat and/or soils or the Project study area is located outside of the species known elevation range.

Other Special-Status Plant Species

Based on the literature search, of the 55 special-status vascular plant species evaluated for potential to occur within the Project study area, 40 are not federally or state listed, but are CRPR List 1B, 2B, 3, or 4 plants.[2] Details for these special-status plant species, including habitat, life form, blooming period, and potential to occur within the study area are provided in Appendix D.

Since the Project study area is highly disturbed and surrounded by developed areas, it is not expected to support any of these species. No special-status plants were observed within the Project study area during the field survey. Of the 40 nonlisted plant species identified from the literature search, 3 species have a low potential of occurring within the Project study area based on the presence of suitable habitat: Payne's bush lupine (*Lupinus paynei,* CRPR 1B.1) and Catalina mariposa lily (*Calochortus catalinae,* CRPR 4.2) within California sagebrush scrub *o*n the slopes located in the southeastern portion of the study area; and southern California black walnut (*Juglans californica*, CRPR 4.2) in woodland and scrub communities in the Project study area, outside of the Project footprint. The other 37 special-status plant species identified from the literature search are not expected to occur due to a

[2] California Rare Plant Rank (CRPR) 1B=Plants rare, threatened, or endangered in California and elsewhere; CRPR 2B=Plants rare, threatened or endangered in California but more common elsewhere; CRPR 3=Plants needing more information; CRPR 4=Plants of limited distribution. Threat ranks: 0.1=Seriously endangered in California. 0.2=Fairly endangered in California.

lack of suitable habitat and/or soils or the Project study area is located outside of the species' known elevation range.

5.1.5 Wildlife Species

Wildlife species observed during the survey include species commonly found in disturbed and developed areas, such as common side blotch lizard (*Uta stansburiana*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*) northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), and California ground squirrel (*Otospermophilus beecheyi*). A list of all wildlife species observed in the Project study area is provided in Appendix C.

Federally and/or State-Listed Wildlife Species

Based on the results of the literature review, 16 federally and/or state-listed wildlife species, or candidates under consideration for listing are known from the vicinity of the Project study area. Of those 16 species, 5 were found to have potential to occur within the Project study area, as follows:

- Amphibians:
  - Arroyo toad (*Anaxyrus californicus*, federally endangered, SSC)
  - California red-legged frog (*Rana draytonii*, federally threatened, SSC)
- Birds:
  - CAGN (Polioptila californica californica, federally threatened, SSC)
  - LBVI (*Vireo bellii pusillus*, federally endangered, state endangered)
  - SWFL (Empidonax traillii extimus, federally endangered, state endangered)

Appendix C identifies all listed wildlife species known to occur in the vicinity of the Project and their potential to occur within the Project study area.

The primary aquatic drainage feature within the Project study area, Arroyo Simi, provides suitable habitat for Arroyo toad, which has a moderate potential to occur, and California red-legged frog, which has a low potential to occur within the Project study area. However, suitable habitat for these two amphibian species lies outside of the Project footprint. Due to the presence of potentially suitable nesting habitat for three listed bird species within the Project study area, protocol presence/absence surveys for CAGN, LBVI, and SWFL were conducted during the breeding season for these species, as described below.

Coastal California Gnatcatcher

CAGN was federally listed as threatened in 1993. CAGN typically occurs in or near coastal scrub vegetation that is composed of relatively low-growing, dry-season deciduous and succulent plants. CAGN also occurs in chaparral, grassland, and riparian vegetation communities where coastal scrub is nearby (Bontrager 1991). CAGN tends to occur most frequently in the coastal sagebrush–dominated stands on mesas, gently sloping areas, and along the lower slopes of the Coast Ranges (Atwood 1990). CAGN occurs in high frequencies and densities in coastal scrub communities with an open or broken canopy, but it is absent from coastal scrub dominated by tall shrubs and occurs in low frequencies and densities in low coastal scrub with a closed canopy (Weaver 1998).

No CAGN were detected during protocol surveys. The protocol survey report is included as Appendix E.

Least Bell's Vireo

LBVI was federally listed as endangered in 1986 and state listed as endangered in 1980. LBVI is the westernmost subspecies of Bell's vireo and breeds entirely within southern California and Baja California. The LBVI breeding season extends from March through September. During the breeding season, LBVI is restricted to riparian woodland and riparian scrub. Early to mid-successional riparian habitat is typically used for nesting by LBVI because it supports the dense shrub cover required for nest concealment as well as a structurally diverse canopy for foraging.

No LBVI were detected during protocol surveys. However, an incidental detection of LBVI occurred during the June 9, 2020, SWFL survey. There were no observations of LBVI before or after June 9, 2020, during surveys conducted for the Project and it is presumed that the individual observed on June 9 was dispersing through the Project study area. The protocol survey report is included as Appendix F.

Southwestern Willow Flycatcher

SWFL was federally listed as endangered in 1995 and state listed as endangered in 1991. SWFL is a migratory passerine that breeds in the southwestern U.S. and winters in Mexico, Central America, and potentially in northern areas of South America. SWFL breed in riparian habitats characterized by dense vegetation within close proximity to open water or saturated soil. Vegetation structure and size of the riparian stand, rather than plant species, is more indicative of flycatcher breeding habitats.

No SWFL were detected during protocol surveys. The protocol survey report is included as Appendix G.

Other Special-Status Wildlife

Based on the results of the literature review, 21 wildlife species that are not listed under FESA or CESA but are considered California SSCs or are fully protected, including by the Bald and Golden Eagle Protection Act, have potential to occur within the Project vicinity (Appendix D). Thirteen of these species have potential to occur within the Project study area:

- Reptiles:
  - Western pond turtle (*Emys marmorata*, SSC)
  - Coast horned lizard (*Phyrnosoma blainvilli*, SSC)
  - Coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC)
  - Southern California legless lizard (*Anniella stebbinsi*, SSC)
  - California glossy snake (*Arizona elegans occidentalis*, SSC)
  - Two-striped gartersnake (*Thamnophis hammondii,* SSC)
- Birds:
  - White-tailed kite (*Elanus leucurus*, fully protected), Yellow-breasted chat (*Icteria virens*, SSC)
  - Yellow warbler (*Setophaga petechia,* SSC)

- Mammals:
  - Pallid bat (*Antrozous pallidus*, SSC)
  - Spotted bat (*Euderma maculatum*, SSC)
  - Western mastiff bat (*Eumops perotis californicus*, SSC)
  - San Diego desert woodrat (*Neotoma lepida intermedia*, SSC)

However, suitable habitat for all these species does not occur within the Project footprint, and direct impacts on these species are not anticipated.

During initial habitat mapping, potential suitable habitat for burrowing owl (*Athene cunicularia*) was evaluated. While ground squirrel burrows were observed in several areas of the Project study area, none of them were considered suitable to support burrowing owl due to the lack of large enough tracts (5 acres or greater) of open habitat suitable to support an individual or pair of burrowing owls.

The Project study area provides potential foraging habitat for white-tailed kite, a state fully protected species. However, suitable nesting habitat for this species is absent from the Project study area, and suitable foraging habitat is absent from the Project footprint.

The only special-status wildlife species observed during breeding season surveys in the Project study area was yellow warbler. As stated above, suitable habitat for yellow warbler is not present within the Project footprint and, as such, direct impacts by the Project on this species are not anticipated.

5.2 Jurisdictional Aquatic Resources

The JSA is located in the Calleguas Creek watershed, and flows that originate within the JSA are conveyed primarily by Arroyo Simi and Las Llajas Canyon channel, a tributary to Arroyo Simi (Figure 5-4).

The only jurisdictional aquatic resources located within the immediate vicinity of the JSA are Arroyo Simi, which is located just outside of the JSA, and Las Llajas Canyon channel, which is tributary to Arroyo Simi and passes beneath the rail ROW and East Los Angeles Avenue via a concrete box culvert (Appendix B, Photographs 17 and 20). There were also no potentially jurisdictional aquatic resource features observed in the two westernmost signal location areas subsequently surveyed on January 20, 2021. Detailed information on the existing site conditions related to jurisdictional areas is provided in the Jurisdictional Delineation Report (Appendix B).

Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 7 of 11)

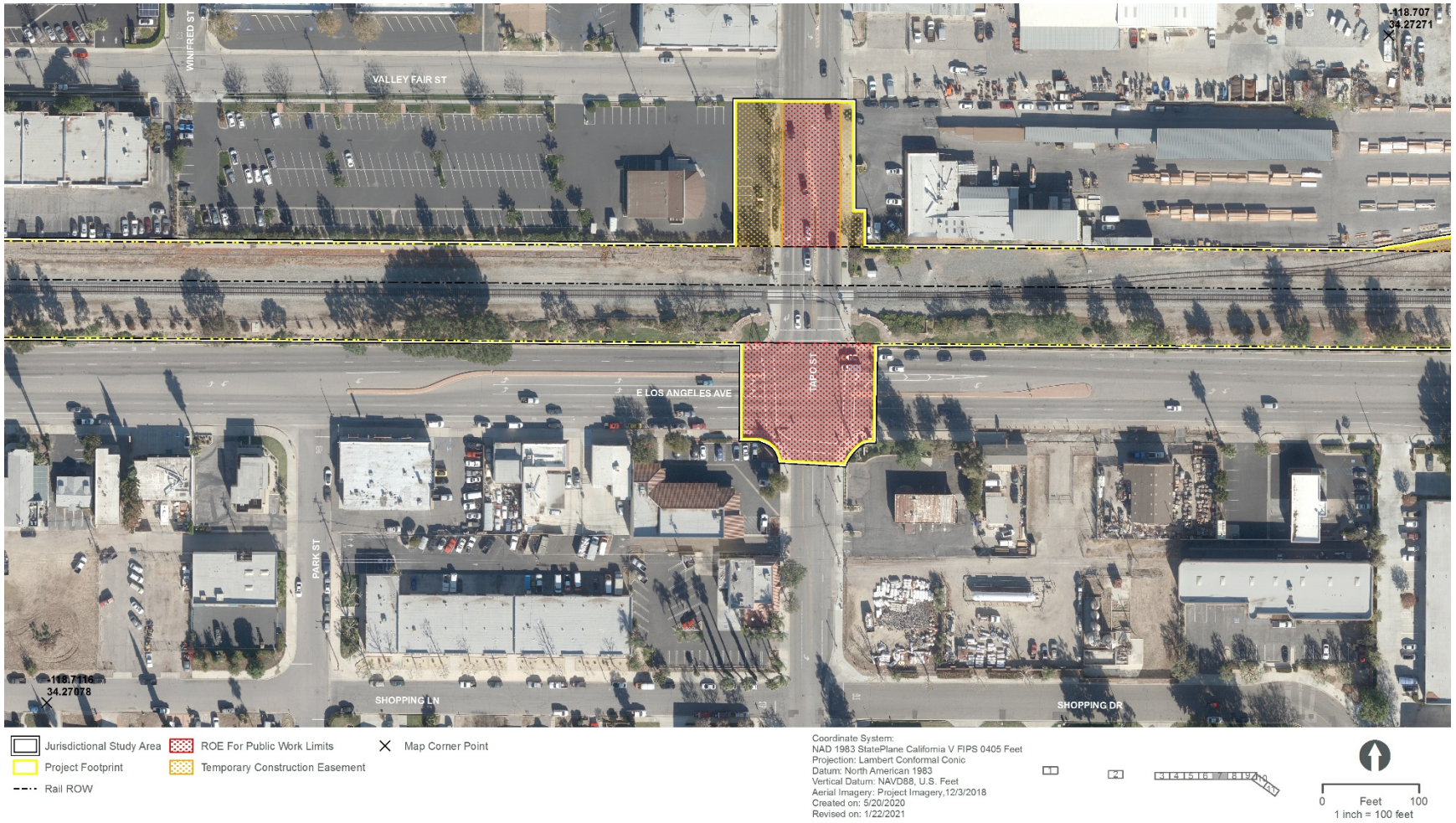

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map

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Figure 5-4. Jurisdictional Delineation Map
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Figure 5-4. Jurisdictional Delineation Map

(Sheet 11 of 11)

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5.2.1 United States Army Corps of Engineers Jurisdiction

There are no wetland or nonwetland waters of the U.S. that would be subject to USACE jurisdiction under Section 404 of the CWA within the JSA.

5.2.2 Regional Water Quality Control Board Jurisdiction

There are no waters of the state that would be subject to RWQCB jurisdiction under Section 401 of the CWA or the Porter Cologne Act within the JSA.

5.2.3 California Department of Fish and Wildlife Jurisdiction

There are no features that exhibit streambed and stream banks and/or riparian vegetation that would be subject to CDFW jurisdiction under Section 1600 et seq. of the California Fish and Game Code within the JSA.

5.3 Nesting Birds

Suitable habitat to support nesting birds protected under the MBTA and California Fish and Game Code Section 3500 et seq. within the Project study area includes trees located outside of the ROW. There is also low potential for ground-nesting birds, such as killdeer (*Charadrius vociferus*), to nest within portions of the ROW, although the high level of disturbance and lack of nearby foraging habitat reduces the potential for nests to occur within the ROW. A number of native bird species were observed in the Project study area (Appendix C).

5.4 Wildlife Corridors and Habitat Linkages

Wildlife movement corridors, also called dispersal corridors or landscape linkages, are linear features whose primary wildlife function is to connect at least two significant habitat areas (Beier and Loe 1992). Other definitions of corridors and linkages are as follows:

- A corridor is a specific route used for movement and migration of species. A corridor may be different from a linkage because it represents a smaller or narrower avenue for movement. Linkage means an area of land which supports or contributes to the long-term movement of wildlife and genetic material.
- A linkage is a habitat area that provides connectivity between habitat patches, as well as year-round foraging, reproduction, and dispersal habitat for resident plants and animals.

Wildlife corridors and linkages are important features in the landscape, and the viability and quality of a corridor or linkage are dependent on site-specific factors. Topography and vegetative cover are important factors for corridors and linkages. These factors should provide cover for both predator and prey species. They should direct animals to areas of contiguous open space or resources and away from humans and development. The corridor or linkage should be buffered from human encroachment and other disturbances (e.g., light, loud noises, domestic animals) associated with developed areas that have caused habitat fragmentation (Schweiger et al. 2000). Wildlife corridors and linkages may function at various levels depending upon these factors and, as such, the most successful of wildlife corridors and linkages would accommodate all or most of the necessary life requirements of predator and prey species.

Areas not considered as functional wildlife dispersal corridors or linkages are typically obstructed or isolated by concentrated development and heavily traveled roads, known as chokepoints. One of the worst scenarios for dispersing wildlife occurs when a large block of habitat leads animals into cul de sacs of habitat surrounded by development. These habitat cul de sacs frequently result in adverse human/animal interface.

The Project study area is highly urbanized, and the existing railroad corridor exhibits very little vegetative cover, limiting its potential for use by wildlife. The Project study area likely supports some local, nocturnal, urban-adapted animal movement. Additionally, Arroyo Simi runs parallel to, and south of, the Project footprint and provides a potential west-to-east corridor for wildlife, connecting tracts of open space. Las Llajas Canyon channel also has the potential to support urban-animal adapted movement. However, Arroyo Simi and Las Llajas Canyon channel are outside of the Project footprint.

6 Impacts Analysis

For the purpose of this analysis, all biological resources within the Project study area are considered subject to direct impacts from one of the following: permanent easement, temporary construction easement, and railroad ROW, as depicted on Figure 6-1 (Sheets 1 through 7). Habitats adjacent to these areas would be subject to potential indirect impacts.

6.1 Vegetation Communities and Other Land Cover Types

The Project would result in a total of 33.90 acres of impacts on vegetation communities (ornamental) and other land cover types (disturbed and urban/developed) within the Project study area, as indicated in Table 6-1 and on Figure 6-1 (Sheets 1 through 7).

Table 6-1. Potential Project Impacts on Vegetation Communities

Vegetation Community	Total Acres	Potential Project Impacts			
		Easement	Temporary Construction Easement	ROW	Total
Tree-dominated habitats					
Mixed willow riparian forest	1.50	0.00	0.00	0.00	0.00
Valley oak woodland	2.72	0.00	0.00	0.00	0.00
Native ornamental	1.64	0.00	0.00	0.29	0.29
Nonnative ornamental	1.11	0.00	0.00	0.26	0.26
Shrub-dominated habitats					
California sagebrush scrub	9.47	0.00	0.00	0.00	0.00
Herbaceous-dominated habitats					
Cattail marsh	2.01	0.00	0.00	0.00	0.00
Other land cover types					
Nonvegetated Channel	1.39	0.00	0.00	0.00	0.00
Disturbed	7.62	0.0	2.50	1.26	3.76
Urban/developed	328.84	0.05	0.74	28.78	29.57
Total	**356.28**	**0.05**	**3.25**	**30.60**	**33.90**

Notes:
Totals may not add up due to rounding.
ROW=right-of-way

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

(Sheet 1 of 7)

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

(Sheet 4 of 7)

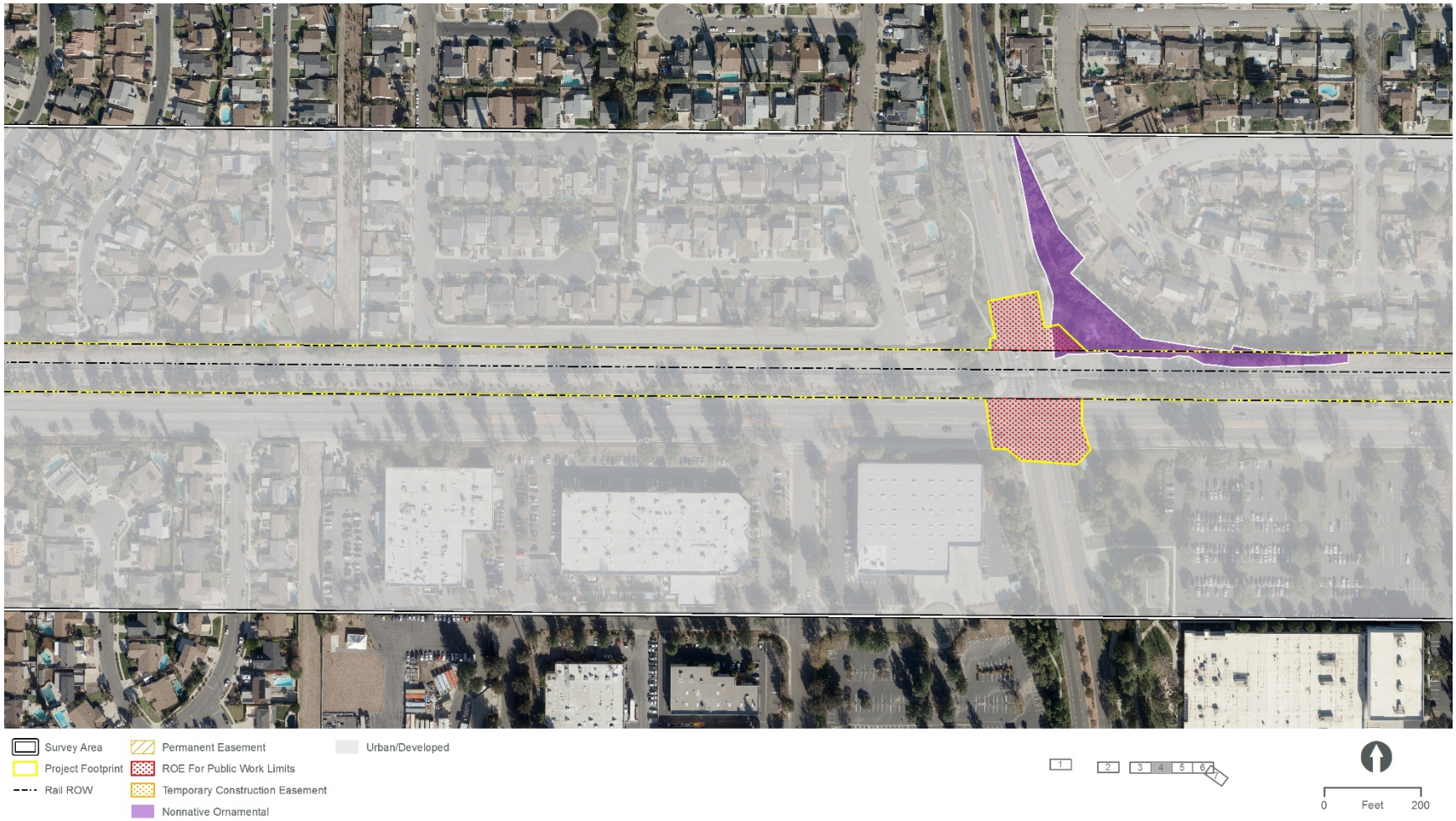

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

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Figure 6-1. Proposed Project Impacts on Vegetation Communities

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6.1.1 Riparian Habitat and Other Special-Status Vegetation Communities

Riparian habitat and other special-status vegetation communities, such as valley oak woodland, occur outside of the Project footprint and would not be directly affected by the Project. With implementation of standard best management practices described in Mitigation Measure BR-1, there would be no indirect impacts on special-status vegetation communities.

6.2 Plant Species

6.2.1 Federally and/or State-Listed Plant Species

The majority of the Project study area consists of urban and developed habitats. However, an area of California sagebrush scrub is located along the slopes in the southwest portion of the Project study area. As discussed above, one state rare plant species has the potential to occur within California sagebrush scrub, Santa Susana tarplant (*Deinandra minthornii*). However, this habitat occurs outside of the Project footprint; therefore, federally, and/or state listed plant species would not be directly affected by the Project. With implementation of standard best management practices described in Mitigation Measure BR-1, there would be no indirect impacts on Santa Susan tarplant, which may occur outside of the Project footprint.

6.2.2 Other Special-Status Plant Species

The majority of the Project study area consists of urban and developed habitats. However, California sagebrush scrub and valley oak woodland occur along the southeastern edge of the Project study area. As discussed above, three special-status plant species have the potential to occur within California sagebrush scrub (Catalina mariposa lily and Payne's bush lupine) and woodland habitat (Southern California black walnut). However, these habitats occur outside of the Project footprint; therefore, special-status plant species would not be directly affected by the Project. With implementation of standard best management practices described in Mitigation Measure BR-1, there would be no indirect impacts on Catalina mariposa lily, Payne's bush lupine, or Southern California black walnut, which may occur outside of the Project footprint.

6.3 Wildlife Species

6.3.1 Federally and/or State-Listed Wildlife Species

As discussed above, the Project study area includes suitable habitat for five federally and/or state-listed wildlife species: arroyo toad, California red-legged frog, CAGN, LBVI, and SWFL. Suitable habitat for these species occurs within the Project study area, however, it occurs outside of the Project footprint. Therefore, no direct impacts on these species would occur. Indirect impacts on these species could occur if these species were present in areas adjacent to the Project footprint during construction. Indirect impacts may include decreased water quality; damage to potential foraging habitat resulting from fugitive dust associated with construction; or disruption of foraging, breeding, or communication resulting from additional noise associated with Project construction and operation. Mitigation Measure BR-1 would minimize or avoid potential indirect impacts on arroyo toad, California red-legged frog, CAGN, LBVI, and SWFL.

6.3.2 Other Special-Status Wildlife Species

Based on the results of the literature review, 13 wildlife species that are not listed under FESA or CESA but that are considered California SSCs have potential to occur within the Project study area (Appendix D). These species; western pond turtle, coast horned lizard, coastal whiptail, southern California legless lizard, California glossy snake, two-striped gartersnake, white-tailed kite, yellow-breasted chat, yellow warbler, pallid bat, spotted bat, western mastiff bat, and San Diego desert woodrat; could utilize the native habitats, including the riparian areas associated with Arroyo Simi, within the Project study area. However, suitable habitat for all these species is absent from the Project footprint; therefore, they would not be directly impacted by the Project.

Indirect impacts on these species could occur if these species were present in areas adjacent to the Project footprint during construction. Indirect impacts may include decreased water quality; damage to potential foraging habitat resulting from fugitive dust associated with construction; or disruption of foraging, breeding, or communication resulting from additional noise associated with Project construction and operation. Mitigation Measure BR-1 would minimize or avoid potential indirect impacts on western pond turtle, coast horned lizard, coastal whiptail, southern California legless lizard, California glossy snake, two-striped gartersnake, white-tailed kite, yellow-breasted chat, yellow warbler, pallid bat, spotted bat, western mastiff bat, and San Diego desert woodrat.

Project-related indirect impacts on any bat species foraging in Arroyo Simi are not anticipated because construction would occur during daylight hours, and bats forage before and after daylight hours. If nighttime construction occurs, Mitigation Measure BR-1 would be implemented to avoid potential indirect impacts of lighting on special-status bat species that may be foraging in Arroyo Simi.Yellow warbler was observed during the breeding season within the Project study area. Suitable nesting habitat for yellow warbler occurs outside of the Project footprint and therefore would not be directly affected by the Project. Mitigation Measure BR-2 would be implemented to avoid potential indirect impacts on yellow warbler.

6.3.3 Migratory Bird Treaty Act/Migratory Birds and Raptors

Suitable nesting and foraging habitat for birds protected by the MBTA and California Fish and Game Code Sections 3500 et seq. occurs within and adjacent to the Project footprint. Direct impacts on an active nest, which could result from, for example, removal of vegetation or demolition of a structure that contains an active nest, would be considered significant and adverse. Indirect impacts could result from disturbance of nesting birds due to increased noise or human presence near an active nest, for example. Mitigation Measure BR-2 would reduce these impacts to less than significant.

6.4 Jurisdictional Aquatic Resources

No potential jurisdictional features were identified within the JSA. However, potential jurisdictional features adjacent to the JSA have the potential to be indirectly affected by Project construction. Mitigation Measure BR-1 would be implemented to reduce these impacts to less than significant.

6.5 Wildlife Corridors and Habitat Linkages

The Project study area is highly urbanized, and the existing railroad corridor exhibits minimal vegetative cover, limiting its potential for use by wildlife. It likely supports some local, nocturnal, urban-adapted animal movement. Additionally, Arroyo Simi runs parallel to and south of the Project footprint and provides a potential west-to-east corridor for wildlife, connecting tracts of open space.

The Las Llajas Canyon channel within the Project study area also has the potential to support urban-animal adapted movement. However, the Arroyo Simi and Las Llajas Canyon channel are outside of the Project footprint and would not be directly affected by the Project. Furthermore, since a majority of Project construction and operation would occur during daylight hours and since wildlife typically utilize corridors before and after daylight hours. it is highly unlikely that the proposed Project would have any impact on wildlife movement in the Arroyo Simi or Las Llajas Canyon channel.

6.6 Local Policies

The Project is generally consistent with local policies pertaining to the protection of biological resources, as detailed in Table 6-2. However, consistency with the City of Simi Valley Municipal Code Chapter 9-38, Tree Preservation, would require that an arborist, horticulturist, or registered landscape architect conduct a survey for protected trees within the Project footprint to determine the potential for direct impacts on protected trees, prepare a tree report, and outline the requirements for a tree removal permit, per Mitigation Measure BR-3.

Table 6-2. Compliance with Local Policies

Policy/Goal	Project Consistency	Consistent? (Yes/No)
City of Simi Valley General Plan		
Goal NR-1: Natural resources of importance to the City of Simi Valley and its Planning Area are conserved, enhanced, and protected.		
Policy NR-1.1: Protect, conserve, and maintain the open space, hillside, and canyon areas that provide a buffer zone around the city's urban form, serve as designated habitat for sensitive species, and provide recreation opportunities for residents and visitors.	The Project would protect, conserve, and maintain the open space, hillside, and canyon areas that provide a buffer zone around the city's urban form, serve as designated habitat for sensitive species, and provide recreation opportunities for residents and visitors, where feasible.	Yes
Policy NR-1.2: In open space areas, uses requiring grading or other alteration of land shall maintain the natural topographic character and ensure that downstream properties and watercourses are not adversely affected by siltation or chemical runoff.	The Project would ensure, where feasible, that in open space areas, uses requiring grading or other alteration of land would maintain the natural topographic character and ensure that downstream properties and watercourses are not adversely affected by siltation or chemical runoff.	Yes
Policy NR-1.6: Preserve open space in its natural form. Prioritize preservation of open space that can support Sensitive, Endangered, and Protected species, as defined by the county, state, and federal governments, as part of a contiguous system that allows the movement of wildlife from one habitat area to another.	The Project would, where feasible, preserve open space in its natural form, prioritize preservation of open space that can support sensitive, endangered, and protected species, as defined by the county, state, and federal governments, as part of a contiguous system that allows the movement of wildlife from one habitat area to another.	Yes
Policy NR-1.11: Enhance and conserve the Arroyo Simi and its tributaries as a natural resource for scenic and passive recreational enjoyment by the community.	The Project would, where feasible, enhance and conserve the Arroyo Simi and its tributaries as a natural resource for scenic and passive recreational enjoyment by the community.	Yes

Table 6-2. Compliance with Local Policies

Policy/Goal	Project Consistency	Consistent? (Yes/No)
Goal NR-2: Plant and wildlife habitat are preserved and enhanced and wildlife movement corridors are protected.		
Policy NR-2.1: Encourage the preservation of trees and native vegetation in development projects. Require that new development utilizes creative land planning techniques to preserve any existing healthy, protected trees to the greatest extent possible.	The Project would, where feasible, encourage the preservation of trees and native vegetation, and use creative land planning techniques to preserve any existing healthy, protected trees to the greatest extent possible.	Yes
Policy NR-2.2: Require the installation of wildlife crossing structures by developers or as part of public improvement projects. Minimize artificial night lighting in the vicinity of wildlife crossing structures and adjacent wild lands. Install appropriate wildlife fencing and encourage the growth of woody native vegetation leading up to crossing structures to provide cover and direction and to encourage the use of the crossing structures by wildlife.	The Project would, where feasible, minimize artificial night lighting in the vicinity of wildlife crossing structures and adjacent wild lands.	Yes
Policy NR-2.3: Work with federal, state, and local agencies, such as Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority, Rancho Simi Recreation and Park District, National Park Service, and other organizations, for guidance on the restoration of riparian communities and vegetative cover at passageways.	The Project would, where feasible, work with federal, state, and local agencies, such as Santa Monica Mountains Conservancy, Mountains Recreation and Conservation Authority, Rancho Simi Recreation and Park District, National Park Service, and other organizations, for guidance on the restoration of riparian communities and vegetative cover at passageways.	Yes
Policy NR-2.4: Ensure that projects within areas identified as regional wildlife corridors are designed and constructed so as to preserve the ability of wildlife to travel through the region.	The Project would, where feasible, be designed and constructed so as to preserve the ability of wildlife to travel through the region.	Yes
Policy NR-2.5: Conserve wildlife ecosystems, wetlands, and sensitive habitat areas in the following order of protection preference: (1) avoidance; (2) on-site mitigation; and (3) off-site mitigation. Where avoidance is not possible, require provision of replacement habitat through restoration and/or habitat creation to mitigate the loss of wetland and/or sensitive habitat. Off-site replacement habitat should be at a minimum of 5:1 replacement ratio or as recommended by CDFW.	The Project would, where feasible, conserve wildlife ecosystems, wetlands, and sensitive habitat areas in the following order of protection preference: (1) avoidance; (2) on-site mitigation; and (3) off-site mitigation. Where avoidance is not possible, the Project would provision of replacement habitat through restoration and/or habitat creation to mitigate the loss of wetland and/or sensitive habitat. The Project would, where feasible, ensure that off-site replacement habitat should be at a minimum of 5:1 replacement ratio or as recommended by CDFW.	Yes

Table 6-2. Compliance with Local Policies

Policy/Goal	Project Consistency	Consistent? (Yes/No)
Policy NR-2.6: Require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors. Ensure that individual projects incorporate measures to reduce impacts to special-status species, sensitive natural communities, and important wildlife areas and movement corridors according to Simi Valley's environmental review process.	The Project would, where feasible, require assessment by a qualified professional for development applications that may adversely affect sensitive biological or wetland resources, including occurrences of special-status species, occurrences of sensitive natural communities, and important wildlife areas and movement corridors, and ensure that measures to reduce impacts to special-status species, sensitive natural communities, and important wildlife areas and movement corridors are incorporated according to Simi Valley's environmental review process.	Yes
Goal NR-5: Local watersheds, water bodies, and groundwater resources, including creeks, reservoirs, and rivers, are protected from pollution and degradation.		
Policy NR-5.2: Conserve undeveloped open space areas and drainage channels for the purpose of protecting water resources in the city's watershed. For new development and post-development runoff, control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the city's National Pollution Discharge Elimination System Permit.	The Project would, where feasible, conserve undeveloped open space areas and drainage channels for the purpose of protecting water resources in the city's watershed, and for new development and post-development runoff, control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the city's National Pollution Discharge Elimination System Permit.	Yes
Policy NR-5.5: Restore and protect the Arroyo Simi as a natural resource that contributes to recharge and filtration capability for the watershed.	The Project would, where feasible, restore and protect the Arroyo Simi as a natural resource that contributes to recharge and filtration capability for the watershed.	Yes
City of Simi Valley Municipal Code		
Chapter 9-32 Hillside Performance Standards		
The cty is situated among a series of major and minor hills. These hills constitute a significant natural topographical feature of the community because they are visible to all persons traveling the major highway arteries as well as to citizens residing in and around the city. The purposes of the performance standards set forth in this Article, therefore, are to implement those provisions of the General Plan as they relate to the preservation of hillside areas, the promotion of single-family, detached housing in hillside areas, the maintenance of open space, the retention of scenic and recreational resources of the city, and to further enhance the public health, safety, or welfare by regulating development in hillside areas	The Project would, where feasible, be consistent with the provisions of the General Plan as they relate to the preservation of hillside areas, the maintenance of open space, the retention of scenic and recreational resources of the city, and to further enhance the public health, safety, or welfare in hillside areas.	Yes

Table 6-2. Compliance with Local Policies

Policy/Goal	Project Consistency	Consistent? (Yes/No)
Chapter 9-38 Tree Preservation		
It is the determination of the Council that proper and necessary steps be taken in order to protect and preserve trees, to the greatest extent possible, in order to protect the health, safety, or welfare of the citizens of the city. These steps include conducting a survey for protected trees, preparation of a tree survey report by an arborist, horticulturist, or registered landscape architect, and obtaining a tree removal permit from the Director of Public Works.	The Project would take proper and necessary steps in order to protect and preserve trees, to the greatest extent possible, in order to protect the health, safety, or welfare of the citizens of the city, including conducting a survey for protected trees, preparation of a tree survey report by an arborist, horticulturist, or registered landscape architect, and obtaining a tree removal permit from the Director of Public Works, if needed.	Yes

Notes:
CDFW=California Department of Fish and Wildlife

7 Mitigation Measures

Mitigation Measure BR-1 is required to avoid and minimize direct and indirect impacts on biological resources, including special-status plants and wildlife.

BR-1 **Implement biological resource protection measures during construction.** The construction contractor shall implement the following best management practices during construction to minimize direct and indirect impacts on special-status species:

a. No work activities, materials or equipment storage or access will be permitted outside the Project limits. All parking and equipment storage by the contractor related to the Project will be confined to the Project limits. Undisturbed areas and special-status vegetation communities outside and adjacent to the Project limits will not be used for parking or equipment storage. Project-related vehicle traffic will be restricted to the Project limits and established roads and construction access points.

b. Construction activities will be limited to daylight hours to the extent feasible. If nighttime activities are unavoidable, then workers will direct all lights for nighttime lighting into the work area and minimize the lighting of natural habitat areas adjacent to the work area. The contractor will use light glare shields to reduce the extent of illumination into special-status vegetation communities. If the work area is located near surface waters, the lighting will be shielded such that it does not shine directly into the water.

c. Clearing will be confined to the minimal area necessary to facilitate construction activities. Cleared vegetation and spoils will be disposed of daily at a permanent off-site spoils location or at a temporary on-site location that will not create habitat for special-status wildlife species. Spoils and dredged material will be disposed of at an approved site or facility in accordance with all applicable federal, state, and local regulations.

d. Food-related and other garbage will be disposed of in wildlife-proof containers and will be removed from the Project study area daily during the construction period. Vehicles carrying trash will be required to have loads covered and secured to prevent trash and debris from falling onto roads and adjacent properties.

e. The spread of dust from work sites to special-status vegetation communities or habitats for special-status species on adjacent lands will be minimized by use of a water truck. Dirt access roads, haul roads, and spoils areas will be watered at least twice each day when being used during construction dry periods.

f. Vehicles will be refueled in upland areas where fuel cannot enter waters of the U.S. or waters of the state and in areas that do not have suitable habitat to support federally and/or state-listed species.

g. In the event that no activity is to occur in the work area for the weekend and/or a period of time greater than 48 hours, all portable fuel containers will be removed from the Project site.

h. Equipment and containers will be inspected daily for leaks. Should a leak occur, contaminated soils and surfaces will be cleaned up and disposed of following the guidelines identified in the stormwater pollution prevention plan, materials safety

data sheets, and any specifications required by other permits issued for the Project.

i. Off-site maintenance and repair shops will be utilized as much as possible for maintenance and repair of equipment. If maintenance of equipment must occur on site, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks within all areas. Where feasible, maintenance of equipment will occur in upland areas where fuel cannot enter waters of the U.S. or waters of the state and in areas that do not have suitable habitat to support federally and/or state-listed species.

Mitigation Measure BR-2 is required based on the presence of suitable habitat for species protected by the MBTA California Fish and Game Code 3500 et seq.

BR-2 **Avoid impacts on migratory and nesting birds.** If vegetation clearing or initial ground-disturbance activities occur between January 15 and September 15, a preconstruction nesting bird survey (within seven days prior to construction activities) shall be conducted by a qualified biologist to determine if active nests are present within the area proposed for disturbance to avoid the nesting activities of breeding birds/raptors. The results of the surveys will be made available to the wildlife agencies [USFWS/CDFW], upon request, prior to initiation of any construction activities. Should nesting bird species aside from European starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) be found, a 300-foot (500 feet for raptors) exclusionary buffer will be established by the biologist. This buffer shall be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this buffer zone until the biologist determines that the young have fledged or the nest is no longer active. At the discretion of the biologist, the buffer may be reduced if the nest is buffered by existing visual and noise barriers such as hills, walls, buildings, etc. visual and noise barriers are added, or the nesting species is known to tolerate higher levels of disturbance.

Mitigation Measure BR-3 is required to comply with the City of Simi Valley's Tree Ordinance.

BR-3 **Protected trees.** Preconstruction surveys for protected trees (all historic trees, all mature native oak trees, or any mature trees which are associated with a proposal for urban development, or are located on a vacant parcel) that are subject to protection under the City of Simi Valley Municipal Code Chapter 9-38 Tree Preservation shall be conducted by an arborist, horticulturist, or registered landscape architect within the Project footprint pending the completion of final engineering design. Mature trees are defined in the City of Simi Valley's Mature Tree Preservation Ordinance (Ordinance No. 1278) as any living native oak tree that has a diameter of 5 inches or more, or a tree of any other species that has a diameter of 9.5 or more inches as measured 4.5 feet above the root crown. The types, location, sizes, health, aesthetic quality, damage or disease, recommended remedial measures, replacement value, and feasibility of relocation of protected trees subject to removal will be documented in a tree protection report prior to construction. Any protected trees subject to removal from the Project will be replaced at a one to one ratio with specimen trees that adhere to the City of Simi Valley's tree list.

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Appendix A. Literature Review Results

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To: March 15, 2021
Consultation Code: 08EVEN00-2021-SLI-0239
Event Code: 08EVEN00-2021-E-00968
Project Name: SCORE Simi Valley

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

Project Summary

Consultation Code: 08EVEN00-2021-SLI-0239
Event Code: 08EVEN00-2021-E-00968
Project Name: SCORE Simi Valley
Project Type: TRANSPORTATION
Project Description: This analysis is for the expansion of the railroad, primarily contained within the ROW.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.2719564,-118.74492163966521,14z

Counties: Ventura County, California

Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor *Gymnogyps californianus* Population: U.S.A. only, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
California Orcutt Grass *Orcuttia californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4923	Endangered
Conejo Dudleya *Dudleya abramsii ssp. parva* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4871	Threatened
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered
Lyon's Pentachaeta *Pentachaeta lyonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4699	Endangered
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fillmore (3411848) OR Piru (3411847) OR Val Verde (3411846) OR Moorpark (3411838) OR Simi (3411837) OR Santa Susana (3411836) OR Newbury Park (3411828) OR Thousand Oaks (3411827) OR Calabasas (3411826))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Anaxyrus californicus arroyo toad	AAABB01230	Endangered	None	G2G3	S2S3	SSC
Anniella spp. California legless lizard	ARACC01070	None	None	G3G4	S3S4	SSC
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Artemisiospiza belli belli Bell's sage sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Baccharis malibuensis Malibu baccharis	PDAST0W0W0	None	None	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus clavatus var. gracilis slender mariposa-lily	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
Calochortus fimbriatus late-flowered mariposa-lily	PMLIL0D1J2	None	None	G3	S3	1B.3
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	PDPGN040J1	None	Endangered	G2T1	S1	1B.1
Chorizanthe parryi var. parryi Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
Cismontane Alkali Marsh Cismontane Alkali Marsh	CTT52310CA	None	None	G1	S1.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Deinandra minthornii Santa Susana tarplant	PDAST4R0J0	None	Rare	G2	S2	1B.2
Delphinium parryi ssp. blochmaniae dune larkspur	PDRAN0B1B1	None	None	G4T2	S2	1B.2
Delphinium umbraculorum umbrella larkspur	PDRAN0B1W0	None	None	G3	S3	1B.3
Diadophis punctatus modestus San Bernardino ringneck snake	ARADB10015	None	None	G5T2T3	S2?	
Dudleya blochmaniae ssp. blochmaniae Blochman's dudleya	PDCRA04051	None	None	G3T2	S2	1B.1
Dudleya cymosa ssp. agourensis Agoura Hills dudleya	PDCRA040A7	Threatened	None	G5T1	S1	1B.2
Dudleya cymosa ssp. marcescens marcescent dudleya	PDCRA040A3	Threatened	Rare	G5T2	S2	1B.2
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Dudleya parva Conejo dudleya	PDCRA04016	Threatened	None	G1	S1	1B.2
Dudleya verityi Verity's dudleya	PDCRA040U0	Threatened	None	G1	S1	1B.1
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eriogonum crocatum conejo buckwheat	PDPGN081G0	None	Rare	G1	S1	1B.2
Euderma maculatum spotted bat	AMACC07010	None	None	G4	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	AFCPA03011	Endangered	Endangered	G5T1	S1	FP
Gila orcuttii arroyo chub	AFCJB13120	None	None	G2	S2	SSC
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Gymnogyps californianus California condor	ABNKA03010	Endangered	Endangered	G1	S1	FP
Harpagonella palmeri Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2
Helminthoglypta fontiphila Soledad shoulderband	IMGASC2250	None	None	G1	S1	
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G3G4	S4	
Lepechinia rossii Ross' pitcher sage	PDLAM0V060	None	None	G1	S1	1B.2
Lupinus paynei Payne's bush lupine	PDFAB2B580	None	None	G1Q	S1	1B.1
Macrotus californicus California leaf-nosed bat	AMACB01010	None	None	G3G4	S3	SSC
Monardella hypoleuca ssp. hypoleuca white-veined monardella	PDLAM180A5	None	None	G4T3	S3	1B.3
Monardella sinuata ssp. gerryi Gerry's curly-leaved monardella	PDLAM18163	None	None	G3T1	S1	1B.1
Myotis ciliolabrum western small-footed myotis	AMACC01140	None	None	G5	S3	
Navarretia ojaiensis Ojai navarretia	PDPLM0C130	None	None	G2	S2	1B.1
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Nolina cismontana chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
Oncorhynchus mykiss irideus pop. 10 steelhead - southern California DPS	AFCHA0209J	Endangered	None	G5T1Q	S1	
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Pentachaeta lyonii Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Rana boylii foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Salvadora hexalepis virgultea coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Socalchemmis gertschi Gertsch's socalchemmis spider	ILARAU7010	None	None	G1	S1	
Southern California Threespine Stickleback Stream Southern California Threespine Stickleback Stream	CARE2320CA	None	None	GNR	SNR	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Cottonwood Willow Riparian Forest Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Mixed Riparian Forest Southern Mixed Riparian Forest	CTT61340CA	None	None	G2	S2.1	
Southern Riparian Forest Southern Riparian Forest	CTT61300CA	None	None	G4	S4	
Southern Riparian Scrub Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Willow Scrub Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Spea hammondii western spadefoot	AAABF02020	None	None	G2G3	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis hammondii two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
Trimerotropis occidentiloides Santa Monica grasshopper	IIORT36300	None	None	G1G2	S1S2	
Valley Needlegrass Grassland Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 91

CNPS California Native Plant Society

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

49 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3411848, 3411847, 3411846, 3411838, 3411837, 3411836, 3411828 3411827 and 3411826;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Acanthoscyphus parishii var. parishii	Parish's oxytheca	Polygonaceae	annual herb	Jun-Sep	4.2	S3S4	G4? T3T4
Asplenium vespertinum	western spleenwort	Aspleniaceae	perennial rhizomatous herb	Feb-Jun	4.2	S4	G4
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	1B.1	S2	G2
Baccharis malibuensis	Malibu baccharis	Asteraceae	perennial deciduous shrub	Aug	1B.1	S1	G1
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	4.2	S3S4	G3G4
Calochortus clavatus var. clavatus	club-haired mariposa lily	Liliaceae	perennial bulbiferous herb	(Mar)May-Jun	4.3	S3	G4T3
Calochortus clavatus var. gracilis	slender mariposa lily	Liliaceae	perennial bulbiferous herb	Mar-Jun(Nov)	1B.2	S2S3	G4T2T3
Calochortus fimbriatus	late-flowered mariposa lily	Liliaceae	perennial bulbiferous herb	Jun-Aug	1B.3	S3	G3
Calochortus plummerae	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	4.2	S4	G4
Calystegia peirsonii	Peirson's morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	4.2	S4	G4
Castilleja gleasoni	Mt. Gleason paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	May-Jun(Sep)	1B.2	S2	G2
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Cercocarpus betuloides var. blancheae	island mountain-mahogany	Rosaceae	perennial evergreen shrub	Feb-May	4.3	S4	G5T4
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
Chorizanthe parryi var. parryi	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	1B.1	S2	G3T2
Clarkia exilis	slender clarkia	Onagraceae	annual herb	Apr-May	4.3	S3	G3

Clinopodium mimuloides	monkey-flower savory	Lamiaceae	perennial herb	Jun-Oct	4.2	S3	G3
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	4.2	S4	G4
Deinandra minthornii	Santa Susana tarplant	Asteraceae	perennial deciduous shrub	Jul-Nov	1B.2	S2	G2
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov(Dec)	4.2	S4	G4
Delphinium parryi ssp. blochmaniae	dune larkspur	Ranunculaceae	perennial herb	Apr-Jun	1B.2	S2	G4T2
Delphinium parryi ssp. purpureum	Mt. Pinos larkspur	Ranunculaceae	perennial herb	May-Jun	4.3	S4	G4T4
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	Crassulaceae	perennial herb	Apr-Jun	1B.1	S2	G3T2
Dudleya cymosa ssp. agourensis	Agoura Hills dudleya	Crassulaceae	perennial herb	May-Jun	1B.2	S1	G5T1
Dudleya cymosa ssp. marcescens	marcescent dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G5T2
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
Dudleya parva	Conejo dudleya	Crassulaceae	perennial herb	May-Jun	1B.2	S1	G1
Dudleya verityi	Verity's dudleya	Crassulaceae	perennial herb	May-Jun	1B.1	S1	G1
Eriogonum crocatum	conejo buckwheat	Polygonaceae	perennial herb	Apr-Jul	1B.2	S1	G1
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	3.2	S3S4	G3G4
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	4.2	S4	G4
Lepechinia fragrans	fragrant pitcher sage	Lamiaceae	perennial shrub	Mar-Oct	4.2	S3	G3
Lepechinia rossii	Ross' pitcher sage	Lamiaceae	perennial shrub	May-Sep	1B.2	S1	G1
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	4.2	S4?	G4T4?
Lupinus paynei	Payne's bush lupine	Fabaceae	perennial shrub	Mar-Apr(May-Jul)	1B.1	S1	G1Q
Monardella sinuata ssp. gerryi	Gerry's curly-leaved monardella	Lamiaceae	annual herb	Apr-Jun	1B.1	S1	G3T1
Monardella sinuata ssp. sinuata	southern curly-leaved monardella	Lamiaceae	annual herb	Apr-Sep	1B.2	S2	G3T2
Navarretia ojaiensis	Ojai navarretia	Polemoniaceae	annual herb	May-Jul	1B.1	S2	G2
Nolina cismontana	chaparral nolina	Ruscaceae	perennial evergreen shrub	(Mar)May-Jul	1B.2	S3	G3
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	1B.1	S1	G1
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	4.2	S4	G4
Piperia michaelii	Michael's rein orchid	Orchidaceae	perennial herb	Apr-Aug	4.2	S3	G3
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4

Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	1B.1	S3	G3
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
Stylocline masonii	Mason's neststraw	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	1B.3	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 15 March 2021].

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Appendix B. Jurisdictional Delineation Report

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METROLINK

Jurisdictional Delineation Report

Simi Valley Double Track and Platform Project

February 2021

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Contents

Tables

Figures

Appendices

Acronyms

CDFW	California Department of Fish and Wildlife
CP	control point
CWA	Clean Water Act
JD	jurisdictional determination
JSA	jurisdictional study area
MP	mile post
OHWM	ordinary high water mark
Project	Rancho Cucamonga Siding Extension Project
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SCRRA	Southern California Regional Rail Authority
SWRCB	State Water Resources Control Board
UPRR	Union Pacific Railroad
U.S.	United States
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey
VCL	Ventura County Line

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1 Introduction

This jurisdictional delineation report was prepared by HDR to summarize the extent of United States (U.S.) Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction pursuant to Sections 404 and 401 of the Clean Water Act (CWA) and Section 1600 et seq. of the California Fish and Game Code, respectively, within the Simi Valley Double Track and Platform Project (Project) jurisdictional study area (JSA).

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2 Project Description

2.1 Project Overview

The Southern California Regional Rail Authority (SCRRA) is proposing the Simi Valley Double Track and Platform Project to improve safety at the Simi Valley Station and to increase operational capacity on Metrolink's Ventura County Line (VCL). The Project includes at-grade crossing improvements and the construction of new rail infrastructure. The Project would occur primarily within existing railroad right-of-way (ROW) owned by SCRRA and Union Pacific Railroad (UPRR) from Sequoia Avenue east to the Arroyo Simi Railroad Bridge just south of Stearns Street in the City of Simi Valley, California. The Project would add 2.20 miles of main track and increase the passenger capacity at the Simi Valley Station by adding an additional platform and pedestrian undercrossing. In addition, an existing signal at Sycamore Drive would be relocated, and a new signal would be installed approximately 2,000 feet west of Erringer Road.

The objectives of the Project are to improve safety by adding pedestrian safety features and improve reliability by allowing more efficient train operations; allow for an hourly bidirectional service, a half-hourly regional train to dispatch in the peak direction, and an hourly express train in the peak direction along Metrolink's VCL, which operates on the Ventura Subdivision between Moorpark and Los Angeles Union Station; and include at-grade crossing improvements at Sequoia Avenue, Tapo Canyon Road, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive in support of the city's future application with the Federal Railroad Administration for quiet zone status along the alignment.

2.2 Goals and Objectives

The Project includes the following objectives:

- Objective 1: Improve safety and reliability of the existing rail system
- Objective 2: Increase operational capacity of the existing VCL passenger rail system and increase passenger capacity at the Simi Valley Station
- Objective 3: Implement infrastructural improvements that will support the city's future applications to the Federal Railroad Administration for quiet zone status along the alignment

2.3 Project Location

For the purposes of the environmental impact report, SCRRA defined a Project study area, which comprises the Project's physical footprint along the approximately 2.20-mile segment of SCRRA's Ventura Subdivision with a 500-foot buffer. The Project study area begins at its western terminus at Sequoia Avenue and ends east of Hidden Ranch Drive, just west of the Arroyo Simi Railroad Bridge, within the City of Simi Valley. Figure 2-1 shows the regional location of the Project. Figure 2-2 shows the Project's location in southern Simi Valley, the extent of the proposed improvements, and the Project study area. The Project study area is part of the Simi Land Grant on the United States Geological Survey (USGS) *Simi Valley East, California* 7.5-minute series topographical quadrangle. As shown on Figure 2-2, the Project is located between Mile Post (MP) 436.20 and MP 438.40.

2.4 Project Components

As shown on Figure 2-3 (Sheet 1 through 9), the Project would include construction of a new side platform (south of the existing platform) and pedestrian underpass at the existing Simi Valley Station, the construction of a second main track along a 2.20-mile stretch of Metrolink's existing Ventura Subdivision from MP 436.20 to MP 438.40, and the implementation of two new control points (CP) at MP 436.30 (CP Sequoia) and MP 438.40 (CP Arroyo) (Figure 2-3). New intermediate signals would be installed at MP 433.96, MP 435.13, and MP 437.30. Additionally, Project improvements would include supplemental safety measures at the existing grade crossings at Sequoia Avenue, Tapo Canyon Street, Tapo Street, East Los Angeles Avenue, and Hidden Ranch Drive, which would support future applications by the city to the Federal Railroad Administration for quiet zone status along the alignment.[1] Existing wet and dry utilities (above and below grade) within the Project study area would also be protected in place or relocated pending final engineering design and final placement of the proposed infrastructure.

2.4.1 Physical Improvements

The Project would include multiple improvements to the existing Simi Valley Station, including construction of a second platform, a supporting pedestrian undercrossing (or underpass), and passenger emergency egress to enhance passenger safety. The existing platform would also be reconfigured to remove the curvature within the existing platform to the north side of the main line tracks. In conjunction with these station improvements, SCRRA proposes the installation of approximately 2.20 miles of new main track within existing rail ROW, new railroad signals and positive train control towers, and related supplemental safety measures at existing at-grade crossings. These improvements are described in more detail below.

Track and Civil

SCRRA proposes the construction of an approximately 2.20-mile segment of second mainline track, from Barnes Street in the west to Hidden Ranch Road in the east, to enhance operational capacity on Metrolink's VCL. The track improvements are described in further detail below:

- Approximately 900 feet of the main track would be reprofiled east of CP Sequoia.
- West of Tapo Street (to Barnes Street), a new second track would be placed within SCRRA ROW. The new track would be constructed north of the existing main line track and would connect to the existing track east of Tapo Street to form Main Track 1.
- Approximately 900 feet of existing track between East Los Angeles Avenue and Tapo Street would be shifted to accommodate the new tracks tying into the existing track. In addition, an existing UPRR spur track between East Los Angeles Avenue and Tapo Street, within SCRRA ROW, would be shifted to accommodate the second track on the north side.

[1] Upon completion of the Project, the City of Simi Valley would be required to complete the Quiet Zone Creation Process in accordance with the regulations, policies, and procedures established by the Federal Railroad Administration in its Train Horn Final Rule, as amended on August 17, 2006 (49 Code of Federal Regulations Part 222).

- Approximately 1,400 feet of existing track would be shifted between East Los Angeles Avenue to Simi Valley Station to accommodate the installation of a second track south of the existing track, within UPRR ROW. These two main tracks are shown and labeled as MT-1 and MT-2 on Figure 2-3 (Sheets 3 through 6). The new track on the south side of the ROW would connect to the existing track just east of Tapo Street, such that the new track east of Tapo Street and existing track west of Tapo Street form Main Track 2.

At the Simi Valley Station, the existing and proposed station platforms would be shifted eastward to maintain approximately 19-foot track centers for 150 feet beyond the platforms to accommodate the inter-track fence. The 19-foot track spacing through station limits would avoid placing track curvature within Hidden Ranch Drive, avoid the need to obtain more ROW through the station, and maintain clearance from the Arroyo Simi Bike Path. The 780-foot length of the existing platform would be maintained, and the new platform would be a minimum of 680 feet. The existing track alignment would be maintained at four of the at-grade crossings (Sequoia Avenue, Tapo Canyon Street, Tapo Street, and East Los Angeles Avenue), but the track alignment would be shifted approximately 6 inches south at the Hidden Ranch Drive crossing to eliminate curvature between the platform and the crossing.

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Figure 2-1. Regional Location

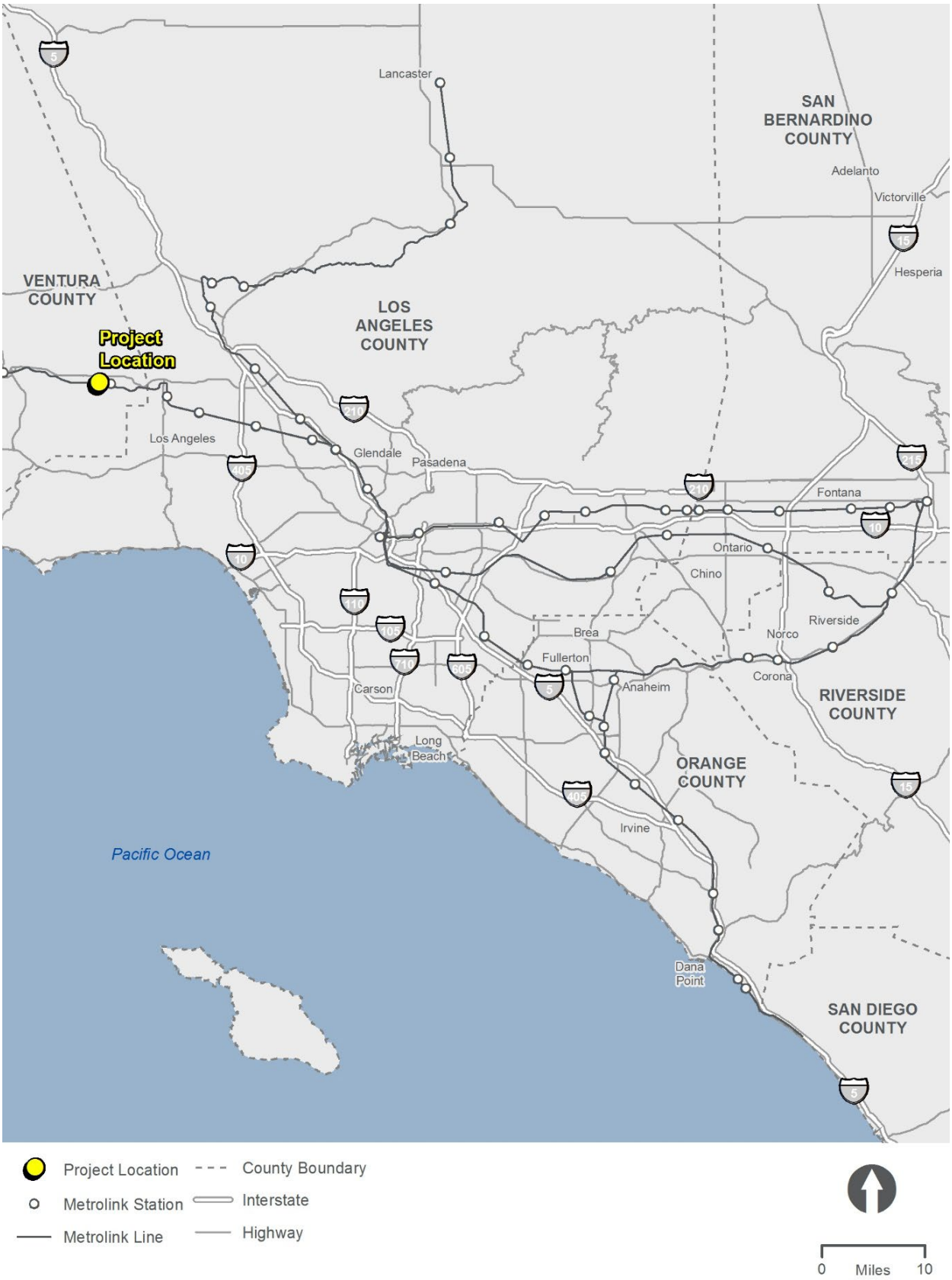

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Figure 2-2. Project Location

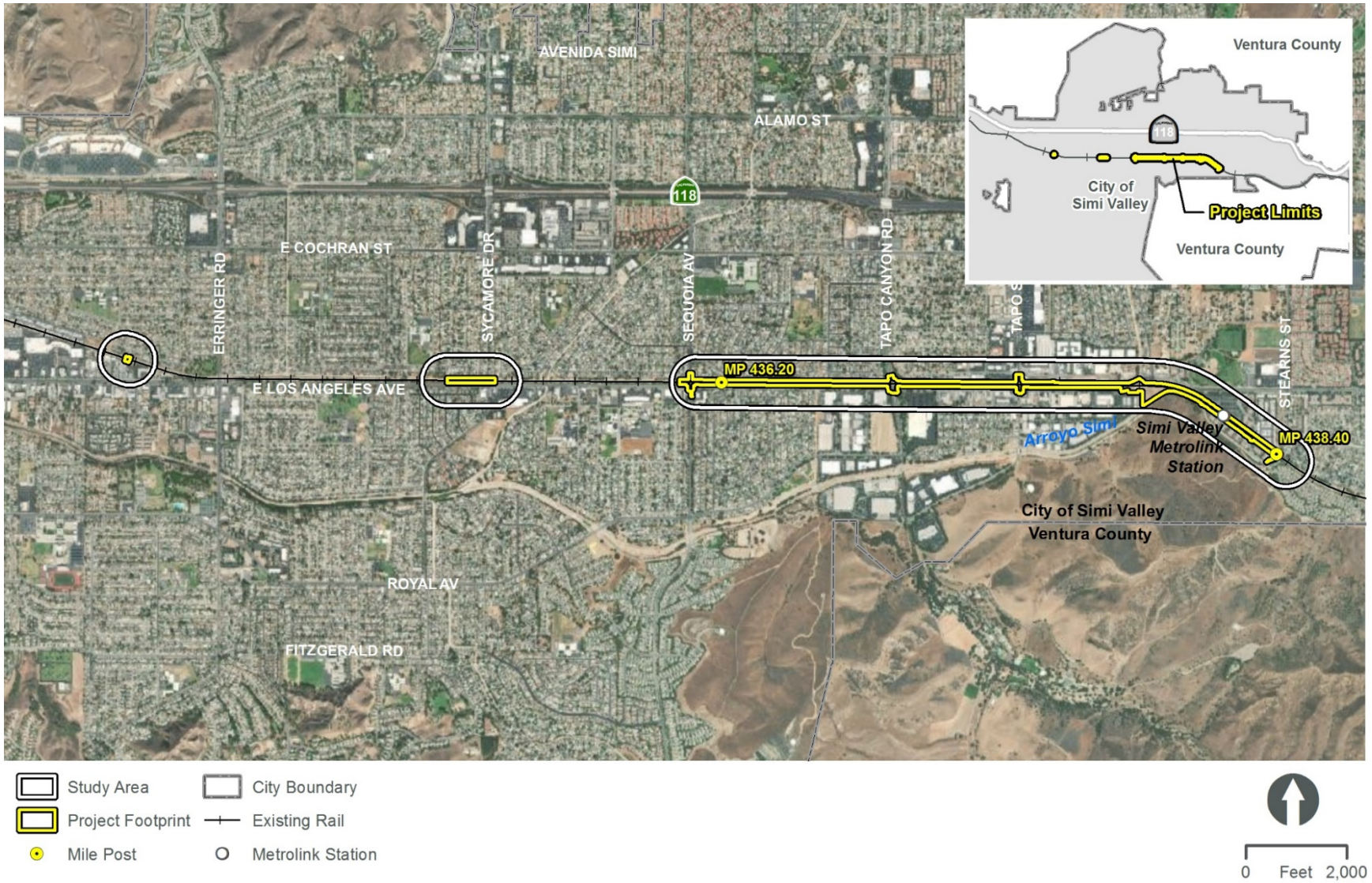

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Figure 2-3. Project Detail Map

(Sheet 1 of 9)

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Figure 2-3. Project Detail Map

(Sheet 2 of 9)

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Figure 2-3. Project Detail Map

(Sheet 3 of 9)

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Figure 2-3. Project Detail Map

(Sheet 4 of 9)

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Figure 2-3. Project Detail Map

(Sheet 5 of 9)

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Figure 2-3. Project Detail Map

(Sheet 6 of 9)

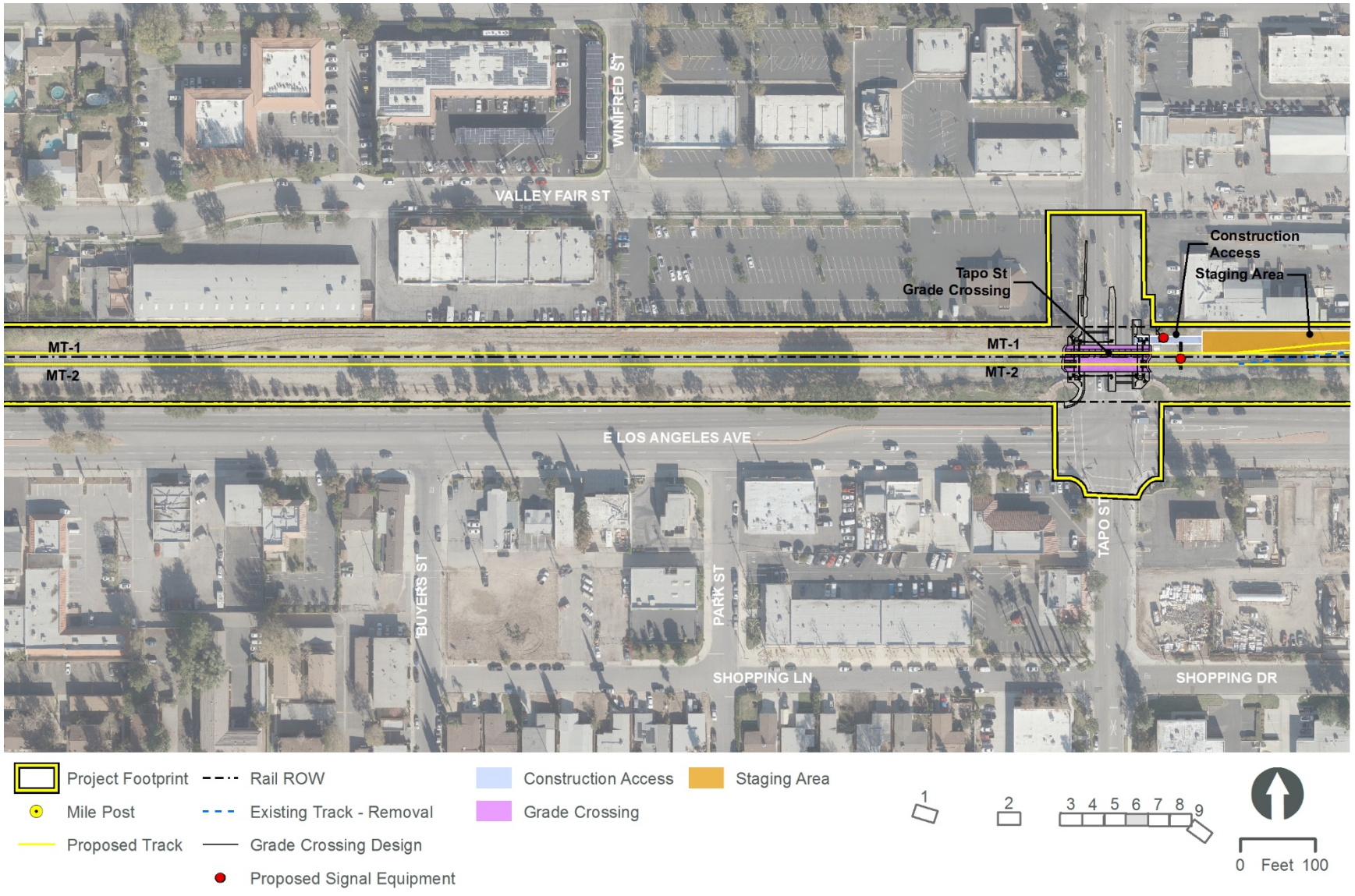

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Figure 2-3. Project Detail Map

(Sheet 7 of 9)

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Figure 2-3. Project Detail Map

(Sheet 8 of 9)

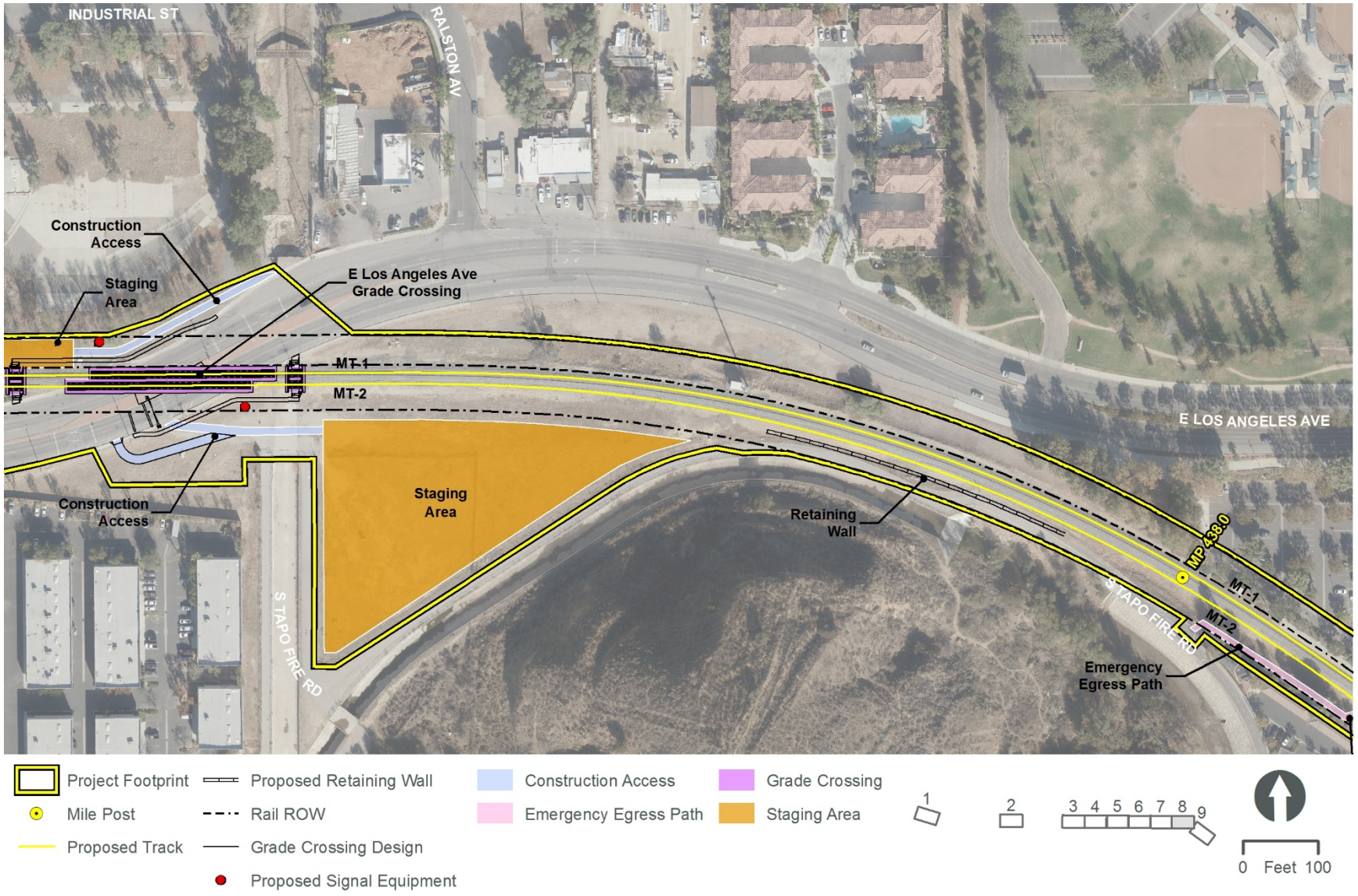

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Figure 2-3. Project Detail Map

(Sheet 9 of 9)

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At-Grade Crossings

The Project would include improvements and related supplemental safety measures at existing at-grade crossings within the Project study area to facilitate future quiet zone implementation. These at-grade crossing improvements would generally include the accommodation of the second mainline track and related ancillary improvements, except for at the Sequoia at-grade crossing, where a second track would not be constructed. These improvements would include sidewalk and pavement reconstruction; installation of pedestrian gates and warning signals; roadway restriping; pedestrian channelization; construction, of or modification to, a raised roadway median; and installation/modification of the roadway gates. Each at-grade crossing is further described below.

- **Sequoia Avenue.** The improvements at Sequoia Avenue include those described above, except a second mainline track crossing would not be constructed. A new railroad signal house would also be installed at this location.
- **Tapo Canyon Street.** In addition to the improvements described above, a new signal house would also be constructed at Tapo Canyon Street.
- **Tapo Street.** In addition to the improvements described above, a new signal house would also be constructed at Tapo Street.
- **East Los Angeles Avenue.** In addition to the improvements described above, a new signal house would also be constructed at East Los Angeles Avenue. Additionally, the existing access roads leading from the Arroyo Simi Bike Path would be modified to accommodate the proposed pedestrian improvements and the existing retaining wall located in the southeast quadrant would be reconstructed.
- **Hidden Ranch Drive.** In addition to the improvements described above, a new signal house would also be constructed at Hidden Ranch Drive.

Railroad Signals and Communications

The track improvements would require new track panels, signals, and warning devices at the existing at-grade crossings. At Sequoia Avenue, Tapo Canyon Road, and Tapo Street, the presignals on the southwest quadrants would be located outside of the exit gates to improve visibility for southbound traffic approaching the tracks. Additional safety improvements would include adding flashers to the warning devices for vehicles turning onto Tapo Canyon Road from East Los Angeles Avenue. Maintenance access to the new signal houses would also be added.

The Project would include two new CPs. At the western limit of the new track, CP Sequoia would be installed approximately 0.20 mile east of Sequoia Avenue. CP Arroyo would be installed directly west of Arroyo Simi. The existing signal at Tapo Street would be modified to accommodate the second track. In order to account for the proximity to the new CP Sequoia, the existing signal at Sycamore Drive would be relocated approximately 700 feet west. To reduce headway times to CP Strathern, an additional signal would be added approximately 2,000 feet west of Erringer Road.

At each new signal site, the following improvements would be installed:

- 6-foot by 8-foot signal house with a security fence
- Wayside signal
- 40-foot positive train control tower antenna tower

- 200-amp Southern California Edison power meter pedestal
- Underground railroad fiber optic cable with vault

Simi Valley Station Enhancements

The existing Simi Valley Station consists of one side platform on the north side of the main line track with custom passenger canopies, a ticket vending machine, and an at-grade parking lot north of the platform. The existing path of travel to the station extends south from a bus stop at the platform entrance and from the adjacent parking lot. Station access would remain unchanged under the Project.

The Project would change the existing platform configuration by demolishing approximately 250 feet of the curved portion of the platform on the west end of the station. To maintain the 780-foot length of the existing platform, the remaining platform would be extended approximately 95 feet to the west and 155 feet to the east, so that the entire length of the platform is along tangent track (i.e., where the track is not curved). At the east end of the station, a pedestrian underpass would be installed with ramp and stair access. The new underpass would provide access to a new, second platform on the south side of the main line tracks, which would be a minimum of 680 feet long.

The Project would match the existing platform amenities (canopies, seating, signage, and lighting), and would include aesthetic treatments to the ramps, stairs, and underpass walls and ceiling. The Project would implement crime prevention through environmental design principles, which would include natural surveillance, natural access control, territorial reinforcement, and maintenance. The proposed station improvements would also meet National Fire Protection Association standards by providing passengers egress capabilities to vacate the platform within 4 minutes and to reach a point of safety within 6 minutes.

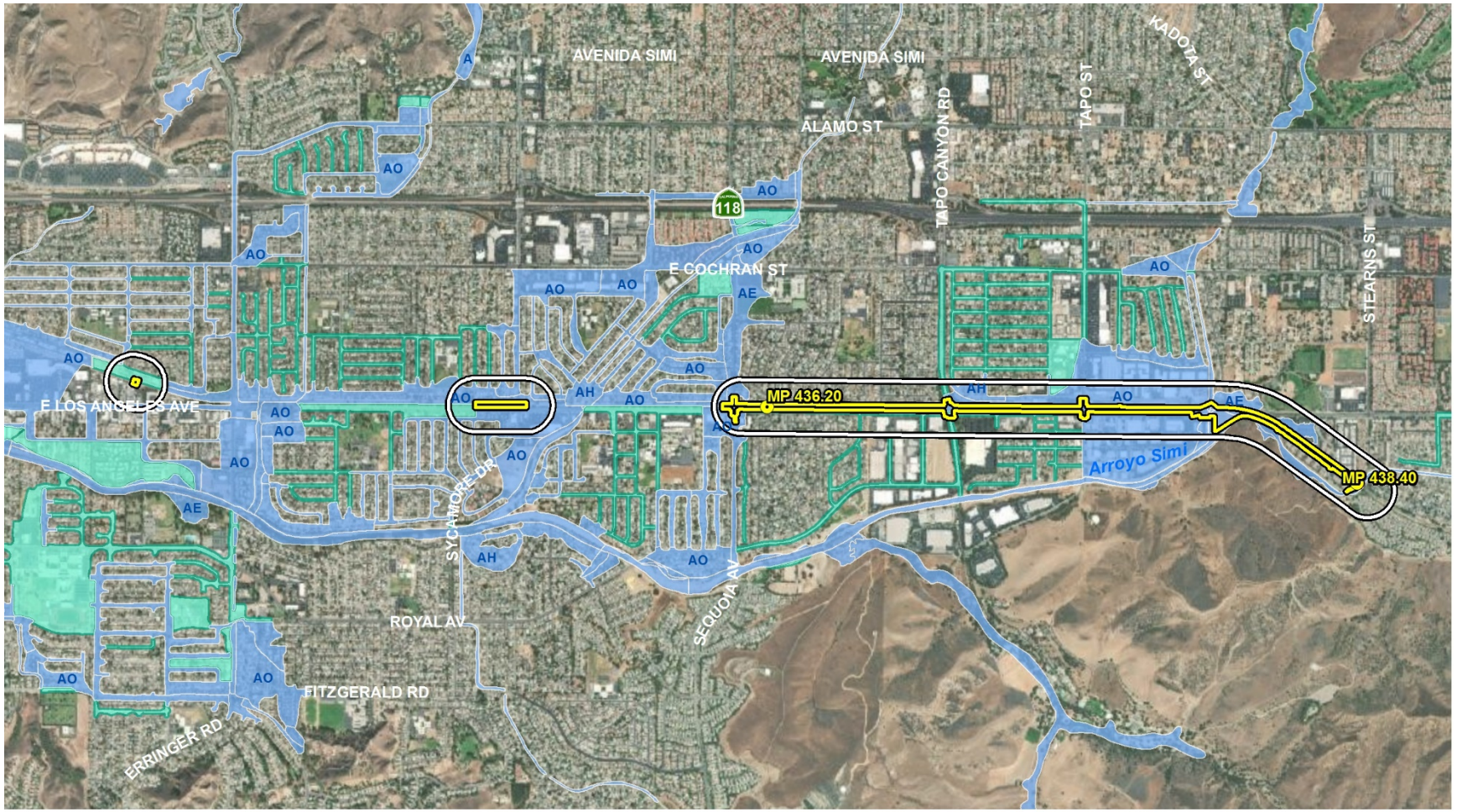
Drainage Improvements

The Project would include the following drainage improvements:

- Underdrains at the at-grade crossings where ditches are infeasible, and between the tracks at the platforms with the subgrade sloping toward the underdrain
- Trackside ditches between at-grade crossings
- Storm drain extensions or encasements where existing drainage systems intersect the proposed track infrastructure
- A new pump station at the low point of the pedestrian underpass at Simi Valley Station

Portions of the Project study area overlap with areas mapped by the Federal Emergency Management Agency as having a 1 percent annual chance of flood hazard with a potential for shallow flooding (Figure 2-4). The proposed drainage improvements would be coordinated with the City of Simi Valley to provide the new track infrastructure with adequate flood protection and to maintain existing drainage patterns to the extent practical throughout the Project study area.

Figure 2-4. Federal Emergency Management Agency Flood Hazard Map



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Structures

The Project would construct a new pedestrian underpass, stairs, and ramps at the Simi Valley Station. The design of the pedestrian underpass would be in accordance with the most recent SCRRA design criteria manual. The proposed structure type is a precast concrete box structure, composed of sections, selected to minimize construction track windows (i.e., minimize impacts on train schedules). The internal dimensions of the proposed structure would be 14 feet wide by 9 feet, 10 inches high. The depth of cover (i.e., amount of fill between the structure and the tracks) would be minimized to facilitate construction and maintenance of the structure, as well as to reduce the length of approach ramps and the number of stairs needed to reach the station platform. The design of the approach ramp retaining wall would be in accordance with the most recent SCRRA design criteria manual.

Utilities

Utilities within the Project study area include gas lines, electrical power lines, communications/fiber optic lines, and municipal water and sewer pipes. The Project would result in multiple utility conflicts, and impacted utilities would either be protected in place, extended, or relocated. Specifically, the Project may require relocation or casing extensions for the following utilities:

- Crimson Pipeline gasoline pipeline (6- to 12-inch pipeline) at East Los Angeles Avenue and Topo Canyon Road
- Southern California Edison electrical transmission and distribution (above and below ground) lines at Sequoia Avenue, East Los Angeles Avenue, Goddard Avenue, and Hidden Ranch Drive
- City of Simi Valley sewer and potable water lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Canyon Road, and Hidden Ranch Drive
- Southern California Gas natural gas lines at Sequoia Avenue, East Los Angeles Avenue, Tapo Street, Arroyo lane, and Hidden Ranch Drive
- Golden State Water Company potable water lines at Sequoia Street, Goddard Avenue, Hietter Avenue, Tapo Street, and East Los Angeles Avenue
- Fiber optic cables parallel to the ROW owned by the following communications companies:
    - Lumen Technologies (formerly CenturyLink)
    - Verizon
    - AT&T
    - Sprint
    - Wilshire Communication
    - Charter Communications

Potholing would be implemented in conjunction with final design to verify the locations of all existing utilities within the Project study area and to determine which utilities would be protected in place and which utilities would require relocation or abandonment.

Right-of-Way

The majority of proposed improvements (including the proposed pedestrian underpass at the Simi Valley Station) would be constructed within the railroad ROW (Figure 2-3, Sheet 1 through 9).The northern 40 feet of ROW are owned by SCRRA, while the southern 60 feet are owned by UPRR. The ramp and stair access from the undercrossing to the new platform would extend south of the existing UPRR ROW and require acquisition of a portion of the adjacent multifamily parcel.

Roadway improvements would generally be located outside of the railroad ROW and within the City of Simi Valley's roadway ROW. Improvements at Hidden Ranch Drive would require acquisition of portions of two adjacent multifamily parcels at the southern and western corners of the crossing. Additionally, potential sidewalk crossing improvements that would extend into unimproved areas of private properties near Hidden Ranch Drive would require temporary construction easements in order to access the proposed CP Arroyo area.

To connect with the Arroyo Simi Bike Path, the egress path from the new platform may also extend south of the ROW onto the Ventura County Flood Control District's property, or it could extend further west to connect to the bike path within UPRR ROW. Final ROW needs would be confirmed during final design.

2.4.2 Construction

Project construction would begin as early as April 2022 and last for approximately 19 months. The work would be accomplished over four phases, beginning with construction of the pedestrian underpass and new platform at the station, and ending with reconstruction of 250 feet of the existing station platform. Construction may involve multiple crews working simultaneously and would include equipment such as track stabilizers, excavators, front-end loaders, rubber-tired dozers, cranes, haul trucks, and water trucks.

Construction would generally proceed in the following four phases over the 19-month construction schedule:

- Phase 1:
    - A number of third-party utility lines would be relocated in order to make way for the improvements of the Project. These utilities include fiber optic lines that run parallel to the Project study area, as well as many crossing utilities, such as water, gas, electric, and others. The relocations are due to the addition of a second main track, added second platform, inadequate depth underneath the rail, or insufficient casing length that spans the entire railroad ROW.
- Phase 2:
    - Construct structures, including the pedestrian underpass and new platform at Simi Valley Station and the retaining wall near the Arroyo Simi Bike Path
    - Construct track work, including the new main track (Main Track 1) outside of grade crossing limits and new turnouts, while maintaining service on the existing track
    - Construct signal houses, signal foundations, grade crossing warning devices and associated conduits

- Phase 3:
  - Construct track and roadway improvements at the at-grade crossings
  - Transfer rail service onto the newly constructed Main Track 1; take the existing track out of service for the second main track (Main Track 2) improvements
  - Finish installing signals at new CP Sequoia and CP Arroyo
- Phase 4:
  - Construct Main Track 2 track and upgrade existing from timber to concrete ties
  - Activate Main Track 2 track into service
  - Remove and reconstruct 250 feet of the existing Simi Valley Station platform and finish upgrading any remaining timber ties to concrete ties

Material and equipment imports and construction personnel would access the Project study area via walking points from the nearest fence access or staging area. Potential construction access points and staging areas have been identified within the ROW and are shown on Figure 2-3 (Sheets 3, 6, 7, 8, and 9). An additional staging area outside the ROW was identified between East Los Angeles Avenue and Arroyo Simi, as shown on Figure 2-3. The final construction staging area locations would be confirmed during design development.

Construction activities would be scheduled during time frames that allow for exclusive track occupancy by construction crews to minimize effects on Metrolink operations. To the greatest extent possible, construction activities would be scheduled during the daytime; however, nighttime work would be required to maximize construction work windows. The Project would also include weekend work when Metrolink service is reduced.

Prior to construction, coordination would be needed with regard to the bike trail and potential temporary construction closures. Dewatering is expected to be necessary during construction of the pedestrian underpass at the station and would be completed in accordance with applicable regulations.

2.4.3 Operation

The Project would improve safety and reliability on the VCL and at the Simi Valley Station and adds capacity to accommodate growth of Metrolink commuter train operations through the Project study area. The Project would install safety improvements at four grade crossings and create a new 2.20-mile double track segment through southern Simi Valley, which would reduce the distance of single-track territory through the Project study area. Passenger trains running along the Ventura Subdivision on the Metrolink VCL would be able to use this double track segment to pass uninterrupted through the Project study area rather than idling at the nearest location with two tracks, waiting for trains in the opposite direction to cross the single-track segment.

Project operation is projected to start in 2025. The Project would also provide faster, more frequent, and more reliable service by increasing on-time performance. As the population of Southern California increases, it is likely that additional passenger rail service would be added to the Metrolink VCL in the future to ease traffic congestion on freeways and local streets.

With Project implementation, as well as completion of the other VCL projects, Metrolink service would increase, providing up to 48 revenue trains per day on the VCL (Table 2-1).

Table 2-1. 2019 Schedules and Proposed Service Schedules: Ventura County Line

Schedule	Existing Service (2019)			Proposed Service (2025)		
	To Los Angeles[a]	From Los Angeles[a]	All	To Los Angeles[a]	From Los Angeles[a]	All
Weekday	16	17	33	24	24	48
Saturday	0	0	0	1[b]	1[b]	2[b]
Sunday	0	0	0	0	0	0

Notes:

[a] VCL trains to or from Los Angeles originate or terminate in Ventura, Moorpark, Chatsworth, or Burbank. Future service includes trains originating and terminating in Van Nuys.

[b] VCL Saturday service would operate between April and October only.

VCL=Ventura County Line

2.5 Jurisdictional Study Area

The Project is located on a 2.20-mile segment of the SCRRA VCL between MP 436.20 and MP 438.40. The Project alignment begins at its western terminus at Sequoia Avenue and ends south of Stearns Street at the Arroyo Simi Railroad Bridge, within the City of Simi Valley. The JSA is smaller than the overall Project study area and consists of the Project footprint, which includes Metrolink ROW within the Project's MP limits, as well as all temporary construction easements. The Project JSA is located in an area of Simi Land Grant on the USGS *Simi Valley East, California* 7.5-minute series topographical quadrangle. Figure 2-1 shows the regional location of the Project. Figure 2-2 shows the Project's location in southern Simi Valley, the extent of the proposed improvements, and the Project footprint (i.e., JSA).

3 Regulatory Setting

3.1 United States Army Corps of Engineers

3.1.1 Section 404 of the Clean Water Act

Pursuant to Section 404 of the CWA, USACE regulates the discharge (temporary or permanent) of dredged or fill material into waters of the U.S., including wetlands. A discharge of fill material includes, but is not limited to, grading, placing riprap for erosion control, pouring concrete, and stockpiling excavated material into waters of the U.S. Activities that generally do not involve a regulated discharge (if performed specifically in a manner to avoid discharges) include driving pilings, performing certain drainage channel maintenance activities, constructing temporary mining and farm/forest roads, and excavating without stockpiling.

As of June 22, 2020, the term waters of the U.S. is defined in the USACE regulations at 33 Code of Federal Regulations Part 328.3(a) as:

a. Jurisdictional waters. For purposes of the CWA, 33 U.S.C. 1251 et seq. and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term waters of the U.S. means:

    1. The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
    2. Tributaries;
    3. Lakes and ponds, and impoundments of jurisdictional waters; and
    4. Adjacent wetlands.

b. Nonjurisdictional waters. The following are not waters of the U.S.:

    1. Waters or water features that are not identified in paragraph (a)(1), (2), (3), or (4) of this section;
    2. Groundwater, including groundwater drained through subsurface drainage systems;
    3. Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
    4. Diffuse stormwater runoff and directional sheet flow over upland;
    5. Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
    6. Prior converted cropland;
    7. Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
    8. Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in nonjurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;

9. Water-filled depressions constructed or excavated in upland or in nonjurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in nonjurisdictional waters for the purpose of obtaining fill, sand, or gravel;
10. Stormwater control features constructed or excavated in upland or in nonjurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
11. Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in nonjurisdictional waters; and
12. Waste treatment systems.

The term ephemeral means surface water flowing or pooling only in direct response to precipitation (e.g., rain or snow fall). The term intermittent means surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts). The term perennial means surface water flowing continuously year-round. Per USACE Regulatory Guidance Letter 08-02, applicants can elect to request and obtain an approved jurisdictional determination (JD), he or she can also decline to request an approved JD, and instead obtain a USACE individual or general permit authorization based on either a preliminary JD, or, in appropriate circumstances (such as authorizations by nonreporting nationwide general permits), no JD whatsoever. By definition, a preliminary JD can only be used to determine that wetlands or other water bodies that exist on a particular site may be jurisdictional waters of the U.S. A preliminary JD by definition cannot be used to determine either that there are no wetlands or other water bodies on a site at all (i.e., that there are no aquatic resources on the site and the entire site is comprised of uplands), or that there are no jurisdictional wetlands or other water bodies on a site, or that only a portion of the wetlands or waterbodies on a site are jurisdictional. The use of a preliminary JD may expedite the permitting process when compared to the approved JD process which requires the JD to be coordinated with U.S. Environmental Protection Agency.

The limits of USACE jurisdiction in nontidal waters extends to the ordinary high water mark (OHWM), which is defined at 33 Code of Federal Regulations 328.3(e) 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.*

Per the Regulatory Program CWA Guidance to Implement the U.S. Supreme Court Decision for the Rapanos and Carabell Cases (USACE 2008a), USACE typically does not assert jurisdiction over nontidal drainage and irrigation ditches that are excavated on dry land, drain adjacent upland areas, and do not convey relatively permanent flow.

Wetlands

The term wetlands (a subset of waters of the U.S.) is defined at 33 Code of Federal Regulations 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987, USACE published a manual to guide its field personnel in determining jurisdictional wetland boundaries followed by the Arid West Supplement in 2008 (USACE 2008b). The methodology set forth in the *Regional Supplement to the Corps of Engineers Wetland Delineation*

Manual: Arid West Region generally requires that in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual provides great detail in methodology and allows for varying special conditions, a wetland should normally meet each of the following three criteria:

1. The plant community must be determined to be hydrophytic based on: (1) the dominance test applied using the 50/20 rule[2]; or (2) where the vegetation fails the dominance test and wetland hydrology and hydric soils are present, vegetation is determined to be hydrophytic using the Prevalence Index test[3] based upon the indicator status (i.e., rated as facultative or wetter in the 2016 National List of Plant Species that Occur in Wetlands [Lichvar et al. 2016, USACE 2020]).
2. Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., redoximorphic features with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions).
3. Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for a sufficient period to cause: (1) the formation of hydric soils; and (2) establishment of a hydrophytic plant community. A positive test for wetland hydrology is based on the presence of one primary or two secondary indicators.

3.2 Regional Water Quality Control Board

In California, the State Water Resources Control Board (SWRCB) and nine RWQCBs regulate activities within state and federal waters under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. The SWRCB is responsible for setting statewide policy, coordinating and supporting RWQCB efforts, and reviewing petitions that contest RWQCB actions. Each RWQCB is semi-autonomous and has the authority to set water quality standards, issue Section 401 certifications and waste discharge requirements, and take enforcement action for projects occurring within its boundary. However, when a project crosses multiple RWQCB jurisdictional boundaries, the SWRCB becomes the regulating agency that issues project permits.

3.2.1 Section 401 of the Clean Water Act

Section 401 specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge into waters of the U.S. A federal permit or license cannot be issued that may result in a discharge to waters of the U.S. unless certification under Section 401 of the CWA is granted or waived by the U.S. Environmental Protection Agency, state, or tribe where the discharge would originate (SWRCB 2014). The Project JSA is within the boundaries of the Los Angeles (Region 4) RWQCB, which would have the authority to grant, grant with conditions, deny, or waive water quality certification for the Project.

[2] If a particular species accounts for more than 50 percent of the total coverage of vegetation in the stratum, or for at least 20 percent of the total coverage in the stratum which the species was found, that species is defined as dominant.

[3] A Prevalence Index is calculated using wetland indicator status and relative abundance for each vascular plant species present.

Under Section 401, all activities regulated at the federal level by USACE are also regulated at the state level. Therefore, state jurisdiction usually includes all waters or tributaries to waters that are determined to be waters of the U.S. and, similar to waters of the U.S., are typically delineated at the OHWM.

3.2.2 Porter-Cologne Water Quality Control Act

RWQCB also regulates discharge of waste to waters of the state, pursuant to California's Porter-Cologne Water Quality Control Act, enacted in 1969, which provides the legal basis for water quality regulation within California. Under this act, waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (Water Code section 13050(e)). Should RWQCB determine that discharge of pollutants (including fill) is proposed to waters that meet the definition of waters of the state but not waters of the U.S., waste discharge requirements may be required.

3.2.3 State Water Resources Control Board’s 2019 Wetland and Riparian Area Protection Policy

The SWRCB adopted a statewide definition of rules to protect wetlands and other environmentally sensitive waterways throughout the state on April 2, 2019. These rules define what SWRCB considers a wetland and include a framework for determining if a feature that meets the SWRCB wetland definition is a water of the state, subject to regulation. Second, the rules clarify requirements for permit applications to discharge dredged or fill material to any water of the state.

The SWRCB (2019) defines an area as wetland as follows:

> *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.*

SWRCB considers the following wetlands (as determined using methodology in the USACE *Wetland Delineation Manual* (Environmental Laboratory 1987) as 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 on 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 1 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
    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 1 acre in size and do not satisfy the criteria set forth in numbers 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.

3.3 California Department of Fish and Wildlife

3.3.1 California Fish and Game Code Section 1600 et seq.

The State of California regulates water resources under Section 1600 et seq. of the California Fish and Game Code. Section 1602 states:

> *An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.*

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated, or to the limit of the adjacent riparian habitat located contiguous to the watercourse if the stream or lake is vegetated.

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4 Methodology

4.1 Literature Review

The following literature and materials were reviewed both prior to conducting delineation fieldwork and in the process of determining jurisdictional status of features identified in the field:

- Current and historical aerial photographs (Google Earth 2020; Historic Aerials 2020)
- U.S. Department of Agriculture Natural Resources Conservation Service soil mapping data (U.S. Department of Agriculture Natural Resources Conservation Service 2020)
- USGS *Simi Valley East, California* 7.5-minute topographical map to determine the current or historical presence of any blue line drainages or other mapped water features (USGS 1966)
- National Hydrography Dataset (USGS 2020)
- U.S. Fish and Wildlife Service National Wetlands Inventory data to identify areas mapped as wetland features (U.S. Fish and Wildlife Service 2020)

4.2 Field Investigation

A field survey of the JSA was conducted on April 21, 2020. After two new signal locations were added to the Project footprint west of the existing at-grade crossings at Sycamore Drive and Erringer Road, a site visit was conducted on January 20, 2021, to survey the new areas for jurisdictional resources. All potential drainage features within the JSA were investigated on foot, recorded on aerial photographs, and digitized using geographic information systems. Notes describing drainage type, substrate type, flow regime, presence or absence of vegetation, and any other pertinent details regarding apparent hydrology were taken at each feature.

Plant species observed were identified by visual characteristics and morphology in the field. Taxonomic nomenclature for plants follows the *Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012) and the Jepson eflora (Jepson Flora Project 2020). Vegetation communities were characterized using *A Manual of California Vegetation*, second edition (Sawyer and Keeler-Wolf 2009).

Representative photographs of the JSA and assessed features are provided in Appendix A.

4.2.1 United States Army Corps of Engineers

USACE jurisdiction was delineated according to the methods outlined in the *USACE Wetland Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008b), and *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (USACE 2008c).

Features were investigated for evidence of an OHWM or other jurisdictional indicators, such as presence of hydrophytic vegetation. Three wetland sampling points were assessed within the JSA in areas exhibiting potential wetland conditions, notably potentially hydrophytic vegetation. Wetland indicator status of plant species was determined by using the *2016 Arid West Regional Wetland Plant List* (Lichvar et al. 2016). Soils were analyzed using the *Natural Resources Conservation Service Field Indicators of Hydric Soils in the U.S., Version 8.2* and List of California Hydric Soils (United States

Department of Agriculture Natural Resources Conservation Service 2018) and Munsell Soil Color Chart (Munsell 2013).

4.2.2 Regional Water Quality Control Board

RWQCB jurisdiction, for the purposes of CWA Section 401 Certification, is identical to USACE jurisdiction. In addition, the JSA was evaluated for isolated features that would not be subject to federal jurisdiction but would be potentially regulated under the Porter-Cologne Water Quality Control Act.

4.2.3 California Department of Fish and Wildlife

The JSA was surveyed for features that exhibit streambed and stream banks and/or riparian vegetation and would, therefore, be subject to CDFW jurisdiction. Any such features would be mapped from top of bank to top of bank or to the extent of riparian vegetation, whichever is greater. Constructed, ephemeral features that were excavated in uplands and only drained upland areas into adjacent streets or storm drains were mapped but were not considered jurisdictional.

4.2.4 Vegetation

Plant species observed were identified by visual characteristics and morphology in the field. Taxonomic nomenclature for plants follows the *Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012) and the Jepson eFlora (Jepson Flora Project 2020). Vegetation communities were characterized using *A Manual of California Vegetation*, second edition (Sawyer and Keeler-Wolf 2009).

5 Results

5.1 Environmental Setting

The JSA is located in southeast Ventura County, in the City of Simi Valley, a highly urbanized area of the county. The JSA is adjacent to the northwestern perimeter of the San Fernando Valley and is bordered by the Santa Susana Mountains to the north and the Simi Hills to the east and south. The JSA and surrounding areas are developed, and most natural vegetation and drainage features have been removed.

5.1.1 Climate

Simi Valley has a warm and temperate climate with hot, dry summers and with rain occurring primarily in the winter months. The average precipitation for Simi Valley is 17.6 inches per year and most of the rainfall occurs in January and February (U.S. Climate Data 2020).

5.1.2 Soils

The following soil associations are mapped by the United States Department of Agriculture Soils Survey within the JSA (Figure 5-1) (United States Department of Agriculture Natural Resources Conservation Service 2020):

- **Metz Series**: The Metz series consists of deep, well drained soils formed in alluvial material derived from mostly sedimentary rocks. Metz soils are on floodplains and alluvial fans with slopes of 0 to 15 percent. Metz loamy fine sand (0 to 2 percent slopes) is mapped within the JSA.
- **Mocho Series**: The Mocho series consists of very deep, well drained soils that formed in alluvium derived mostly from sandstone and shale rock sources. Mocho soils commonly occur on alluvial fans and have slopes of 0 to 9 percent. Three Mocho series soils are mapped within the JSA: Mocho clay loam (0 to 2 percent slopes), Mocho loam (0 to 2 percent slopes), and Mocho loam (2 to 9 percent slopes).
- **Pico Series**: The Pico series consists of deep, well drained soils that formed in alluvium from mostly sedimentary rocks. Pico soils commonly occur on floodplains and alluvial fans and have slopes of 0 to 9 percent. Pico sandy loam (0 to 2 percent slopes) is mapped within the JSA.
- **Riverwash:** Riverwash consists of very recent depositions of gravel, sand, and silt alluvium along major streams and their tributaries. Gravel bars make up the majority of these areas. During floods, alluvial areas are subject to repeated deposition, erosion, and shifting of transported material. Riverwash is the only soil type that has a hydric rating that is mapped within the JSA.
- **Soper Series:** The Soper series consists of moderately deep, well drained soils that formed in material weathered from conglomerate and sandstone. Soper soils are on hills and uplands and have slopes of 15 to 50 percent. Soper gravelly loam (30 to 50 percent slopes) is mapped within the JSA.

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Figure 5-1. United States Geological Survey Mapped Soils

(Sheet 1 of 2)

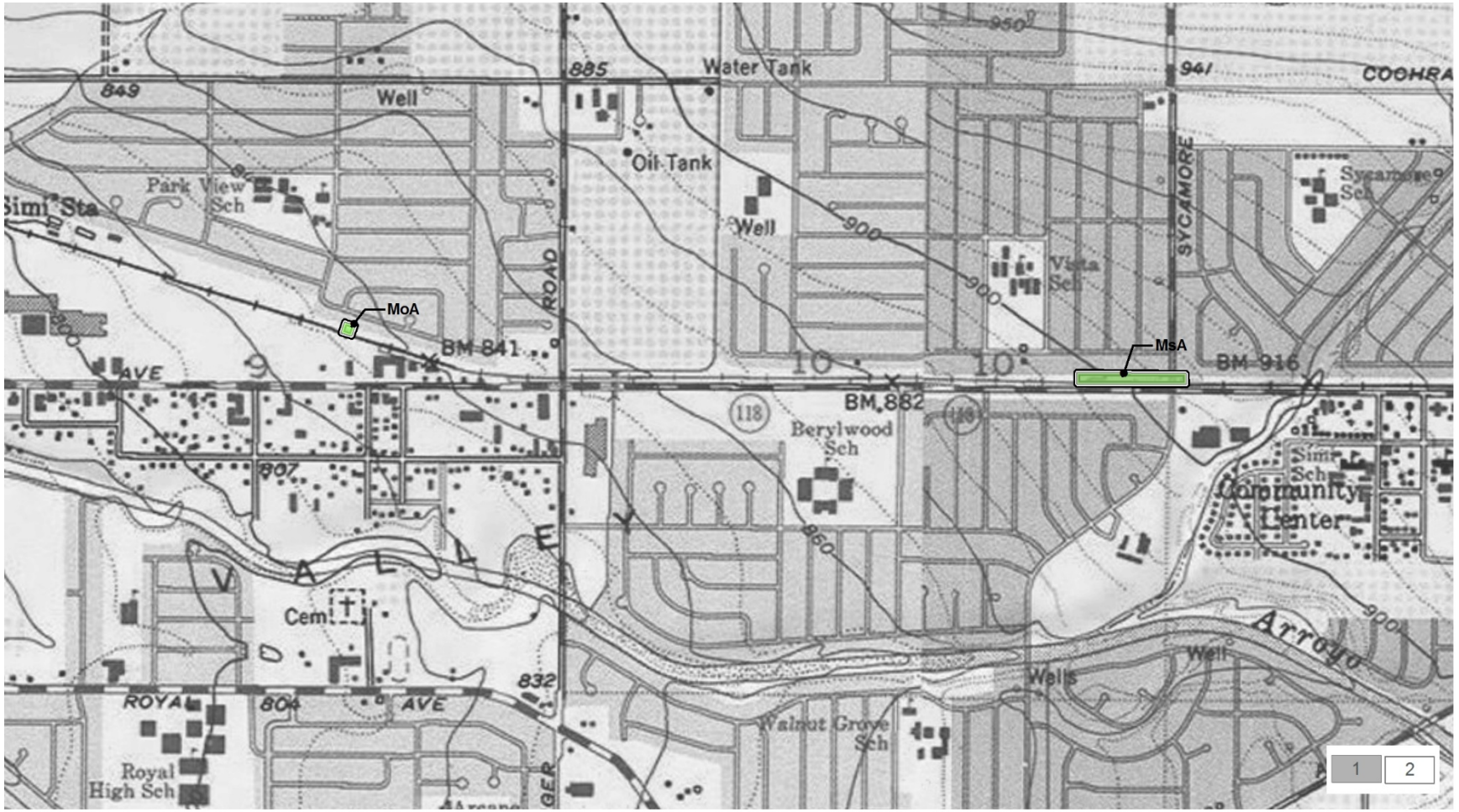

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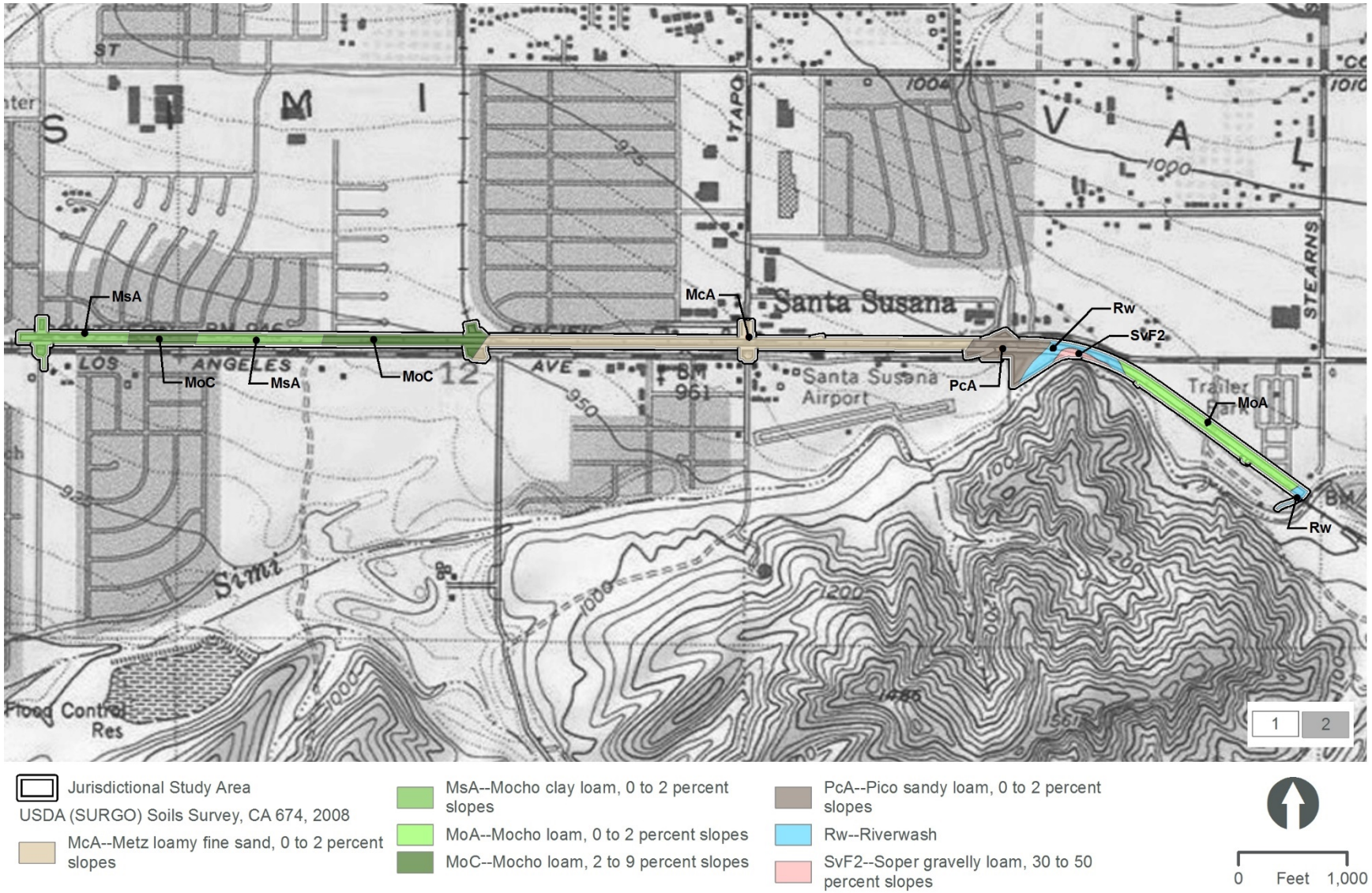
Figure 5-2. United States Geological Survey Mapped Soils
(Sheet 2 of 2)



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5.1.3 Hydrology

Simi Valley is located within the Calleguas Creek Watershed. This watershed encompasses approximately 343 square miles, predominantly in southern Ventura County, and is generally 30 miles long and 14 miles wide. The northern boundary is formed by South Mountain and Oak Ridge, northeast and east boundary is formed by the Santa Susana Mountains, and the southern boundary is formed by the Simi Hills and Santa Monica Mountains (SWRCB 2020).

The Watershed includes the Conejo Creek, Arroyo Santa Rosa, Arroyo Simi, Arroyo Las Posas, and Calleguas Creek, as well as Revolon Slough and Mugu Lagoon (Calleguas Municipal Water District 2004). Approximately 50 percent of the Watershed is undeveloped open space, 25 percent is agricultural, and the remaining 25 percent is urban land use (Watersheds Coalition of Ventura County 2006). The upper reach of the Watershed includes Simi Valley and Las Posas Valley. The main surface water bodies are the Arroyo Simi, Arroyo Las Posas and the uppermost reach of the Calleguas Creek. The groundwater bodies include the Las Posas Basin, one of the major aquifers within the Fox Canyon Aquifer System, and the South Las Posas Basin and the Simi Valley Basin, both unconfined groundwater basins.

The Watershed has relatively few surface water features. There are no natural lakes and no major rivers. The surface waters are primarily arroyos and creeks that have historically carried storm flows and post-storm flows from the upper watershed down to the alluvial valleys and the southeastern portion of the Oxnard Plain (Larry Walker Associates 2004). The major drainage course through the City of Simi Valley is the Arroyo Simi. This major channel drains from the extreme limits of the Watershed in the east and northeast, then westerly through the Las Posas Valley (as Arroyo Las Posas) to the Oxnard Plain (as Calleguas Creek), and finally into the Pacific Ocean through Mugu Lagoon (Ventura County Watershed Protection District 2003). In the eastern half of the valley, the Arroyo Simi traverses close to the base of the hills on the southern edge of the valley, while in the western half it traverses diagonally across the valley to the northwest, reaching the center of the valley, from which it discharges downstream toward Moorpark (City of Simi Valley 1990). Tributaries to Arroyo Simi from the Santa Susana Mountains on the north are, from west to east, Alamos Canyon, Brea Canyon, North Simi Drain, Dry Canyon, Tapo Canyon, Chivo Canyon, and Las Llajas Canyon. Canyons draining the Simi Hills from the south are Sycamore Canyon, Bus Canyon, Erringer Road Drain, Runkle Canyon, Meier Canyon, and Black Canyon in the Santa Susana area (Ventura County Watershed Protection District 2003).

The main hydrologic features within the vicinity of the JSA, as shown on the National Wetland Inventory (Figure 5-3), are Arroyo Simi and Las Llajas Canyon channel, which is tributary to Arroyo Simi. Las Llajas Canyon channel passes beneath East Los Angeles Avenue and the rail ROW via a concrete box culvert. Arroyo Simi lies outside of the JSA.

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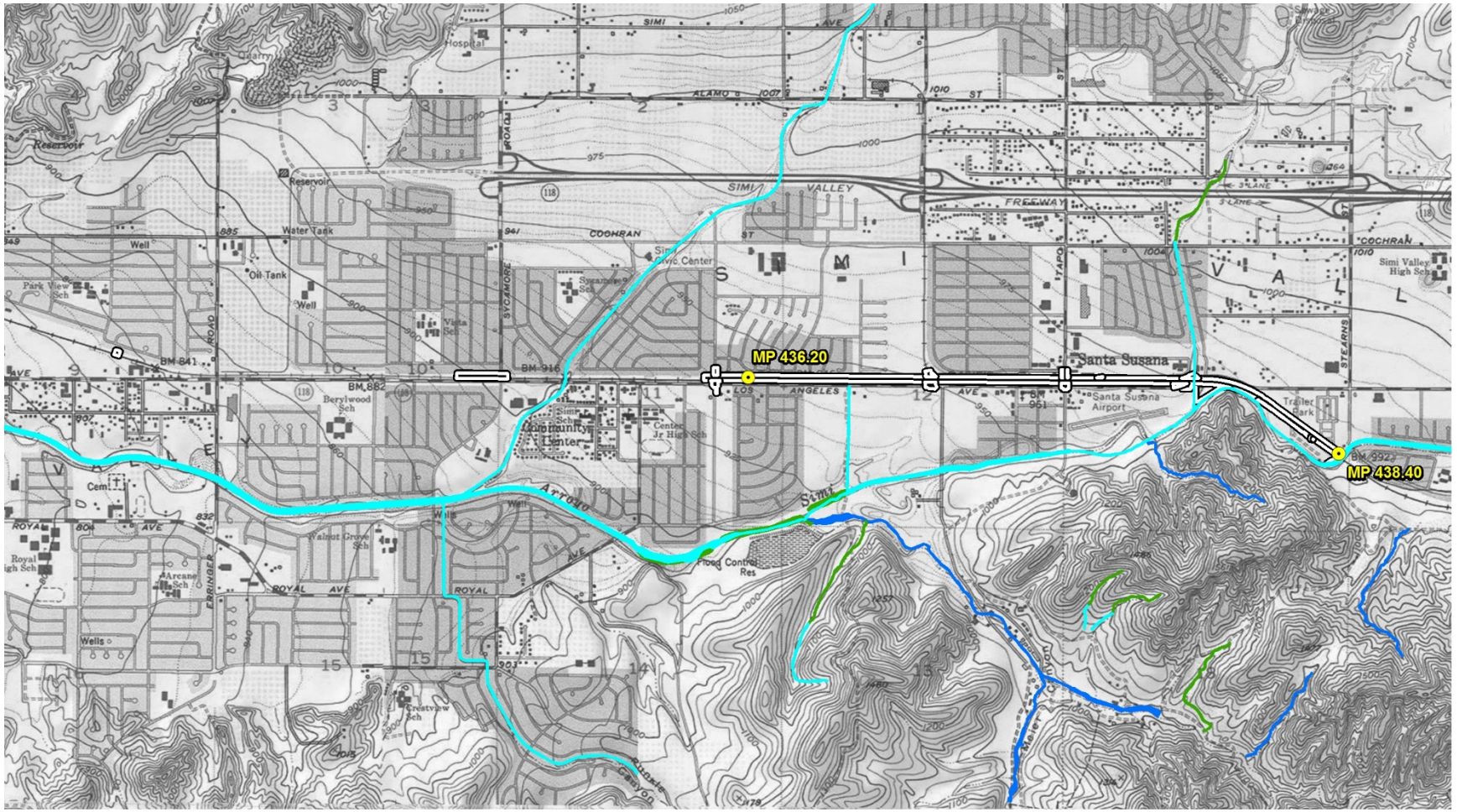
Figure 5-3. National Wetland Inventory



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5.1.4 Vegetation and Land Cover Types

The majority of the JSA is developed or disturbed with small amounts of associated ornamental or ruderal vegetation. For the most part, plant species within the JSA consist of nonnative species, such as nonnative grasses (e.g., foxtail chess [*Bromus madritensis*]) and ornamental trees (e.g., pepper tree [*Schinus molle*]). Vegetation community or land cover types within the JSA are shown from west to east on Figure 5-4 (Sheets 1 through 7) and are described below.

Urban/Developed

Urban/developed land refers to areas that have been manipulated by grading and compacting soils to build infrastructure, such as roads, buildings, parks, fields, etc. These areas have no biological function or value, except that they may provide habitat for nesting birds.

Within the JSA, paved roads, associated landscaping, and portions of the Metrolink ROW were mapped as urban/developed. The JSA contains approximately 32.32 acres of urban/developed land cover.

Nonnative Ornamental

Areas with ornamental vegetation are typically found near development, along streets, and in parks. This vegetation usually consists of irrigated plants and trees that are not native but may include native species that are intentionally planted.

Within the JSA, a small stand of nonnative ornamental pepper trees (*Schinus molle*), covering approximately 0.31 acre, is located on the northeast corner of East Los Angeles Avenue and Tapo Canyon Road.

Disturbed

Disturbed areas are where natural communities have been impacted to the extent that they no longer function naturally. These areas have been previously physically disturbed but continue to retain a soil substrate. Disturbed areas consist of predominantly nonnative weedy and ruderal species. This is not a natural community and generally does not provide habitat for wildlife or special-status species, though exceptions occur. Examples of disturbed habitat include areas that have been graded for development or cleared for fuel management, staging areas, off-road vehicle trails, and abandoned home or business lots.

Within the JSA, stabilized streambanks along Arroyo Simi and vacant lots that would serve as staging areas for the Project constitute disturbed land cover and amount to approximately 3.77 acres.

Native Ornamental

The JSA contains small areas of mature, native coast live oak (*Quercus agrifolia*) and western sycamore (*Platanus racemosa*) trees that are surrounded by development and serve as ornamental trees. Mature native trees, especially oak trees, may be protected by state regulations and local ordinances and are therefore identified separately from nonnative ornamental trees.

Within the JSA, native trees that serve as ornamental trees occur along the rail ROW and cover approximately 0.29 acre.

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Figure 5-4. Vegetation within the Jurisdictional Study Area

(Sheet 1 of 7)

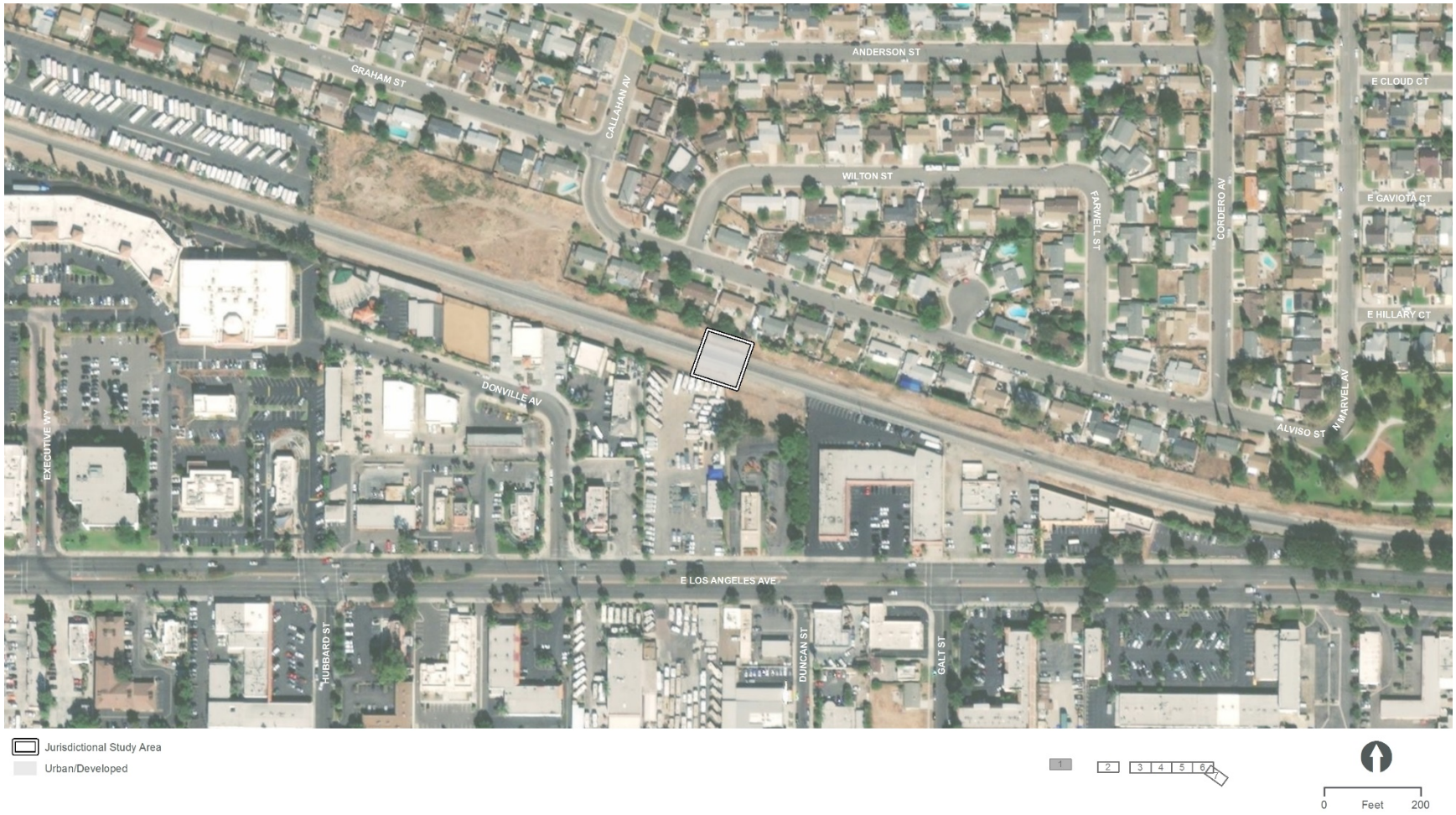

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Figure 5-3. Vegetation within the Jurisdictional Study Area
(Sheet 2 of 7)

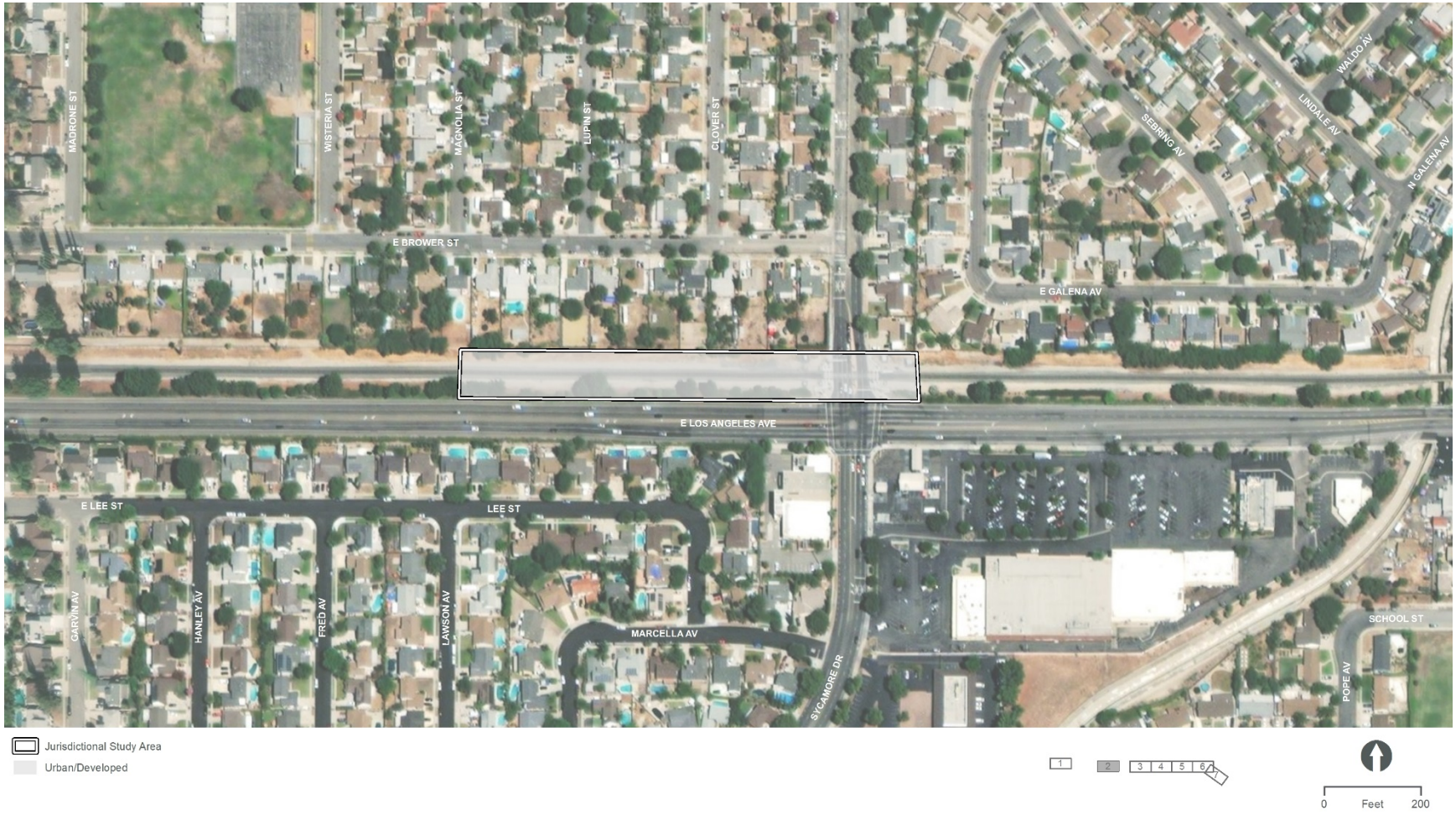

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Figure 5-3. Vegetation within the Jurisdictional Study Area
(Sheet 3 of 7)

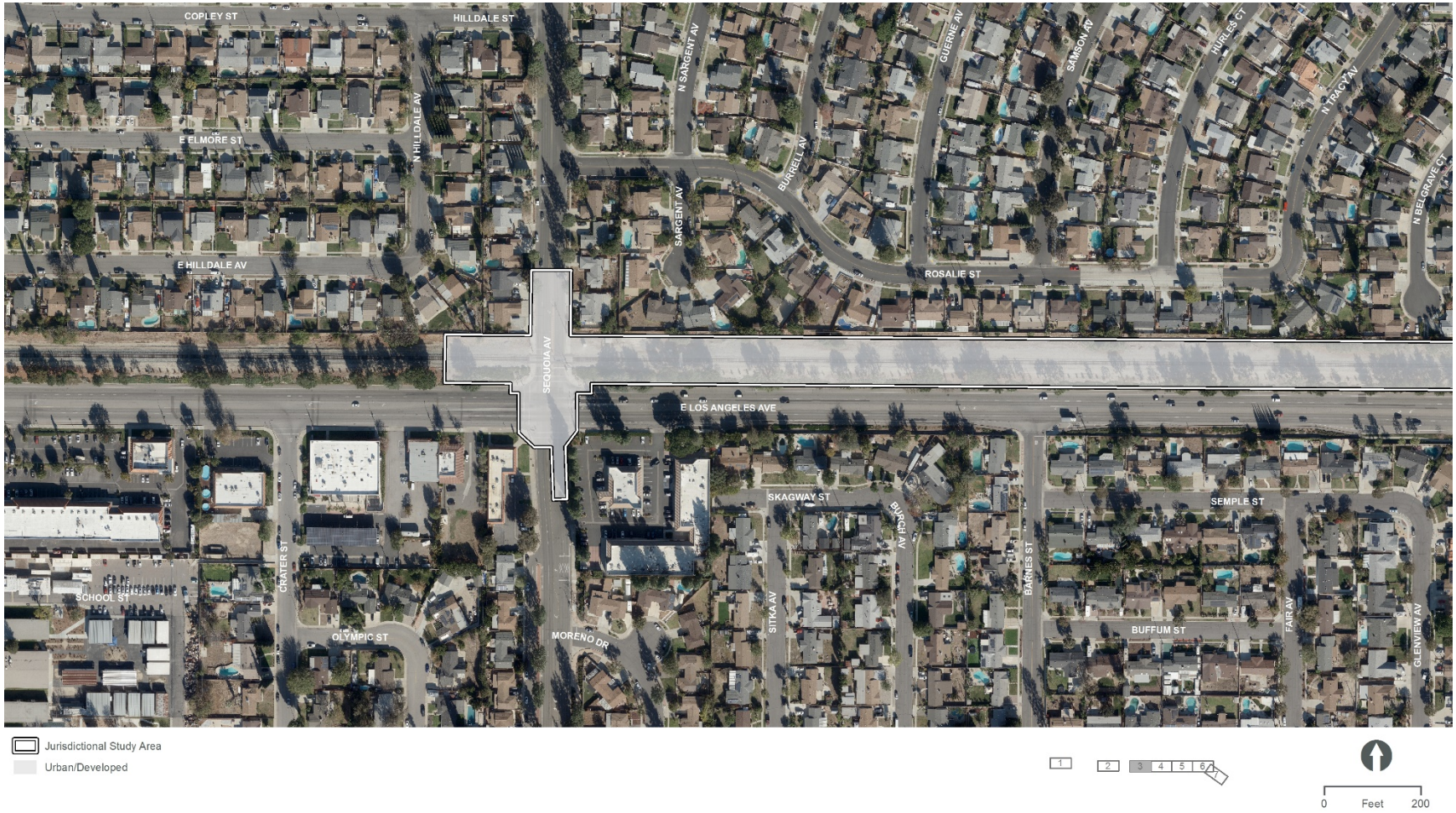

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Figure 5-3. Vegetation within the Jurisdictional Study Area
(Sheet 4 of 7)

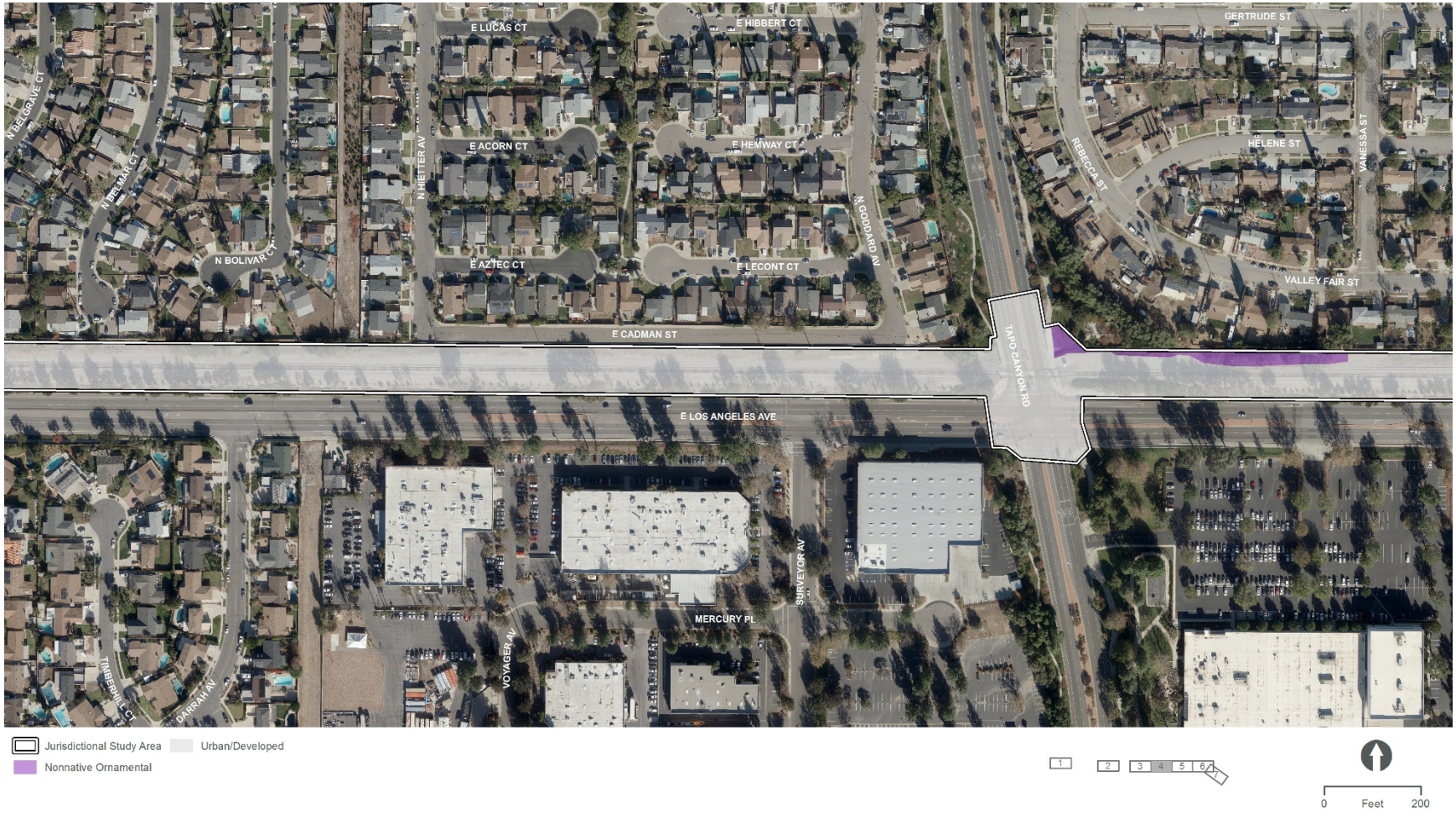

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Figure 5-3. Vegetation within the Jurisdictional Study Area

(Sheet 5 of 7)

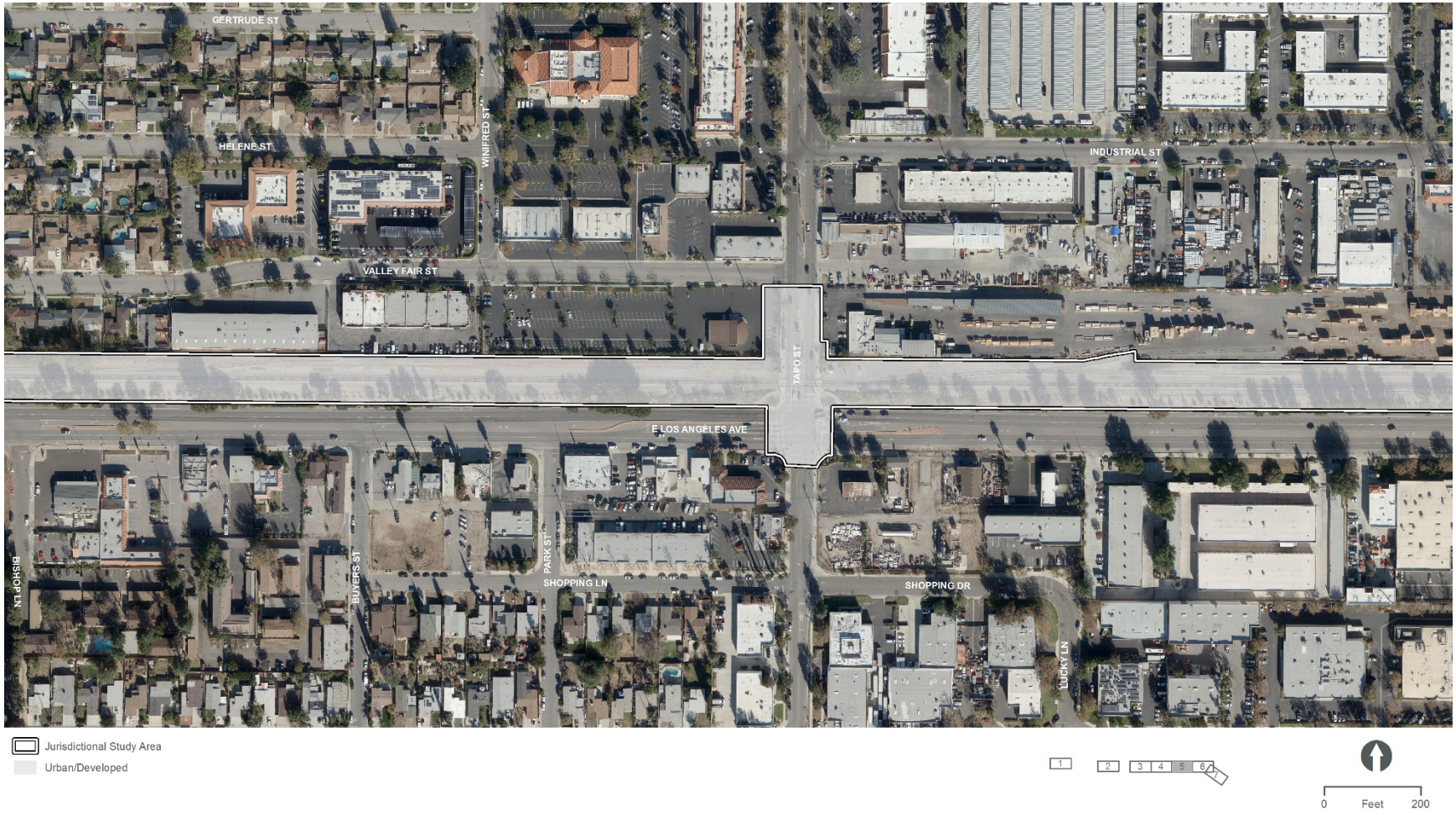

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Figure 5-3. Vegetation within the Jurisdictional Study Area
(Sheet 6 of 7)

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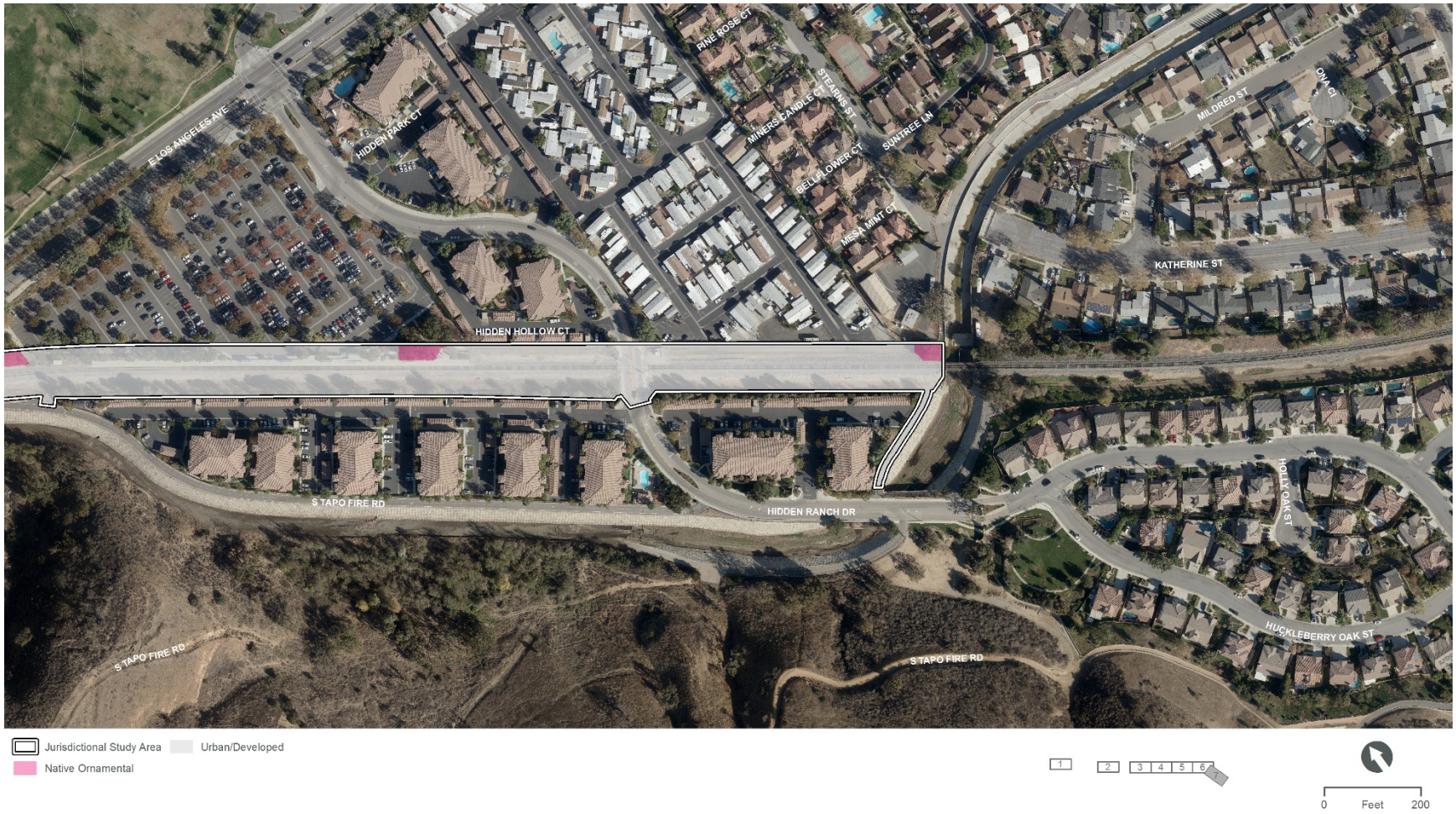
Figure 5-3. Vegetation within the Jurisdictional Study Area
(Sheet 7 of 7)



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5.2 Field Assessment Results

The only jurisdictional aquatic resources located within the immediate vicinity of the JSA are Arroyo Simi, which is located just outside of the JSA (Appendix A, Photograph 20), and Las Llajas Canyon channel, which is tributary to Arroyo Simi and passes beneath the rail ROW and East Los Angeles Avenue via a concrete box culvert (Appendix A, Photograph 17).

5.2.1 United States Army Corps of Engineers

Several storm drain outlets, multiple culverts, and all topographic low points within the JSA were examined for indicators of wetland hydrology or vegetation and indicators of OHWM. None of the features exhibited an OHWM.

A relatively large ponded area was observed near the Simi Valley Station, south of the railroad and west of the existing station platform. The depression remained inundated for approximately 4 weeks but exhibited little vegetative cover. Where vegetation was present, it consisted of dead upland bromes or newly recruited hydrophytes. Hydric soil indicators were not present, suggesting that the ponding may not reflect normal circumstances and would no longer occur following regular maintenance activities (Appendix A, Photograph 18, and Appendix B, Wetland Determination Data Form – Sampling Point 1). Standing water was also observed east of the Hidden Ranch Drive crossing and south of the rail at a small culvert passing beneath the Hidden Ranch Drive parallel to the rail. Although the depression supported a predominance of hydrophytes, it did not exhibit hydric soils (Appendix A, Photograph 19, and Appendix B, Wetland Determination Data Form – Sampling Point [i.e., soil pit] 2). Figure 5-5 depicts all features investigated within the JSA. Representative photographs are provided in Appendix A. Wetland Determination Data Forms are provided in Appendix B.

As depicted on Figure 5-5 (Sheets 3 and 4) and Appendix A (Photographs 3 and 7), an intermittent series of swales occur along the northern edge of the ROW between Sequoia Avenue and approximately 230 feet east of the culvert at MP 436.56. These low areas likely retain surface runoff from the adjacent residential community, which is discharged to the site through a series of short storm drains and wall scuppers. As visible in Appendix A (Photographs 5 through 11), indicators of OHWM, including change in soil characteristics, presence of litter and debris, destruction of terrestrial vegetation, ripples, sediment deposition and flow lines were not observed even though the site visit was made within two weeks after a significant rain event and during an average rain year. A soil pit in one of these typical swales that exhibited 100-percent cover of curly dock (*Rumex crispus*, facultative species[4]) exhibited no hydric soil indicators or indicators of wetland hydrology (Appendix A, Photograph 7, and Appendix B, Wetland Determination Data Form - Sampling Point 3).

Isolated, standing water was observed at one storm drain outlet (Figure 5-5, Sheet 3, and Appendix A, Photograph 4). The area at the outlet contains southern cattail (*Typha domingensis*, obligate species), dallis grass (*Paspalum dilatum*, facultative species), Washington fan palm (*Washingtonia robusta*, facultative wetland [FACW]), and ornamental fig (*Ficus* sp., upland species). Based on the presence of mucky soils, this outlet supports approximately 36 square feet of wetland. However the outlet drains only adjacent residential development and long duration inundation is most likely a result of over-irrigation.

[4] FAC=Facultative species are equally likely to occur in wetland as nonwetland, OBL=obligate species almost always occur in wetland, FACW=facultative wetland species are slightly more likely to occur in wetlands than uplands, UPL=upland species almost never occur in wetlands.

Very fine sediment was observed on the concrete apron of the outlet of the culvert at MP 436.56 (Appendix A, Photograph 10), however based on the topography at the outlet and the absence of indicators at the culvert inlet (Appendix A, Photographs 8 and 9), the sediment appears to be deposited by local sheet flow collecting on the apron rather than storm flows from higher in the watershed. Based on aerial photography and USGS topographic mapping from 1947 through 1977 (Historic Aerials 2020) both the culvert MP 436.46 and the culvert at MP 436.56 may have historically passed irrigation drainage southward from the adjacent agricultural uses to the north. Since that time, urban development has resulted in the diversion of surface flows to underground storm drain systems, the culvert at MP 436.46 was abandoned and only local sheet flow from Rosalie Street, Belmar, Belgrave and Bolivar Courts, and Cadman Street appear to still be discharged to the railroad ROW where it infiltrates the soil.

Similarly, as depicted on Figure 5-5 (Sheet 6) and Appendix A (Photographs 12 through 15), the culvert at MP 436.96 exhibited no indicators of an OHWM entering the culvert and only signs of 6-inch wide sheet flow extending south of the outlet.

There were no potentially jurisdictional aquatic resource features observed in the two westernmost signal location areas surveyed on January 20, 2021.

Figure 5-5. Jurisdictional Delineation Map
(Sheet 1 of 11)

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 2 of 11)

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 3 of 11)

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 4 of 11)

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 5 of 11)

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 6 of 11)

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 7 of 11)

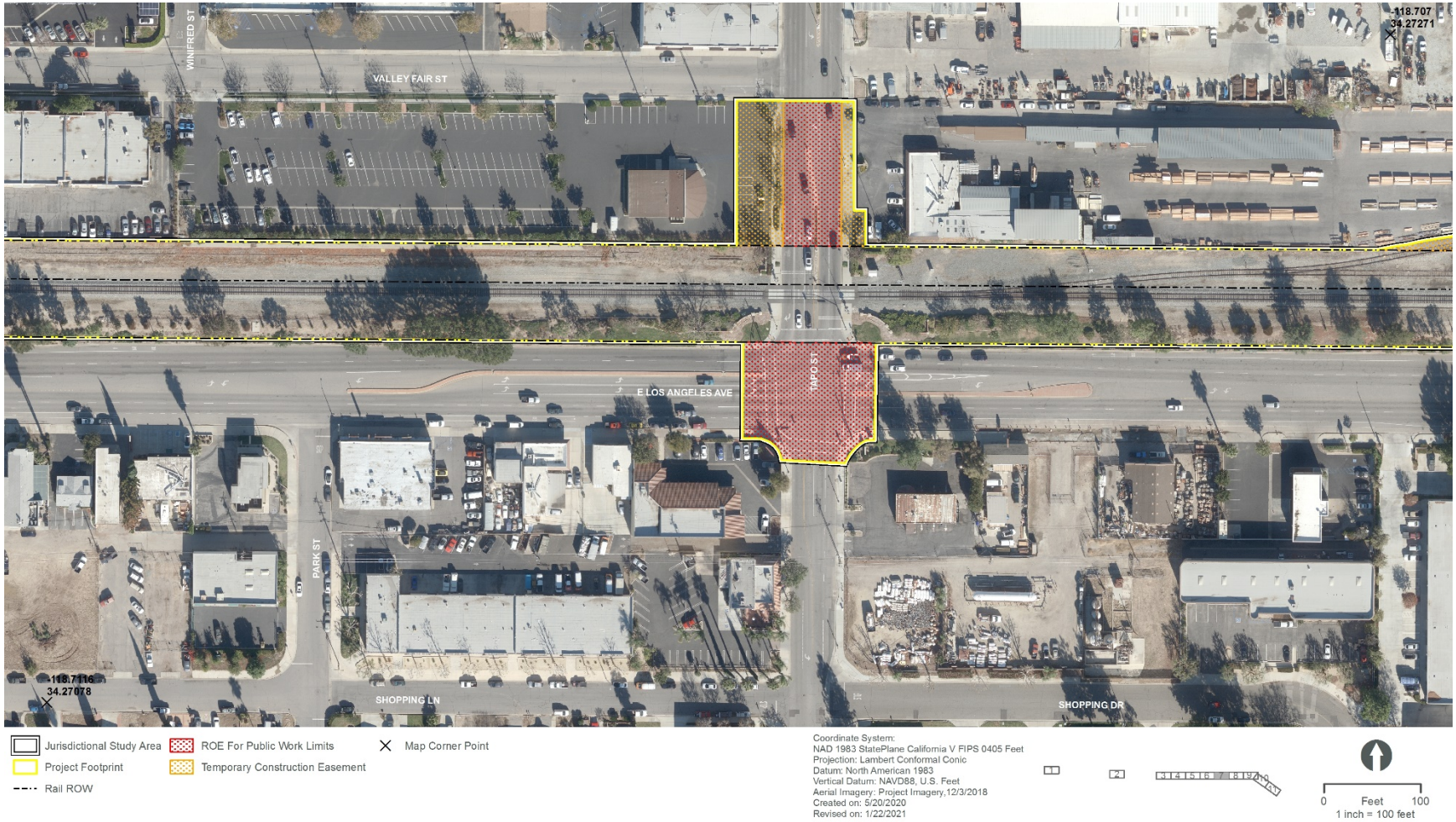

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Figure 5-4. Jurisdictional Delineation Map

(Sheet 8 of 11)

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Figure 5-4. Jurisdictional Delineation Map
(Sheet 9 of 11)

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Figure 5-4. Jurisdictional Delineation Map
(Sheet 10 of 11)

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Figure 5-4. Jurisdictional Delineation Map
(Sheet 11 of 11)

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5.2.2 Regional Water Quality Control Board

As described in Section 5.2.1, none of the features examined exhibited indicators of an OHWM that would make them potentially subject to RWQCB jurisdiction pursuant to Section 401 of the CWA or Porter Cologne Act. The small patch of wetland observed within the ROW between Sequoia Avenue and the abandoned culvert at MP 436.46 is not subject to regulation because it is an artificial wetland that is less than one acre in size, it is subject to ongoing maintenance within the ROW, and it does not meet any of the criteria for waters of the state.

5.2.3 California Department of Fish and Wildlife

Features within the JSA were evaluated for CDFW jurisdiction by searching for indicators of streambed and banks and steam function. Ditches or swales that collected flows only from adjacent roadways or rail ROW and connected directly to the underground storm drain system were not considered subject to CDFW jurisdiction. None of the features exhibited indicators that would make them potentially subject to CDFW jurisdiction under Section 1600 et seq. of the California Fish and Game Code.

The only jurisdictional aquatic resources located within the immediate vicinity of the JSA are Arroyo Simi and Las Llajas Canyon channel, which are located just outside of the JSA.

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6 Conclusions

The JSA is in a highly urbanized area, and any historic drainages that may have traversed the railroad in the past no longer do so. As a result, no indicators of OHWM or streambed and banks were identified within the JSA.

Findings presented in this jurisdictional delineation report are preliminary and subject to verification by USACE, RWQCB, and CDFW.

6.1 United States Army Corps of Engineers Jurisdiction

There are no wetland or nonwetland waters of the U.S. that would be subject to USACE jurisdiction under Section 404 of the CWA within the JSA.

6.2 Regional Water Quality Control Board Jurisdiction

There are no waters of the state that would be subject to RWQCB jurisdiction under Section 401 of the CWA or the Porter Cologne Act within the JSA.

6.3 California Department of Fish and Wildlife Jurisdiction

There are no features that exhibit streambed and stream banks and/or riparian vegetation that would be subject to CDFW jurisdiction under Section 1600 et seq. of the California Fish and Game Code within the JSA.

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Appendix A. Representative Photographs

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Photograph 1: Off-Site Ditch Constructed in Uplands looking northeast. Ditch drains residential neighborhood to north of Project (4/21/2020).

Photograph 2: Existing rail line looking southwest towards the intersections of Sequoia Avenue and Los Angeles Avenue (4/21/2020).

Photograph 3: Existing rail line looking east (4/21/2020).

Photograph 4: Standing water observed at storm drain outlet. Vegetated with cattail (*Typha domingensis*, OBL), dallis grass (*Paspalum dilatum*, FAC) and ornamental (*Ficus* sp.). Culvert drains abutting residential development (4/21/2020).

Photograph 5: 24-inch Culvert passing beneath the rail. No OHWM, bed or bank present (4/21/2020).

Photograph 6: Culvert outlet from residential neighborhood to the north. No OHWM, bed or bank present (4/21/2020).

Photograph 7: Soil Pit 3. Swale vegetated with curly dock (*Rumex crispus*). No indicators of wetland hydrology or hydric soils, no OHWM, bed or bank present (4/21/2020).

Photograph 8: Inlet of existing double culvert MP 436.56 passing beneath the rail looking southeast. No OHWM, bed or bank present. Based on historic topographic maps, this location did not support a defined drainage (4/21/2020).

Photograph 9: Close-up view of culvert MP 436.56 inlet. No OHWM, bed or bank present (4/21/2020).

Photograph 10: Outlet of existing double culvert MP 436.56 passing beneath the rail looking north. No OHWM, bed or bank present (4/21/2020).

Photograph 11: Swale leading from culvert MP 436.56 to storm drain inlet at Los Angeles Ave. No OHWM. Slight historic incision visible for approximately 5 feet (4/21/2020).

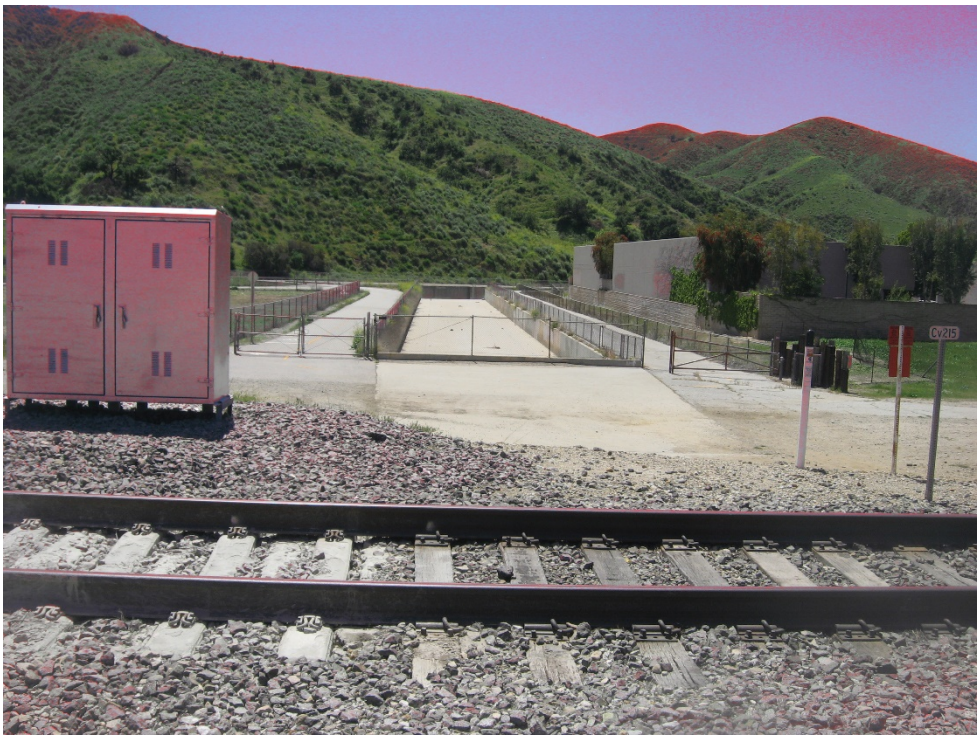
Photograph 12: Existing culvert MP 436.96 passing beneath rail looking upslope (northwest). No OHWM, bed or bank present (4/21/2020).

Photograph 13: Inlet of existing culvert MP 436.96 passing beneath the rail looking south. No OHWM, bed or bank present. Based on historic topographic maps, this location did not support a defined drainage (4/21/2020).

Photograph 14: Outlet of existing culvert MP 436.96 passing beneath the rail looking northeast. No OHWM, bed or bank present (4/21/2020).

Photograph 15: Swale leading from culvert MP 436.96 to storm drain inlet at Los Angeles Avenue. No OHWM, bed or bank (4/21/2020).

Photograph 16: Rail Right-of-Way looking east (4/21/2020).



Photograph 17: Rail Right-of-Way looking south at Las Llajas Canyon channel (4/21/2020).

Photograph 18: Sampling Point 1, shallow depression south of the rail at the station. Based on the mix of recently recruited hydrophytic vegetation and upland herbs, this inundation appears recent and may indicate drainage is blocked (4/21/2020).

Photograph 19: Sampling Point 2, shallow depression at rail crossing east of station (4/21/2020).

Photograph 20: Arroyo Simi Bridge looking northeast (4/21/2020).

Appendix B. Wetland Determination Data Forms

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SCORE Simi Valley City/County: Simi Valley / Ventura Sampling Date: 4/21/2020
Applicant/Owner: Southern California Regional Rail Authority (SCRRA) State: CA Sampling Point: 1
Investigator(s): Eich, I., Martinelli, E. Section, Township, Range: ~~Simi Land Grant~~ S 7 T3N R19W
Landform (hillslope, terrace, etc.): Railroad Trackside Ditch Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): Mediterranean CA (LRR C) Lat: 34.270909 Long: -118.696773 Datum: NAD83
Soil Map Unit Name: Mocho loam NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:
Does not meet hydric soil parameter.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 10 ft. Radius)			
1. N/A			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10 ft. Radius)			
1. Baccharis salicifolia	25	Yes	FAC
2. Salix sp.	25	Yes	FACW
3.			
4.			
5.			
	50 = Total Cover		
Herb Stratum (Plot size: 10 ft. Radius)			
1. Bromus madritensis	30	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: 10 ft. Radius)			
1. N/A			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	30	x 5 =	150
Column Totals:	80 (A)		275 (B)

Prevalence Index = B/A = 3.44

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:
Mulefat and willow appear to have sprouted this year in the ponded area. They were not mature. Area appears to usually be dominated by nonnative brome (Bromus madritensis).

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-12"	10YR 3/2	100	N/A				Silty clay	
12"	10YR 3/2	100	N/A				Clay	

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

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

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: Clay

Depth (inches): 12"

Hydric Soil Present? Yes ____ No ✓

Remarks:

Soil had a brownish hue throughout the sample, dark

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes ✓ No ____ Depth (inches): ____

Water Table Present? Yes ____ No ✓ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 0-12"

Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

Saturation (A3) from surface due to clay layer at 12" depth, Area does not appear to typically pond. Ponding may have occurred this year due to abundant rainfall or perhaps a blocked drainage pipe (if present).

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SCORE Simi Valley City/County: Simi Valley/Ventura Sampling Date: 4/21/2020
Applicant/Owner: Southern California Regional Rail Authority (SCRRA) State: CA Sampling Point: 2
Investigator(s): Eich, I., Martinelli, E. Section, Township, Range: ~~Simi Land Grant~~ S 7 T3N R19W
Landform (hillslope, terrace, etc.): Railroad Trackside Ditch Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): Mediterranean CA (LRR C) Lat: 34.2769019 Long: -118.693560 Datum: NAD 83
Soil Map Unit Name: Mocho loam NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10 ft. Radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10 ft. Radius)			
1. N/A			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 10 ft. Radius)			
1. Cyperus eragrostis	20	Yes	FACW
2. Conium maculatum	13	Yes	FACW
3. Tamarix sp.	2	NO	FAC
4.			
5.			
6.			
7.			
8.			
	35	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft. Radius)			
1. N/A			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 65 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	33	x 2 =	66
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	35 (A)		72 (B)

Prevalence Index = B/A = 2.06

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
✓ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-1"	10YR 3/3	100					Mucky Peat	
1-8"	10YR 3/3	100	10YR 6/6	<1%	C	M	Clay Loam	
8-12"	10YR 3/3	100					Sandy Loam	

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

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

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): _____

Water Table Present? Yes ___ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

Area appears to pond for short duration after rain events.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: SCORE Simi Valley Double Track City/County: Simi Valley, Los Angeles Sampling Date: 4/11/20

Applicant/Owner: Metrolink State: CA Sampling Point: 3

Investigator(s): I. Eich and E. Martinelli Section, Township, Range: Section 11 T3N R19W

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): concave Slope (%): <1%

Subregion (LRR): C Lat: 34.272080° Long: -118.723641° Datum:

Soil Map Unit Name: Mocha loam 2 to 9 % NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ✔	No ☐	**Is the Sampled Area within a Wetland?** Yes ☐ No ✔
Hydric Soil Present?	Yes ☐	No ✔	
Wetland Hydrology Present?	Yes ☐	No ✔	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 10'x2')			
1. Rumex crispus	100	Y	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	100 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

☐ Prevalence Index is ≤3.0[1]

☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No ☐

Remarks:

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR3/2	100	--				loam	

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

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

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✔

Remarks:

does not meet

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

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

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): _____

Water Table Present? Yes ___ No ✔ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): _____

Wetland Hydrology Present? Yes ___ No ✔

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

Remarks:

no indicators

Appendix C. Plant and Wildlife Species Observed

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List of Wildlife Species Observed

Scientific Name	Common Name
REPTILIA	**Reptiles**
IGUANIDAE	**Iguana Family**
Sceloporus occidentalis	Western Fence Lizard
Uta stansburiana	Common Side-blotched Lizard
AVES	**Birds**
ANATIDAE	**Ducks, Geese, and Swan Family**
Anas platyrhynchos	Mallard
Branta canadensis	Canada Goose
COLUMBIDAE	**Pigeon Family**
Zenaida macroura	Mourning Dove
TROCHILIDAE	**Hummingbird Family**
Calypte anna	Anna's Hummingbird
Selasphorus sasin	Allen's Hummingbird
RALLIDAE	**Rail Family**
Porzana carolina	Sora
CHARADRIIDAE	**Lapwing and Plover Family**
Charadrius vociferus	Killdeer
ARDEIDAE	**Heron Family**
Nycticorax nycticorax	Black-crowned Night-Heron
CATHARTIDAE	**Vulture Family**
Cathartes aura	Turkey Vulture
ACCIPITRIDAE	**Raptor Family**
Accipiter cooperii	Cooper's Hawk
Buteo jamaicensis	Red-tailed Hawk
Circus hudsonius	Northern Harrier
PICIDAE	**Woodpecker Family**
Melanerpes formicivorus	Acorn Woodpecker
TYRANNIDAE	**Tyrant Flycatcher Family**
Empidonax difficilis	Pacific-slope Flycatcher
Sayornis nigricans	Black Phoebe
CORVIDAE	**Crow and Raven Family**
Corvus brachyrhynchos	American Crow
Corvus corax	Common Raven
HIRUNDINIDAE	**Swallow Family**
Hirundo rustica	Barn Swallow
Petrochelidon pyrrhonota	Cliff Swallow
Stelgidopteryx serripennis	Northern Rough-winged Swallow
AEGITHALIDAE	**Bushtit Family**

Scientific Name	Common Name
Psaltriparus minimus	Bushtit
TROGLODYTIDAE	**Wren Family**
Thryomanes bewickii	Bewick's Wren
Troglodytes aedon	House Wren
SYLVIIDAE	**Wrentit Family**
Chamaea fasciata	Wrentit
TURDIDAE	**Thrush Family**
Sialia mexicana	Western Bluebird
FRINGILLIDAE	**New World Finch Family**
Haemorhous mexicanus	House Finch
Spinus psaltria	Lesser Goldfinch
PASSERELLIDAE	**New World Sparrow Family**
Junco hyemalis	Dark-eyed Junco
Melospiza melodia	Song Sparrow
Melozone crissalis	California Towhee
Pipilo maculatus	Spotted Towhee
Zonotrichia leucophrys	White-crowned Sparrow
*Passer domesticus**	House Sparrow
ICTERIDAE	**New World Oriole Family**
Icterus cucullatus	Hooded Oriole
PARULIDAE	**Warbler Family**
Geothlypis trichas	Common Yellowthroat
Oreothlypis celata	Orange-crowned Warbler
Setophaga coronata	Yellow-rumped Warbler
Setophaga petechia	Yellow Warbler
MAMMALIA	**Mammals**
Otospermophilus beecheyi	California Ground Squirrel
Sylvilagus audubonii	Desert Rabbit

List of Plant Species Observed

Scientific Name	Common Name
MAGNOLIOPSIDA - Dicot Flowering Plants	
ADOXACEAE	**Muskroot family**
Sambucus nigra ssp. caerulea	blue elderberry
ANACARDIACEAE	**Sumac Family**
Malosma laurina	laurel sumac
Schinus molle	pepper tree
APIACEAE	**Carrot Family**
Apium graveolens	celery
ARECACEAE	**Palm Family**
Washingtonia robusta	Mexican fan palm
ASTERACEAE	**Sunflower Family**
Artemisia californica	California sagebrush
Baccharis salicifolia ssp. salicifolia	mule fat
Baccharis salicina	willow-like baccharis
Baccharis sarothroides	broom baccharis
Centaurea melitensis	Maltese star-thistle
Encelia farinose	brittlebush
Helminthotheca echioides	bristly ox-tongue
Heterotheca grandiflora	telegraph weed
Isocoma menziesii	coastal goldenbush
Lactuca serriola	prickly lettuce
Lepidospartum squamatum	scaly scale-broom
Senecio vulgaris	common groundsel
Sonchus asper ssp. *asper*	prickly sow thistle
Sonchus oleraceus	common sow thistle
BORAGINACEAE	**Borage Family**
Amsinckia menziesii	common fiddleneck
BRASSICACEAE	**Mustard Family**
Brassica nigra	black mustard
Hirschfeldia incana	shortpod mustard
*Raphanus raphanistrum**	jointed charlock
CACTACEAE	**Cactus Family**
Opuntia ficus-indica	mission prickly-pear
Opuntia littoralis	coast prickly-pear
CHENOPODIACEAE	**Goosefoot Family**
Chenopodium album	lamb's quarters
Chenopodium californicum	California goosefoot
Chenopodium murale	wall-growning pigweed
Salsola tragus	Russian thistle
CUCURBITACEAE	**Gourd Family**
Marah macrocarpa	large fruit man-root
CUPRESSACEAE	**Cypress Family**
Cupressus empervirens	Italian cypres
EUPHORBIACEAE	**Spurge Family**

Ricinus communis	castor bean
FABACEAE	**Legume Family**
Acmispon glaber	deerweed
Lupinus longifolius	long leaf bush lupine
Melilotus indicus	Indian sweetclover
FAGACEAE	**Oak family**
Quercus agrifolia	coast live oak
Quercus lobata	valley oak
GERANIACEAE	**Geranium Family**
Erodium cicutarium	redstem filaree
LAMIACEAE	**Mint Family**
Marrubium vulgare	common horehound
Salvia apiana	white sage
Salvia leucophylla	purple sage
MALVACEAE	**Mallow Family**
Malva parviflora	cheeseweed
OLEACEAE	**Olive Family**
Fraxinus uhdei	shamel ash
Olea europaea	European olive
ONAGRACEAE	**Evening Primrose Family**
Clarkia unguiculata	Elegant clakia
OXALIDACEAE	**Oxalis Family**
Oxalis pes-caprae	bermuda buttercup
PINACEAE	**Pine Family**
Pinus sp.	pine
PLANTAGINACEAE	**Plantain Family**
Plantago sp.	plantain
Veronica anagallis-aquatica	water speedwell
PLATANACEAE	**Sycamore Family**
Platanus racemosa	western sycamore
POLYGONACEAE	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Rumex crispus	curly dock
SALICAEAE	**Willow Family**
Populus fremontii ssp. *fremontii*	Fremont's cottonwood
Salix laevigata	red willow
Salix lasiolepis	arroyo willow
SIMAROUBACEAE	**Simarouba Family**
*Ailanthus altissima**	tree of heaven
SOLANACEAE	**Nightshade Family**
Datura wrightii	Wright's jimsonweed
Nicotiana glauca	tree tobacco
TAMARICACEAE	**Tamarisk Family**
Tamarix chinensis	fivestamen tamarisk
URTICACEAE	**Nettle Family**
Urtica dioica	dioecious stinging nettle
Urtica urens	dwarf nettle

VERBENACEAE	**Verbena Family**
Verbena lasiostachys var. *scabrida*	robust vervain
LILIOPSIDA - Monocot Flowering Plants	
AGAVACEAE	**Agave Family**
Hesperoyucca whipplei	whipple's chaparral yucca
Yucca sp.	Spanish bayonet
CYPERACEAE	**Sedge Family**
Cyperus involucratus	involucre flatsedge
POACEAE	**Grass Family**
Arundo donax	giant reed
Avena barbata	slender wild oat
Avena fatua	wild oat
Bromus diandrus	ripgut grass
Bromus madritensis ssp. rubens	red brome
Echinochloa crus-galli	cock's spur barnyard grass
Ehrharta erecta	panic veldt grass
Hordeum vulgare	barley
Pennisetum setaceum	crimson fountain grass
Polypogon monspeliensis	annual beard grass
Stipa miliacea var. miliacea	smilo grass
TYPHACEAE	**Cattail Family**
Typha domingensis	southern cattail

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Appendix D. Special-Status Species Known from Vicinity of Study Area

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Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Invertebrates								
Bombus crotchii	Crotch bumble bee	None	SCE	N	Inhabits open grassland and scrub habitats. Nesting occurs underground. This species is classified as a short-tongued species, whose food plants include Asclepias, Chaenactis, Lupinus, Medicago, Phacelia, and Salvia (Williams et al. 2014).	Williams et al. 2014. Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla. 2014b. Bumble bees of North America: an Identification Guide. Princeton University Press.	N	Not expected, Project study area is outside of any known historical occurences.
Branchinecta lynchi	vernal pool fairy shrimp	FT	None	N	Endemic to California and the Agate Desert of Southern Oregon. Found only in cool water vernal pools and vernal pool-like habitats. (USFWS 2007).	USFWS. 2007. Vernal Pool Fairy Shrimp (Branchinecta lynchi) 5-Year Review: Summary and Evaluation. USFWS; Sacramento, CA.	N	No vernal pools or vernal pool-like habitats present within Project study area.
Helminthoglypta walkeriana	Morro shoulderband	FE	None	N	Restricted to the coastal strand in the immediate vicinity of Morro Bay. Inhabits the duff beneath goldenbush (Ericameria spp.), sage (Salvia spp.), dudleya (Dudleya spp.), and iceplant (Mesembryanthemum spp.) (USFWS 2019).	USFWS. 2019. Recovery Plan for the Morro Shoulderband Snail and Four Plants from Western San Luis Obispo County, California. USFWS; Ventura, CA.	N	Not expected, Project study area is outside of the coastal strand of Morro Bay.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Streptocephalus woottoni	Riverside fairy shrimp	FE	None	N	Restricted to vernal pools and non-vegetated ephemeral pools deeper than 12 inches. Inland areas of Riverside, Orange, and San Diego counties. Coastal areas of San Diego County and northwestern Baja California (USFWS 2008).	USFWS. 2008. Riverside Fairy Shrimp (Streptocephalus woottoni) 5-year Review: Summary and Evaluation. USFWS; Carlsbad, CA.	N	No vernal pools present within Project study area.
Fish								
Catostomus santaanae	Santa Ana sucker	FT	None	N	Occur in watersheds draining the San Gabriel and San Bernardino mountains. Can survive in diverse habitats, from clear mountain streams to rivers in alluvial plains with high sediment loads. Currently distributed in 3 watersheds: Santa Ana River system, San Gabriel River system and the Los Angeles River. Also occurs in the Santa Clara watershed, but this population is not considered part of the listed entity (USFWS 2017).	U.S. Fish and Wildlife Service. 2017. Recovery Plan for the Santa Ana sucker. U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. xii + 92 pp.	N	Not expected, Project study area is outside of known occupied watersheds.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Gila orcuttii	arroyo chub	None	SSC	N	Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa margarita Rivers, as well as Malibu and San Juan Creeks. Has been extirpated from much of the native range, but introduced to streams along the coast and the Mojave River system, where they have eliminated the Mohave tui chub (UC Davis 2013). Southern coastal streams in habitats characterized by slow-moving water, mud or sand substrate, and depths greater than 40 cm. Have also been found in pool habitats with gravel, cobble and boulder substrates. Adapted to survive in low oxygen waters and wide temperature fluctuations (Moyle et al 2015).	Moyle, P.B., R. M. Quiñones, J. V. Katz and J. Weaver. 2015. Fish Species of Special Concern in California. Sacramento: California Department of Fish and Wildlife. www.wildlife.ca.gov	N	Not Expected. Project study area is outside of known occupied watersheds.

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Oncorhynchus mykiss irideus pop. 10	steelhead (southern California DPS)	FE	None	N	Includes naturally spawned anadromous steelhead originating below natural and manmade impassable barriers from the Santa Maria River to the U.S.-Mexico Border. Spawning habitat = gravel-bottomed, fast-flowing, well-oxygenated rivers and streams. Non-spawning = estuarine, marine waters (NOAA 2019).	NOAA. 2019. NOAA Fisheries, West Coast Region, Protected Species Accounts, https://archive.fisheries.noaa.gov/wcr/protected_species/salmon_steelhead/salmon_and_steelhead_listings/steelhead/southern_california/index.html	N	Not Expected. Project study area is outside of known occupied watersheds.
Amphibians								
Anaxyrus californicus	arroyo toad	FE	SSC	N	Breeding habitat = slow moving streams with shallow pools, nearby sandbars and adjacent stream terraces. Often breed in shallow, sandy pools bordered by sand/gravel flood terraces. Inhabit upland habitats when not breeding, such as sycamore-cottonwood woodlands, oak woodlands, coastal sage scrub, chaparral and grassland (USFWS 2009).	USFWS. 2009. Arroyo Toad (Bufo californicus (=microscaphus)) 5-Year Review: Summary and Evaluation. USFWS; Ventura, CA.	Y	Moderate. Suitable habitat in Arroyo Simi with riparian woodland, sandy bottom and adjacent oak woodlands/ coastal sage scrub.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Rana boylii	foothill yellow-legged frog	None	SE	N	Ranges in the northern half of California except for the Central Valley, Modoc Plateau, and eastern side of the Sierra Nevada Mountains. Generally found in shallow flowing streams and rivers with at least cobble sized substrate. Breeding generally occurs at the margins of wide shallow channels with reduced flow variation near tributary confluences. Specifically, egg masses are placed in low flow locations on or under rocks with preferred substrates being boulders, cobbles, or gravel. Eggs have been found at depths to 87cm in water velocities of 0-0.21 meters per second and at most 12.5 meters from shore. Maximum water temperature for breeding is 26oC and 9oC to 21.5oC is the preferred range. Tadpoles avoid areas below 13oC and prefer temperatures between 16.5oC and 22.2oC (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	N	Not expected. No suitable habitat occurs within the Project study area.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Rana draytonii	California red-legged frog	FT	SSC	N	Ponds/streams in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover in lowlands or foothills. Breeding habitat includes permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry. From sea level to 5,000 feet. Occurs along the Coast Ranges from Mendocino County south to northern Baja California, and inland across the northernmost reaches of the Sacramento Valley and locally south through portions of the Sierra Nevada foothills as far south as northern Tulare County (Nafis 2019).	Nafis, Gary. 2019. California Herps: A Guide to Reptiles and Amphibians of California. http://www.californiaherps.com/	Y	Low potential. Suitable habitat in Arroyo Simi, but no observations within 5 miles of Project study area. Sparse understory in Project study area may not provide suitable cover.

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Spea hammondii	western spadefoot	None	SSC	N	Ranges in western California except for the north west corner. Generally found in grasslands, oak woodlands, coastal sage scrub, and chaparral in washes, floodplains, alluvial fans, playas, and alkali flats. Natural and artificial water bodies are used for breeding. Specifically, vernal pools used by this species have an average ponding duration of 81 days, and successful recruitment occurs in ponds that last on average 21 days longer than larval development time. Pool temperature requirements are from 9oC to 32oC. Pools with invasive species, such as crayfish, bullfrogs (Xenopus laevis), or fish often exclude this species in its northern population. The southern population is not necessarily excluded by the presence of invasive species, however the effect of invasives on the southern population are not fully understood (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	N	No suitable water bodies present within Project study area.
Reptiles								

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Anniella stebbinsi	southern California legless lizard	None	SSC	N	Little is known about this species. Information is based on Anniella pulchra before it was split into five species. Current known range is cismontane southern California and the Mojave Desert portion of Kern County (CDFW 2019). Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodland, desert scrub, sandy washes, and stream terraces (Nafis 2017). Originally known to occur throughout Southern California south of the Transverse Ranges into northern Baja California, Mexico (Papenfuss and Parham, 2013).	Papenfuss, T.J., and J.F. Parham. 2013. Four New Species of California Legless Lizards (Anniella). Breviora. 10.3099/mCZ10.1. AND California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database. Rarefind 5. All Records of Oc	Y	Moderate potential. Suitable habitat occurs in oak woodlands and grasslands in Project study area.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Arizona elegans occidentalis	California glossy snake	None	SSC	N	Ranges in the cismontane portion of southern California, the southern portion of the central coast ranges, and in isolated pockets up to the Alameda and San Joaquin County border. Generally found in open desert, grasslands, shrublands, chaparral, and woodlands. Some evidence of open and sandy habitat preference exists, but specific habitat requirements for this species aren't known (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	Y	Moderate potential. Suitable habitat in oak woodlands and grasslands in Project study area.
Aspidoscelis tigris stejnegeri	coastal whiptail	None	SSC	N	Ranges in cismontane southern California. Generally found in a wide range of habitats including coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas. Specifically this species prefers sand or gravel bottomed habitats with decent shrub cover and is not often found near development (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	Y	High potential. Suitable habitat in Artemisa californica-Erigogonum californica Alliance and riparian woodland habitats in Project study area.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Emys marmorata	western pond turtle	None	SSC	N	Ranges throughout California except for Inyo and Mono Counties. Generally occurs in various water bodies including permanent and ephemeral systems either natural or artificial. Upland habitat that is at least moderately undisturbed is required for nesting and overwintering, in soils that are loose enough for excavation (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	Y	Low potential. Suitable habitat within the Project study area, specifically in Arroyo Simi, but outside of the Project footprint several observations of this species in other areas of Arroyo Simi.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Phrynosoma blainvillii	Blainville's horned lizard	None	SSC	N	Ranges in the southern half of California outside of the desert and along the foothills of the Sierra Nevada Mountains to Butte County and along the central coast ranges up to Contra Costa County. Generally occurs in sage scrub, dunes, alluvial scrub, annual grassland, chaparral, oak, riparian, and Joshua tree woodland, coniferous forest, and saltbush scrub. Needs loose, fine soils for burrowing, open areas for basking, and dense foliage for cover. Negatively associated with Argentine ants (Linepithema humi) (Thomson et al. 2016)	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	Y	Moderate potential. Suitable habitat slopes with Artemisa californica Alliance, located south of the railroad tracks.
Salvadora hexalepis virgultea	coast patch-nosed snake	None	SSC	N	Ranges in cismontane southern California and southern San Luis Obispo County. Generally found in relatively dense chaparral but also known in a wide variety of habitats with dense shrub cover. Some evidence shows a preference for chamise (Adenostoma fasciculatum) or red shank chaparral (A. sparsifolium) but that has not be fully determined (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	N	Not expected. No chaparral habitat or Adenostoma in Project study area.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Thamnophis hammondii	two-striped gartersnake	None	SSC	N	Ranges in cismontane Southern California with some occurrences in Monterey and San Luis Obispo Counties and southern San Benito County. Generally found in or near permanent and intermittent freshwater streams, creeks, and pools, as well as stock ponds and other artificial aquatic habitats bordered by dense vegetation. Associated habitat include willow, oak woodlands, chaparral, brushland and coniferous forest from sea level to 8,000 feet elevation (Thomson et al. 2016).	Thomson, Robert C., Wright, Amber N., and Shaffer H. Bradley. 2016. California Amphibian and Reptile Species of Special Concern. University of California Press Berkeley, CA.	Y	Moderate potential. Suitable habitat in Arroyo Simi; several observations of this species in other areas of Arroyo Simi.
Birds								

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Agelaius tricolor	tricolored blackbird	None	CT, SSC	N	Preferred nesting habitat includes cattails (Typha spp.), bulrushes (Schoenoplectus spp.), Himalayan blackberry (Rubus armeniacus), and agricultural silage. Dense vegetation is preferred but heavily lodged cattails not burned in recent years may preclude settlement. Need access to open water. Strips of emergent vegetation along canals are avoided as nest sites unless they are about 10 or more meters wide but in some ponds, especially where associated with Himalayan blackberries and deep water, settlement may be in narrower fetches of cattails. (Hamilton 2004). Mostly a year-round resident in California. Common locally throughout Central Valley and in coastal districts from Sonoma County south. Breeds locally in northeastern California. In winter, becomes more widespread along central coast and San Francisco Bay area, and can be found in portions of the Colorado Desert (CDFW 2019).	Hamilton, W. J. 2004. Tricolored Blackbird (Agelaius tricolor). In The Riparian Bird Conservation Plan:a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight. | CDFW. 2019. California Wildlife Habitat Relationships System	N	Not expected. Riparian habitat is present but occurs along a concrete lined canal with cattails not dense enough for suitable nesting habitat. May forage or migrate in area.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Aquila chrysaetos	golden eagle	BGEPA	FP	N	Habitat includes rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. Uncommon resident in hills and mountains throughout California, and an uncommon migrant and winter resident in the Central Valley and Mojave Desert (Zeiner et. al. 1988-1990).	Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and m. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.	N	Not expected. No suitable open space for foraging or nesting.
Athene cunicularia	burrowing owl	None	SSC	N	Species known to be a yearlong resident of open, dry grasslands and varying desert habitats (CWHR 1999). Nesting habitat includes open areas with mammal burrows, including rolling hills, grasslands, fallow fields, sparsely vegetated desert scrub, vacant lots and human disturbed lands. Soils must be friable for burrows (Bates 2006).	CWHR. 1999. Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updated by CWHR Program staff, September 1999 / Bates, C. 2006. Burrowing Owl (Athene cunicularia). In The Draft. Desert Bird Conservation Plan: a strategy for reversing the decline of desert-associated birds in California. California Partners in N Flight. http://www.prbo.org/c	N	Not expected. Over 5 acres of suitable disturbed habitat not present within or adjacent to the Project study area.

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
						alpif/htmldocs/desert.html		
Campylorhynchus brunneicapillus sandiegensis	San Diego cactus wren	None	SSC	N	Taxonomically intermediate between more widespread subspecies in southern U.S. and Baja California, Mexico. C.b. sandiegensis thought to only occur in coastal sage scrub community in southern Orange and San Diego Counties. Key habitat element is thickets of cholla or prickly-pear tall enough to support nests (Shuford 2008).	Shuford, W.D. and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation in California. Studies of Western Birds 1. Western Field Orni	N	No suitable habitat.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT	SE	N	Riparian woodland with dense cover; primarily old-growth cottonwood forests with willow understory, but will also nest in overgrown orchards adjacent to streams and dense thickets alongside marshes (USFWS 2019).	USFWS. 2019. ECOS Environmental Conservation Online System - Species Profile for Yellow-billed Cuckoo https://ecos.fws.gov/ecp0/profile/speciesProfile?spcode=B06R	N	Not expected. No suitable large riparian areas to support this species.
Elanus leucurus	white-tailed kite	None	FP	N	Occurs in herbaceous and open stages of valley lowland habitats, usually near agricultural land. Forages in undisturbed, open grasslands, meadows, farmlands and emergent wetlands (CWHR 2005). Typically nest in the upper third of trees that may be 10–160 feet tall. These can be open-country trees growing in isolation, or at the edge of or within a forest (Cornell 2017).	CWHR. 2005. Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updated by CWHR Program staff, July 2005. | Cornell University. 2017. https://www.allaboutbirds.org/guide/White-tailed_Kite/lifehistory	Y	Moderate potential. Project study area is adjacent to open, undisturbed areas that could support this species. May forage in Project study area.

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Empidonax traillii extimus	southwestern willow flycatcher	FE	SE	N	Dense riparian forest and scrub habitats associated with rivers, swamps, wetlands, lakes and reservoirs (USFWS 2002).	USFWS. 2002. Final Recovery Plan Southwestern Willow Flycatcher (Empinodax traillii extimus). USFWS; Albuquerque, NM.	Y	Low. Riparian habitat in Project study area does not support the multi-storied riparian habitat required for nesting. Species may forage in Project study area, and could nest in Project study area if understory becomes more developed. Species was not detected during protocol surveys in 2020.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Gymnogyps californianus	California condor	FE	SE, FP	N	Chaparral, coniferous forest and oak savannah in southern and central California. Nest in cliff cavities, large rock outcrops, or large trees. Roost on large liffs or trees near feeding areas (USFWS 1996).	USFWS. 1996. Recovery Plan for the California Condor. USFWS; Portland, OR.	N	Not expected. No suitable open space for foraging or nesting.
Icteria virens	yellow-breasted chat	None	SSC	N	Nest in early-successional riparian habitats with a well-developed shrub layer and an open canopy. Restricted to narrow border of streams, creeks, sloughs and rivers. Often nest in dense thicket plants such as blackberry and willow (Shuford 2008).	Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.	Y	Moderate potential. Riparian habitat associated with Arroyo Simi is suitable for this species, although understory may not be developed enough and species was not observed during breeding season bird surveys.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Polioptila californica californica	Coastal California gnatcatcher	FT	SSC	N	Scrub dominated plant communities, strongly associated with coastal scrub, sage scrub, and coastal succulent scrub communities. Distribution ranges from southern Ventura County down through Los Angeles, Orange, Riverside, San Bernardino and San Diego Counties (USFWS 2010).	USFWS. 2010. Coastal California Gnatcatcher (Polioptila californica californica) 5-year Review: Summary and Evaluation. USFWS; Carlsbad, CA.	Y	Moderate potential. Suitable foraging and nesting habitat in Artemisa californica Alliance on slopes on west side of Project study area, though species was not detected during protocol surveys in 2020.
Riparia riparia	bank swallow	None	ST	N	Riparian, lacustrine, and coastal areas with vertical banks, bluffs or cliffs with fine-textured or sandy soils, into which it digs nesting holes. Also nests in earthen banks as well as sand and gravel pits (CWHR 1999).	CWHR. 1999. California Wildlife Habitat Relationships (CHWR) System. Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updated by CWHR Program Staff, September 1999.	N	Not expected. Project study area does not support suitable vertical bluffs or river banks for this species.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Setophaga petechia	yellow warbler	None	SSC	N	Usually found in riparian deciduous habitats in summer: cottonwoods (Populus ssp.), willows (Salix ssp.), alders (Alnus ssp.), and other small trees and shrubs typical of low, open-canopy riparian woodland. Also breeds in montane shrubbery in open conifer forests (CWHR 2005).	CWHR. 2005. California Wildlife Habitat Relationships (CHWR) System. Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updated by CWHR Program Staff, August 2005.	Y	High potential. Riparian habitat associated with Arroyo Simi is suitable for this species and the species was observed during breeding season bird surveys within the Project study area.

Vireo bellii pusillus	least Bell's vireo	FE	SE	N	Obligate riparian breeder. Cottonwood, willow, oak woodlands, and mule fat scrub along watercourses (USFWS 1998).	USFWS. 1998. Draft recovery plan for least Bell's vireo. U.S. Fish and Wildlife Service, Portland, Oregon	Y	Moderate potential. Riparian habitat in Project study area does not support the multi-storied riparian habitat required for nesting. Species may forage in Project study area, and could nest in Project study area if understory becomes more developed. Species was not detected during 2020 protocol surveys. Incidental detection of species did occur during a SWFL protocol survey, no individuals observed

								before or after.
Mammals								

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Antrozous pallidus	pallid bat	None	SSC	N	Ranges across all of California except for high elevation portions of the Sierra Nevada Mountains and Del Norte, western Siskiyou, Humboldt, and northern Mendocino Counties. Generally found in a wide variety of habitats but with some preference for drier areas. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings (CDFW 2018).	CDFW. 2018. California Wildlife Habitat Relationships System Life History Accounts and Range Maps. Available online: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. CDFW Biogeographic Data Branch; Sacramento, CA.	Y	Low potential. Suitable foraging habitat present along Arroyo Simi and Project study area is in species' range. Not likely to roost in Project study area due to lack of preferred roost sites. No recorded occurrences near Project study area since 2004.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Euderma maculatum	spotted bat	None	SSC	N	Ranges along the eastern half of California as well as all of Southern California except for Orange County and southern Los Angeles County. Generally occurs in desert, mixed conifer, and grassland habitats. Specifically this species prefers to roost in rock crevices on cliffs, but will sometimes use caves and buildings (CDFW 2018).	CDFW. 2018. California Wildlife Habitat Relationships System Life History Accounts and Range Maps. Available online: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. Last updated May 2000. CDFW Biogeographic Data Branch; Sacramento, CA.	Y	Low potential. Suitable foraging habitat present along Arroyo Simi and Project study area is in species' range. Not likely to roost in Project study area due to lack of preferred roost sites. No recorded occurrences in Ventura County.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Eumops perotis californicus	western mastiff bat	None	SSC	N	Ranges throughout all of Southern California, the central coast, and the Sierra Nevada Mountain Range. Generally occurs in open, arid, or semi-arid habitats. Specifically this species roosts in rock crevices and buildings. (CDFW 2018).	CDFW. 2018. California Wildlife Habitat Relationships System Life History Accounts and Range Maps. Available online: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. CDFW Biogeographic Data Branch; Sacramento, CA.	Y	Low potential. Suitable foraging habitat present along Arroyo Simi and Project study area is in species' range. Not likely to roost in Project study area due to lack of preferred roost sites.. No recorded occurrences near Project study area since 1954.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Macrotus californicus	California leaf-nosed bat	None	SSC	N	Ranges in southern and western San Diego County, the western halves of Riverside and San Bernardino Counties, and all of Imperial County. Generally prefers various types of desert scrub, riparian corridors, and palm oasises. Specifically, this species roosts in mine tunnels, caves, and occasionally buildings and bridges and prefers to forage over flats and washes (CDFW 2018).	CDFW. 2018. California Wildlife Habitat Relationships System Life History Accounts and Range Maps. Available online: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. CDFW Biogeographic Data Branch; Sacramento, CA.	N	Not expected. Outside of species' range, no suitable roost sites in vicinity of Project study area.
Neotoma lepida intermedia	San Diego desert woodrat	None	SSC	N	This species prefers Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats, but is also found in a variety of other habitats. Moderate to dense canopies are preferred. Particularly abundant in rock outcrops and rocky cliffs and slopes, especially those with Joshua trees. Elevational range from sea level to 8,500 feet (CWHR 2008).	CWHR. 2008. Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updated by CWHR program staff February 2008.	Y	Moderate potential. Suitable foraging and nesting habitat in Artemisia californica Alliance on slopes on west side of Project study area.

Simi Valley-Special Status Wildlife Species Table

Scientific Name	Common Name	USFWS	CDFW	Critical Habitat Affected	Habitat Characteristics	Citation	Potential to Occur in Study Area	Rationale
Taxidea taxus	American badger	None	SSC	N	Ranges in all of California except the extreme north west corner. Generally found in drier open areas of habitats with friable soils (CDFW 2018).	CDFW. 2018. California Wildlife Habitat Relationships System Life History Accounts and Range Maps. Available online: <https://www.wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. CDFW Biogeographic Data Branch; Sacramento, CA.	N	Not expected. No open, treeless areas in Project study area.

Source: California Department of Fish and Wildlife (CDFW) 2018, 2019; California Wildlife Habitat Relationships (CWHR) 1999, 2008; Nafis 2019; National Oceanic and Atmospheric Administration (NOAA) 2019; Shuford and Gardali 2008; Thompson, R. et al 2016

Notes:

Special status ranking:

County of Orange Central/Coastal NCCP/HCP: C=Covered, None=Not Covered

FD= Federally Delisted (monitored for 5 years)

FP= Fully Protected (CDFW)

FT= Federally Threatened; SE= State Endangered; BGEPA=Bald and Golden Eagle Protection Act; SSC= CDFW Species of Special Concern; SCE= State Candidate Endangered; BCC= USFWS Birds of Special Concern

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Acanthoscyphus parishii var. parishii	Parish's oxytheca	None	None	4.2	Chaparral, Lower montane coniferous forest	N	No potential. Project study area occurs outside known elevation range of the species and no suitable habitat present.
Arenaria paludicola	marsh sandwort	FE	SE	1B.1	Sandy soils in marshes and swamps with brackish freshwater. Elevation: 10–558 feet. Blooming period: May–August	N	No potential. Project study area occurs outside known elevation range of the species and no suitable habitat present.
Asplenium vespertinum	western spleenwort	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub	N	Not expected to occur. Nearest known occurrence is approximately 12 miles south of the Project study area and dates from the 1960s.
Astragalus brauntonii	Braunton's milk-vetch	FE	None	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. Suitable combination of soilsand habitats not present
Baccharis malibuensis	Malibu baccharis	None	None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	N	Not expected to occur. Known from only one location in Ventura County approximately 9 miles southwest of the Project study area.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Calochortus catalinae	Catalina mariposa lily	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland	Y	Limited potential to occur in Project study area - not expected to occur in Project footprint. Suitable habitat is limited to slopes located within the Project study area, but outside of the Project footprint. Nearest known occurrence, from 2012, is approximately 2 miles south of the Project study area.
Calochortus clavatus var. clavatus	club-haired mariposa lily	None	None	4.3	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. Suitable soils absent from Project study area and nearest known occurrence is from 2003, approximately 10 miles southwest of the Project study area.
Calochortus clavatus var. gracilis	slender mariposa lily	None	None	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. Project study area is outside known elevation range of the species. Nearest known occurrence is from 2010, over 2.5 miles south of the Project study area.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Calochortus fimbriatus	late-flowered mariposa lily	None	None	1B.3	Chaparral, Cismontane woodland, Riparian woodland	N	Not expected to occur. No suitable soils present. Nearest known occurrence is from 2004, over 15 miles north of the Project study area.
Calochortus plummerae	Plummer's mariposa lily	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	N	Not expected to occur. No suitable soils present. Nearest known occurrence is from 2011, approximately 2 miles south of the Project study area.
Calystegia peirsonii	Peirson's morning-glory	None	None	4.2	Chaparral, Chenopod scrub, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	N	Limited potential to occur in Project study area – not expected in Project footprint. Suitable habitat is limited to slopes located south of the Project footprint and nearest known occurrence is from 2004, approximately 9 miles north of the Project study area.
Castilleja gleasoni	Mt. Gleason paintbrush	None	SR	1B.2	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland	N	Not expected to occur. Project study area occursoutside known elevation range of the species. No suitable habitat present.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Centromadia parryi ssp. australis	southern tarplant	None	None	1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools	N	Not expected to occur. No suitable soils present.
Cercocarpus betuloides var. blancheae	island mountain-mahogany	None	None	4.3	Closed-cone coniferous forest, Chaparral	N	Not expected to occur. No suitable habitat present.
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	FC	CE	1B.1	Coastal scrub (sandy), Valley and foothill grassland	N	Not expected to occur. No suitable microhabitat present. Nearest known occurrence is from 2014, approximately 8 miles south of Project study area.
Chorizanthe parryi var. parryi	Parry's spineflower	None	None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland		Not expected to occur. No suitable microhabitat present.
Clarkia exilis	slender clarkia	None	None	4.3	Cismontane woodland	N	Not expected to occur. No suitable habitat present and no known occurrences from Ventura County.
Clinopodium mimuloides	monkey-flower savory	None	None	4.2	Chaparral, North Coast coniferous forest	N	Not expected to occur. No suitable habitat present.
Convolvulus simulans	small-flowered morning-glory	None	None	4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland	N	Not expected to occur. No suitable soils or microhabitat present. Nearest known occurrence is from 2008, over 10 miles west of the Project study area.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Deinandra minthornii	Santa Susana tarplant	None	SR	1B.2	Chaparral, Coastal scrub	Y	Low potential to occur in Project study area – not expected in Project footprint. No suitable microhabitat present. Nearest known occurrence is from 2009 on a rocky outcrop at Santa Susana Open Space park less than 1 mile east of the Project study area.
Deinandra paniculata	paniculate tarplant	None	None	4.2	Coastal scrub, Valley and foothill grassland, Vernal pools	N	Not expected to occur. No suitable soils present. Nearest known occurrence is from 2002, approximately 15 miles north of the Project study area.
Delphinium parryi ssp. blochmaniae	dune larkspur	None	None	1B.2	Chaparral (maritime), Coastal dunes	N	Not expected to occur. No suitable habitat present.
Delphinium parryi ssp. purpureum	Mt. Pinos larkspur	None	None	4.3	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland	N	Not expected to occur. No suitable habitat present. Project study area is outside known elevation range of the species.
Dodecahema leptoceras	slender-horned spineflower	FE	SE	1B.1	Sandy soils in chaparral, cismontane woodland, and alluvial fan coastal scrub. Elevation: 656–2,493 feet. Blooming period: April–June	N	No potential. Project study area occurs outside known elevation range of the species and no suitable habitat present.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Dudleya abramsii ssp. parva	Conejo dudleya	FT	None	1B.2	Rocky to gravelly clay or volcanic soils in coastal scrub and grassland. Elevation: 196–1,476 feet. Blooming period: May–June	N	Not expected to occur. No suitable soils or microhabitat present.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None	None	1B.1	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. No suitable soils or microhabitat present.
Dudleya cymosa ssp. agourensis	Agoura Hills dudleya	FT	None	1B.2	Chaparral, Cismontane woodland	N	Not expected to occur. No suitable soils or microhabitat present.
Dudleya cymosa ssp. marcescens	marcescent dudleya	FT	SR	1B.2	Chaparral	N	Not expected to occur. No suitable soils or microhabitat present.
Dudleya multicaulis	many-stemmed dudleya	None	None	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. No suitable soils or microhabitat present.
Dudleya verityi	Verity's dudleya	FT	None	1B.1	Chaparral, Cismontane woodland, Coastal scrub	N	Not expected to occur. Project study area occurs outside known elevation range of the species.
Eriogonum crocatum	conejo buckwheat	None	SR	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. No suitable soils or microhabitat present.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Harpagonella palmeri	Palmer's grapplinghook	None	None	4.2	Clay soils in chaparral, grassland, coastal sage scrub. Elevation: 65–3,132 feet. Blooming period: March–May	N	Not expected to occur. No known occurrences from Ventura County.
Hordeum intercedens	vernal barley	None	None	3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools	N	Not expected to occur. No suitable soils or microhabitat present.
Horkelia cuneata var. puberula	mesa horkelia	None	None	1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub	N	Not expected to occur. Suitable combination of soils and habitat not present. Nearest known occurrence is from 2011, over 10 miles west of Project study area.
Juglans californica	Southern California black walnut	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	Y	Low potential to occur. None observed during field survey, although it is possible saplings of this deciduous tree could be present. Nearest known occurrence is from 2011, approximately 10 miles west of the Project study area.
Lepechinia fragrans	fragrant pitcher sage	None	None	4.2	Chaparral	N	Not expected to occur. No suitable habitat present.
Lepechinia rossii	Ross' pitcher sage	None	None	1B.2	Chaparral	N	Not expected to occur. No suitable habitat present.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	None	None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland	N	Not expected to occur. No suitable habitat present.
Lupinus paynei	Payne's bush lupine	None	None	1B.1	Coastal scrub, Riparian scrub, Valley and foothill grassland	Y	Low potential to occur. Species not observed during rare plant habitat assessment. Nearest known occurrence is from 2009, approximately 3 miles north of Project study area.
Monardella hypoleuca ssp. hypoleuca	white-veined monardella	None	None	1B.3	Chaparral and cismontane woodland. Elevation: 164–5,002 feet. Blooming period: April–December	N	Not expected to occur. No suitable habitat present. Nearest known occurrence is from 2009, over 15 miles southwest of the Project study area.
Monardella sinuata ssp. gerryi	Gerry?s curly-leaved monardella	None	None	1B.1	Coastal scrub	N	Not expected to occur. No suitable habitat present. Project study area is outside known elevation range of the species.
Monardella sinuata ssp. sinuata	southern curly-leaved monardella	None	None	1B.2	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub (openings)	N	Not expected to occur. Extirpated from Ventura County and nearest known occurrence is over 80 miles northwest of the Project study area.
Navarretia fossalis	spreading navarretia	FT	None	1B.1	Chenopod scrub, assorted freshwater marshes and swamps, playas, and vernal pools. Elevation: 98–2,149 feet. Blooming period: April–June	N	Not expected to occur. No suitable microhabitat present.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Navarretia ojaiensis	Ojai navarretia	None	None	1B.1	Chaparral (openings), Coastal scrub (openings), Valley and foothill grassland	N	Not expected to occur. No suitable soils present.
Nolina cismontana	chaparral nolina	None	None	1B.2	Chaparral, Coastal scrub	N	Not expected to occur. No suitable soils present.
Orcuttia californica	California Orcutt grass	FE	CE	1B.1	Vernal pools	N	Not expected to occur. No suitable habitat present.
Pentachaeta lyonii	Lyon's pentachaeta	FE	CE	1B.1	Chaparral (openings), Coastal scrub, Valley and foothill grassland	N	Not expected to occur. No suitable soils present.
Phacelia hubbyi	Hubby's phacelia	None	None	4.2	Chaparral, Coastal scrub, Valley and foothill grassland	N	Not expected to occur. No suitable microhabitat present.
Piperia michaelii	Michael's rein orchid	None	None	4.2	Coastal bluff scrub, Closed-cone coniferous forest, Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest	N	Not expected to occur. No suitable microhabitat present.
Pseudognaphalium leucocephalum	white rabbit-tobacco	None	None	2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland	N	Not expected to occur. No suitable microhabitat present and nearest known occurrence is from 2015, approximately 9 miles northwest of Project study area in sandy riparian habitat along the Santa Clara River.
Quercus dumosa	Nuttall's scrub oak	None	None	1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub	N	Not expected to occur. No suitable habitat present.

Simi Valley-Special Status Plant Species Table

Scientific Name	Common Name	USFWS	CDFW	CRPR	Habitat Characteristics	Potential to Occur in Project Study Area	Rationale
Rorippa gambellii	Gambel's watercress	FE	CT	1B.1	Marshes and swamps (freshwater or brackish) at an elevaton range of 15 - 990 feet.	N	Not expected to occur. No suitable microhabitat present.
Senecio aphanactis	chaparral ragwort	None	None	2B.2	Chaparral, Cismontane woodland, Coastal scrub	N	Not expected to occur. No suitable habitat present.
Stylocline masonii	Mason's neststraw	None	None	1B.1	Chenopod scrub, Pinyon and juniper woodland	N	Not expected to occur. No suitable habitat present.
Symphyotrichum greatae	Greata's aster	None	None	1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland	N	Not expected to occur. No suitable microhabitat present.

Sensitivity Status

United States Fish and Wildlife Service (USFWS): FE=Federally Listed Endangered; FT=Federally Listed Threatened; FPT=Federally Proposed Threatened
California Department of Fish and Wildlife (CDFW): SE=State Listed Endangered, SR=State Listed Rare
California Rare Plant Ranking (CRPR):
1B: Plants Rare, Threatened, or Endangered in California and Elsew here
The plants of Rank 1B are rare throughout their range w ith the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. California Rare Plant Rank 1B plants constitute the majority of plant taxa tracked by the CNDDB, w ith more than 1,000 plants assigned to this category of rarity.
2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsew here
The plants of Rank 2B are rare, threatened or endangered in California, but more common elsew here. Plants common in other states or countries are not eligible for consideration under the provisions of the Federal Endangered Species Act; how ever, they are eligible for consideration under the California Endangered Species Act. This rank is meant to highlight the importance of protecting the geographic range and genetic diversity of more w idespread species by protecting those species w hose ranges just extend into California. Note: Plants of both Rank 1B and 2B are rare, threatened or endangered in California; the only difference is the status of the plants outside of the state.
3: Need more inf ormation
4: Plants of limited distribution
Threat Ranks:
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats know n)

Simi Valley-Special Status Plant Species Table

Appendix E. Special-Status Wildlife Species Survey Report: Coastal California Gnatcatcher

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July 13, 2020

Chris Kofron
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

Re: Submittal of Protocol Survey Results for the Coastal California Gnatcatcher for the Southern California Optimized Rail Expansion's Simi Valley Double Track and Platform Project in the City of Simi Valley, Ventura County, California

Dear Dr. Kofron,

This letter report summarizes the methodology and findings of presence/absence surveys for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*, CAGN) conducted by HDR for the Southern California Optimized Rail Expansion's Simi Valley Double Track and Platform Project (Project). Surveys were conducted at the site from April 21 through June 18, 2020, in accordance with the United States Fish and Wildlife Service's (USFWS) February 28, 1997, *Presence/Absence Survey Guidelines*. Surveys covered all potentially suitable habitat located within the Project study area (Figures 1, 2, and 3, attached).

Site Location and Description

As shown on Figure 1, the Project is located in the City of Simi Valley, Ventura County, California, within Section 7 of Township 2 North and Range 17 West of the United States Geological Survey 7.5 minute East Simi Valley, CA quadrangle (approximate latitude and longitude: 34.271352, -118.699483). The Project study area consists of the railroad right-of-way plus a 500-foot buffer and primarily has urban/developed and disturbed land cover (Figure 2). However, approximately 9.4 acres of California sagebrush scrub, which is suitable habitat for CAGN, are located within the Project study area (Figure 3).

Methods

A 15-day notification for surveys was provided to the USFWS on April 6, 2020 (Appendix A, attached). All potentially suitable habitat that was surveyed is depicted on Figure 3, attached.

As stipulated in the protocol for study areas not covered by a Natural Communities Conservation Plan, permitted biologists Ingrid Eich (TE-092469-3) and Erin Martinelli (TE-75325D-0) conducted six surveys at least seven days apart between April 21 and June 18, 2020. All surveys were completed before 12:00 PM. No surveys were conducted during extreme weather conditions (i.e., winds exceeding 15 mph, rain, or temperatures in excess of 95°F).

Suitable CAGN habitat described above was surveyed on foot to allow for direct visual observations of the habitat. Taped vocalizations were utilized to elicit a response from CAGN that might be present. Table 1 presents the survey dates, times, and weather conditions for the Simi Valley Project site.

hdrinc.com

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Suite 200
Irvine, CA 92602
T (714) 730-2389

Table 1. Summary of Survey Dates and Weather Conditions at Simi Valley Project Site

Survey Date	Time (start/end)	Permitted Surveyor	Temperature °F (start/end)	Cloud Cover (start/end)	Wind Speed mph (start/end)
4/21/20	0825/1000	IE/EM	61/63	Clear/Clear	0-1/0-1
5/1/20	0910/1100	IE/EM	68/70	Clear/Clear	0-2/0-2
5/12/20	0820/1045	IE/EM	59/63	Overcast/Overcast	0-5/0-5
5/26/20	0840/1030	IE/EM	71/78	Clear/Clear	0-5/0-5
6/8/20	0900/1015	EM	68/72	Clear/Clear	0-10/0-10
6/18/20	0730-0930	EM	63/63	Overcast/Overcast	0-3/0-3

IE: Ingrid Eich – Permitted Biologist, EM: Erin Martinelli – Permitted Biologist

Results

No CAGN were detected during the protocol surveys at the Simi Valley Project site. A complete list of birds observed on-site during surveys is included as Appendix B, attached.

If you have any questions regarding this survey report, please contact me at (714) 730-2389.

I certify that the information in this survey report and attached exhibits fully and accurately depict my work.

Sincerely,
HDR Engineering, Inc.

Ingrid Eich, TE-092469-3
Environmental Sciences Section Manager

Erin Martinelli, TE-75325D-0
Senior Biologist

Attachments:

Figure 1. Regional Simi Valley Project Location
Figure 2. Simi Valley Project Location
Figure 3: Simi Valley Suitable CAGN Habitat Survey Area
Appendix A: USFWS 10-Day Notification Letter (April 3, 2020)
Appendix B: Inventory of Avian Species Observed During 2020 Protocol Surveys

Figure 1. Regional Simi Valley Project Location

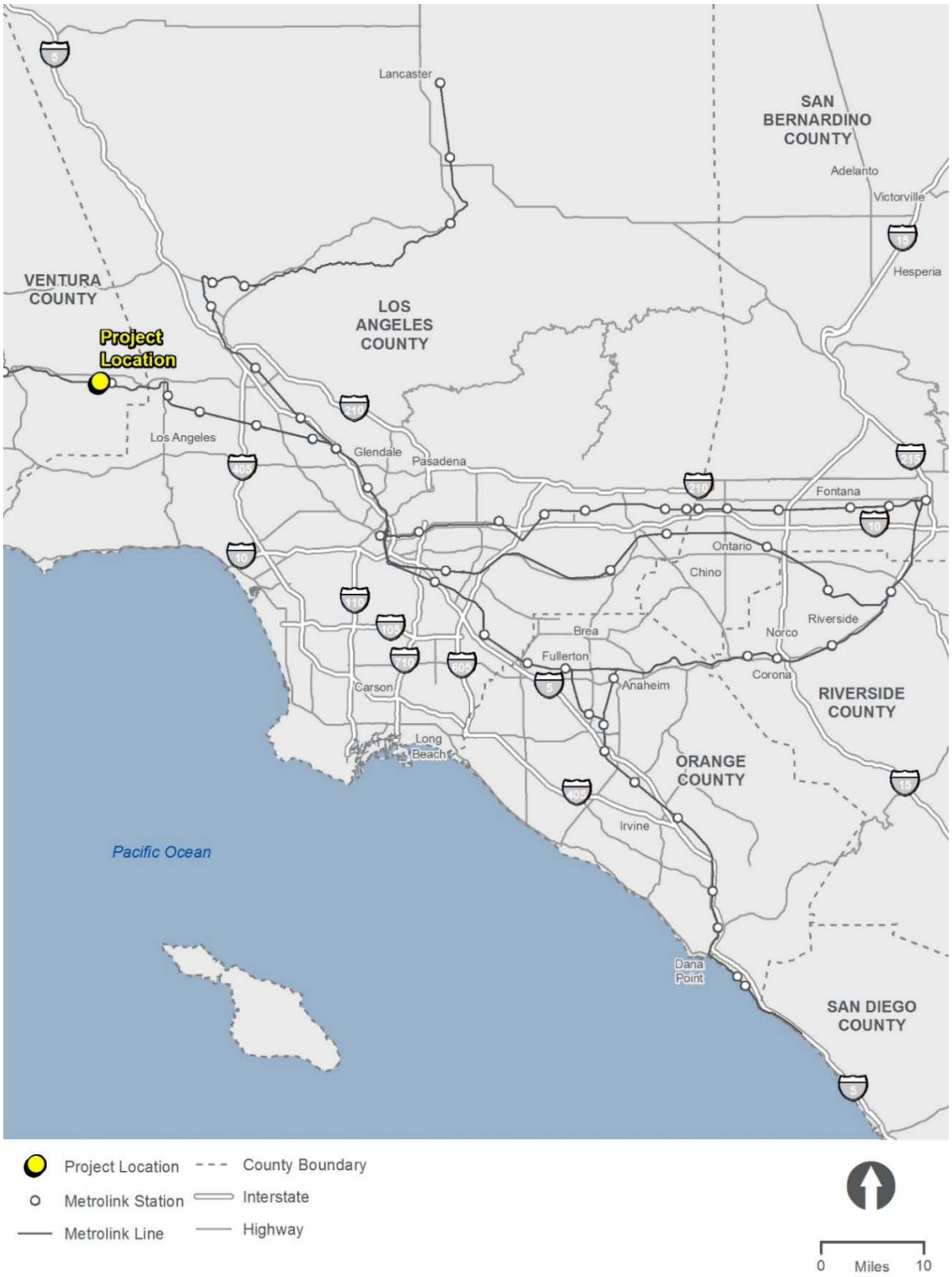
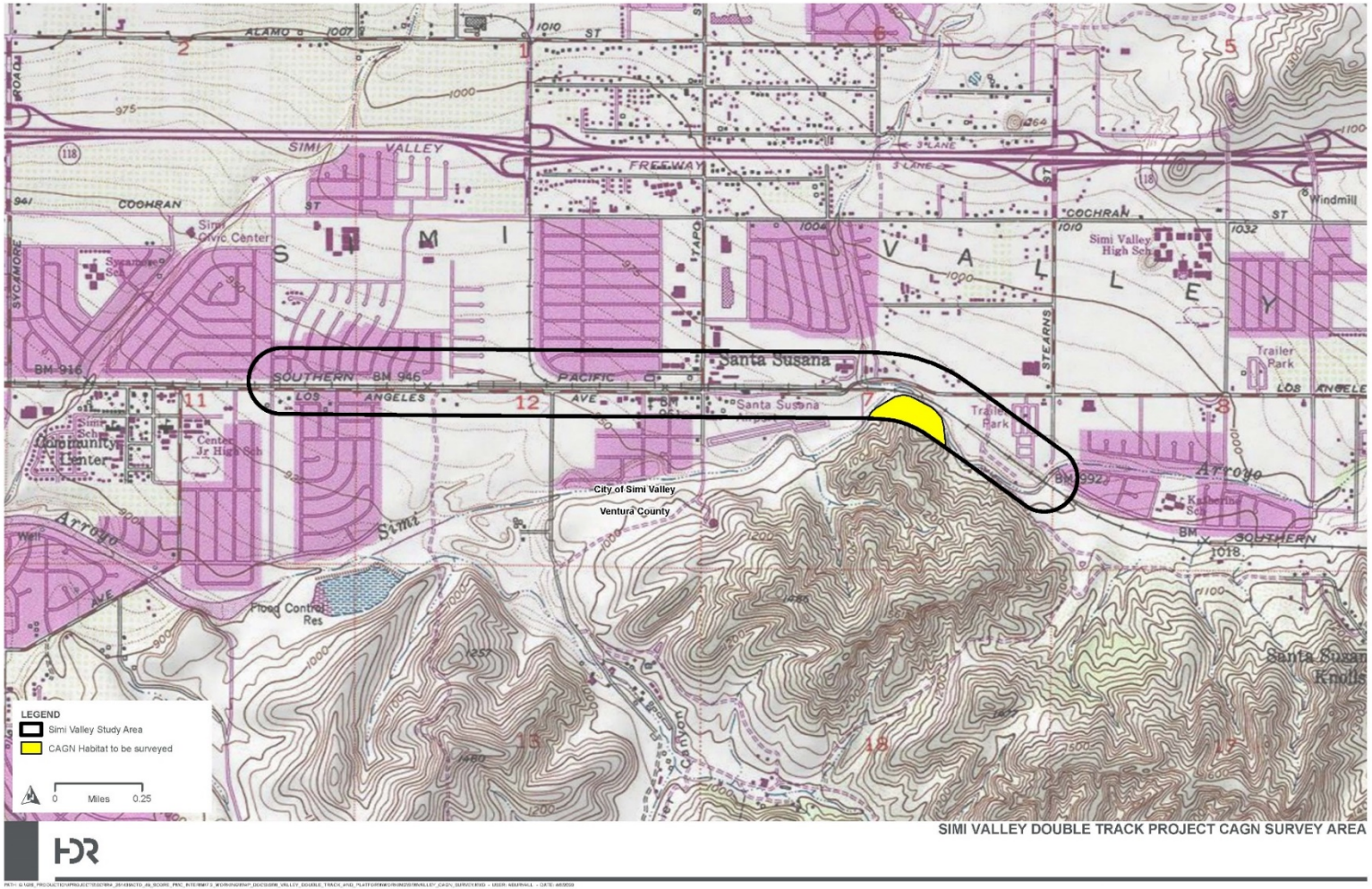


Figure 2. Simi Valley Project Location

Figure 3. Simi Valley Suitable CAGN Habitat Survey Area



Appendix A. USFWS 10-Day Notification Letter

TE -092469-3

April 6, 2020

Chris Kofron
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

SUBJECT: Notification to Conduct Protocol Surveys for the Coastal California Gnatcatcher for the Southern California Optimized Rail Expansion's Simi Valley Double Track Project in the City of Simi Valley, Ventura County, California

Dear Dr. Kofron:

Biologists from HDR, Inc. propose to conduct presence/absence surveys for the coastal California gnatcatcher (*Polioptila californica californica*) per protocol identified in the United States Fish and Wildlife Service's (USFWS) February 28, 1997, Presence/Absence Survey Guidelines. Surveys will be conducted for the Southern California Optimized Rail Expansion's Simi Valley Double Track Project in the City of Simi Valley, Ventura County, California. The survey area, as depicted on the attached figure, is within Section 7 of Township 2 North and Range 17 West of the United States Geological Survey (USGS) 7.5 minute East Simi Valley, CA quadrangle (approximate latitude and longitude: 34.271352, -118.699483).

HDR will conduct a total of six surveys a minimum of 7 days apart beginning on April 21, 2020, to determine whether coastal California gnatcatchers are present or absent from the project study area. Senior biologist Ingrid Eich (TE-092469-3) will conduct the surveys. Senior biologist Erin Martinelli submitted an application to USFWS on April 2, 2020, to transfer her coastal California gnatcatcher authorization from TE-777965 to a new permit number. If Erin receives her permit during this survey season, she will also conduct some of the surveys.

If you have any questions regarding this notification, please email me at ingrid.eich@hdrinc.com or call me at (714) 213-9278.

HDR Engineering, Inc.

Ingrid Eich
Environmental Sciences Section Manager – Biological Sciences

hdrinc.com

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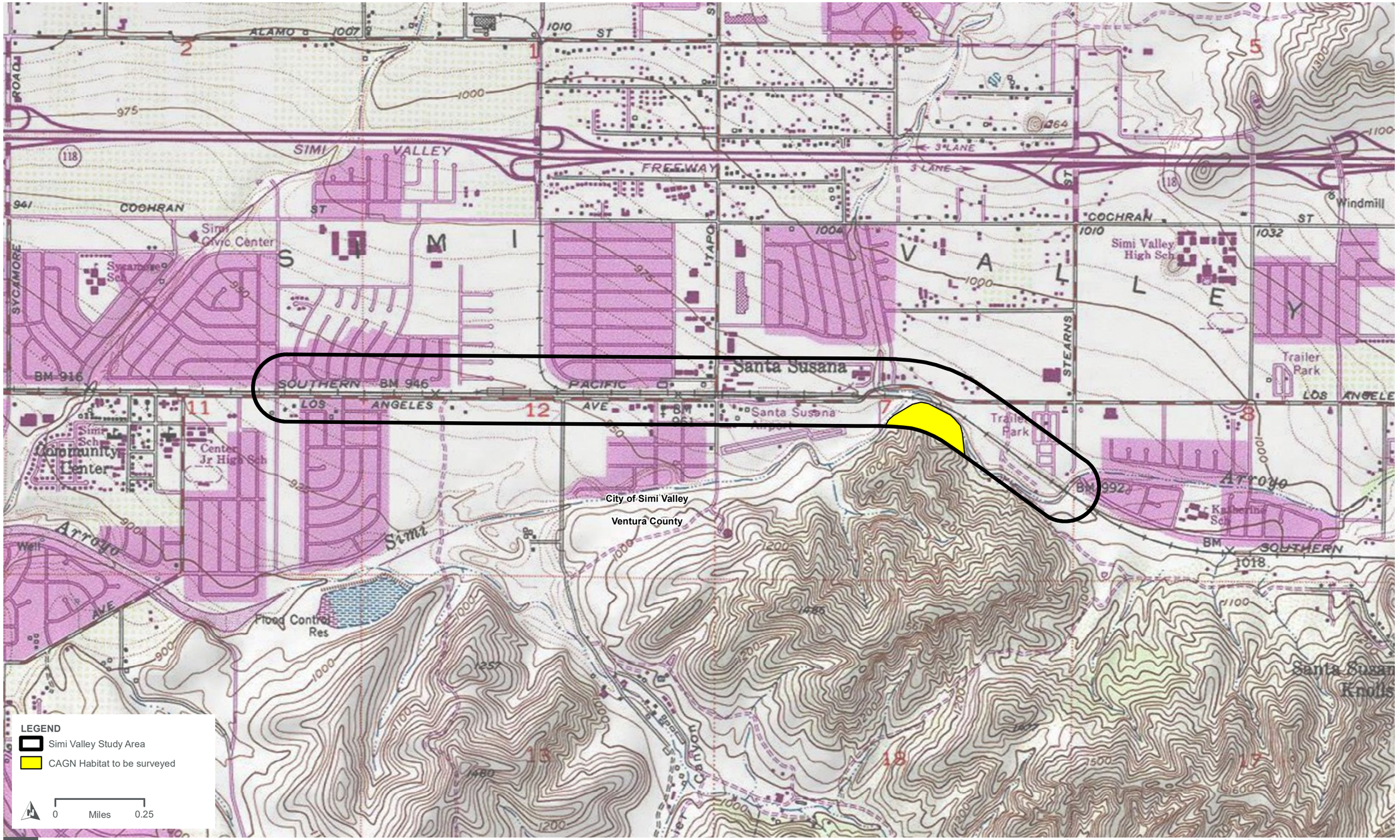
(714) 730-2300



SIMI VALLEY DOUBLE TRACK PROJECT CAGN SURVEY AREA

Appendix B: Inventory of Avian Species Observed During 2020 Protocol Survey

Scientific Name	Common Name	Status
Anatidae	**Ducks, Geese, and Swans**	
Anas platyrhynchos	Mallard	-
Branta canadensis	Canada Goose	-
Columbidae	**Pigeons and Doves**	
*Streptopelia decaocto**	Eurasian Collared Dove*	-
Zenaida macroura	Mourning Dove	-
Trochilidae	**Hummingbirds**	
Calypte anna	Anna's Hummingbird	-
Selasphorus sasin	Allen’s Hummingbird	-
Rallidae	**Rails**	-
Porzana carolina	Sora	-
Charadriidae	**Plovers and Lapwings**	
Charadrius vociferus	Killdeer	-
Ardeidae	**Herons**	
Egretta thula	Snowy Egret	-
Nycticorax nycticorax	Black-crowned Night Heron	-
Cathartidae	**New World Vulture**	
Cathartes aura	Turkey Vulture	-
Accipitridae	**Kites, Hawks, and Eagles**	
Accipiter cooperii	Cooper's Hawk	-
Buteo jamaicensis	Red-tailed Hawk	-
Picidae	**Woodpeckers**	
Melanerpes formicivorus	Acorn Woodpecker	-
Tyrannidae	**Tyrant Flycatchers**	
Empidonax difficilis	Pacific-slope Flycatcher	-
Myiarchus cinerascens	Ash-throated Flycatcher	-
Tyrannus vociferans	Cassin’s Kingbird	-
Sayornis nigricans	Black Phoebe	-
Corvidae	**Crows and Ravens**	

Corvus brachyrhynchos	American Crow	-
Corvus corax	Common Raven	-
Hirundinidae	**Swallows**	
Stelgidopteryx serripennis	Northern Rough-winged Swallow	-
Hirundo rustica	Barn Swallow	-
Petrochelidon pyrrhonota	American Cliff Swallow	-
Aegithalidae	**Bushtits**	
Psaltriparus minimus	Bushtit	-
Sittidae	**Nuthatches**	
Sitta carolinensis	White-breasted nuthatch	-
Troglodytidae	**Wrens**	
Thryomanes bewickii	Bewick's Wren	-
Troglodytes aedon	House Wren	-
Sylviidae	**Old World Warblers and Gnatcatchers**	
Chamaea fasciata	Wrentit	-
Turdidae	**Thrushes**	
Sialia mexicana	Western Bluebird	-
Mimidae	**Mockingbirds and Thrashers**	
Toxostoma redivivum	California Thrasher	-
Mimus polyglottos	Northern Mockingbird	-
Sturnidae	**Starlings**	
*Sturnus vulgaris**	European Starling*	-
Passeridae	**Old World Sparrows**	
*Passer domesticus**	House Sparrow*	-
Fringillidae	**Finches**	
Carpodacus mexicanus	House Finch	-
Spinus psaltria	Lesser Goldfinch	-
Emberizidae	**Emberizines**	
Melospiza melodia	Song Sparrow	-
Pipilo crissalis	California Towhee	-

Pipilo maculatus	Spotted Towhee	-
Passerellidae	**American Sparrows**	
Junco hyemalis hyemalis	Dark-eyed junco	-
Icteridae	**Icterids**	
Icterus cucullatus	Hooded Oriole	-
Parulidae	**Wood Warblers**	
Cardellina pusilla	Wilson's Warbler	-
Geothlypis trichas	Common Yellowthroat	-
Oreothlypis celata	Orange-crowned Warbler	-
Setophaga petechia	Yellow Warbler	SSC

"-" = None; SSC = State Species of Special Concern; "*" = Nonnative Species

Appendix F. Special-Status Wildlife Species Survey Report: Least Bell's Vireo

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July 31, 2020

Chris Kofron
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

Re: Protocol Least Bell's Vireo Survey Results for the Simi Valley Double Track and Platform Project

Dear Dr. Kofron,

This letter report summarizes the methodology and findings of presence/absence surveys for the federally listed endangered least Bell's vireo (*Vireo bellii pusillus*, LBVI) conducted by HDR for the Southern California Optimized Rail Expansion's Simi Valley Double Track and Platform Project (Project). Surveys were conducted at the site from April 10 through July 16, 2020, in accordance with the U.S. Fish and Wildlife Service's (USFWS) January 19, 2001, *Least Bell's Vireo Survey Guidelines*. Surveys covered all potentially suitable habitat located within the Project study area.

Site Location and Description

As shown on Figure 1, the Project is located in the City of Simi Valley, Ventura County, California, within Section 7 of Township 2 North and Range 17 West of the United States Geological Survey 7.5 minute East Simi Valley, CA quadrangle (approximate latitude and longitude: 34.271352, -118.699483). The Project study area consists of the railroad right-of-way plus a 500-foot buffer and primarily has urban/developed and disturbed land cover (Figure 2). The site supports two vegetation communities suitable for LBVI nesting and foraging, including 1.63 acres of mixed willow riparian, and 2.01 acre of cattail marsh (Figure 3, attached).

Methods

All potentially suitable habitat subject to surveys is depicted on Figure 2, attached. HDR biologists Ingrid Eich, Erin Martinelli, Andrew Phillips, Aaron Newton, and Adam Lockyer conducted eight surveys from April 10 through July 2, 2020 in accordance with the USFWS January 19, 2001, *Least Bell's Vireo Survey Guidelines*. All surveys were completed between dawn and 11:00 AM. No surveys were conducted during extreme weather conditions (i.e., winds exceeding 15 mph, rain, or temperatures in excess of 95°F).

Suitable LBVI habitat described above was surveyed on foot to allow for direct visual and auditory observations. Table 1 presents the survey dates, times, and weather conditions for the surveys.

Chris Kofron
Ventura Fish and Wildlife Office
July 31, 2020

Table 1. Summary of Survey Dates and Weather Conditions for Project

Survey Date	Time (start/end)	Surveyor	Temperature °F (start/end)	Cloud Cover (start/end)	Wind Speed mph (start/end)
4/10/20	0800/1030	AN/AL	49/52	Overcast/Overcast	0-1/0-3
4/21/20	0825/1000	IE/EM	61/63	Clear/Clear	0-1/0-1
5/1/20	0910/1100	IE/EM	68/70	Clear/Clear	0-2/0-2
5/12/20	0820/1045	IE/EM	59/63	Overcast/Overcast	0-5/0-5
5/26/20	0840/1030	IE/EM	71/78	Clear/Clear	0-5/0-5
6/8/20	0900/1015	EM	68/72	Clear/Clear	0-10/0-10
6/18/20	0730-0930	EM	63/63	Overcast/Overcast	0-3/0-3
7/2/20	0830/0920	AP	68/79	Overcast/Overcast	0/0

AN: Aaron Newton, AL: Adam Lockyer, IE: Ingrid Eich, EM: Erin Martinelli, AP: Andrew Phillips

Results

No LBVI were detected during the protocol LBVI surveys at the Simi Valley Project site. However, Andrew Phillips incidentally observed LBVI during a southwestern willow flycatcher survey on June 9, 2020, and will be reporting his observation. No LBVI were observed before or after June 9 and it is presumed that the individual observed on June 9 was dispersing through the survey area. A complete list of birds observed on-site during surveys is included as Appendix A.

If you have any questions regarding this survey report, please contact me at (562) 264-1137.

I certify that the information in this survey report and attached exhibits fully and accurately depict my work.

Sincerely,
HDR Engineering, Inc.

Erin Martinelli, TE-75325D-0
Senior Biologist

Attachments:

Figure 1. Regional Simi Valley Project Location
Figure 2: Simi Valley Project Location
Figure 3: Simi Valley Suitable LBVI Habitat Survey Area
Appendix A: Inventory of Avian Species Observed During 2020 Protocol Surveys

Figure 1. Regional Simi Valley Project Location

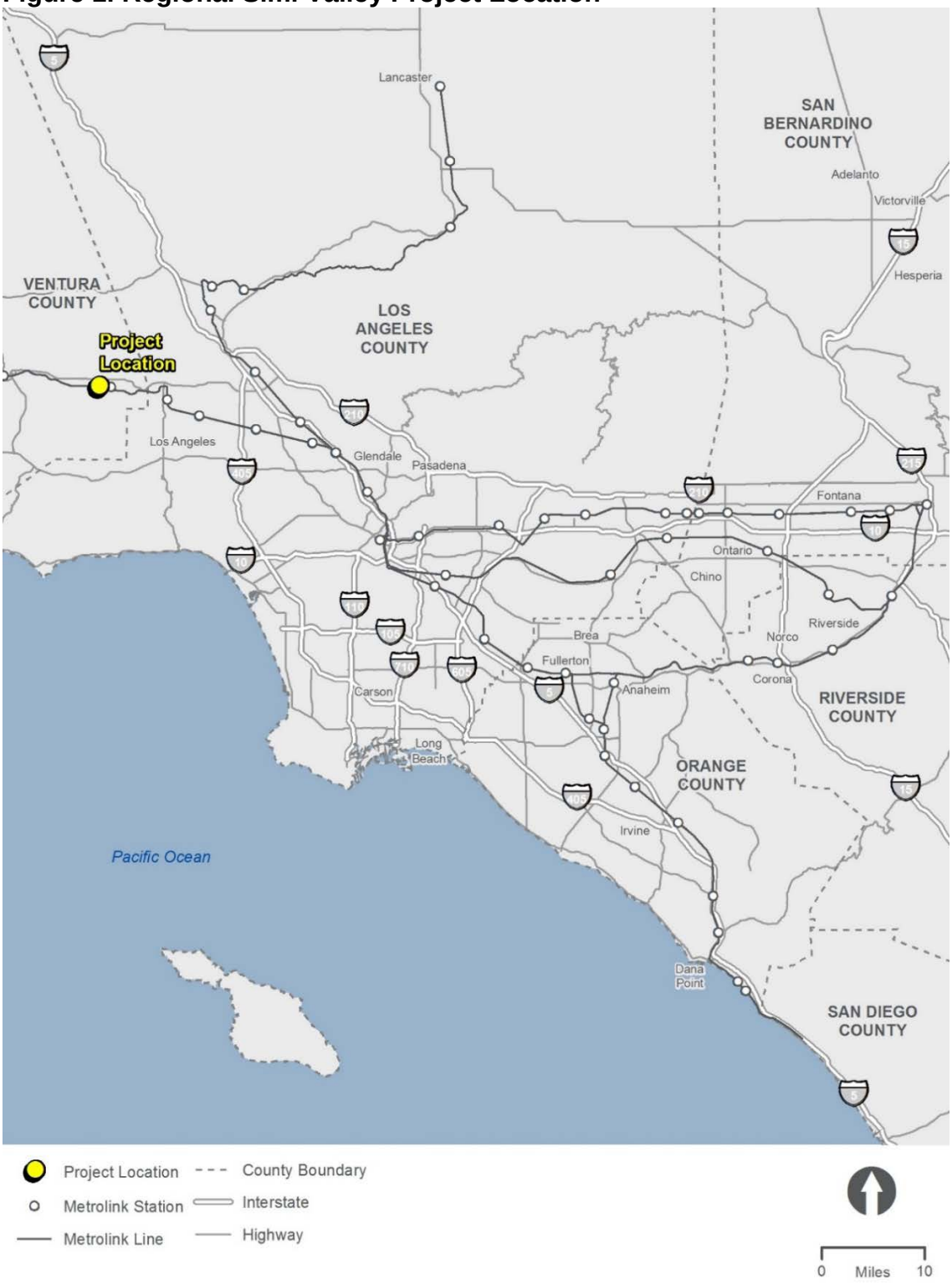
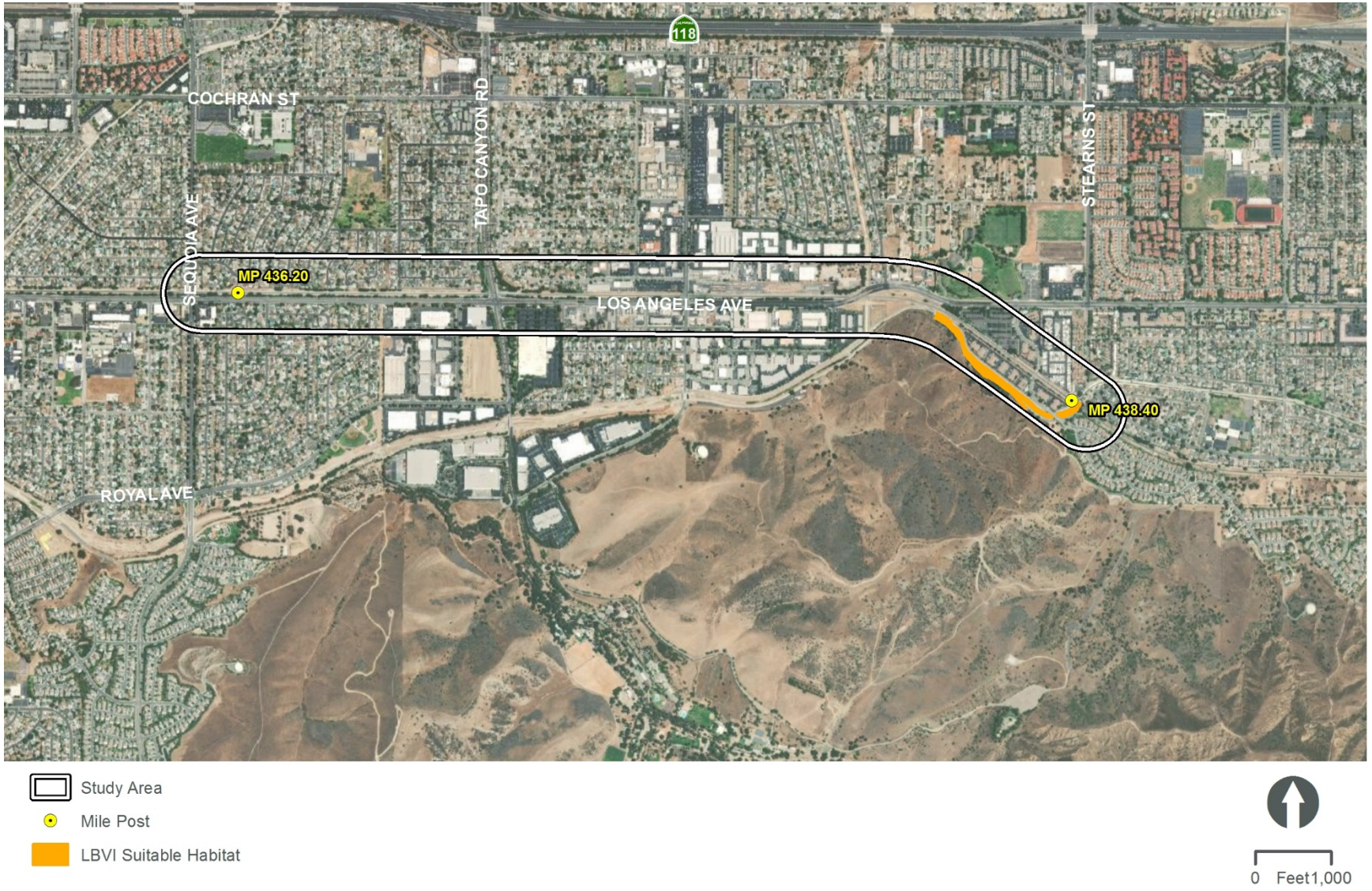


Figure 2. Simi Valley Project Location

Figure 3. Simi Valley Suitable LBVI Habitat Survey Area



Appendix A: Inventory of Avian Species Observed During 2020 Protocol Survey

Scientific Name	Common Name	Status
Anatidae	**Ducks, Geese, and Swans**	
Anas platyrhynchos	Mallard	-
Branta canadensis	Canada Goose	-
Columbidae	**Pigeons and Doves**	
Streptopelia decaocto	Eurasian Collared Dove	-
Zenaida macroura	Mourning Dove	-
Trochilidae	**Hummingbirds**	
Calypte anna	Anna's Hummingbird	-
Selasphorus rufus	Rufous Hummingbird	-
Selasphorus sasin	Allen’s Hummingbird	-
Rallidae	**Rails**	
Porzana carolina	Sora	-
Charadriidae	**Plovers and Lapwings**	
Charadrius vociferus	Killdeer	-
Ardeidae	**Herons**	
Ardea Herodias	Great Blue Heron	-
Egretta thula	Snowy Egret	-
Nycticorax nycticorax	Black-crowned Night Heron	-
Cathartidae	**New World Vulture**	
Cathartes aura	Turkey Vulture	-
Accipitridae	**Kites, Hawks, and Eagles**	
Accipiter cooperii	Cooper's Hawk	-
Buteo jamaicensis	Red-tailed Hawk	-
Picidae	**Woodpeckers**	
Melanerpes formicivorus	Acorn Woodpecker	-
Tyrannidae	**Tyrant Flycatchers**	
Empidonax difficilis	Pacific-slope Flycatcher	-
Myiarchus cinerascens	Ash-throated Flycatcher	-
Tyrannus vociferans	Cassin’s Kingbird	-
Sayornis nigricans	Black Phoebe	-
Corvidae	**Crows and Ravens**	
Aphelocoma californica	California Scrub Jay	-
Corvus brachyrhynchos	American Crow	-
Corvus corax	Common Raven	-

Hirundinidae	**Swallows**	
Stelgidopteryx serripennis	Northern Rough-winged Swallow	-
Hirundo rustica	Barn Swallow	-
Petrochelidon pyrrhonota	American Cliff Swallow	-
Aegithalidae	**Bushtits**	
Psaltriparus minimus	Bushtit	-
Sittidae	**Nuthatches**	
Sitta carolinensis	White-breasted Nuthatch	-
Troglodytidae	**Wrens**	
Thryomanes bewickii	Bewick's Wren	-
Troglodytes aedon	House Wren	-
Sylviidae	**Old World Warblers and Gnatcatchers**	
Chamaea fasciata	Wrentit	-
Turdidae	**Thrushes**	
Sialia mexicana	Western Bluebird	-
Mimidae	**Mockingbirds and Thrashers**	
Toxostoma redivivum	California Thrasher	-
Mimus polyglottos	Northern Mockingbird	-
Sturnidae	**Starlings**	
Sturnus vulgaris	European Starling	-
Passeridae	**Old World Sparrows**	
Passer domesticus	House Sparrow	-
Fringillidae	**Finches**	
Carpodacus mexicanus	House Finch	-
Spinus psaltria	Lesser Goldfinch	-
Emberizidae	**Emberizines**	
Melospiza melodia	Song Sparrow	-
Pipilo crissalis	California Towhee	-
Pipilo maculatus	Spotted Towhee	-
Passerellidae	**American Sparrows**	
Junco hyemalis hyemalis	Dark-eyed junco	-
Zonotrichia leucophrys	White-crowned Sparrow	-
Icteridae	**Icterids**	
Icterus cucullatus	Hooded Oriole	-
Parulidae	**Wood Warblers**	

Cardellina pusilla	Wilson's Warbler	-
Geothlypis trichas	Common Yellowthroat	-
Oreothlypis celata	Orange-crowned Warbler	-
Setophaga coronate	Yellow-rumped Warbler	-
Setophaga petechia	Yellow Warbler	SSC

"-" = Not Applicable; SSC = State Species of Concern

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Appendix G. Special-Status Wildlife Species Survey Report: Southwestern Willow Flycatcher

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August 4, 2020

Chris Kofron
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

Subject: Results of a Protocol Survey for the Southwestern Willow Flycatcher -- Southern California Optimized Rail Expansion's Simi Valley Double Track and Platform Project in the City of Simi Valley, Ventura County, California

Dear Dr. Kofron,

This letter report summarizes the results of a presence/absence surveys for the federally endangered Southwestern willow flycatcher (*Empidonax traillii extimus*, SWFL). The survey was conducted in support of the Southern California Optimized Rail Expansion's (SCORE) Simi Valley Double Track and Platform Project (Project). Surveys were conducted at the site from May 26 through July 16, 2020, in accordance with the U.S. Fish and Wildlife Service's (USFWS), *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (2010). Surveys covered all potentially suitable habitat located within the Project study area (see **Figures 1**, **2**, and **3**). A 15-day survey notification letter was submitted to the USFWS prior to surveys (**Appendix A**).

SITE LOCATION AND HABITAT DESCRIPTION

The Project is located in the City of Simi Valley, California (Ventura County), within Township 2 North, Section 7, Range 17 West of the United States Geological Survey 7.5 minute East Simi Valley, CA quadrangle (approximate latitude and longitude: 34.271352, -118.699483) – see **Figure 1**. The Project study area is a 500-foot buffer of a railroad right-of-way within an area dominated by suburban development (**Figure 2**). The study area also contains patches of potentially suitable habitat for SWFL, including 1.63 acres of mixed willow riparian and 2.01 acre of adjacent cattail marsh (see **Figure 3** and **Appendix D: Survey Photographs**). The mixed willow riparian habitat consists of two discrete patches of habitat averaging about 40 feet wide and collectively totaling 1500 feet long. The two habitat patches are separated by a 300 feet long gap of low quality habitat dominated by cattail herbaceous vegetation. The habitat vegetation ranges between 2 to 10 meters in height (averaging 6 meters) with low to moderate density.

METHODS

The presence/absence surveys for SWFL were conducted within suitable habitat in accordance with the USFWS protocol for project-related surveys. Permitted biologist Andrew Phillips (permit #TE64613B-2) conducted five protocol surveys between May 26 and July 16, 2020. A call-playback technique was used for the survey during which a pre-recorded *fitz-bew* song vocalization was broadcast to elicit a territorial response from potential SWFL in the study area. Determining the presence of territorial SWFL requires, at least, hearing the *fitz-bew* song during the non-migrant period (generally between June 15 and July 20). All surveys were completed before 10:30 AM and were not conducted during extreme weather conditions (i.e., winds exceeding 15 mph, rain, or temperatures in excess of 95°F). **Table 1** lists the survey dates, times, and weather conditions during the Project surveys.

hdrinc.com

3230 El Camino Real
Suite 200
Irvine, CA 92602
T (714) 730-2300 **F** (714) 730-2301

Table 1. Summary of Survey Dates and Weather Conditions

Survey Date	Time (start/end)	Permitted Surveyor*	Temperature °F (start/end)	Cloud Cover (start/end)	Wind Speed mph (start/end)
5/26/20	0700 / 0810	AP	70/85	Clear/Clear	0-1/0-1
6/9/20	0800 / 0850	AP	75/86	Clear/Clear	0-1/0-1
6/24/20	0700 / 0750	AP	66/76	Overcast/Clear	1-2/1-2
7/2/20	0730 / 0825	AP	68/79	Overcast/Overcast	0/0
7/16/20	0700 / 0810	AP	68/73	Clear/Clear	1-2/1-2

* AP: Andrew Phillips – Permitted Biologist

RESULTS

The Southwestern willow flycatcher was not detected during the surveys of the Project study area. Based upon the survey results and low quality of suitable habitat in the study area, SWFL could use the area for stopover foraging habitat during migration, but are unlikely to nest within the area.

An incidental detection of the federally endangered least Bell's vireo (*Vireo bellii pusillus* - LBVI) occurred during the June 9th, 2020 survey. The LBVI detection was of a single individual near 11S 343732 E, 3793492 N. The detection occurred at the western end of the study area within a patch of riparian habitat dominated by willow (*Salix* spp.) and bordered by coast live oak (*Quercus agrifolia*) (see **Appendix D: Photographs 4-6**). A complete list of incidental bird species detected during the survey is included in **Appendix B**. Survey data forms and photographs documenting site conditions and habitat characteristics are included in **Appendix C** and **D**, respectively.

If you have any questions regarding this survey report, please contact me at (720) 876-7667.

I certify that the information and data in this report fully and accurately depict my work.

Sincerely,
HDR Engineering, Inc.

Andrew Phillips, TE64613B-2
Senior Biologist

Figures and Appendices:

Figure 1 **Project Location Regional Map**
Figure 2 **Study Area Location Map**
Figure 3 **Project Study Area and Suitable SWFL Habitat**

Appendix A **USFWS 15-Day Notification Letter**
Appendix B **Incidental Avian Species Detected**
Appendix C **Survey Data Forms**
Appendix D **Survey Photographs**

Figure 1. Project Location Regional Map

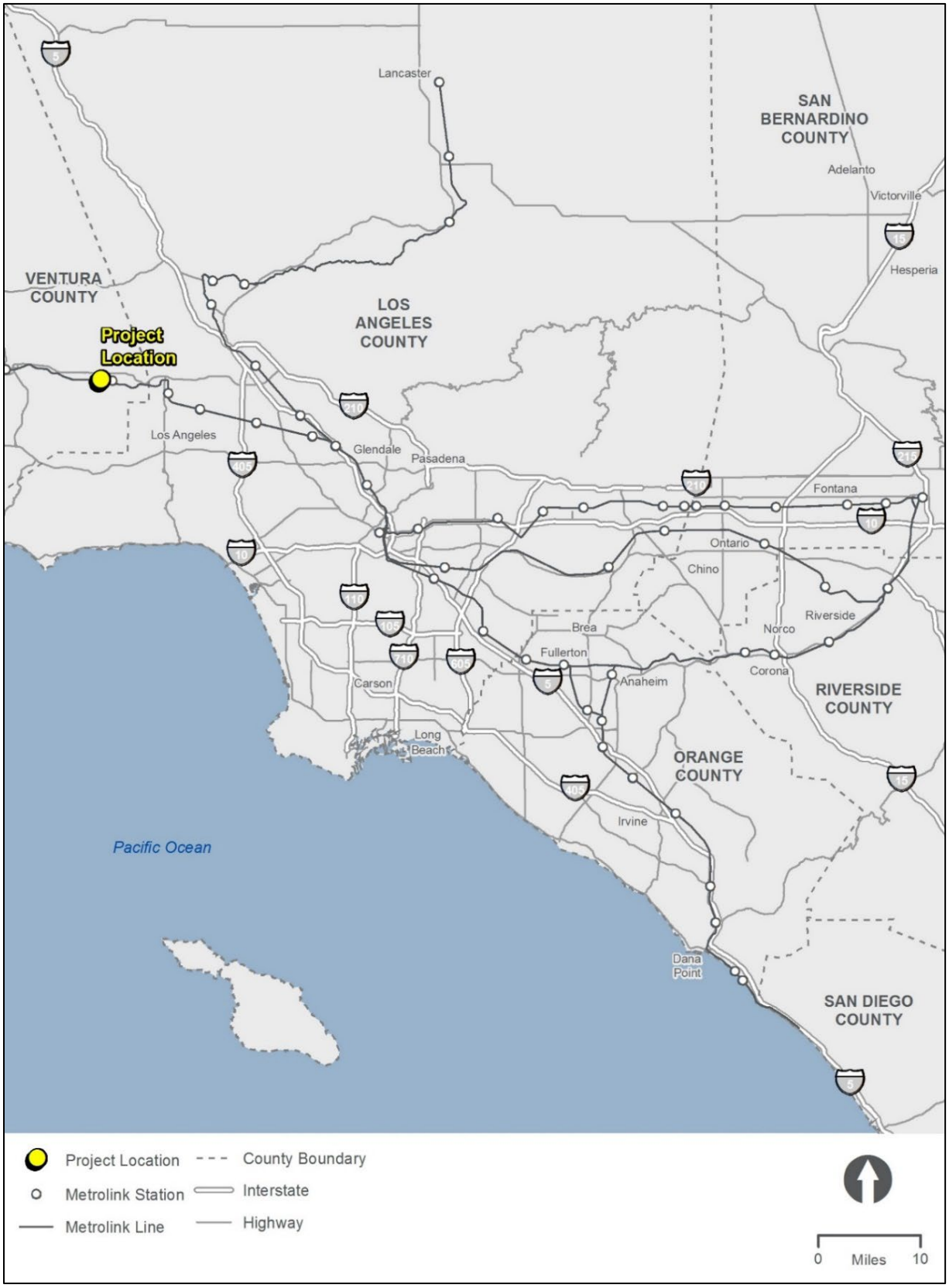
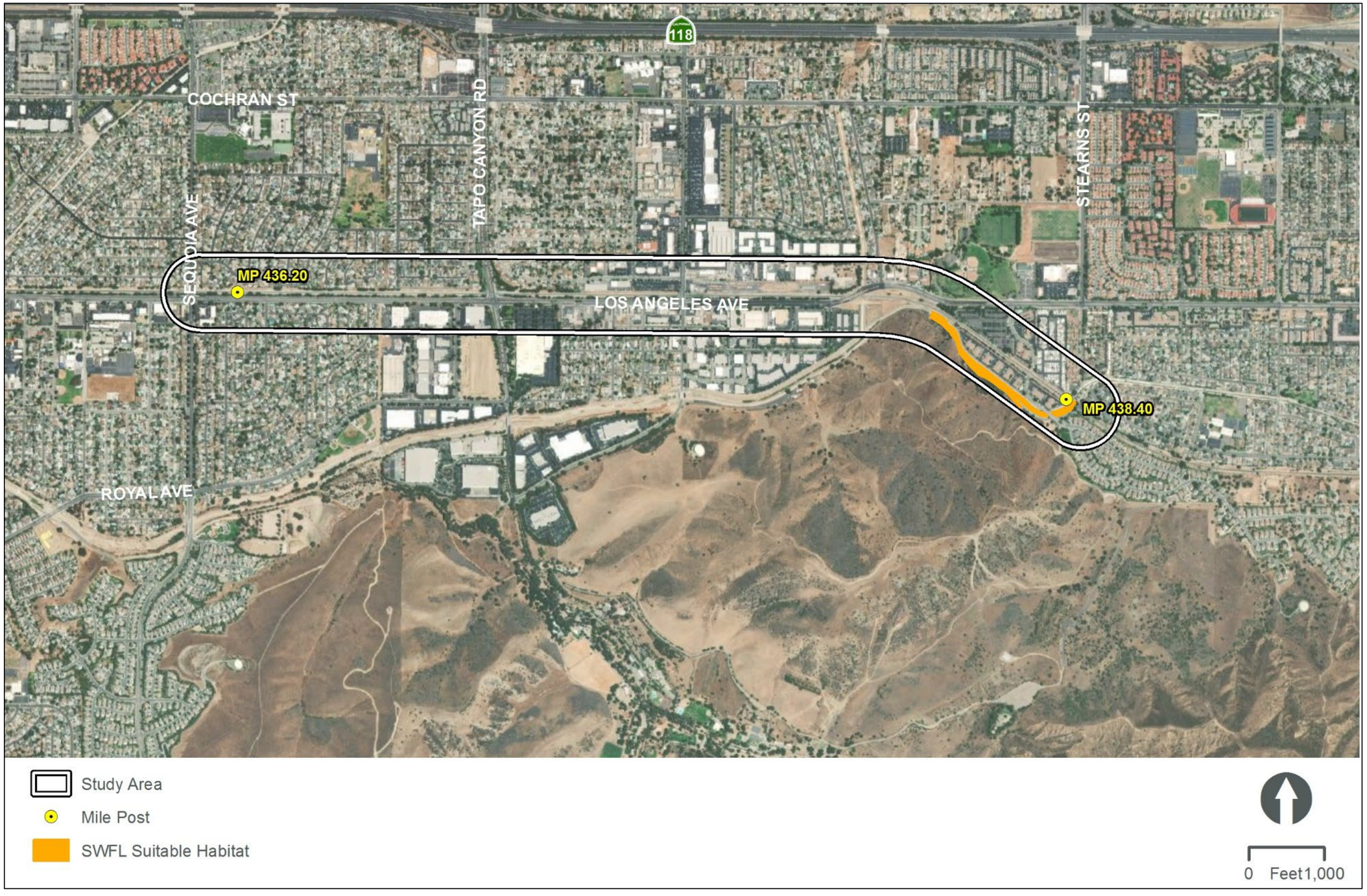


Figure 2. Study Area Location Map

Figure 3. Project Study Area and Suitable SWFL Habitat



Appendix A: USFWS 15-Day Notification Letter

Chris Kofron
U.S. Fish and Wildlife Service
2493 Portola Road
Ventura, California 93003

SUBJECT: Notification to Conduct Presence/Absence Surveys for Southwestern Willow Flycatcher for the Southern California Regional Rail Authority Project in Simi Valley, California (Ventura County)

Mr. Kofron,

The Southern California Regional Rail Authority (SCRRA) is proposing the Simi Valley Double Track and Platform Project (Project) as part of its Southern California Optimized Rail Expansion (SCORE) Program. The Project includes new rail infrastructure within SCRRA's right-of-way between Sequoia Avenue and Stearns Street in the City of Simi Valley, California (Ventura County). The proposed Project crosses suitable riparian habitat for the endangered Southwestern Willow Flycatcher (*Empidonax traillii extimus*). SCRRA has tasked HDR, Inc. to conduct presence/absence surveys for the species along the Project.

The Project study area is located in an area of Simi Land Grant on the United States Geological Survey Simi Valley East, California 7.5-minute series topographical quadrangle (approximate coordinates: 34°16'8.19"N, 118°41'44.42"W) [see **Figure 1** below]. Senior biologist Andrew Phillips (TE64613B-2) will conduct the surveys per the protocol, *A Natural History Summary and Survey Protocol for Southwestern Willow Flycatcher*. Protocol presence/absence surveys for Southwestern Willow Flycatcher will be conducted using the call-playback technique. Five separate project-related surveys will be conducted over three survey periods: one survey will be conducted between May 15 and May 31, two surveys between June 1 and June 24, and two surveys between June 25 and July 17. The first survey is scheduled for May 26, 2020, with subsequent surveys conducted at least five days apart.

Surveys will be conducted when birds are most active, between one hour before sunrise and 1030am (weather dependent). The small size of the project study area (about 3 areas) will permit a comprehensive survey in one survey morning. Southwestern Willow Flycatchers detected in the study area will be considered *migrant* or *territorial* based upon the pattern and frequency of detections, and other observational data resulting from the presence/absence surveys. Nest searches and monitoring will not be a component of the surveys.

If you have any questions regarding this notification, please contact me at (719) 272-8816 or by email at andrew.phillips@hdrinc.com.

Thank you,

Andrew J Phillips

Andrew Phillips
Senior Biologist
HDR Engineering, Inc.

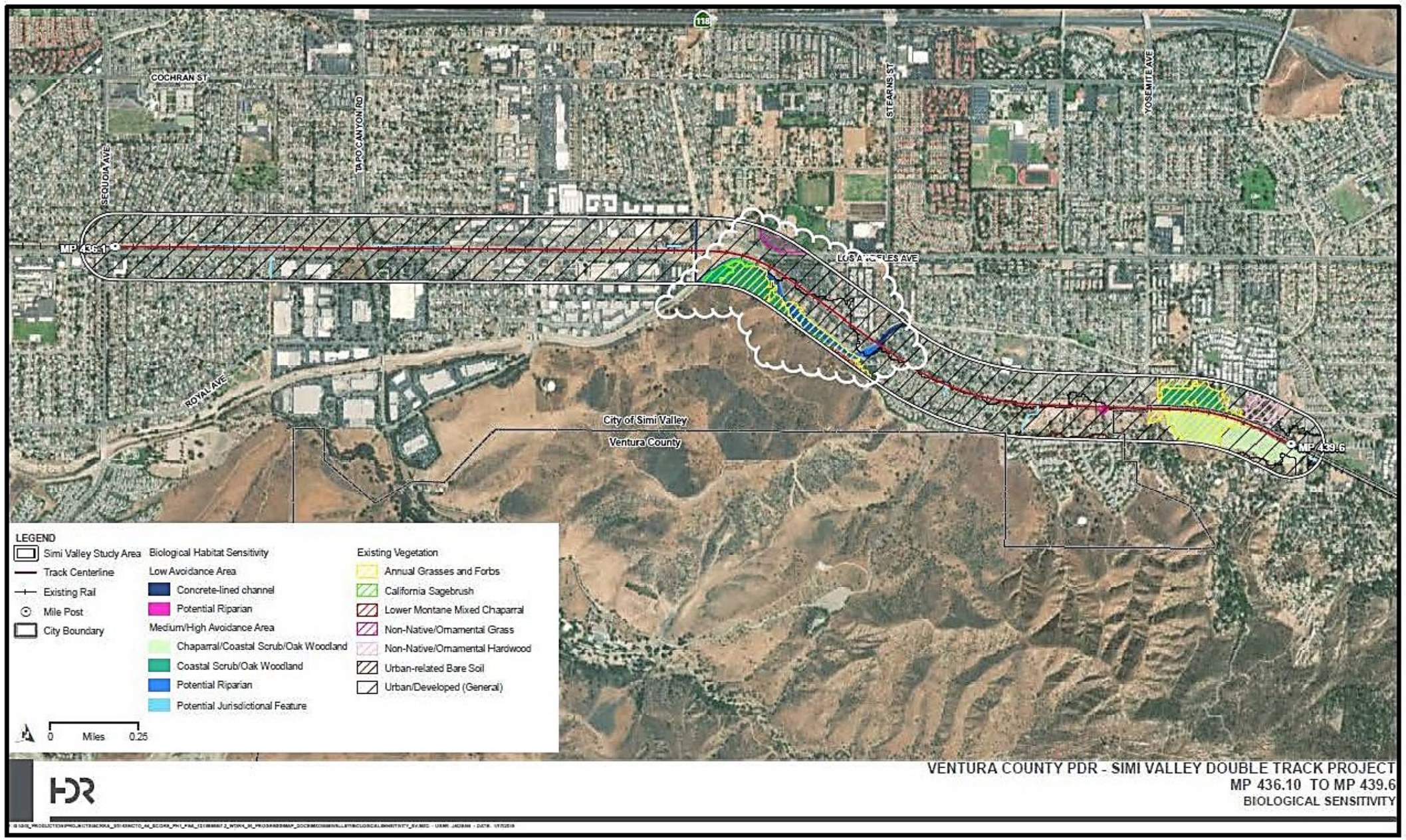


FIGURE 1: Project Study Area

Appendix B: Incidental Avian Species Detected

Scientific Name	Common Name	Status
Anatidae (Ducks, Geese, and Waterfowl)		
Anas platyrhynchos	Mallard	-
Odontophoridae (New World Quail)		
Callipepla californica	California Quail	-
Columbidae (Pigeons and Doves)		
Zenaida macroura	Mourning Dove	-
Trochilidae (Hummingbirds)		
Archilochus alexandri	Black-chinned Hummingbird	-
Selasphorus rufus	Rufous Hummingbird	-
Ardeidae (Herons, Egrets, and Bitterns)		
Ardea herodias	Great Blue Heron	-
Ardea alba	Great Egret	-
Nycticorax nycticorax	Black-crowned Night Heron	-
Cathartidae (New World Vulture)		
Cathartes aura	Turkey Vulture	-
Accipitridae (Hawks, Eagles, and Kites)		
Accipiter cooperii	Cooper's Hawk	-
Buteo jamaicensis	Red-tailed Hawk	-
Paridae (Chickadees, and Titmice)		
Baeolophus inornatus	Oak Titmouse	-
Picidae (Woodpeckers)		
Melanerpes formicivorus	Acorn Woodpecker	-
Tyrannidae (Tyrant Flycatchers)		
Myiarchus cinerascens	Ash-throated Flycatcher	-
Sayornis nigricans	Black Phoebe	-
Vireonidae (Vireos)		
Vireo bellii pusillus	Least Bell's Vireo	FE, SE
Corvidae (Crows, Jays, and Magpies)		
Aphelocoma californica	California Scrub Jay	-
Corvus brachyrhynchos	American Crow	-
Hirundinidae (Swallows)		
Petrochelidon pyrrhonota	Cliff Swallow	-
Aegithalidae (Bushtits)		
Psaltriparus minimus	Bushtit	-

Scientific Name	Common Name	Status
Troglodytidae (Wrens)		
Thryomanes bewickii	Bewick's Wren	-
Troglodytes aedon	House Wren	-
Passeridae (Old World Sparrows)		
Passer domesticus	House Sparrow	-
Fringillidae (Finches)		
Haemorhous mexicanus	House Finch	-
Spinus psaltria	Lesser Goldfinch	-
Passerellidae (New World Sparrows)		
Junco hyemalis	Dark-eyed junco	-
Melozone crissalis	California Towhee	-
Melospiza melodia	Song Sparrow	-
Spizella passerina	Chipping Sparrow	-
Icteridae (Blackbirds and Orioles)		
Icterus cucullatus	Hooded Oriole	-
Icterus bullockii	Bullock's Oriole	-
Parulidae (Wood Warblers)		
Geothlypis trichas	Common Yellowthroat	-
Oreothlypis celata	Orange-crowned Warbler	-
Setophaga petechia	Yellow Warbler	SSC

"-" = Not Applicable; FE = Federally Endangered; SE = State Endangered; SSC = State Species of Concern

Appendix C: Survey Data Forms

Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: **Southern California Regional Rail Authority Project** State: **CA** County: **Ventura County**
USGS Quad Name: **Simi Valley East, California** Elevation: **300** (meters)
Creek, River, or Lake Name: **Arroyo Simi**
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? *Yes* **X** *No* ____
Survey Coordinates: Start: E **344048** N **3793211** UTM Datum: **NAD83** (See instructions)
Stop: E **343702** N **3793539** UTM Zone: **11S**
If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.
*****Fill in additional site information on back of this page*****

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding;-potential threats [livestock, cowbirds, *Diorhabda* spp.]). If *Diorhabda* found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
Survey # 1	Date:						# Birds	Sex	UTM E	UTM N
Observer(s):	5/26/2020									
Andrew Phillips	Start:									
	7:00	0	0	0	N					
	Stop:									
	8:10									
	Total hrs:									
	1.15									
Survey # 2	Date:						# Birds	Sex	UTM E	UTM N
Observer(s):	6/9/2019									
Andrew Phillips	Start:									
	8:00	0	0	0	N					
	Stop:									
	8:50									
	Total hrs:									
	1.00									
Survey # 3	Date:						# Birds	Sex	UTM E	UTM N
Observer(s):	6/24/2019									
Andrew Phillips	Start:									
	7:00	0	0	0	N					
	Stop:									
	7:50									
	Total hrs:									
	1.00									
Survey # 4	Date:						# Birds	Sex	UTM E	UTM N
Observer(s):	7/2/2020									
Andrew Phillips	Start:									
	7:30	0	0	0	N					
	Stop:									
	8:30									
	Total hrs:									
	1.00									
Survey # 5	Date:						# Birds	Sex	UTM E	UTM N
Observer(s):	7/16/2019									
Andrew Phillips	Start:									
	7:00	0	0	0	N					
	Stop:									
	8:10									
	Total hrs:									
	1.00									
Overall Site Summary		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes ____ No **X**				
Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		0	0	0	N	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs:	5.2									

Reporting Individual: **Andrew Phillips** Date Report Completed: **7/22/2020**
US Fish & Wildlife Service Permit #: **TE64613B-2** State Wildlife Agency Permit #: **none**

***Submit** form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.*

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual **Andrew Phillips** Phone # **719.272.8816**

Affiliation **HDR Engineering** E-mail andrew.phillips@hdrinc.com

Site Name **Southern California Regional Rail Authority Project** Date report Completed **7/22/2020**

Was this site surveyed in a previous year? Yes____ No__X__ Unknown____

Did you verify that this site name is consistent with that used in previous yrs? Yes____ No____ Not Applicable **X**

If name is different, what name(s) was used in the past? **Not Applicable**

If site was surveyed last year, did you survey the same general area this year? Yes **N/A** No **N/A** If no, summarize below.

Did you survey the same general area during each visit to this site this year? Yes **X** No____ If no, summarize below.

Management Authority for Survey Area: Federal____ Municipal/County **X** State____ Tribal____ Private____

Name of Management Entity or Owner (e.g., Tonto National Forest) **City of Simi Valley, California**

Length of area surveyed: **0.50** (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

X Native broadleaf plants (entirely or almost entirely, > 90% native)

____ Mixed native and exotic plants (mostly native, 50 - 90% native)

____ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)

____ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Salix gooddingii, Quercus agrifolia, Eucalyptus globulus

Average height of canopy (Do not include a range): **6** (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features. Attach additional sheets if necessary.
California chamise (*Adenostoma fasciculatum*) occurs in uplands bordering the riparian habitat along the survey area.

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

Appendix D: Survey Photographs

Photo 1: Homogenous cattail vegetation (non-suitable nesting habitat)

Photo 2: Start of suitable habitat (eastern end of survey area)

Photo 3: Habitat exterior / overview (eastern/central habitat patch)

Photo 4: Habitat exterior (western habitat patch)

Photo 5: Habitat interior (western habitat patch)

Photo 6: Habitat exterior (west end of site)