Envicom Corporation

City of Thousand Oaks

Box Canyon Manhole and Road Improvements Project

Initial Study/ Mitigated Negative Declaration

Prepared for:

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Boulevard

Thousand Oaks, CA 91362

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February 2026

City of Thousand Oaks

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Prepared for:

CITY OF THOUSAND OAKS
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February 2026

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1.0 INTRODUCTION

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to disclose and evaluate the environmental impacts of the Box Canyon Manhole and Road Improvements (Project), located in the City of Thousand Oaks (City), California, as described further in Section 3.0 Project Description, below.

LEGAL AUTHORITY

As Lead Agency, the City has prepared this IS/MND in accordance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code 21000–21189) and relevant provisions of the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000–15387), as amended.

Initial Study. Section 15063(c) of the CEQA Guidelines defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. To paraphrase from this Section, the relevant purposes of an Initial Study are:

(1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration (ND);

(2) To enable the Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby, enabling the project to qualify for an ND; and

(3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment based on the record as a whole, that the environmental effects of a project will not have a significant effect on the environment that would necessitate an EIR.

Negative Declaration or Mitigated Negative Declaration (MND). CEQA Guidelines Section 15070 states a public agency shall prepare a ND or MND for a project subject to CEQA when:

(a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or

(b) The initial study identifies potentially significant effects, but:

1. Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed MND and IS are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

A ND or MND may be used to satisfy the requirements of CEQA when a project would have no significant, unmitigable effects on the environment.

2.0 FINDINGS OF THIS INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

The impact analysis in this Initial Study demonstrates that with the incorporation of mitigation measures, the Project would have a less than significant impact on the environment with regard to all CEQA Environmental Checklist topics. For each topic addressed in Section 4.0, the impacts associated with development of the Project have been determined to be "Potentially Significant Unless Mitigation Incorporated," "Less than Significant," or "No Impact." Thus, a MND may be issued.

3.0 PROJECT DESCRIPTION

The Box Canyon Manhole and Road Improvements Project (Project) is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City of Thousand Oaks (City) Public Works Department (PWD) wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately ten (10) feet of existing asbestos cement (AC) eight (8) - inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five (5) new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three (3) additional upstream headwalls for three (3) existing storm drain culverts.

PROJECT BACKGROUND

The Conejo Valley Sanitation District (CVSD) originally constructed and maintained the wastewater infrastructure serving the City of Thousand Oaks. This system is comprised of two (2) major wastewater interceptor pipelines, Unit W and Unit Y, along with approximately seven (7) miles of access roads and 20 utility facilities (e.g., manholes, valves, etc.). The Unit Y pipeline was constructed in 1960, followed by Unit W in 1962. In 1964, the City of Thousand Oaks PWD assumed responsibility for the long-term maintenance of the access roads, pedestrian pathways, and pipeline infrastructure from CVSD. The City's wastewater service area encompasses approximately 55 square miles, includes about 38,000 service connections, and serves a population of approximately 130,000.[1]

The Unit W and Unit Y pipelines convey sewage from the City to the Hill Canyon Treatment Plant (HCTP) located in Santa Rosa Valley. The Unit W portion of the pipeline, which includes the Box Canyon access road, is centered at approximately 34.201237°N, 118.912922°W, located primarily within the City designated Arroyo Conejo Open Space and partially within the Conejo Canyons Open Space within the South Fork of the Arroyo Conejo. Unit W includes eight manhole sites and approximately 3.9 miles of access road segments. The Unit Y portion of the pipeline is centered at approximately 34.214970°N, 118.905494°W, located within Wildwood Park Open Space,[2] and consists of twelve manhole sites and approximately 4.1 miles of access road segments. The Project, which involves the Box Canyon access road, represents a component of the City's broader maintenance efforts along the Unit W pipeline corridor.

PROJECT LOCATION

The Project site contains PWD infrastructure (eight (8) - inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. Lynn Ranch is designated as part of the Thousand Oaks Area Plan,

[1] City of Thousand Oaks Sewer System Management Plan, 2025 Sewer System Management Plan Update. April 8, 2025.

[2] Thousand Oaks' Open Space System was conceptualized in the mid-1960s to be a continuous and contiguous "ring" of green around the perimeter of the City. This ring of open space was envisioned by the founders of the City as a means to define the developed portion of the City, protect natural areas, provide trail-oriented recreation, and create a natural buffer from adjacent development. Source: Conejo Open Space Conservation Agency, Canejo Canyons Open Space Management Plan, July 14, 2010.

one of eleven planning sub-areas identified in the Ventura County General Plan. The Project location is shown in **Figure 1, Regional Location Map** and **Figure 2, Vicinity Map.**

The Project site is part of the broader Conejo Canyons area, encompassing approximately 3,641 acres of diverse terrain, including mountains, plateaus, steep-sided canyons, and riparian corridors. This area is divided into four (4) distinct Open Space Units (OSUs): Arroyo Conejo, Lynnmere, Canyons West, and Wildwood.[3] Multiple utility rights-of-way, held by various public agencies and private entities, traverse the Conejo Canyons area, including Unit W. The Project site is predominantly located within the Arroyo Conejo OSU, which is defined by its steep canyon walls carved by historic creek erosion. The Project site is located within a natural canyon landscape that supports a network of tributaries and a perennial stream, along with associated riparian vegetation. A streambed runs generally parallel to the Box Canyon access road and is classified as a non-wetland water of the State. This streambed exhibits intermittent and ephemeral flow regimes, depending on seasonal precipitation and topography. Tributaries in the area vary in condition, some currently contain existing culverts, while others remain unculverted and flow across or adjacent to the access road. The area is zoned Open Space (O-S)[4] and has a General Plan land use designation of Open Space.[5] As shown in Figure 2, the Project site is surrounded by the Arroyo Conejo OSU and is adjacent to low-density residential areas, primarily composed of single-family homes.

PROJECT COMPONENTS

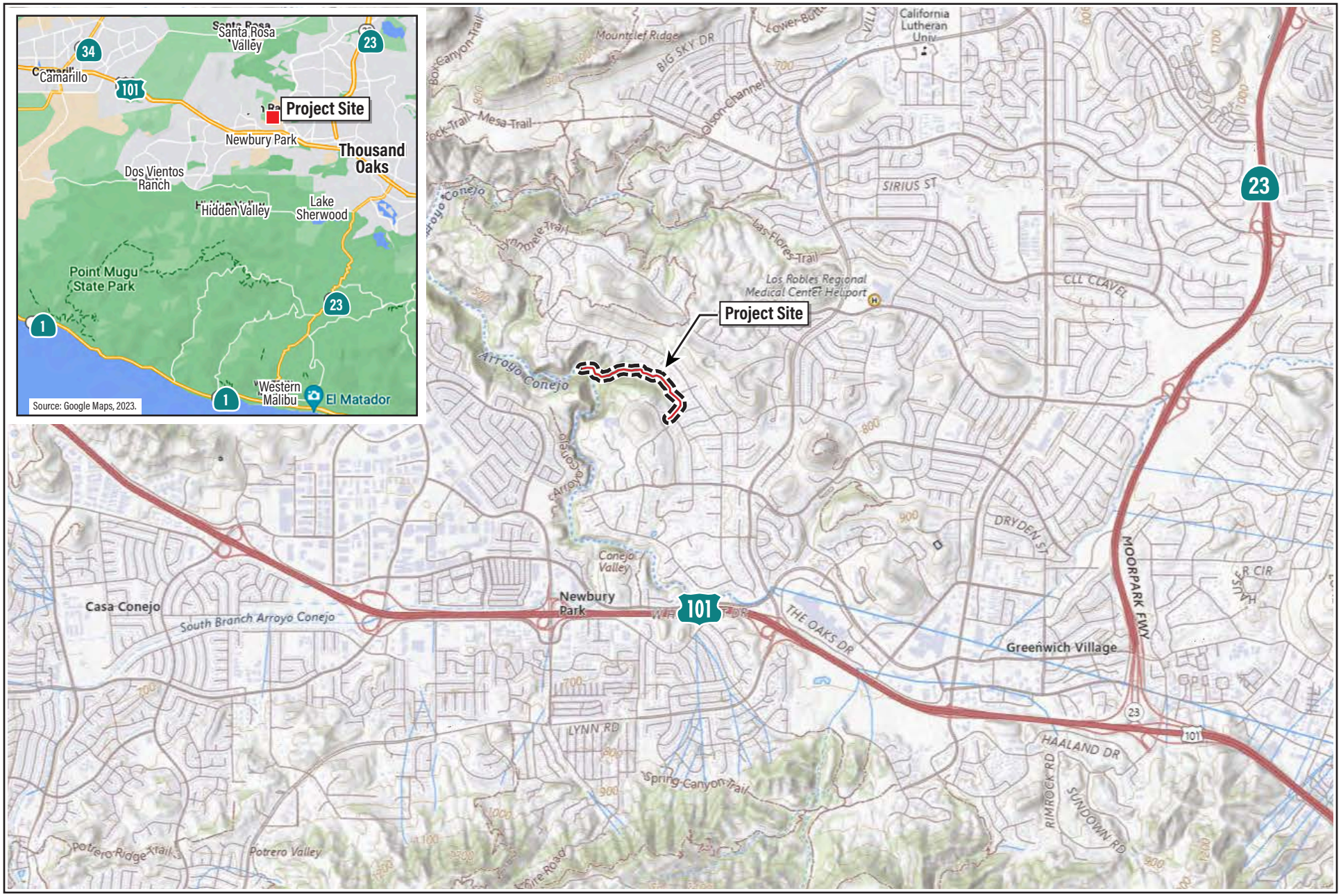
The Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately 10 feet of existing AC eight (8) - inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five (5) new 18-inch RCP storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three (3) additional upstream headwalls for three (3) existing storm drain culverts.

Key Construction Activities

The Project consists of several key construction activities designed to improve access and upgrade wastewater infrastructure. These activities include the installation of new stormwater infrastructure, such as culverts and headwalls; the replacement of ten (10) feet of eight (8) - inch diameter existing wastewater AC pipeline; the concrete paving of an existing unpaved access road; and the installation of a new manhole to enhance system accessibility. In total, the Project is made up of ten (10) specific infrastructure components. Each component includes installation, replacement, and/or rehabilitation of existing sewer infrastructure and associated roadway improvements:

1. Manhole to existing wastewater line and replacement of ten (10) feet of eight (8) - inch diameter AC pipeline;
2. New 18-inch RCP storm drain with upstream and downstream headwalls;
3. New 18-inch RCP storm drain with upstream and downstream headwalls;

[3] Canejo Open Space Conservation Agency, Canejo Canyons Open Space Management Plan, July 14, 2010.
[4] Thousand Oaks Public Map Browser, Accessed October 2025 at: https://gis.toaks.gov/portal/apps/experiencebuilder/experience/?id=09b08b5afd1241288e2f303726a125b2.
[5] Thousand Oaks General Plan 2045, Chapter 4, Land Use, adopted December 5, 2023.



Source: maps.ventura.org/countyview, October 29, 2025.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT

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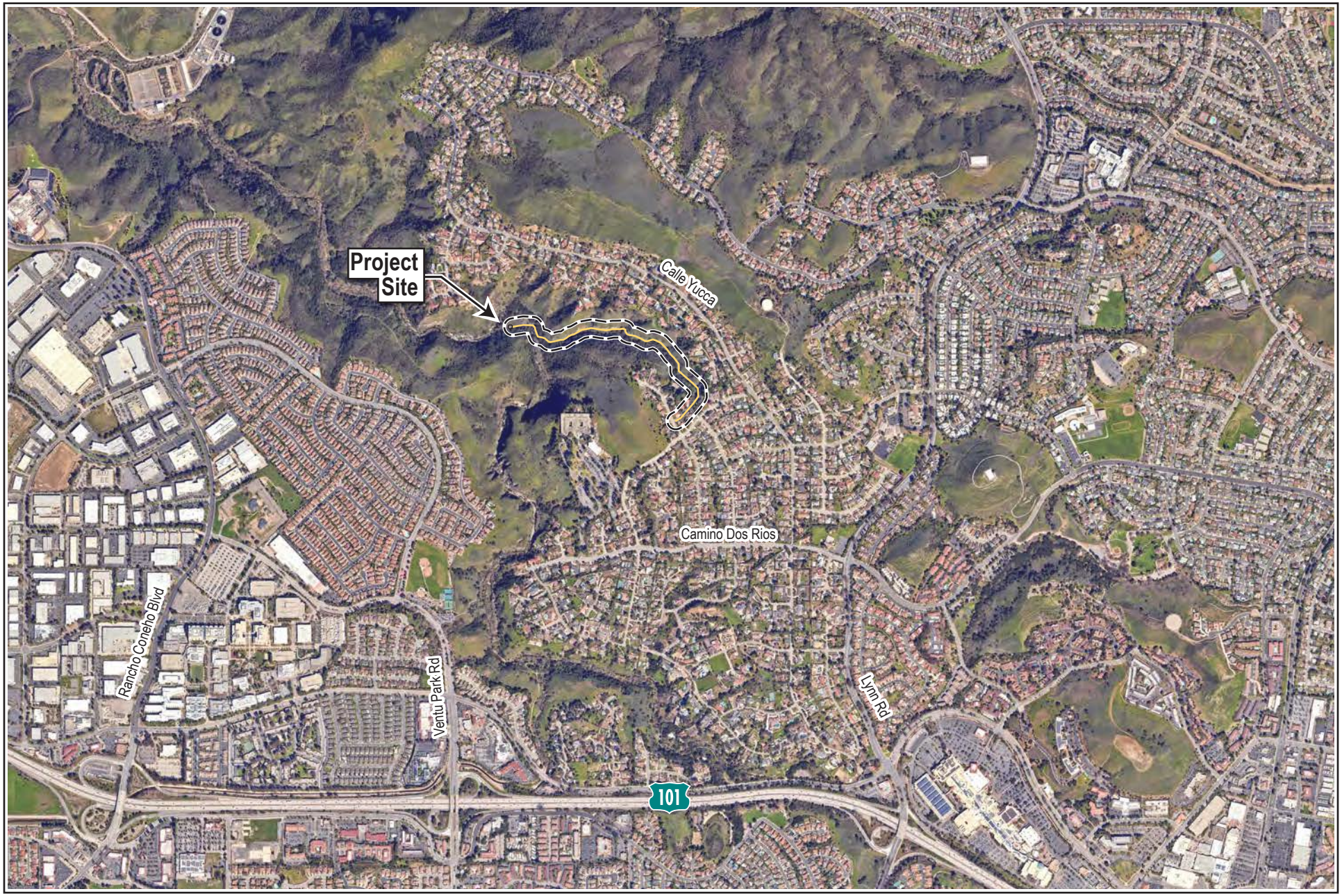
Regional Location Map

FEET 0 1,500 3,000

FIGURE 1



Source: Google Earth October 17, 2023

October 29, 2025

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT

envicom

Vicinity Map

FEET 0 900 1,800

FIGURE 2

4. New 18-inch RCP storm drain with upstream and downstream headwalls;
5. New 18-inch RCP storm drain with upstream and downstream headwalls;
6. New 18-inch RCP storm drain with upstream and downstream headwalls;
7. New upstream headwall; existing ten (10) - inch RCP storm drain to be replaced;
8. New upstream headwall; existing 14-inch RCP storm drain to be cleaned out;
9. New upstream headwall; existing 18-inch RCP storm drain to be cleaned out; and
10. Concrete paving of access road.

The specific locations of each Project component are shown in the site plans included in **Appendix A, Entitlement Package**.

Manhole

The Project includes the construction of a new manhole structure within the existing Box Canyon access road. The manhole would consist of a 36-inch diameter access point and an eight (8) foot by six (6) foot cast-in-place reinforced concrete sewer structure. The structure would be constructed around the existing 30-inch diameter DIP (ductile iron pipe) at its intersection with an existing eight (8) - inch AC pipe. As part of the installation, the top of the 30-inch DIP would be cut and modified to integrate with the new structure shelf. When the manhole structure is constructed, a section of existing eight (8) - inch diameter AC pipeline that currently connects to the 30-inch diameter pipeline would be removed and replaced with polyvinyl chloride (PVC) pipe. Total temporary ground disturbance associated with manhole construction is estimated to be approximately 800 square feet.

Culverts and Storm Drain Infrastructure

As part of the Project's stormwater management improvements, new culverts would be installed to direct surface runoff beneath the access road, helping to maintain natural drainage patterns and reduce erosion. These culverts, typically constructed of RCP or PVC pipe, would be located at key drainage crossings (some existing and some proposed) along the access road and sized to accommodate anticipated stormwater flows. Each culvert would be paired with appropriately sized headwall structures to stabilize soil, reduce erosion, and support long-term structural integrity.

To preserve functionality and capacity of the drainage system, all existing culverts along the access road would be cleaned using a hydrojetter prior to or during construction. This process will remove sediment and debris buildup, ensuring continued performance of the stormwater infrastructure.

The headwalls are designed to be minimal in size to reduce environmental impacts. Typical dimensions include a height of approximately three (3) feet, a thickness of eight (8) - inches, and a length of eight (8) feet. Headwalls would be constructed of cast-in-place reinforced concrete and are engineered to integrate with the culvert alignment and surrounding road base.

Culvert and headwall placement has been designed to follow existing topography and natural flow paths, thereby minimizing grading and ground disturbance. Where feasible, the alignment of these stormwater features has been adjusted to avoid impacts to oak trees and their associated canopies. Construction activities would be confined to previously disturbed areas such as the existing roadbed and adjacent clearings. If work is required near oak trees, appropriate protective measures, such as fencing, root zone buffers, and pruning restrictions, would be implemented to minimize harm to roots, trunks, and overhead canopy. Furthermore, the City would be applying for an Oak Tree Permit for any work, including trimming, that may occur within the dripline of protected trees (i.e., oak or sycamore).

In areas where culverts and headwalls cross above or near existing wastewater infrastructure, the contractor would be required to verify the depth and alignment of existing sewer lines prior to construction to avoid potential conflicts. Field adjustments to culvert or headwall placement may be made during construction to further reduce environmental impacts and ensure compatibility with existing underground utilities.

Concrete Paving

As part of the Project, the existing access road would be regraded to a width of ten (10) feet. In some locations, grading may extend beyond ten (10) feet to match the existing road edge. All work would occur within previously disturbed areas, including grassy sections and the existing unimproved road.

To ensure durable, year-round access for City personnel and service vehicles, approximately 260 linear feet of access road would be paved with concrete. This segment descends from an elevation of approximately 695 feet above mean sea level (AMSL) to 618 feet AMSL, resulting in an average slope of approximately 29.6 percent. The roadway would be constructed with a four (4) - inch thick concrete surface over a six (6) - inch thick engineered base. These structural components are designed to support vehicular loads, reduce erosion, and improve long-term durability, particularly given the steep grade.

Construction

Access to the utility facilities would be provided via the existing unpaved access road, Box Canyon, which would be used by pickup trucks or other City vehicles during construction activities and inspections. Vegetation removal, if necessary during Project implementation within the Project area would be conducted using power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools to ensure safe and efficient clearing. Road surface scraping, in preparation for concrete paving, would be performed using standard skip loaders and bobcats, with water trucks deployed as needed to control dust during operations. Hydro cleaning operations would employ a trailer-mounted hydrojetter and hydro-combination trucks to ensure effective cleaning of pipelines and related infrastructure.

Construction for the Project would occur over approximately six (6) months. Construction is expected to begin in mid 2026. It is anticipated that the majority of the construction would include a eight (8) - person crew working weekdays. Equipment is anticipated to include: an excavator, a loader, a dump truck, a skip loader/backhoe, an air compressor, a transport truck, a roller compactor, concrete trucks (manhole, headwalls and pavement areas). Material stockpiling would be constrained to previously disturbed areas and would be hauled offsite and disposed of at a legal disposal facility.

Best Management Practices

To minimize environmental impacts and protect sensitive resources during construction, the following Best Management Practices (BMPs) would be implemented throughout the duration of the Project:

- Construction personnel and equipment would be free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil) prior to entering the Project area. All potentially contaminated equipment would be carefully cleaned prior to the initiation of Project activities.
- Materials shall be stored at least 50 feet from streams and wetlands, as feasible, or equipment would utilize secondary containment.
- Any substances that could be hazardous to wildlife resulting from Project-related activities shall be prevented from contaminating the soil and/or entering waterways.
- Project activities would take place during the daytime.

REQUIRED APPROVALS

This IS/MND would serve as the CEQA review document for project implementation, including required City approvals. This IS/MND would also serve as the CEQA review document for use by Responsible Agencies including, but not limited to:

California Department of Fish and Game

- Section 1602 Streambed Alteration Agreement

Regional Water Quality Control Board

- Section 401 Clean Water Act Certification

United States Army Corps of Engineers

- Clean Water Act Section 404 Permit

4.0 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY AND ENVIRONMENTAL CHECKLIST

1. Project title:
Box Canyon Manhole and Road Improvements Project

2. Lead Agency name and address:
City of Thousand Oaks
Public Works Department
2100 Thousand Oaks Boulevard
Thousand Oaks, California CA 91362

3. Contact person and phone number:
Patrick McCulloch, Utilities Maintenance Supervisor
E-mail: PMcCulloch@toaks.gov
Telephone: (805) 376-5060

4. Project location:
Box Canyon, City of Thousand Oaks

5. Project Applicant name and address:
City of Thousand Oaks
Public Works Department
2100 Thousand Oaks Boulevard
Thousand Oaks, California CA 91362
Attention: Mr. Patrick McCulloch, Utilities Maintenance Supervisor

6. General Plan Land Use designation:
Open Space

7. Zoning designation:
Open Space (O-S)

8. Project Description:
The Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately ten (10) feet of existing AC eight (8) - inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five (5) new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three (3) additional upstream headwalls for three (3) existing storm drain culverts. Please see Section 3.0, Project Description, for further detail.

9. Surrounding land uses and setting:
The Project site is surrounded by the Arroyo Conejo OSU and is adjacent to low-density residential areas, primarily composed of single-family homes.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

California Department of Fish and Game

- Section 1602 Streambed Alteration Agreement

Regional Water Quality Control Board

- Section 401 Clean Water Act Certification

United States Army Corps of Engineers

- Clean Water Act Section 404 Permit

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On December 11, 2025, the City PWD sent a letter to the Native American tribes that are culturally affiliated with the Project area, notifying the tribes of the Project. No response/request for consultation was received for the Project. The City PWD closed consultation on February 17, 2026. The relevant consultation correspondences are provided in **Appendix B, Tribal Consultation**, to this document.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and Project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology /Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, an EIR Addendum will be prepared.

Name: Patrick McCulloch

Title: Utilities Maintenance Supervisor, Public Works Department

Signature: Date: 2/23/2026

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project introduces incompatible visual elements within a field of view containing a scenic vista or substantially blocks views of a scenic vista.

No Impact. The City of Thousand Oaks is visually defined by a distinctive ring of open space that surrounds the community, contributing to its scenic quality and natural character. Prominent landscape features include oak woodlands, knolls, ridgelines, and rolling hills. Local planning policies encourage development that blends with natural terrain and discourages construction on steep hillsides or highly visible ridgelines.[6] The Project site is located within the Arroyo Conejo Open Space area, accessed via Calle Las Trancas, and is situated approximately 200 feet northwest of its intersection with Calle Pecos. The site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space and low-density residential development. The area is zoned Open Space (O-S)[7] and has a General Plan land use designation of Open Space.[8]

A streambed runs parallel to the access road, exhibiting intermittent and ephemeral flows. Some tributaries in the area are culverted, while others flow across or adjacent to the existing road. The surrounding steep canyon walls and vegetation limit views to and from the Project site.

The Project involves improvements to existing infrastructure within a previously disturbed corridor and does not include any building construction or vertical structures that would introduce massing, height, or visual

6 Thousand Oaks General Plan 2045, Chapter 7, Conservation, adopted December 5, 2023.
7 Thousand Oaks Public Map Browser, Accessed October 2025 at: https://gis.toaks.gov/portal/apps/experiencebuilder/experience/?id=09b08b5afd1241288e2f303726a125b2.
8 Thousand Oaks General Plan 2045, Chapter 4, Land Use, adopted December 5, 2023.

changes inconsistent with the surrounding natural environment. No scenic vistas are located on or adjacent to the Project site, and the proposed improvements would not obstruct or alter view corridors. Therefore, the Project would not degrade or block scenic vistas, and no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if scenic resources within a City-designated scenic highway would be damaged or removed by development of a project.

No Impact. The nearest State Scenic Highway is U.S. Route 101, located approximately 1.05 miles south of the Project site. U.S. 101 is identified by Caltrans as eligible for scenic highway designation and therefore is not officially designated as a scenic highway.[9] Due to the site's location within the Arroyo Conejo Open Space area, along with surrounding steep canyon walls, mature vegetation, and the absence of long-range visibility, the Project site is not visible from U.S. 101, nor is it located along a designated scenic roadway.

Although the Project site is located within a natural open space area that includes a streambed, this feature is situated within a steep-sided canyon, with dense vegetation and limited visibility. The streambed runs parallel to the Box Canyon access road but is not visible from any public vantage points or from designated or eligible scenic highways. As such, it does not qualify as a scenic resource within a scenic highway corridor under CEQA. The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. All improvements would occur within a previously disturbed corridor and would not introduce visually prominent structures or features. Although some vegetation trimming may occur to facilitate construction, these activities would be temporary and minimal. No rock outcroppings, historic structures, or scenic resources visible from scenic highways would be affected.

Additionally, the Project area contains oak trees and other species protected under the City of Thousand Oaks Oak Tree and Landmark Tree Preservation Ordinances. The Project has been designed to avoid impacts to these protected resources to the greatest extent feasible, and best management practices (BMPs), as described in Section IV.c, Biological Resources, would be implemented to ensure their preservation during construction. Because the Project is not visible from any state-designated or eligible scenic highway and would not damage scenic resources associated with such corridors, it would have no impacts and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A significant impact may occur if a project introduced incompatible visual elements on the site or visual elements incompatible with the character of the area surroundings.

No Impact. The Project site is located within the Arroyo Conejo Open Space area, in a steep-sided canyon characterized by natural vegetation, and riparian features. The surrounding area includes open space and low-density single-family residential uses. Due to the site's location within a canyon and its limited public visibility, views of the site are screened from surrounding public roads and vantage points.

The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall

[9] California Department of Transportation, California State Scenic Highway System Map, Accessed October 2025 at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

upgrades, and concrete paving. These activities would occur within an already disturbed corridor and would not introduce buildings, structures, or massing that would alter the site's visual character. Vegetation removal would be limited to that necessary for construction access, and protected tree species would be avoided to the extent feasible. Given the nature, scale, and location of the proposed improvements, the Project would not substantially degrade the visual character or quality of the site or its surroundings. Therefore, there would no impacts and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A significant impact may occur if a project introduced a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

No Impact. The Project site is located within the Arroyo Conejo Open Space area, accessed via Calle Las Trancas, and is situated approximately 200 feet northwest of its intersection with Calle Pecos. The site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space and low-density residential development. There are no existing lights within the Box Canyon access road, and the Project does not propose the installation of any new permanent lighting or reflective materials.

The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. As no new lighting would be installed and construction would occur during daylight hours, the Project would not introduce new sources of light or glare that could affect nighttime views or generate visual discomfort for adjacent land uses. Therefore, the Project would not create a new source of substantial light or glare that is incompatible with adjacent uses or that would adversely affect day or nighttime view in the area, and no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES.				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact Analysis

a-e. A project may result in a significant impact if it would convert Important Farmland to a non-agricultural use, conflict with zoning for agricultural uses or with a Williamson Act contract, conflict with zoning or cause re-zoning of timberland or Timberland Production areas, result in the loss or conversion of forest land, or otherwise involve or result in the conversion of Important Farmland or forest land to other uses.

No Impact. The Project site is located within the City of Thousand Oaks, in an area that has been developed and urbanized for several decades. According to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the Project site and surrounding area are designated as "Urban and Built-Up Land" and "Other Land." The site does not contain any lands classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[10] Additionally, the Project site is not under a Williamson Act contract, and the site, which is zoned O-S and designated as Open Space, is not zoned or designated for agricultural or forestry use. The proposed infrastructure improvements would occur entirely within a previously disturbed municipal access corridor and would not result in changes to the existing

[10] California Department of Conservation, California Important Farmland Finder, Accessed October 2025 at: https://maps.conservation.ca.gov/DLRP/CIFF/.

environment that could lead to the conversion of farmland or forest land to other uses. Therefore, the Project would result in no impacts to agriculture or forestry resources, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

Impact Analysis

The Project site is located in the South Central Coast Air Basin (Basin) and is under the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). Air quality in the Basin is affected by the emission sources located in the region, as well as by the following three (3) natural factors:

- A natural terrain barrier to emission dispersion north and east of the metropolitan Los Angeles area.
- A dominant on-shore flow transports and disperses air pollution by driving air pollution originating in industrial areas along the coast towards the natural terrain barrier, limiting horizontal dispersion. The effect of this on-shore flow is a gradual degradation of air quality from coastal to inland areas. The greatest impacts can be seen in the San Gabriel Valley and near Riverside at the foot of the San Gabriel Mountains.
- Atmospheric inversions limit dispersion of air pollution on a vertical scale. Temperature typically decreases with altitude. However, under inversion conditions, temperature begins to increase at some height above the ground. The temperature increase continues through an unspecified layer after which the temperature change with height returns to standard conditions. The inversion layer is typically very stable and acts as a cap to the vertical dispersions of pollutants.

a. A significant air quality impact may occur if a project is not consistent with the applicable Air Quality Management Plan (AQMP) or if a project would represent a substantial hindrance to implementing the policies or obtaining the goals of that plan.

No Impact. The applicable AQMP for the Project is the 2022 Ventura County AQMP.[11] The 2003 Ventura County Air Quality Assessment Guidelines (AQAGs) state that a project's consistency with the AQMP can be determined by comparing the actual population growth in the County with the projected growth rates used in the AQMP. If a project is consistent with the population forecasts used in the most recently adopted

[11] Ventura County Air Pollution Control District, 2022 Ventura County Air Quality Management Plan, December 13, 2022.

AQMP, it would show consistency with the AQMP. The AQMP relies on the Southern California Association of Government (SCAG) 2024-2050 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) forecast for regional population growth.[12] The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. There would be no population growth associated with the Project and therefore, it is well within the growth assumptions that are incorporated into the 2022 Ventura County AQMP and would not result in unplanned population growth, as discussed in Section XIV, Population and Housing. As such, the Project would not conflict with or obstruct implementation of the AQMP, and the Project would result in no impacts. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project adds a considerable cumulative contribution to federal or State nonattainment pollutants.

Less Than Significant Impact. For projects located within the County, the AQAGs [13] provide volatile organic compounds (VOC) and nitrogen oxides (NO_x) thresholds that the VCAPCD has determined would: "individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County," which are as follows:

1. VOC 25 pounds (lbs)/day
2. NO_X 25 lbs/day

According to the AQAGs, construction-related emissions of VOC and NO_x are not counted toward the two (2) significance thresholds, since these emissions are temporary. However, the AQAGs state that if a project's estimated construction-related emissions of reactive organic gases (ROG) and NO_x would exceed 25 pounds/day, the VCAPCD recommends the following measures to mitigate ozone precursor emissions from construction motor vehicles:

1. Minimize equipment idling time.
2. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
3. Lengthen the construction period during smog season (May through October), to minimize the number of vehicles and equipment operating at the same time.
4. Use alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, if feasible.

The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. All work would be temporary and short-term in duration. Construction within the Project area would utilize power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools for vegetation clearing and access preparation. Surface scraping for concrete paving would be completed using standard equipment, such as skip loaders and bobcats. Water trucks would be used as needed to minimize dust during construction.

[12] Southern California Association of Governments 2024–2050 Regional Transportation Plan / Sustainable Communities Strategy, April 4, 2024.

[13] Ventura County Air Pollution Control District Ventura County Air Quality Assessment Guidelines, Section 3.3 Recommended Significance Criteria, October 2003.

The Project does not involve extensive grading or the construction of buildings or other permanent structures and would not introduce a new source of stationary emissions. Air pollutant emissions would primarily be short-term and associated with equipment use during infrastructure upgrades and vehicle trips to the Project site. However, due to the limited scope of the maintenance activities and equipment used, short duration, and dispersed nature of these activities, emissions would be minimal and well below AQAGs significance thresholds for criteria pollutants of 25 lbs/day for either ROG or NO_x. As such, the Project would result in a less than significant air quality impact related to a considerable cumulative contribution to federal or State nonattainment pollutants during construction.

According to the AQAGs, a project that is consistent with the 2022 Ventura County AQMP is considered not to result in significant cumulative air quality impacts. The 2022 Ventura County AQMP outlines strategies for achieving compliance with SCAG. These projections include anticipated cumulative development within the region, including the City. As discussed in Section III.a, Air Quality, above, the Project would not conflict with the assumptions or control measures outlined in the AQMP. As regional emissions associated with planned growth are already factored into the AQMP, the Project's contribution to cumulative air pollutant emissions would be considered less than significant and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A project may have a significant impact if it would expose sensitive receptors to substantial pollutant concentrations, such as creating a human health hazard by exposing sensitive receptors to toxic air emissions.

Less Than Significant Impact. Sensitive receptors are those most susceptible to respiratory distress, such as children under 14, elderly over 65, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. The VCAPCD states that localized air quality impacts to sensitive receptors typically result from fugitive dust, CO, TACs, odors, and entrained fungal spores that cause San Joaquin Valley Fever. Sensitive land uses in the vicinity of the Box Canyon access road are limited to single-family residences located to the north within the Lynn Ranch community. In the lower portions of the access road, some homes are relatively close to the access road. As the road ascends into the canyon, residences are positioned higher up along the northern slopes, increasing both horizontal and vertical distance from the Project site. The remainder of the surrounding area consists of the Arroyo Conejo Open Space area, providing natural open space buffers on all other sides.

Fugitive Dust

As discussed in Section III.b, Air Quality, above, based on the duration of construction activities and the equipment to be utilized on-site, the Project's short-term construction-related emissions of ROG or NO_x would not exceed the VCAPCD guideline of 25 lbs/day and therefore would not trigger the need for mitigation measures. Additionally, VCAPCD Rule 55 requires projects to minimize construction fugitive dust emissions, which includes but is not necessarily limited to the following BMPs:

- Apply water to disturbed soils of the site at least twice daily during construction.
- Require the use of a gravel apron and/or rumble pad at truck exit points to reduce mud and dirt trackout onto area roadways.
- All soil materials transported off-site shall be securely covered during transit.
- Apply non-toxic soil stabilizers according to manufacturers' specifications to all graded areas that remain inactive for ten (10) days or more).
- Limit traffic speeds on all unpaved portions of the site to 15 mph or less by providing worker notification, signage, or other means.

Carbon Dioxide Hotspots

A CO hotspot is a localized concentration of CO that is above the State or national 1-hour or eight-hour CO ambient air standards. Localized CO "hotspots" can occur at intersections with heavy peak hour traffic that could cause local CO concentration to exceed federal or State ambient air quality standards (AAQS). According to the AQAGs, a CO hotspot screening analysis should be conducted for any project with indirect emissions greater than the applicable ozone project significance thresholds that may significantly impact roadway intersections that are currently operating at, or are expected to operate at, Levels of Service (LOS) E, or F. As shown above, the Project's emissions of ozone precursors ROG or NO_x would not exceed the VCAPCD significance thresholds. As such, pursuant to AQAGs, a CO hotspot screening analysis for this Project would not be warranted and potential impacts would be less than significant. and no mitigation is required.

Toxic Air Contaminants

Construction activities at the Project site would generate some emissions of toxic air contaminants (TACs), including diesel particulate matter (DPM), typically associated with the use of heavy-duty equipment. However, the proposed work consists primarily of infrastructure improvements that would rely on hand tools and occasional use of small, mechanized equipment, such as rubber-tracked vehicles. The Project does not require heavy construction equipment or prolonged operation of diesel-powered machinery. As such, DPM emissions would be minimal and short in duration. Given the limited intensity of equipment use and the short-term nature of construction activities, exposure to any one sensitive receptor would be brief and intermittent. Therefore, the Project would not result in concentrations of TACs that pose a significant health risk to nearby sensitive receptors.

San Joaquin Valley Fever

San Joaquin Valley Fever (formally known as *Coccidioidomycosis*) is an infectious disease caused by the fungus *Coccidioides immitis*. Infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The Valley Fever fungus tends to be found at the base of hillsides, in virgin, undisturbed soil, and it is found in the southwestern United States. In its primary form, symptoms appear as a mild upper respiratory infection, acute bronchitis, or pneumonia. The most common symptoms are fatigue, cough, chest pain, fever, rash, headache, and joint aches, although 60 percent of people infected are asymptomatic and do not seek medical attention. In the remaining 40 percent, symptoms range from mild to severe. There is no recommended threshold for a significance for San Joaquin Valley Fever impact; however, according to the VCAPCD, the following factors may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches).
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, non-urban areas.
- Windy areas.
- Archaeological resources probable or known to exist in the area (Native American midden sites).
- Special events (fairs, concerts) and motorized activities (motocross track, All Terrain Vehicle activities) on unvegetated soil (non-grass).
- Non-native population (i.e., out-of-area construction workers).

According to the AQAGs, the Lead Agency should consider the factors above that are applicable to the Project or the Project site. Based on these or other factors, if a Lead Agency determines that a project may create a significant Valley Fever impact, the VCAPCD recommends that the Lead Agency consider the Valley Fever mitigation measures listed in the AQAGs to minimize fugitive dust, as well as minimizing

worker exposure. The AQAGs provide the following list of measures to be considered if the Lead Agency determines a project site poses a risk of San Joaquin Valley Fever:

1. Restrict employment to persons with positive coccidioidin skin tests (since those with positive tests can be considered immune to reinfection).
2. Hire crews from local populations where possible, since it is more likely that they have been previously exposed to the fungus and are therefore immune.
3. Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
4. Require that the cabs of grading and construction equipment be air-conditioned.
5. Require crews to work upwind from excavation sites.
6. Pave construction roads.
7. Where acceptable to the fire department, control weed growth by mowing instead of discing, thereby leaving the ground undisturbed and with a mulch covering.
8. During rough grading and construction, the access way into the project site from adjoining paved roadways should be paved or treated with environmentally safe dust control agents.

The Project site consists of an existing unimproved access road used for wastewater system maintenance, with surrounding areas largely comprised of undeveloped open space. Project activities would disturb topsoil along the road corridor during infrastructure upgrades and maintenance activities. However, the disturbance area is limited to previously disturbed areas within the existing road alignment. In addition, the Project would be required by VCAPCD Rule 55 to implement measures to minimize fugitive dust during construction, including the application of water to exposed soils, which would minimize dust from dry soils or during windy conditions to minimize risk for *Coccidioides immitis* to be present and disturbed during construction. Due to the combination of these factors, the potential of the Project to result in substantial San Joaquin Valley Fever impacts would be less than significant and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A project may have a significant impact if it would create objectionable odors affecting a substantial number of people.

No Impact. Land uses typically associated with objectionable odors that can potentially adversely affect a substantial number of people include certain types of agriculture, sewage treatment plants, landfills, green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing, rendering plants, and certain types of food manufacturing. Based on the AQAGs, a project may have a significant impact if it would generate an objectionable odor to a degree that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or to the public, or which would endanger the comfort, repose, health, or safety of any such persons or the public, or which would cause, or have a natural tendency to cause, injury or damage to business or property.

During construction, the use of certain materials and equipment may generate odors that are typical of small-scale infrastructure projects. These may include the application of concrete, asphalt, or protective coatings, and emissions from construction equipment such as diesel-powered machinery. Additionally, minor vegetation clearing and soil disturbance may produce organic odors, particularly in areas with accumulated leaf litter or decaying plant material. These odors would be temporary, intermittent, and mostly confined to the immediate vicinity of construction equipment or the surface in question. Such odors would dissipate into the air, and if they reach a sensitive receptor, would be diluted to well below a concentration that would cause an air quality concern. Further, odors produced by materials would begin to wane immediately after application and cease when the materials dry, and odors produced by machinery would

only be present while machinery is operating. As such, the Project would result in no substantial odor impacts and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in the local or regional plans, policies, regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

The following analysis is based on the Arroyo Conejo Utility and Road Maintenance Project Jurisdictional Delineation and Habitat Assessment (JDHA) prepared by Rincon Consultants (Rincon), August 2025 (**Appendix C.1**). Rincon originally prepared the JDHA in support of a broader maintenance effort proposed by the City within the Arroyo Conejo corridor. A portion of the JDHA Study Area encompasses the area where the Box Canyon Project activities would be conducted. For additional detail refer to **Appendix C.2, Jurisdictional Delineation of the Box Canyon Manhole and Road Improvements Project**. Therefore, the JDHA is used as the basis for the following environmental analysis.

a. A significant impact may occur if a project would result in a substantial adverse effect on any species identified as a candidate, sensitive or special-status species in local or regional plans.

Potentially Significant Unless Mitigation Incorporated. The Project site is located within the Arroyo Conejo Open Space area, accessed via Calle Las Trancas, and is situated approximately 200 feet northwest of its intersection with Calle Pecos. The site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space and low-density residential development. The JDHA includes record searches for special-status species, special-status wildlife species, nesting birds, critical habitat, and other sensitive resources species that could occur within the Study Area.

This section discusses sensitive or regulated biological resources that have potential to occur within the Box Canyon Study Area. The potential for a special-status species to occur within the Study Area was based upon known ranges and habitat preferences for the species, species occurrence records [e.g., California Natural Diversity Database (CNDDB)] in the vicinity, occurrences documented in available reports from nearby projects, and the field survey results. While the JDHA evaluated the potential for occurrence of special-status species within a much broader area than the Box Canyon Study Area, potential for occurrence determinations discussed in this section are specifically evaluated for the Box Canyon Study Area. The total number of species considered are the same 72 special-status species evaluated in the JDHA, including 34 plant and 38 wildlife species The potential for each special-status species to occur in the Study Area and/or Project site was evaluated according to the following criteria:

- **No Potential**. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on the site if present.
- **Low Potential**. Few of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not very likely to occur on the site.
- **Moderate Potential**. Some of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. There are confirmed extant populations in the regional vicinity without barriers to dispersal. The species has a moderate probability of occurring on the site.
- **High Potential**. All the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. There are confirmed extant populations in the immediate vicinity without barriers to dispersal. The species has a high probability of occurring on the site.
- **Present**. Species was observed on the site or have been recorded (e.g., CNDDB, other reports) on the site recently (within the last five (5) years) with no significant changes to the site.

Special Status Plant Species

Of the 34 special-status plant species evaluated for potential for occurrence in the Box Canyon Study Area, 15 special-status plant species were determined to have some potential to occur (ranging from low to moderate) as summarized below in **Table 1, Special-Status Plant Species Potential for Occurrence**. Only three (3) of the total 15 potentially occurring special-status species were determined to have a moderate potential to occur within the Box Canyon Study Area, namely Sonoaran maiden fern (*Pelzoneuron puberulum* var. *sonorense*), Conejo dudleya (*Dudleya parva*) and Conejo buckwheat (*Eriogonum crocatum*). However, no potentially occurring special-status plant species were observed within the Study Area. Required rare plant surveys identified under the Mitigation Measures heading would reduce potential impacts to special-status pant species to a less-than-significant level.

Table 1
Special-Status Plant Species Potential for Occurrence

Common Name (*Scientific Name*)	Lifeform	Blooming Period	Status (Federal / State / CNPS)	Primary Habitat Associations	Status / Potential to Occur on-site (Observed, Moderate Potential, Low Potential, Presumed Absent, Absent)
Federal or State Listed Species					
FLOWERING PLANTS – DICOTS					
Agoura Hills dudleya (*Dudleya cymosa* ssp. *agourensis*)	perennial herb	May-Jun	FT / None / 1B.2	Chaparral, Cismontane woodland rocky, volcanic at elevations from 200 to 500 meters amsl.	**Low Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area. Low potential because species is mostly restricted endemically to the Agoura Hills area.
marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*)	perennial herb	Apr-Jul	FT / CR / 1B.2	Chaparral volcanic, rocky at elevations from 150 to 520 meters amsl.	**Low Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area. Virtually all occurrences are located in the Santa Monica Mountains, away from the Study Area.
Santa Monica dudleya (*Dudleya cymosa* ssp. *ovatifolia*)	perennial herb	Mar-Jun	FT / None / 1B.1	Chaparral, Coastal scrub volcanic or sedimentary, rocky at elevations from 150 to 1675 meters amsl.	**Low Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area. Virtually all occurrences are located in the Santa Monica Mountains, away from the Study Area
Conejo dudleya (*Dudleya parva*)	perennial herb	May-Jun	FT / None / 1B.2	Coastal scrub, Valley and foothill grassland rocky or gravelly, clay or volcanic at elevations from 60 to 450 meters amsl.	**Moderate Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area. Site is within known range of these species.
Verity's dudleya (*Dudleya verityi*)	perennial herb	May-Jun	FT / None / 1B.1	Chaparral, cismontane woodland, coastal scrub. On volcanic rock outcrops in the Santa Monica Mountains. Elevations: 195-395ft. (60-120m.)	**Low Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area. Study Area generally lacks volcanic microhabitat.

Table 1
Special-Status Plant Species Potential for Occurrence

Common Name (*Scientific Name*)	Lifeform	Blooming Period	Status (Federal / State / CNPS)	Primary Habitat Associations	Status / Potential to Occur on-site (Observed, Moderate Potential, Low Potential, Presumed Absent, Absent)
conejo buckwheat (*Eriogonum crocatum*)	perennial herb	Apr-Jul	None / CR / 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland Conejo volcanic outcrops, rocky at elevations from 50 to 580 meters amsl.	**Moderate Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area. Study Area is within range of this species.
Other Special-Status Species					
FERNS AND ALLIES					
Sonoran maiden fern (*Pelazoneuron puberulum* var. *sonorense*)	perennial rhizomatous herb	Jan-Sep	None / None / 2B.2	Meadows and seeps (seeps and streams) at elevations from 50 to 610 meters amsl.	**Moderate Potential.** Could potentially occur along banks of Arroyo Conejo within the Study Area.
FLOWERING PLANTS – DICOTS					
Malibu baccharis (*Baccharis malibuensis*)	perennial deciduous shrub	Aug	None / None / 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland at elevations from 150 to 305 meters amsl.	**Low Potential.** Could potentially occur within riparian woodland or adjacent upland areas.
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	perennial herb	Apr-Jun	None / None / 1B.1	Coastal bluff scrub, Chaparral, Coastal scrub, Valley and foothill grassland rocky, often clay or serpentinite at elevations from 5 to 450 meters amsl.	**Low Potential.** Could potentially occur on rocky outcrop north of access road, in western portion of Study Area.
mesa horkelia (*Horkelia cuneata* var. *puberula*)	perennial herb	Feb-Jul (Sep)	None / None / 1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub sandy or gravelly at elevations from 70 to 810 meters amsl.	**Low Potential.** Could be potentially present in upland areas on the slope north of access road.
Payne's bush lupine (*Lupinus paynei*)	perennial shrub	Mar-Apr(May-Jul)	None / None / 1B.1	Coastal scrub, riparian scrub, valley and foothill grassland. Sandy. Elevations: 720-1380ft. (220- 420m.)	**Low Potential.** Marginal suitable habitat present on the slope north of the access road.
white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*)	perennial herb	(Apr)May-Aug(Sep-Dec)	None / None / 1B.3	Chaparral, Cismontane woodland at elevations from 50 to 1525 meters amsl.	**Low Potential.** Marginal suitable chaparral habitat is present on portions of the slope north of the access road.

Table 1
Special-Status Plant Species Potential for Occurrence

Common Name (*Scientific Name*)	Lifeform	Blooming Period	Status (Federal / State / CNPS)	Primary Habitat Associations	Status / Potential to Occur on-site (Observed, Moderate Potential, Low Potential, Presumed Absent, Absent)
Gerry's curly-leaved monardella (*Monardella sinuate* ssp. *gerryi*)	annual herb	Apr-Jun	None / None / 1B.1	Coastal scrub. Sandy openings. Elevations: 490-805ft. (150-245m.)	**Low Potential.** Marginal coastal scrub habitat is present on the slope north of the access road.
chaparral nolina (*Nolina cismontana*)	perennial evergreen shrub	(Mar)May-Jul	None / None / 1B.2	Chaparral, Coastal scrub sandstone or gabbro at elevations from 140 to 1275 meters amsl.	**Low Potential.** Marginal suitable chaparral habitat present on the slope north of the access road.
chaparral ragwort (*Senecio aphanactis*)	annual herb	Jan-Apr(May)	None / None / 2B.2	Chaparral, Cismontane woodland, Coastal scrub sometimes alkaline at elevations from 15 to 800 meters amsl.	**Low Potential.** Marginal suitable chaparral and scrub habitats present on the slope north of the access road.

The following status codes are applicable to special-status plants.

Federally Protected Species

FE (Federal Endangered): A species that is in danger of extinction throughout all or a significant portion of its range.

FT (Federal Threatened): A species that is likely to become endangered in the foreseeable future.

FC (Federal Candidate): A species for which USFWS has sufficient information on its biological status and threats to propose it as Endangered or Threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

State Protected Species

CE (California Endangered): A native species or subspecies which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

CT (California Threatened): A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as "Rare" on or before January 1, 1985, is a "Threatened species."

SC (State Candidate Threatened/Endangered): A native species that is currently under review for listing as either Threatened or Endangered under the State Endangered Species Act

CR (California Rare): A species, subspecies, or variety of plant is Rare under the Native Plant Protection Act when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Animals are no longer listed as Rare; all animals listed as Rare before 1985 have been listed as Threatened.

California Native Plant Society (CNPS) Rare Plant Rank

CRPR 1A: Plants presumed extinct in California and either rare or extinct elsewhere.

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

CRPR 2A: Plants presumed extirpated in California, but more common elsewhere.

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

CRPR 3: A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.

CRPR 4: A watch list for plants that are of limited distribution in California.

CNPS Threat Rank

The CNPS Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment, as follow:

- 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat).
- 0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat).
- 0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

However, it is unlikely that special-status plant species are located within the Project site's existing access road and stormwater facilities since they have been previously developed and disturbed. Additionally, vegetation trimming to access wastewater infrastructure would be minor and would not expand the disturbance footprint. Although it is unlikely for special-status plant species to be present where

improvement activities would occur, if present, direct impacts could occur. Additionally, indirect impacts could also occur through habitat modification resulting from the introduction of invasive plants during construction and fugitive dust generated from equipment. Potential impacts to these species would be avoided and/or minimized through implementation of Mitigation Measures **MM-BIO-1 and MM-BIO-2**, which involves conducting pre-construction surveys to flag special-status plant species for avoidance prior to initiating vegetation trimming and surface scraping and delivering a Worker Environmental Awareness Training (WEAT). Indirect impacts would be reduced and/or avoided by implementing Project-specific BMPs, such as (but not limited to) fugitive dust control (See Section III.c, Air Quality). Following implementation of Mitigation Measures **MM-BIO-1** and **MM-BIO-2**, Project impacts to special status species would be reduced to less than significant.

Special Status Wildlife Species

Of the total 38 special-status wildlife species considered within Box Canyon Study Area, 21 were determined to have some potential to occur (ranging from low to high) within the Box Canyon Study Area as summarized below in **Table 2, Special-Status Wildlife Species Potential for Occurrence**. Of these, 12 are either present or were determined to have a high/moderate potential to occur within the Box Canyon Study Area. Pre-construction nesting bird and wildlife species surveys identified under the Mitigation Measures heading would reduce potential impacts to potentially occurring special-status wildlife species to a less-than-significant level.

Table 2
Special-Status Wildlife Species Potential for Occurrence

Common Name (Scientific Name)	**Status (Federal / State)**	**Primary Habitat Associations**	**Status on Site / Potential to Occur** (Present, High Potential, Moderate Potential, Low Potential)
Federal and State Listed Species			
Insects and Crustaceans			
Crotch's bumble bee (*Bombus crotchii*)	None / SC	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum*.	**Low Potential.** Species prefers large swathes of coastal sage scrub for nesting and hibernating. Could potentially nest on the dry slopes north of the access road outside of the work area, but it is unlikely to nest within the work area given a lack of coastal sage scrub. Potential for occurrence within the Study Area is limited to a low foraging potential.
monarch – California overwintering population (*Danaus plexippus plexippus* pop. 1	PT / None	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Moderate Potential.** There is no overwintering habitat present in the Study Area and therefore no populations of monarchs would overwinter in the Study Area. Individuals may forage the Study Area

Table 2
Special-Status Wildlife Species Potential for Occurrence

Common Name (Scientific Name)	**Status (Federal / State)**	**Primary Habitat Associations**	**Status on Site / Potential to Occur** (Present, High Potential, Moderate Potential, Low Potential)
			while moving through, but would easily be able to escape harm. Only overwintering populations are protected under FESA.
Reptiles and Amphibians			
southwestern pond turtle (*Actinemys pallida*)	PT / SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	**High.** Species has been documented in Arroyo Conejo and would potentially occur within proximity of the Project; however, species is very unlikely to occur in the tributary drainages where most of the work would take place due to the absence of permanent aquatic habitat. Species would easily be able to escape harm during Project activities as there will be no work within standing or flowing water.
western spadefoot (*Spea hammondii*)	PT / SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Low Potential.** No vernal pools within the Study Area. Species could potentially utilize upland areas within the Study Area but is unlikely to occur given the lack of suitable breeding habitat.
Birds			
burrowing owl (*Athene cunicularia*)	None / SC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**Low Potential.** Could potentially occur within the more open, herbaceous portions of coastal sage/chaparral habitats on the slope north of the access road. However, species is unlikely to nest within the Study Area given a lack of preferred habitat. Would not nest in the work area.

Table 2
Special-Status Wildlife Species Potential for Occurrence

Common Name (Scientific Name)	**Status (Federal / State)**	**Primary Habitat Associations**	**Status on Site / Potential to Occur** (Present, High Potential, Moderate Potential, Low Potential)
coastal California gnatcatcher (*Polioptila californica californica*)	FT / SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**Low Potential.** Species could potentially nest in upland coastal sage habitats on the slopes north of the access road. Could also forage other parts of the Study Area but is unlikely to nest in the work area.
western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FE/CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Low Potential.** Species is rare in the region and most occurrences are documented for the Santa Clara River, well away from the Study Area. Could occur temporarily while foraging but is unlikely to nest.
least Bell's vireo (*Vireo bellii pusillus*)	FE / CE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	**Moderate.** Species' preferred nesting habitat is present in the Study Area. Recent surveys conducted by Werner in 2022 (Werner 2022) identified one (1) individual male in Arroyo Conejo. Could potentially nest in the Study Area.
Other Special Status Species			
Reptiles and Amphibians			
Southern California legless lizard (*Anniella stebbinsi*)	None / SSC	Contra Costa County south to San Diego, within a variety of open habitats. This element represents California records of Anniella not yet assigned to new species within the Anniella pulchra complex. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	**Moderate Potential.** Preferred habitat, including moist, loose soils, is present within the Study Area.
California glossy snake (*Arizona elegans occidentalis*)	None / SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	**Low Potential.** Suitable habitat is present within the Study Area, though species is rarely sighted and there are few records in Ventura County.

Table 2
Special-Status Wildlife Species Potential for Occurrence

Common Name (Scientific Name)	**Status (Federal / State)**	**Primary Habitat Associations**	**Status on Site / Potential to Occur** (Present, High Potential, Moderate Potential, Low Potential)
coastal whiptail (*Aspidoscelis tigris stejnegeri*)	None / SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	**Present.** Multiple individuals observed by Rincon (Rincon JDHA 2025) during biological surveys. Is likely to occur within the Study Area.
coast horned lizard (*Phrynosoma blainvillii*)	None / SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Moderate Potential.** Species could potentially occur in upland areas on slopes north of access road, but is unlikely to occur on the access road or in riparian/woodland areas of the Study Area.
two-striped gartersnake (*Thamnophis hammondii*)	None / SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**Moderate Potential.** Could potentially occur with the Study Area, most likely to occur near Arroyo Conejo (permanent water). However, less likely to occur in tributary drainages.
Birds			
golden eagle (*Aquila chrysaetos*)	None / CFP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Low Potential.** There is some potential for this species to occur within the Study Area temporarily while foraging aerially or moving through. Species would not nest.
white-tailed kite (*Elanus leucurus*)	None / CFP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate Potential.** Species is likely to forage the Study Area or occur temporarily within it. There is some potential for this species to nest.
yellow warbler (*Setophaga petechia*)	None / SSC	Riparian plant associations in close proximity to water. Also nests in mountain shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**High Potential.** Species can be expected to nest within riparian vegetation in the Study Area.

Table 2
Special-Status Wildlife Species Potential for Occurrence

Common Name (Scientific Name)	Status (Federal / State)	Primary Habitat Associations	Status on Site / Potential to Occur (Present, High Potential, Moderate Potential, Low Potential)
Mammals			
pallid bat (*Antrozous pallidus*)	None / SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Low Potential.** Species could potentially forage the Study Area. There is a low potential for this species to roost in tree hollows.
western mastiff bat (*Eumops perotis caliornicus*)	None / SSC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	**Low Potential.** Species could potentially forage the Study Area but there are no suitable rock outcrops for roosting.
western red bat (*Lasiurus frantzii*)	None / SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging, mostly in riparian areas. Foliage-dwelling, migratory bat occurs in California's Central Valley, foothills, and in similar areas of tree growth in southern California (Constantine 1998).	**Moderate Potential.** Species' preferred roosting habitat (foliage of trees in riparian areas) is present in the Study Area. Species is likely to roost in riparian trees.
San Diego desert woodrat (*Neotoma lepida intermedia*)	None / SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	**Moderate Potential.** Given the presence of some rocky areas within the Study Area, species could potentially occur if woodrat middens are present.
American badger (*Taxidea taxus*)	None / SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Moderate Potential.** Could potentially forage the Study Area but is unlikely to nest or den within it.

The following status codes are applicable to special-status animals:

Federally Protected Species

FE (Federal Endangered): A species that is in danger of extinction throughout all or a significant portion of its range.

FT (Federal Threatened): A species that is likely to become endangered in the foreseeable future.

FC (Federal Candidate): A species for which USFWS has sufficient information on its biological status and threats to propose it as Endangered or Threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

FSC (Federal Species of Concern): A species under consideration for listing, for which there is insufficient information to

Table 2
Special-Status Wildlife Species Potential for Occurrence

Common Name (Scientific Name)	Status (Federal / State)	Primary Habitat Associations	Status on Site / Potential to Occur (Present, High Potential, Moderate Potential, Low Potential)

support listing at this time. These species may or may not be listed in the future, and many of these species were formerly recognized as "Category-2 Candidate" species.

State Protected Species

CE (California Endangered): A native species or subspecies which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

CT (California Threatened): A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as "Rare" on or before January 1, 1985, is a "Threatened species."

SC (State Candidate Endangered/Threatened: A native species that is currently under consideration for listing as a special-status species under CESA. While under review, State Candidate species are afforded the same protections as "listed" pursuant to CESA and require mandatory consideration under CEQA.

SSC (California Species of Special Concern): Animals that are not listed under the California Endangered Species Act, but which nonetheless 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist.

CFP (California Fully Protected): This designation originated from the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians, reptiles, and birds. Most fully protected species have also been listed as Threatened or Endangered species under the more recent endangered species laws and regulations. California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Wildlife species that have a low potential to occur within the Study Area, including Crotch's bumble bee [SC], western spadefoot [PT, SSC], burrowing owl [PT, SC], coastal California gnatcatcher [FT, SSC], western yellow-billed cuckoo [FE, CE], California glossy snake [SSC], golden eagle [CFP], pallid bat [SSC], and western mastiff bat [SSC], would primarily only occur temporarily while moving through or foraging the Study Area. However, these species are unlikely to inhabit or nest within the Study Area due to a lack of suitable habitat required for nesting and/or hibernating. For example, Crotch's bumble bee nests in large swathes of coastal sage scrub habitats with suitable animal burrows and other hibernacula. There is some potential for this species to nest in coastal sage scrub habitat on the adjacent slopes north of the access road outside of the work area, but it is unlikely to nest within the Project work area given a lack of coastal sage scrub habitat. This species has limited potential to forage the Study Area. It is therefore unlikely to be impacted by Project activities. Similarly, western spadefoot, burrowing owl, and coastal California gnatcatcher could potentially occur temporarily within the Study Area while foraging or moving through, but the necessary habitat elements for these species to reproduce, nest, or inhabit it are absent from the work area. They are therefore unlikely to be impacted by Project activities.

Twelve (12) special-status wildlife species are present or have a moderate or high potential to occur within the Study Area (refer to **Table 2, Special-Status Wildlife Species Potential for Occurrence**). Potential impacts to these special-status wildlife species are analyzed below.

Aquatic Species

Southwestern pond turtle [PT; SSC], and two-striped garter snake [SSC] have a moderate or high potential to occur within the riparian habitats within the Study Area and where improvement activities would occur. These two (2) species could be directly impacted by Project activities including operation of construction equipment and trampling by Project personnel. Direct impacts to these species would be avoided through implementation of Mitigation Measures **MM-BIO-2,** which involves delivering a WEAT, and **MM-BIO-4**, Pre-Construction Surveys. Indirect impacts would be reduced and/or avoided with Project-specific BMPs, such as (but not limited to) invasive plant prevention measures (see Section IV.c, Biological Resources). Following implementation of **MM-BIO-2** and **MM-BIO-4**, Project impacts to special status species would be reduced to less than significant.

Monarch Butterfly

Individual monarch butterflies would potentially forage the Study Area. However, no overwintering habitat is present within the Study Area and therefore no populations of this species are expected to overwinter at the site. Only overwintering populations of this species are protected under FESA. Individual monarch butterflies are aerially mobile and have the capacity to move out of harm's way during improvement activities. Lastly, milkweed, a necessary food plant for this species, is not expected to grow within the project disturbance area due to the habitat requirements for this species and its association with dry, barren, slopes/valleys of grasslands and oak savannahs. Therefore, impacts to this species are not anticipated.

Terrestrial Reptiles

Coastal whiptail (Species of Special Concern) was confirmed present, and Southern California legless lizard (Species of Special Concern) and coast horned lizard (Species of Special Concern) have a moderate or high potential to occur within the Study Area. However, with the exception of moving or basking individuals, these species are unlikely to occur within the existing access road and stormwater facilities that would be improved due to the developed and disturbed condition of these areas. Additionally, each of these species is highly mobile and has the capacity to move out of harm's way if present during improvement activities. Therefore, the Project is unlikely to result in impacts to these species. Furthermore, implementation of Mitigation Measure **MM-BIO-2**, which involves delivering a WEAT, and **MM-BIO-4**, which involves pre-construction surveys prior to initiating improvement activities, would ensure impacts to special-status terrestrial reptiles are avoided and/or minimized to the greatest extent feasible. Following implementation of Mitigation Measures **MM-BIO-2** and **MM-BIO-4**, Project impacts to special status species would be reduced to less than significant.

Birds

Least Bell's vireo [FE; CE], white-tailed kite [CFP], and yellow warbler [SSC] have a moderate or high potential to occur within the Study Area. Nesting individuals could be directly impacted by the Project if their nests are removed during Project activities or if they are abandoned due to adjacent improvement activities. Impacts to these species would be avoided via implementation of mitigation measures **MM-BIO-2** and **MM-BIO-3**, which involves conducting work outside of the nesting bird season when feasible and conducting pre-activity nesting bird surveys and avoiding active nests during the nesting bird season, and the WEAT. Following implementation of Mitigation Measures **MM-BIO-2 and MM-BIO-3,** Project impacts to special status bird species would be reduced to less than significant.

Mammals

Western red bat [SSC], San Diego desert woodrat [SSC] and American badger [SSC] have a moderate or high potential to occur within the Study Area. Western red bat is unlikely to be impacted by the Project since they are a highly mobile aerial species, and potentially roosting individuals have the capacity to move out of harm's way during improvement activities. Additionally, no trees or other structures capable of

supporting a roost are proposed to be removed as part of this Project. Additionally, San Diego desert woodrat and American badger are unlikely to occur within the existing access road and stormwater facilities due to their previously developed and disturbed condition. These are also highly mobile species and individuals would move out of harm's way to avoid being trampled by equipment during improvement activities. It is unlikely that any woodrat middens would be present along the margins of the access roads or elsewhere where improvements would occur, and none were observed during the field surveys. However, if by chance there is a woodrat midden present or a potentially occupied American badger den, they would be avoided through the implementation of Mitigation Measures **MM-BIO-2** and **MM-BIO-4**, which involve conducting preconstruction wildlife surveys and flagging woodrat middens and American badger dens for avoidance prior to improvement activities and the WEAT. Following implementation of Mitigation Measures **MM-BIO-2** and **MM-BIO-4**, Project impacts to special mammal status species would be reduced to less than significant.

Nesting Birds

Throughout the Study Area, there is suitable nesting bird habitat for many bird species protected by the federal Migratory Bird Treaty Act (MBTA) of 1918 (50 Code of Federal Regulations [CFR] Section 10.13), and raptors protected under Sections 3503, 3503.5 and 3513 of the California Fish and Game Code (CFGC). The riparian corridor associated with Arroyo Conejo provides ample suitable trees and shrubs for a variety of nesting birds and several inactive nests were observed in these trees during the field surveys. Upland coastal sage scrub and chaparral habitats also provide suitable nesting habitat to numerous passerine species and the steep rocky cliffs surrounding Arroyo Conejo provide suitable nesting platforms for raptors such as red-tailed hawks (*Buteo jamaicensis*) and great horned owls (*Bubo virginianus*) (as do oak trees and trees within the riparian woodland). A small sample of common species expected to nest in the Study Area include, but are not limited to, California scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), bushtit (*Psaltriparus minimus*), mourning dove (*Zenaida macroura*), red-tailed hawk, and great horned owl.

Direct impacts to nesting birds may occur if active nests are present where improvement activities occur. Indirect impacts may occur if active nests are located within close vicinity to the Project Area and are abandoned due to visual and acoustic Project-related disturbance. Potential impacts to nesting birds would be avoided with implementation of Mitigation Measures **MM-BIO-2** and **MM-BIO-3**, which involves conducting work outside of the nesting bird season or conducting nesting bird surveys ahead of work activities performed during the nesting season and establishing avoidance buffers around any active nests found and the WEAT. Following implementation of Mitigation Measures **MM-BIO-2** and **MM-BIO-3**, Project impacts to special status species would be reduced to less than significant.

Mitigation Measures

MM-BIO-1: **Rare Plants.** Focused rare plant surveys will be conducted prior to Project initiation to verify the presence or absence, estimate the abundance, and map the extent of the special-status plant species that are present or have a high or moderate potential to occur within 50 feet of the Project site. The results of the survey will be used to determine if the Project has the potential to impact these special-status plant species. The surveys should be conducted within the plants' most distinct phenology period to correctly identify the species and in accordance with guidelines published by the CDFW[14] and California Native Plant Society (CNPS).[15]

[14] California Department of Fish and Wildlife, Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, March 20, 2018.

[15] California Native Plant Society, Botanical Survey Guidelines, Revised June 2, 2001.

If special-status plant species are detected within the Project's work area(s), the limits of their distribution shall be flagged and project components occurring within the flagged areas shall be relocated to the extent feasible. Flagging shall extend to the furthest extent within the Project area, but outside any private property.

MM-BIO-2: **Worker Environmental Awareness Training.** Prior to the initiation of improvement activities, an approved biologist shall present a Worker Environmental Awareness Training (WEAT) to all on-site personnel. The WEAT will educate the personnel on the identification of special-status species and regulated biological resources that are present or have the potential to occur within the Project area and will cover the applicable regulatory policies and provisions regarding their protection and provide an overview of the Project's mitigation measures. Furthermore, on-site personnel will be briefed on the reporting process if an inadvertent injury or mortality should occur to a special-status species during construction.

MM-BIO-3: **Pre-Construction Nesting Bird Surveys.** To avoid disturbance of nesting birds, including special-status species and birds protected by the MBTA and CFGC Section 3503, including the Western Burrowing Owl, Project activities, such as vegetation removal, should occur outside of the breeding season for nesting birds (February 1 through August 31), if feasible.

If vegetation trimming or soil disturbing activities must occur during the breeding season, a pre-construction nesting bird survey should be conducted no more than seven (7) days prior to the initiation of Project activities. The nesting bird survey shall be conducted on foot inside the Project area and include a 500-foot buffer for raptors and special-status species a 100-foot buffer for all other species. The survey shall be conducted by a biologist familiar with avian species known to inhabit Southern California. If nests are found, an avoidance buffer of up to 500 feet for raptors and special-status species and up to 100 feet for non-raptors (dependent upon the species, the proposed work activity, and existing disturbances associated with land use outside of the workspace) shall be determined and demarcated by the biologist with construction fencing, flagging, or other means to mark the boundary. Intrusion into the buffer may be conducted if it is determined by the biologist that there is no risk of harm to the nest and work is monitored by the biologist. If the risk of nest abandonment is observed, all construction activities within the buffer shall cease until the nest is no longer active as determined by the biologist.

MM-BIO-4: **Pre-Construction Surveys.** Preconstruction surveys will be conducted by a qualified biologist within CDFW jurisdictional streambed no greater than seven (7) days prior to the initiation of vegetation trimming or ground disturbance activities. Woodrat middens, American badger burrows, and any other regulated biological resource will be flagged for avoidance and work activities at that location will be avoided until a qualified biologist confirms that the sensitive biological resource(s) will not be directly or indirectly impacted by the construction activities.

b. A significant impact may occur if a project would have a significant adverse effect on any riparian habitat or sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or United States Fish and Wildlife Service (USFWS).

Potentially Significant Unless Mitigation Incorporated. The JDHA identified riparian habitat and sensitive natural communities within the Study Area, particularly along Arroyo Conejo and its intermittent and perennial tributaries. These areas support a variety of wildlife and plant species and are subject to

jurisdiction under Section 1600 et seq. of the CFGC. Riparian extent was delineated based on topographic and morphological features, including the outer limits of riparian vegetation and stream bank elevations.

Sensitive riparian communities observed in the Study Area include the Goodding's Willow – Red Willow Riparian Woodland & Forest (*Salix gooddingii – Salix laevigata Forest & Woodland Alliance*) and California Sycamore - Coast Live Oak Riparian Woodlands (Platanus racemosa - Quercus agrifolia Woodland Alliance). These communities are habitat types recognized by the CDFW's Vegetation Classification and Mapping Program.

The Project would not introduce new development or permanent structures, and Project improvements to existing infrastructure would remain confined to the existing access road and wastewater facilities within previously disturbed areas. No removal of riparian trees is anticipated, and trimming would be limited to minor vegetation, mostly non-native species or branches, necessary to maintain safe access.

Although the Box Canyon area includes two (2) areas of coast live oak woodlands (refer to Appendix F of Appendix C.1 of this document), these are not considered sensitive natural communities per current CDFW vegetation alliances.[16] Any potential encroachment into oak canopies is addressed under Section IV.e, Biological Resources.

The Project would result in approximately 0.016 acres of temporary impacts and 0.00356 acres of permanent impacts within the understory of these habitats and would not result in a loss or overall reduction in canopy cover or the extent of these vegetation communities. Impacts within sensitive riparian habitat and communities would be limited to minimal vegetation trimming of non-native plants and tree branches less than two (2) inches in diameter and would be confined to previously disturbed areas, with no grading or construction occurring within undisturbed habitat. In addition, compensatory mitigation in the form of non-native species removal within approximately 460 square feet would be implemented to offset permanent impacts, consistent with applicable trustee resource agency requirements. With implementation of Mitigation Measure **MM-BIO-5**, the Project would not result in significant adverse effects to riparian habitat or sensitive natural communities.

Mitigation Measures:

MM-BIO-5: **Compensatory Habitat Mitigation.** To compensate for permanent disturbances that will result from the Project, non-native species removals will be conducted within approximately 460 square feet of area to satisfy the requirements of the applicable trustee resource agencies.

c. A significant impact may occur if a project would have a substantial adverse effect on federally protected wetlands or waters of the U.S.

Potentially Significant Unless Mitigation Incorporated. As described in detail in the JDHA, based on the results of the field delineation, four (4) potential jurisdictional features are present in the Box Canyon area, F08, F09, F10, and F11. All four (4) features are potentially jurisdictional to CDFW and the Los Angeles Regional Water Quality Control Board (RWQCB), while only one (1) feature, F08, is potentially jurisdictional to the U.S. Army Corps of Engineers (ACOE). Summaries of each agency's potential jurisdictional extents are provided below, locations of each feature's potential jurisdictional limits are provided in Appendix H of Appendix C.1 of this document, and wetland and Ordinary High Water Mark (OHWM) datasheets are provided in Appendix I of Appendix C.1 of this document.

[16] City of Thousand Oaks, 2045 General Plan Update Draft EIR, November 2023.

U.S. ACOE Waters of the United States

Feature F08 was determined to meet the definition of non-wetland Waters of the United States (WOTUS) under Section 404 of the Clean Water Act. It is a perennial stream with a permanent flow regime and is considered a tributary to a Traditional Navigable Water (i.e., the Pacific Ocean). Its OHWM was used to define the potential extent of federal jurisdiction. No wetlands were identified in the area due to the absence of hydrophytic vegetation, hydric soils, and wetland hydrology indicators at sampling point SP21, located in F08, which generally parallels the Box Canyon access road.

RWQCB Waters of the State

All four (4) features (F08–F11) exhibit defined OHWMs and are therefore considered non-wetland Waters of the State, subject to regulation under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act.

CDFW Streambed

CDFW streambed extends to the top of bank or edge of riparian canopy, whichever is greater, for all potential jurisdictional features (F08 – F11). For ephemeral features F09, F10, and F11, the top of bank was used for delineation, as riparian vegetation was absent. For the F08 feature, which exhibits perennial flow, the extent of the riparian canopy was used.

Potential Jurisdictional Features Descriptions

The four (4) features (F08 – F11) were determined to have either ephemeral or intermittent flow regimes. Intermittent streams support riparian vegetation and show signs of sustained hydrology, while ephemeral streams are more incised and characterized by bed and bank development, sediment deposits, and drift lines, indicators of periodic flow. Soils varied but were generally sandy loam, sandy clay, or silty clay loam.

The Project involves infrastructure improvements along an existing access road. No new roads or facilities are proposed, and the existing disturbance footprint would not be expanded. Minimal vegetation trimming would occur, limited to non-native plants and tree branches less than two (2) inches in diameter, solely to maintain safe access. In some cases, accumulated sediment from past high-flow events may be removed to allow for infrastructure installation and/or improvements. This sediment would be relocated nearby within upland areas to avoid stream impacts.

As shown in **Table 3, Jurisdictional Impacts to CDFW Streambed/Riparian Areas and Waters of the U.S./State**, the Project would result in permanent impacts to approximately 0.00335 acres (146 linear feet) of CDFW jurisdictional habitat and 0.00021 acres (9 linear feet) of Waters of the U.S./State. These impacts total 0.00356 acres (155 linear feet) and are associated with proposed infrastructure improvements. The temporary loss of up to 0.016 acres (697 linear feet) of CDFW jurisdictional habitat would result due to the installation of the manhole.

Table 3
Jurisdictional Impacts to CDFW Streambed/Riparian and Waters of the U.S./State

Feature	CDFW Streambed/Riparian		Waters of the U.S./State		Total Temporary	Total Permanent	Totals
	Temporary	Permanent	Temporary	Permanent			
1	0.016	0.002	0.000	0.000	0.016	0.002	0.018
2	0.000	0.0003	0.000	0.000	0.000	0.0003	0.0003
3	0.000	0.0003	0.000	0.000	0.000	0.0003	0.0003
4	0.000	0.00005	0.000	0.000	0.000	0.00005	0.00005
5	0.000	0.0003	0.000	0.00005	0.000	0.00035	0.00035
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Feature	CDFW Streambed/Riparian		Waters of the U.S./State		Total Temporary	Total Permanent	Totals
	Temporary	Permanent	Temporary	Permanent			
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.0001	0.000	0.0001	0.000	0.0002	0.0002
9	0.000	0.0002	0.000	0.00006	0.000	0.00026	0.00026
10	0.000	0.0001	0.000	0.000	0.000	0.0001	0.0001
Totals	**0.016**	**0.00335**	**0.000**	**0.00021**	**0.016**	**0.00356**	**0.01956**

These minimal impacts will be avoided or further minimized through the implementation of standard, project-specific BMPs, including:

- Construction personnel and equipment will be free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil) prior to entering the Project area. All potentially contaminated equipment will be carefully cleaned prior to the initiation of Project activities.
- Materials shall be stored at least 50 feet from streams and wetlands, as feasible, or equipment will utilize secondary containment.
- Any substances that could be hazardous to wildlife resulting from Project-related activities shall be prevented from contaminating the soil and/or entering waterways.
- Project activities will take place during the daytime.

As outlined in Mitigation Measures **MM-BIO-5** and **MM-BIO-6**, to authorize temporary work near jurisdictional waters, the Project will consult with the appropriate resource agencies and where applicable obtain the appropriate environmental permits, including:

- A Clean Water Act Section 404 Nationwide Permit from U.S. ACOE;
- A Section 401 Water Quality Certification from the RWQCB; and
- A CDFW Lake and Streambed Alteration Agreement under Section 1602 of the Fish and Game Code.

Any permit conditions or compensatory mitigation requirements imposed through these regulatory approvals will be implemented prior to disturbance of any jurisdictional features. With the implementation of Mitigation Measures **MM-BIO-5** and **MM-BIO-6**, the Project would reduce potential significant impacts to jurisdictional waters through implementation of avoidance, minimization, and permitting measures. Following implementation of Mitigation Measures **MM-BIO-5** and **MM-BIO-6**, Project impacts to jurisdictional waters would be reduced to less than significant.

Mitigation Measures:

MM-BIO-6: **Streambed Alteration Notification Package.** Prior to issuance of a grading permit, the City shall prepare and submit a Streambed Alteration Notification package to the CDFW for alterations to CDFW jurisdictional streambed and habitat. If required by CDFW, a Streambed Alteration Agreement shall be entered into with the CDFW under Section 1602 of the California Fish and Game Code, and the City shall comply with the associated conditions. Prior to issuance of the grading permit, the City shall also consult with the ACOE and the RWQCB to confirm if a Clean Water Act (CWA) Section 404 permit and Section 401 Water Quality Certifications are required. The City shall provide evidence to the County of Los Angeles Department of Regional Planning (LACDRP) that the required permits have been obtained prior to issuance of a grading permit. Mitigation for unavoidable impacts to CDFW jurisdictional habitat shall be provided through implementation of the Comprehensive Conservation and Management Plan.

d. A significant impact may occur if a project would substantially interfere with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

Less than Significant Impact. The Arroyo Conejo Open Space area, where the Project is located, is identified in the City's planning documents as a regional wildlife movement corridor.[17] These corridors provide important physical connections that allow aquatic, avian, and terrestrial wildlife to move between areas of suitable habitat for foraging, breeding, and dispersal, particularly in fragmented landscapes adjacent to urban development. The riparian corridors within the Project area support regular local and regional wildlife movement. Additionally, the upland habitats (including coastal sage scrub, chaparral, and open grassland) provide pathways and habitat value for terrestrial species. The steep cliffs and large trees in the area also support nesting and perching for raptors and other bird species.

The Project consists of infrastructure upgrades to an existing unimproved access road and stormwater facilities that are already disturbed and developed. No new roads, permanent buildings, or barriers to movement are proposed. Construction would not include extensive grading, fencing, or lighting that could fragment or obstruct wildlife corridors or access to nursery sites. The Project site lies within an area covered by Policy CO-23 of the City's General Plan Conservation and Open Space Element, which calls for special consideration of wildlife movement corridors, streams, and other critical habitat features to maintain ecological integrity. Because the Project is limited in scope and footprint, it does not conflict with this policy, and impacts to corridors or stream access would be minimal to none. Therefore, although wildlife movement corridors and sensitive habitat features are present throughout the area, the Project would not interfere with their function due to the temporary, surface-level nature of the improvements and the lack of new permanent structures. As such, the Project would result in a less-than-significant impact related to wildlife movement or nursery site use. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

e. A significant adverse effect may occur if a project were to cause an impact that is inconsistent with local regulations pertaining to biological resources, such as the City Protected[18] and Heritage[19] Tree Ordinances ("Tree Ordinances").

Potentially Significant Unless Mitigation Incorporated. Chapter 4, Article 42 of the Thousand Oaks Municipal Code (TOMC) regulates the protection and preservation of native oak trees within City limits. Oak trees protected by Article 42 include, but are not limited to, valley oaks (*Quercus lobata*), coast live oaks (*Quercus agrifolia*), and scrub oaks (*Quercus berberidifolia*). Article 43 of the TOMC also regulates protection and preservation of "Landmark Trees," which are certain native tree species that have reached a particular size, or any tree designated as such by the City. The following trees are protected under Articles 42 and 43 of the TOMC:

- Oak trees that are larger than two (2) inches in size when measured at diameter at breast height (DBH) (4-1/2 feet) above the trees natural grade. If the tree has multiple trunks, the aggregate total diameter of all trunks shall exceed two (2) inches in diameter.
- California Sycamore (*Platanus racemosa*) which exceeds 12 inches in diameter measured at DBH above the natural grade at the base of the tree.
- California Bay Laurel (*Umbellularia californica*) which exceed eight (8) inches in diameter measured at DBH above the natural grade at the base of the tree.

[17] Thousand Oaks General Plan 2045, Chapter 7, Conservation, Figure 7.2 Wildlife Corridors, November 2023.
[18] City of Thousand Oaks Oak Tree Ordinance (No. 937-NS), TOMC, Title 9, Chapter 4, Article 42.
[19] City of Thousand Oaks Heritage Tree Ordinance (No. 1217-NS), TOMC, Title 9, Chapter 4, Article 43.

- California Black Walnut (*Juglans californica*) which exceeds eight (8) inches in diameter measured at DBH above the natural grade at the base of the tree.
- Toyon (*Heteromeles arbutifolia*) which exceeds eight (8) inches in diameter measured at DBH above the natural grade at the base of the tree.
- For multiple trunks of landmark trees, the sum of the diameters at DBH must exceed the required diameters listed above plus two (2) inches.
- All designated historic trees.

The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. Culvert and headwall placement has been designed to follow existing topography and natural flow paths, thereby minimizing grading and ground disturbance. Where feasible, the alignment of these stormwater features has been adjusted to avoid impacts to oak trees and their associated canopies. Construction activities would be confined to previously disturbed areas such as the existing roadbed and adjacent clearings. However, some work may occur within the protected zone of oak trees, defined by the City as either 15 feet from the trunk or five (5) feet beyond the dripline, whichever is greater. To minimize potential impacts, the Project would implement appropriate protective measures, as outlined in Mitigation Measure **MM-BIO-7**.

The City would obtain an Oak Tree Permit prior to initiating any activity within the protected zone of oak or sycamore trees, including trimming or ground disturbance. Coordination with the City's Planning Division and oversight by a certified arborist would ensure compliance with the Oak Tree Preservation Guidelines and TOMC requirements. Additionally, the Project would implement Mitigation Measure **MM-BIO-7** to further minimize potential impacts. This measure includes adherence to permitting requirements, protective actions during construction, and post-project monitoring or replacement planting if needed. With these measures in place, impacts to protected oak trees would be less than significant.

Mitigation Measures

MM-BIO-7: Oak Tree Protection and Compliance

To ensure compliance with the City's Oak Tree Preservation Program (Sec. 5 -14.01 et seq.) and avoid or minimize impacts to protected trees (e.g., coast live oak and sycamore), the following measures shall be implemented:

Oak Tree Permit. Prior to any ground disturbance or tree trimming within the protected zone of any oak or sycamore tree (defined as 15 feet from the trunk or five (5) feet beyond the dripline, whichever is greater), the City shall obtain an Oak Tree Permit from the City in accordance with its Oak and Landmark Tree Ordinance.

A Tree Protection Plan. A Tree Protection Plan shall be prepared by a certified arborist and submitted with the permit application. The plan shall identify all protected trees within or adjacent to the work area and specify protective measures during construction, including:

- Installation of temporary protective fencing around the dripline or root protection zone.
- Prohibition of grading, trenching, or equipment staging within protected zones unless approved under the permit.
- Procedures for root pruning, if required.
- Prohibited practices (e.g., soil compaction, chemical storage, or mechanical damage).

f. A significant impact may occur if a project would be inconsistent with mapping or policies of an adopted or approved conservation plan.

No Impact. According to the CDFW and USFWS, no adopted or approved Natural Community Conservation Plan (NCCP)[20] or Habitat Conservation Plan (HCP)[21] areas are located in the City. Therefore, the Project would result in no impacts related to conflicts with such plans. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

[20] CDFW, Summary of Natural Community Conservation Plans (NCCPs), June 2021, Accessed November 2025 at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=15329&inline.

[21] USFWS, California Natural Community Conservation Plans, August 2023, Accessed November 2025 at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a. Cause a substantial adverse change in significance of a historical resource pursuant to CEQA Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in significance of an archaeological resource pursuant to CEQA Section 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Impact Analysis

This analysis is based on the Cultural Resources Phase I Assessment (Phase I)[22] (provided in **Appendix D**) of the Project site prepared by Envicom Corporation (Envicom) that included record searches by the South Central Coastal Information Center (SCCIC) and California Native American Heritage Commission (NAHC), a review of historic maps and aerial images, and a pedestrian survey of the Project site. The record searches examined the Project site, plus a 0.25-mile buffer area (Study Area) around the Project site to account for cultural resources that may be immediately adjacent to the Project site and to determine the overall regional archaeological sensitivity of the Project area.

a. A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Section 15064.5.

No Impact. Section 15064.5 of the State CEQA Guidelines defines a historical resource as:

1) a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources;
2) a resource listed in a local register of historical resources or identified as significant in an historical resource survey meeting certain state guidelines; or
3) an object, building, structure, site, area, place, record or manuscript which a lead agency determines to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided that the lead agency's determination is supported by substantial evidence in light of the whole record.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to §5020.1(k) of the Public Resources Code), or identified in a historical survey (meeting the criteria in §5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code §§5020.1 (j) or 5024.1.

[22] Envicom Corporation, Cultural Resources Phase I Assessment for Box Canyon Manhole & Road Improvement Project, November 2025 (Appendix D of this document).

A significant adverse effect would occur if a project were to adversely affect a historical resource meeting one of the above definitions. A substantial adverse change in the significance of a historic resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

Examination of historic maps during preparation of the Cultural Resources Phase I Assessment included 33 historic United States Geological Survey (USGS) maps, dating from between 1900 and 2021. The Newbury Park quadrangle USGS maps do not show individual structures after 1951, so Envicom supplemented the USGS map findings with aerial imagery from the University of California at Santa Barbara (UCSB) Library historical aerial photograph database and historical satellite imagery from Google Earth Pro. The oldest aerial in the UCSB database is from 1900, which shows the Project area as undeveloped with no structures visible immediately around the Project site. A 1938 aerial image shows the topography of the Project site and confirms that no development occurred in the Project region in the early 1900s. The 1950 Newbury Park USGS map shows the development of Calle Yucca, the road north of the Project site. The first change to the Project site is the addition of an access road, which is clearly visible in a 1965 aerial image. This road was likely graded for the initial installation of the Unit W and Unit Y pipelines in 1960 and 1962, respectively. The 1965 aerial image also shows the first residences constructed near the property, along Calle Yucca, and the development of Calle Las Trancas, the road south of the Project site.

By 1977, both Calle Yucca and Calle Las Trancas were lined with residences, but the Project area remained largely undeveloped. However, the SCCIC record search indicates that utility lines were likely located within in the Project area. There is very little visible change in the Project property between the 1977 aerial image and a 2025 satellite image. Pipelines were replaced in Box Canyon during the 1990s. The historical map and aerial image database study, therefore, was negative for older historical cultural resources located on or near the Project site. Based on examination of historic maps and aerial photography, the Project would result in no impacts to historic resources. No mitigations are required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Section 15064.5.

Potentially Significant Unless Mitigation Incorporated. On October 14, 2025, as part of preparation of the Phase I a request was submitted to the SCCIC to conduct a search of their database for cultural resources located within the Study Area. The record search included a request for copies of reports for all the previously recorded cultural resources located within or adjacent to the Project area, as well as copies of all cultural resource technical reports that intersected with all or part of the Project area and surrounding Study Area. A similar request was made to the NAHC on October 8, 2025. The results from the NAHC record search were received on October 10, 2025, with negative findings.

The findings from the SCCIC record search indicated that no previously recorded cultural resources were located on the Project site. One cultural resource, P-56-100077, is located within the surrounding 0.25-mile Study Area. P-56-100077 is an isolate cultural resource recorded in 1997. The isolate comprises two (2) Pismo clam (*Tivela stultorum*) fragments. A California Department of Parks and Recreation (DPR) was completed for this isolate because Pismo clams were commonly used by local tribes, and fragments have been discovered at other prehistoric sites in the region. Notes indicate that a fossilized oyster shell was observed in the vicinity of the isolate. In comparing the isolate location with geologic maps, it was noted that a P-56-100077 was discovered in Pleistocene geology, which can contain Pismo clams. Moreover, no other prehistorical cultural resources have been recorded in Project area. Thus, P-56-100077 is likely a paleontological resource, rather than a cultural resource.

Three cultural resource reports located in the California Historical Resources Information System (CHRIS) database involved the Project site: VN-101, VN-1573, and VN-2233. VN-101 is a study of the Conejo Canyons completed by the Thousand Oaks Planning Department in 1976; the report did not record any new cultural resources. VN-1573 is the 1997 Archaeological Phase I and Impact Assessment that recorded P-56-100077, discussed above. The 1997 survey described in VN-1573 included the entirety of the Project area, as well as a larger Study Area. The report's summary of Box Canyon findings is provided below:

> "Located on the east side of Arroyo Conejo, the Box Canyon feeder runs down Box Canyon within and/or adjacent to an existing graded dirt road. Ground visibility on the dirt road was excellent. Along much of the route, a cut slope bordered the road to the north and drainage bordered it to the south. No cultural resources were seen in or adjacent to the road. The steepness of the slopes in the vicinity of this dirt road combined with the extensive cutting and grading required to construct/grade the dirt road, and the previous trenching within this area for the installation of Box Canyon feeder, make it unlikely that any intact archaeological resources occur within this portion of the Project area."

Finally, VN-2233 is a report describing an archaeological reconnaissance conducted in 2002. The northern edge of VN-2233 abuts the Project area. No new cultural resources were recorded as part of this study.

An additional five (5) reports intersected with the surrounding 0.25-mile Study Area: VN-59, VN-84, VN-231, VN-1130, and VN-1527. VN-59 is an assessment of the impact of a project on archaeological resources found along the Arroyo Conejo, with the report assessing seven (7) prehistoric sites found along the seasonal creek. VN-231 is a re-evaluation of the same area assessed in VN-59 and does not record any additional resources. VN-84 is an archaeological assessment of the former MGM Ranch property that reported 26 prehistoric sites. VN-1527 is a historic study of the MGM Ranch property, completed at the same time as VN-59. Finally, VN-1130 re-assessed the MGM ranch property and recommended new mitigation measures. Although none of the cultural resources mentioned in these five (5) reports are located within this Project's Study Area, they all indicate that the Arroyo Conejo region is sensitive for prehistoric cultural resources. However, the sites discussed in these reports are in the hills, and not in the lower floodplain area where the current Project is located.

The findings of the pedestrian survey were negative for cultural resources within the Project site, and examination of the SCCIC database of previously recorded cultural resources and the NAHC were both negative for cultural resources within the Project site as well. However, as the Project site would experience ground-disturbing activities, the potential for the inadvertent discovery of archaeological resources exists. The Project would result in a less than significant impact to archaeological resources following implementation of mitigation measure **MM-CUL-1**.

Mitigation Measures

MM-CUL-1: **Archaeological, Tribal, and Fossil Resource Discovery Protocol**. If potentially significant intact archaeological, Tribal, or fossil resources are encountered within an undisturbed context, or in contexts that do not readily allow for expedient site removal, then this "discovery" protocol will be followed. If older historical or prehistoric features, artifact concentrations, prehistoric materials, or sensitive fossil materials are encountered during Project grading and subsurface excavation within native soils or original context, then all work in that area shall be halted or diverted away from the discovery to a distance of 30-feet until a qualified senior archaeologist, Tribal Representative(s), or senior paleontologist can evaluate the nature and/or significance of the find(s). If the senior archaeologist, Tribal Representative(s), or the senior paleontologist confirms that the discovery is potentially significant, then the City will be contacted and informed of the discovery immediately.

Construction will not resume in the locality of the discovery until consultation between the resource assessment team, the City's representative, and any other concerned parties (such as other Native American Tribal Groups), takes place and reaches a conclusion approved by the City. If a significant archaeological resource, Tribal resource, or fossil resource is discovered during earth-moving construction activities, complete avoidance of the find is preferred. However, if the discovered resource cannot be avoided, further survey work, evaluation tasks, or data recovery of the resource may be required by the City. All individual reports will be submitted to the SCCIC, the Native American monitoring organization, and/or to the Natural History Museum of Los Angeles County (NHMLAC) at the conclusion of the Project. Curation agreements may also need to be made with appropriate resource depositories.

c. A significant impact may occur if previously interred human remains would be disturbed during excavation of a project site.

Less than Significant Impact. No known human burials have been identified within the Project site and Study Area. As the Project would involve grading and ground moving activities and the site is in area of past human activity, the potential for discovery of human remains during construction period earthwork activities exists. If proper care is not taken during construction, damage to, or destruction of, these unknown remains could occur. The State of California Health and Safety Code Section 7050.5 addresses this possibility and requires that, in the event that human remains are uncovered, no further disturbance shall occur until the County Coroner has made a determination as to the origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. The Coroner must be notified of the find immediately, together with the City and the property owner. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials and an appropriate re-internment site. With required compliance with Health and Safety Code Section 7050.5, Project impacts to human remains would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VI. ENERGY				
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

No Impact. The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. All work would be temporary and short-term in duration.

Vegetation clearing and site preparation would be conducted using power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools. Surface scraping for concrete paving would be completed using standard equipment such as skip loaders and bobcats. Water trucks would be used as needed for dust suppression. Most of the equipment is anticipated to be diesel-fueled; however, smaller tools such as trimmers and chainsaws may be electric-, gasoline-, or natural gas-powered. For the purposes of this analysis, the majority of construction equipment is assumed to be diesel-fueled, while worker trips are assumed to involve gasoline-fueled vehicles.

Construction activities would comply with Title 13, Sections 2449 and 2485 of the California Code of Regulations (CCR), which limit idling of off-road diesel vehicles and heavy-duty diesel trucks to no more than five (5) minutes.[23] Compliance with this regulation would prevent unnecessary consumption of energy from use of diesel fuel during construction. As such, the use of construction equipment and the transportation of materials and workers necessary during the temporary construction period would not represent a substantial proportion of annual gasoline or diesel fuel use in California.

There is no electrical service at the Project site, and no plug-in equipment would be used during construction. Construction activities are limited in scope and duration and would not require large-scale or continuous equipment operation. Therefore, the Project would not place a significant demand on electricity supplies or infrastructure. Similarly, the use of natural gas-powered equipment is expected to be minimal, resulting in negligible impacts on natural gas infrastructure or supply. Overall, energy use during construction would be limited, temporary, and consistent with regulatory requirements.

Furthermore, the Project involves improvements to existing infrastructure within a previously disturbed corridor and does not include any new building construction or population growth. Overall, the Project

[23] California Code of Regulations, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

would not introduce new facilities or uses that would increase long-term energy consumption. There would be no operational energy impacts, as the Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. No mitigations are required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

No Impact. The Project does not involve the construction of new buildings or significant modifications to existing structures. Instead, it consists of infrastructure improvements and routine maintenance activities along an existing unimproved access road and within a regulated stream corridor. These activities are limited in scope and duration and would not result in substantial or ongoing energy use. As such, the Project would not conflict with or obstruct the implementation of any State or local plans related to energy efficiency or renewable energy. Maintenance work would comply with all applicable regulations, and no long-term operational energy demand would be generated. Therefore, the Project would result in no impacts related to energy plans or policies and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological features?	☐	☒	☐	☐

Impact Analysis

a. i. A significant impact may occur if a project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

a. ii. A significant impact may occur if a project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking.

Less than Significant Impact. The California Geological Survey establishes regulatory zones around active faults, called Alquist-Priolo Earthquake Fault Zones. These zones, which extend from 200 to 500 feet on each side of a known fault, identify areas where a potential surface fault rupture could prove hazardous for buildings used for human occupancy. Development projects located within an Alquist-Priolo Earthquake Fault Zone are required to prepare special geotechnical studies to characterize hazards from any potential surface ruptures. Furthermore, a significant impact could occur if a project represents an increased risk to public safety or destruction of property by exposing people, property, or infrastructure to seismically induced ground shaking hazards.

No State-designated Alquist-Priolo Earthquake Fault Zones or active faults are located on the Project site. The closest significant fault to the Project site is the Simi-Santa Rosa fault (located approximately 2.82 miles north of the site).[24] According to the Thousand Oaks General Plan, the Project site is located within the Sycamore Canyon fault, but the fault has been determined to be an inactive fault.[25,26] Additionally, Boney Mountain fault, which is also inactive, is located approximately two (2) miles south of the Project site. The Project site is located within the seismically active southern California region and could experience ground shaking in the event of nearby earthquakes originating from other faults located in Southern California. The potential for surface rupture of a known earthquake fault is low, as the Project site is not located on a known active fault. Furthermore, the Project involves improvements to existing infrastructure within a previously disturbed corridor and does not include any building construction or vertical structures, which would reduce the potential for exposure of people or structures to seismic risks. Therefore, impacts related to Alquist-Priolo Earthquake Fault Zones and strong seismic ground shaking would be less than significant and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

a. iii. A significant impact may occur if a project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction.

Less than Significant Impact. Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Liquefaction factors include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction typically involves a loss of shear strength in affected soil layers due to rapid increases in pore water pressure caused by earthquake shaking.

According to the Thousand Oaks General Plan Safety Element, the Project site is not located within a liquefaction zone.[27] Additionally, the site is not identified by the State as being within an area susceptible to seismically induced liquefaction hazards.[28] As such, the Project would result in a less than significant

[24] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation, Accessed October 2025: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/.
[25] Inactive faults are geologic structures that can be identified but cannot cause and earthquake. Faults are commonly considered to be active if there has been movement observed or evidence of seismic activity during the last 10,000 years.
[26] Thousand Oaks General Plan 2045, Chapter 10, Safety Element, Figure 10.1, adopted December 5, 2023.
[27] Thousand Oaks General Plan 2045, Chapter 10, Safety Element, Figure 10.3, adopted December 5, 2023.
[28] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation, Accessed October 2025: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/.

impact related to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

a. iv. A significant impact may occur if a project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides.

Less than Significant Impact. According to the Thousand Oaks General Plan Safety Element, the Project site is located within a landslide risk zone.[29] Additionally, the site is identified by the State as being within an area designated by the State as having the potential for seismically-induced landslide hazards and that all development should be adequately and safely removed from any slope areas so that seismic-induced landslide hazards are not considered to be potential hazards at the Project site.[30] The Project involves improvements to existing infrastructure within a previously disturbed corridor and does not include any building construction or vertical structures. As such, the Project would result in no impacts related to directly or indirectly causing potential substantial adverse effects, including the risk of loss, injury or death involving landslides. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project would result in substantial soil erosion or the loss of topsoil.

Less than Significant Impact. Construction of the Project would involve ground surface disturbance during site preparation and grading, which could result in soil erosion. All work would be temporary and short-term in duration. However, the Project would be required to comply with VCAPCD Rule 55, which mandates watering disturbed soils to minimize dust and reduce erosion. Additionally, the Project must comply with the TOMC Title 7, Chapter 3, which includes erosion control and drainage requirements for grading and construction activities involving earthwork. Therefore, with adherence to the regulations, impacts related to substantial soil erosion or the loss of topsoil would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A significant impact may occur if a project is built on a geologic unit or soil that is unstable, or that would become unstable as a result of a project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Less than Significant Impact. As discussed in Sections VII.a.iii and VII.a.iv, Geology and Soils, liquefaction is not considered a hazard at the Project site. However, the potential for landslide activity does exist. The Project site includes four (4) mapped soil units identified by the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS):

- Hambright very rocky loam, 15 to 75 percent slopes;
- Huerhuero very fine sandy loam, 5 to 9 percent slopes, eroded;
- Cibo clay, 5 to 15 percent slopes; and
- Urban land–Typic Xerorthents, very gravelly–Topdeck complex, 10 to 35 percent slopes.

[29] Thousand Oaks General Plan 2045, Chapter 10, Safety Element, Figure 10.2, adopted December 5, 2023.

[30] California Department of Conservation, California Geological Survey, Earthquake Zones of Required Investigation, Accessed October 2025: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/.

These soils are generally derived from Mesozoic and Tertiary sedimentary rocks. Subsurface conditions at the Project site consist of native soils, classified as residual soil, colluvium (gravity and sheetflow deposits), and Older Alluvium. These soils typically include dark brown clayey sand with gravel to sandy clay with gravel, ranging from medium dense to dense. The Older Alluvium, found beneath the residual soils and colluvium, becomes very dense/stiff and is considered suitable for use as foundation bearing material.

Lateral spreading, which typically occurs within liquefiable soil layers toward free faces (such as slopes or channels), is not anticipated on the site due to the absence of liquefiable soils. Similarly, subsidence, which generally results from the extraction of groundwater, oil, or gas, is unlikely because the Project site is not located in an area of known subsidence, and no such extraction activities are proposed as part of the Project. Therefore, based on the geologic conditions and the absence of liquefaction-prone soils or resource extraction, the Project would result in a less than significant impact related to landslides, lateral spreading, subsidence, liquefaction, or collapse. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A significant impact may occur if a project is located on expansive soil, creating substantial direct or indirect risks to life or property.

Less than Significant Impact. Expansive soils are those which contain clay minerals which change in volume (shrink or swell) with changes in soil moisture content. When there is a change in the moisture content there would be movement, with anticipated shrinking or swelling. Differential shrinking or swelling can cause damage to foundation systems and concrete flatwork, which can cause cracks to develop in concrete and in interior walls. While portions of the Project site, including areas mapped as Cibo clay, may have a moderate to high expansion potential, the Project does not involve the construction of habitable buildings. Improvements are limited to new culverts, manholes, and related drainage infrastructure.

These components would be designed in accordance with applicable engineering standards, including the California Building Code (CBC) and TOMC, which include requirements for construction in expansive soil conditions. With proper engineering design and adherence to applicable regulations, impacts from expansive soils on proposed infrastructure would be less than significant, and no mitigation is required.

e. A significant impact may occur if a project site contains soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

No Impact. The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. These improvements are part of the City's existing wastewater collection and treatment system. The Project does not involve the use of septic tanks or the construction of any alternative on-site wastewater disposal systems that would rely on soil absorption. Therefore, the Project would result in no impacts related to the capability of soils to support the use of septic tanks or alternative wastewater disposal systems. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

f. A project may result in a significant impact if it would directly or indirectly destroy a unique paleontological resource or site or unique geological features.

Potentially Significant Unless Mitigation Incorporated. As part of preparation of the Cultural Resources Phase I Assessment[31] (provided in Appendix D), on October 8, 2025, the NHMLAC was requested to examine their fossil records database for any paleontological discoveries previously recorded within the development footprint or within the surrounding Project Study Area. In addition, the T.W. Dibblee and H.E. Ehrenspeck 1990 Geologic map of the Camarillo and Newbury Park quadrangles, Ventura County, California, were examined. The Project area is underlain by four (4) types of geology: modern alluvium (Qa), older alluvium (Qoa), Lower Topanga Formation Clay Shale (Ttlc), and Lower Topanga Formation Sandstone (Ttls). Modern alluvium underlies the far western end of the Project area, where the Project intends to place a manhole. This geology dates to the Holocene and is not paleontologically sensitive.

The geology at the base of the hill on the far eastern end of the access road, near Calle Las Trancas, is older alluvium that dates to the Pleistocene, and can be sensitive for Pleistocene terrestrial fossils. This older alluvium geological context extends around the western edge of the hills and along Calle Yucca, to the location where the Pismo clam fragments were recorded. Since the Thousand Oaks region during the Pleistocene had a highly variable shoreline located much farther inland from where the Pacific coast is located today, it is not surprising that deposits of near shore or beach invertebrates are present in the region.

The majority of the Project area is underlain by the Lower Topanga formation, which dates to the Early to Middle Miocene [23 million years ago (mya) to 11.6 mya] and is sensitive for marine fossils. Two types of geological rock units comprise the Lower Topanga formation in the Project area. The first rock unit (Ttlc) is described as, "gray to gray-black micaceous clay-shale; contains few thin layers of hard yellowish dolomitic shale and others of tan fine-grained sandstone." This Lower Topanga formation context is the most prevalent geology type on the Project site. The second Lower Topanga formation rock unit (Ttls) is described as, "tan arkostic sandstone and some interbedded gray micaceous shale," and occurs on the western end of the Project site. Both Topanga Formation bedrock rock unit types were observed during the site survey, indicating that any excavation in the Project site is likely to encounter sensitive Topanga Formation deposits. No paleontological resources were observed during the survey, but due to the paleontological sensitivity of the Topanga Formation, it is possible that fossil resources would be encountered during Project ground disturbing activities.

The NHMLAC record search response was received on October 20, 2025, with negative findings for the Project site. The NHMLAC record search always provides the closest fossil discovery localities, no matter whether they are located within a project study area or from farther out from a project site. The four (4) closest fossil localities were all in the Topanga Formation at an unknown depth. The first locality is Point Mugu, where herring (Xyne), a sardine relative (Ganolytes), drumfish (Lompoquia), herring/shad family taxon (Clupeidae), and invertebrates (including Macrochlamis magnolia and Vertipecten sp.) were recovered from a hard black shale Lower Topanga Formation context. The second locality is North of Madera Road, Simi Valley, where toothed whale (Odontoceti), requiem shark (Carcharhinus, Galeocerdo), weasel shark (Hemipristis), eagle ray (Myliobatidae), and barracuda (Sphyraenidae) fossils were recovered from a gray orange fine grained well-sorted sandstone Topanga Formation context. The third locality is on the Northbound side of Hwy 23, near the Tierra Rejada Road offramp, where shark (*Isurus planus*) and invertebrate (bivalves, echinoids, bryozoans, barnacles) fossil were recovered from a Topanga Formation context characterized by coarse-grained sandstone with fragments of underlying Conejo volcanics. The final fossil locality was in Thousand Oaks, where invertebrate (including *Turritella*) specimens were recovered from the Topanga Formation.

The NHMLAC recommended a full paleontological assessment be conducted, which is their standard response on all record search findings reports. Given that most of the Project site is underlain by sensitive

[31] Envicom Corporation, Cultural Resources Phase I Assessment for Box Canyon Manhole & Road Improvement Project, November 2025 (Appendix D of this document).

Lower Topanga Formation contexts, no further paleontological study is not needed, however it is recommended that full-time paleontological monitoring during excavation of native soils take place during the Project construction phase. However, the manhole that would be installed on the western end of the access road would be in modern alluvial soil, and therefore paleontological monitoring is not recommend for this activity. It is also recommended that contingency measures be followed in case unexpected fossil discoveries occur during Project excavation. Therefore, following implementation of Mitigation Measure **MM-GEO-1**, the Project would result in a less than significant impact to paleontological resources.

Mitigation Measures

MM-GEO-1: **Paleontological Monitoring**. Prior to construction, a company qualified to provide paleontological monitoring will be engaged by the City to provide monitoring services when the project is located within the Topanga Formation or within Pleistocene alluvium. Full-time paleontological monitoring will take place unless the paleontological monitor determines that construction activities are located within fill or disturbed soils, at which point spot-check monitoring can take place. Envicom also recommends that the paleontological monitor be cross-trained in prehistoric archaeological resources in the unlikely case that such material is encountered during monitoring, at which point the Project discovery procedures should be followed.

The paleontological monitor will collect any fossil material that is uncovered through grading or excavating that is found within disturbed or intact soils. If necessary, the paleontological monitor can halt construction within 30-feet of a potentially significant fossil resource that cannot readily be removed or that the monitor believes needs further immediate examination. Fossils from a disturbed context or that can be recovered without halting construction can be collected; fossils that cannot be removed during construction, or that the monitor believes will need further *in situ* assessment, will trigger the Project "discovery" protocol. Discovery situations that do not lead to further assessment, survey, evaluation, or data recovery can be described in the monitor's daily logs or in a final Project monitoring report.

All fossils recovered that may be of importance to California paleontology will be cleaned, analyzed, and described within a final Project monitoring report. All collected materials will be offered to the NHMLAC to be curated at the end of the Project. If the NHMLAC decides that recovered fossils are worthy of curation, then a curation agreement will be needed that is reviewed by the City prior to the completion of the Project. The costs of any paleontological monitoring report and the processing, analysis, and curation of fossil material will be the responsibility of the City.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS.				
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Greenhouse gases (GHGs) can contribute to an increase in the temperature of the earth's atmosphere by absorbing infrared radiation transmitted by the sun, thereby trapping and retaining heat within the atmosphere. Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans over an extended period of time, as well as other associated changes in climate, such as substantial variations in wind patterns, precipitation, and the frequency and/or strength of storms.

The principal GHGs are CO_2, methane (CH_4), nitrous oxide (N_2O), ozone, and water vapor. The CEQA Guidelines define the following as GHGs: CO_2, CH_4, N_2O, sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Each GHG differs in its mass and ability to trap heat within the atmosphere based on factors such as capacity to directly absorb radiation, length of time in the atmosphere, and chemical transformations that create new GHGs. Because the warming potential of each GHG differs, GHG emissions are typically expressed in terms of CO_2 equivalents (CO_2e), providing a common expression for the combined volume and warming potential of the GHGs generated by an emitter. Total GHG emissions from individual sources are generally reported in metric tons (MT) and expressed as metric tons of carbon dioxide equivalents ($MTCO_2e$).

State Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, established mandatory provisions and GHG reduction targets within specified time frames, including a requirement that California's GHG emissions be reduced to 1990 levels by 2020. The most recent target thresholds come from AB 1279, the California Climate Crisis Act, enacted September 16, 2022. It codifies various executive orders made after the establishment of AB 32 which set new target thresholds, resulting in the requirement for California to achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. AB 1279 also requires that statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels by 2045.

As required by AB 32, California Air Resources Board (CARB) was tasked with preparing a scoping plan that identified strategies for reducing GHG emissions. The first Climate Change Scoping Plan was adopted in December 2008, and the document is updated every five (5) years. The 2022 Climate Change Scoping Plan (Scoping Plan) was finalized in December 2022 and is focused on the goal of obtaining carbon neutrality by 2045 or earlier. This is the first updated Scoping Plan that has added carbon neutrality as a science-based guide where it identifies technologically feasible, cost effective and equity-focused path to carbon net zero.

Senate Bill (SB) 375, the Sustainable Communities and Climate Protection Act, passed in 2008, requires CARB to develop and set regional targets for GHG emission reductions from passenger vehicles. These targets are embedded in the Scoping Plan and set on a regional basis. The regional Metropolitan Planning

Organizations (MPOs) are each tasked with preparing a SCS that would reduce GHG emissions to achieve the regional targets, if feasible to do so. Each SCS is a component to a RTP, which regulates transportation financing within each region. The RTP and SCS must complement each other and accommodate the Regional Housing Needs Allocation (RHNA). SB 375 modified the RHNA requirements to align with production of the RTP/SCS. The purpose of this coordination is for each MPO to arrive at a mix of transportation and land use strategies that would direct the region's growth in such a way that emissions from car trips meet the GHG reduction targets.

The SCAG is the MPO for the County of Ventura (along with the Counties of Imperial, San Bernardino, Los Angeles, Orange, and Riverside). The 2024-2050 RTP/SCS, also referred to as Connect SoCal, is the most recent RTP/SCS adopted by SCAG. The 2024-2050 RTP/SCS is a long-range visioning plan that examines existing land use and transportation conditions throughout the SCAG region and forecasts how the plan would meet the region's transportation needs between 2024 and 2050, as well as achieve CARB's GHG emissions reduction targets. On April 4, 2024, SCAG's Regional Council adopted the 2024-2050 RTP/SCS. On August 6, 2025, CARB officially determined that the 2024-2050 RTP/SCS would achieve CARB's 2035 GHG emission reduction target of 19 percent below 2005 per capita emissions levels.[32]

In 2011, VCAPCD staff provided a report entitled "Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County" to the Ventura County Air Pollution Control Board by way of a letter dated November 8, 2011. This letter notes that the most common approach for determining the significance of GHG emissions for land use projects is a tiered approach involving: (1) applicability of any CEQA exemptions; (2) project consistency with a local climate action plan (CAP); and (3) application of an efficiency-based threshold and/or a bright line gap-based threshold based on capturing 90 percent of project GHG emissions. This passage refers to, and cites sections from, a 2008 CAPCOA white paper titled CEQA and Climate Change: Addressing Climate Change through CEQA that provides "a common platform of information and tools to address climate change in CEQA analyses, including the evaluation and mitigation of GHG emissions from proposed projects and identifying significance threshold options." The VCAPCD letter also states that "Given that Ventura County is adjacent to the SCAQMD jurisdiction and a part of the SCAG region, District staff believes it makes sense to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the SCAQMD," and concludes that "unless directed otherwise by [the Air Pollution Control] Board, District staff will continue to evaluate and develop suitable GHG threshold options for Ventura County with preference for GHG threshold consistency with the SCAQMD and the SCAG region."[33] However, to date, VCAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses.

Locally, the City adopted its CAP, the Community Emergency Assistance Programs (CEAP), on May 7, 2024. The CEAP details the strategies and actions that the City will pursue to protect the environment and address the challenges of climate change. The CEAP actions are aimed at reducing the community's collective carbon emissions, sustaining a healthy environment and providing co-benefits like reducing air pollution, supporting local economic development, increasing the City's sustainability and resilience, and improving public health.[34]

a. A significant impact may occur if a project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

[32] CARB Evaluation of SCAG 2024 SCS, August 6, 2025.
[33] Ventura County Air Pollution Control District, Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County, November 8, 2011.
[34] City of Thousand Oaks, Climate & Environmental Action Plan, May 2024.

Less than Significant Impact. As the VCAPCD intends to align future thresholds with the SCAQMD, thresholds established by the SCAQMD may serve for analysis of the Project. To date, however, no quantitative GHG emissions significance threshold for general use in the environmental review process that would apply to the Project has been adopted by a local, regional, or State agency per the requirements of CEQA Guidelines Section 15064.7(b). The SCAQMD has adopted a threshold for heavy industrial projects of 10,000 $MTCO_2e$/year, and SCAQMD staff proposed a threshold of 3,000 $MTCO_2e$/year for residential, commercial, and mixed-use projects in 2008, but this threshold has not been adopted.

The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. All work would be temporary and short-term in duration. GHG emissions would be limited to minor, short-term emissions associated with the use of small, mechanized equipment and vehicle trips to and from the site during construction. No long-term operational GHG emissions would occur as the Project does not include any new structures, ongoing operations, or population growth. Given the limited scope and duration of construction activities, GHG emissions would be minimal and temporary. As such, the Project would not generate a significant amount of GHG emissions and would result in a less-than-significant impact with respect to climate change. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project conflicted with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions for GHGs.

Less than Significant Impact. CEQA Guidelines Section 15064.4(b)(3) states that: "In determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. A lead agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment: The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (see, e.g., section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR [Environmental Impact Report] must be prepared for the project. In determining the significance of impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is not cumulatively considerable."

To demonstrate the extent to which the Project complies with such plans, this evaluation provides an analysis of the Project's consistency with the following plans that have been adopted on a statewide, regional, and local scale.

2022 Scoping Plan

The Project would be required to comply with applicable regulations or requirements that are adopted and implemented for the purpose of reducing GHG emissions, such as complying with the energy conservation

standards of CALGreen. The majority of the strategies, goals, and actions identified in the 2022 Scoping Plan are to be implemented by public agencies on a broader scale throughout the State. Therefore, the Project would not be in conflict with applicable regulations adopted for the purposes of reducing GHG emissions, nor would it interfere with the ability of public agencies to implement such identified strategies, goals, and actions.

2024-2050 SCAG RTP/SCS

As mentioned previously, CARB has determined that the 2024-2050 RTP/SCS would achieve CARB's 2035 GHG emission reduction target of 19 percent below 2005 per capita emissions levels. As the 2024-2050 RTP/SCS is the regional land use tool used by CARB to meet State GHG reduction targets, consistency or lack of conflict with the 2024-2050 RTP/SCS would indicate that a project aligns with the State's long-term climate goals. The 2024-2050 RTP/SCS meets State climate goals essentially by identifying the land use patterns that would result in the greatest housing/employment/transportation efficiencies thereby reducing vehicle miles traveled (VMT). A project would comply with the 2024-2050 RTP/SCS if it fulfilled the land use strategies of the plan, and it would conflict if its use or density directly contradicted the plan. The Project does not require any change to the zoning or General Plan designation of the Project site; therefore, it aligns with the land use assumptions that the 2024-2050 RTP/SCS is based upon. The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. There would be no population growth associated with the Project (refer to Section XIV, Population and Housing). As such, the Project would not conflict with the RTP/SCS; therefore, the Project would align with the land use strategies of the plan which are determined to meet State strategies for the purpose of reducing the emissions for GHGs.

Climate & Environmental Action Plan

As described above, the City adopted the CEAP on May 7, 2024. The CEAP includes an implementation plan for its GHG savings measures, which consists of the timeline for each measure and the lead City Department and/or Division responsible for implementation (along with other participating partners, where applicable). The timeline is subject to change depending on resource availability, funding, and other factors. The implementation of each measure is schedule to occur before 2030; thus, the CEAP also includes the estimated annual GHG savings in 2030 that would be achieved by each measure, where possible. The CEAP focuses its GHG savings measures in the following sectors: building energy, transportation, solid waste, water, environmental, and adaptation and resilience. As with the Scoping Plan, the measures that are identified in the CEAP are to be implemented by the City, such as encouraging building electrification, pursuing viable transit options, increasing electric vehicle charging requirements, reducing food waste and increasing organics composting, transitioning to climate-appropriate landscaping, increasing tree planting, and providing appropriate regulations to allow for development of distributed energy resources in residentially-zoned areas and throughout City. As the City codifies these measures, any proposed development would be required to implement the GHG emissions reduction features into their designs, or retrofit existing buildings where necessary, as a matter of regulatory compliance. As such, the Project would not conflict with the CEAP.

Project impacts regarding conflicts with plans, policies, or regulations adopted for the purpose of reducing GHG emissions would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of types of hazardous materials or quantities.

b. A significant impact may occur if a project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

No Impact. The Project does not involve the routine transport, use, or disposal of hazardous materials. Planned improvements, including installation of a new manhole, culvert and headwall upgrades, and concrete paving, would be carried out using hand tools and small mechanized equipment. These activities

would not require the regular use of hazardous materials beyond standard fuels and lubricants for construction equipment. With implementation of standard construction practices, the Project would result in no impacts related to the routine transport, use, disposal, or accidental release of hazardous materials. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A significant impact may occur if a project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

No Impact. The closest existing school to the Project site is the Madrona Elementary School, which is located approximately 0.8 miles east of the Project site. Redwoods Middle School is located approximately 1.6 miles east of the Project site. Furthermore, the Project does not involve the routine transport, use, or disposal of hazardous materials. As such, the Project would result in no impacts related to potential hazards within one-quarter mile of existing school facilities. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A significant impact may occur if a project is located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and as a result would create a significant hazard to the public or the environment.

No Impact. The Project site and areas located within 1,000 feet of the Project site are not located on the Department of Toxic Substances Control's (DTSC's) EnviroStor database[35] list of clean-up sites. Based on review of the State Water Resources Control Board's (SWRCB's) GeoTracker database,[36] no SWRCB clean-up sites are located within 1,000 feet of the Project site. The Project site is not listed by the SWRCB as a solid waste disposal site with waste constituents above hazardous waste levels outside the management unit.[37] The Project site is not listed by the SWRCB as a site for which a Cease and Desist Order (CDO) or Clean-up and Abatement Order (CAO) is active.[38] According to the California EPA (CalEPA), the hazardous waste facilities that are identified in Health and Safety Code Section 25187.5 are those for which the DTSC has taken or contracted with others for corrective action, because a facility owner/operator has failed to comply with a date for taking corrective action, or because the DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This list is currently comprised of two (2) facilities, neither of which includes the Project site. The two (2) listed sites are AAD Distribution & Dry Cleaning Inc. in Vernon and the Marquardt Co. in Van Nuys.[39] As the Project site is not located on or near a hazardous material site compiled by Government Code Section 65962.5, the Project would result in no impacts related to such regulated sites. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

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35 Department of Toxic Substances Control, EnvirStor, Accessed October 2025 at: https://www.envirostor.dtsc.ca.gov/public/map/?global_id=38330005.

36 State Water Regional Control Board, GeoTracker, Accessed October 2025 at: https://geotracker.waterboards.ca.gov/map/?global_id=T0607302824.

37 CalEPA, Sites Identified with Waste Constituents above Hazardous Waste Levels Outside the Waste Management Unit, Accessed October 2025 at: https://calepa.ca.gov/wp-content/uploads/2016/10/SiteCleanup-CorteseList-CurrentList.pdf.

38 CalEPA, List of "Active" CDO and CAO from Water Board, Excel file Accessed October 2025 at: https://calepa.ca.gov/sitecleanup/corteselist/.

39 CalEPA, Cortese List, Accessed October 2025 at: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/.

e. A project may result in a significant impact if it would be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area.

No Impact. The Project site is not located within two (2) miles of a public use airport and is not located with an airport land use plan. The closest airport to the Project site is the Hollywood Burbank Airport, which is located approximately 44 miles east of the Project site. No impact would occur and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

f. A project would normally have a significant impact if it would interfere with an emergency response plan or emergency evacuation plan.

No Impact. The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. In the vicinity of the Project site, the Camino Do Rios is an evacuation route for the City.[40] As the Project is comprised of infrastructure improvements, it would not modify or block current emergency or evacuation routes or site ingress and egress. The Project would involve temporary, short-term maintenance activities that would not be located within existing streets or affect local circulation patterns. Development of the Project would not impede or impair adopted emergency response plans or emergency evacuation routes; therefore, the Project would result in no impacts. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

g. A significant impact may occur if a project is located in proximity to wildland areas and would pose a potential fire hazard, which could affect persons or structures in the area in the event of a fire.

Less than Significant Impact. As shown on the City's General Plan Safety Element[41] and California Department of Forestry and Fire Protection (CalFire) Maps,[42] the Project site is located within land classified as a Very High Fire Hazard Severity Zone (VHFHSZ). The Project site is part of the broader Conejo Canyons area, which encompasses approximately 3,641 acres of diverse terrain, including mountains, plateaus, steep-sided canyons, and riparian corridors. Multiple utility rights-of-ways, held by various public agencies and private entities, traverse the Conejo Canyons area. The Project site is surrounded by the Arroyo Conejo OSU and is adjacent to low-density residential areas, primarily composed of single-family homes.

Although the Project is located within a VHFHSZ, it consists solely of infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Construction activities would be short-term in nature and limited to non-habitable improvements, such as installation of a manhole, culvert and headwall improvements, and concrete paving. Work would primarily be completed using hand tools, small, mechanized equipment, and rubber-tracked vehicles, which are less likely to generate sparks or heat sufficient to ignite wildland vegetation. No new structures intended for human occupancy are proposed. Furthermore, Project activities would adhere to standard construction practices, including

[40] Thousand Oaks, General Plan 2045, Appendix B: Emergency Evacuation Analysis, November 2023.
[41] Thousand Oaks, General Plan 2045, Chapter 10, Safety Element, Figure 10.6: Fire Hazard Severity Zones, November 2023.
[42] CalFire, Fire Hazard Severity Zones, Find Your Fire hazard Severity Zone (FHSZ), Accessed November 2025 at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

vegetation management and fire safety measures. As such, although the Project site is located within a designated VHFHSZ, the limited scope and nature of the work would not substantially increase the risk of wildfire ignition or spread. Therefore, the Project would result in a less-than-significant impact related to wildfire hazards, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Analysis

a. A project may result in a significant impact if it would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Significant impacts may also occur if a project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include compliance with the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements to reduce potential water quality impacts.

Less than Significant Impact. Stormwater runoff and other non-point source discharges are regulated under the Federal Clean Water Act (CWA) through the National Pollutant Discharge Elimination System (NPDES) program, which is administered in California by the RWQCBs. The NPDES program has been implemented in two (2) primary phases. Phase I, initiated in 1990, applies to stormwater discharges from larger

municipalities (with populations over 100,000), certain categories of industrial operations, and construction sites disturbing 5 acres or more of soil. Phase II expanded the program's scope to include smaller municipalities, generally those within urbanized areas or with populations over 10,000 and a density greater than 1,000 persons per square mile, as well as construction activities that disturb between one (1) and five (5) acres of land. These entities are required to obtain coverage under a general NPDES permit and implement stormwater management practices to reduce pollutant discharges to the maximum extent practicable.

The County of Ventura has developed a Municipal Stormwater Quality Management Program (MSWRP), which includes the City of Thousand Oaks, in order to fulfill the requirements of the Phase II NPDES General Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4 Permit). This program aims to reduce the amount of pollutants discharged in urban runoff and ensure compliance with State and federal stormwater regulations. In 2011, the County of Ventura updated the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures (Manual) as part of its overall Stormwater Management Program, in accordance with the requirements of the Los Angeles RWQCB. Additionally, local stormwater ordinances, adopted by participating jurisdictions, define prohibited discharges and mandate implementation of appropriate BMPs during construction.

The State Water Resources Control Board collaborates with the nine (9) RWQCBs to protect, preserve, enhance, and restore the quality of California's water resources. Stormwater pollutants present in County watersheds include bacteria, metals, nutrients, pathogens, toxics, and trash.[43] The May 2019 Water Quality Control Plan for the Los Angeles Basin (Basin Plan) is the Los Angeles RWQCB's current master water quality control planning document.[44] The Basin Plan establishes beneficial uses and water quality objectives for each of the water bodies in the Los Angeles Region, including Ventura County. The CWA requires that States adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA. CWA Section 303(d) requires States to identify and prepare a list of water bodies that do not meet water quality objectives, and to establish total maximum daily loads (TMDLs) for each water body to ensure attainment of water quality objectives.

The primary pollutants of concern in Ventura County watersheds, including those near the Box Canyon Project site, typically include metals, nutrients, pathogens, trash, pesticides, and toxicity, which are common in areas with urban runoff and disturbed soils. The County's MSWRP addresses the primary pollutants of concern through County measures and BMPs.

The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. All work would be temporary and short-term in duration. Construction within the Project area would utilize power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools for vegetation clearing and access preparation. Surface scraping for concrete paving would be completed using standard equipment such as skip loaders and bobcats. Water trucks would be used as needed to minimize dust during construction. Some minor potential for erosion exists, although the Project does not propose substantial grading or excavation that could lead to substantial erosion. The Project does not involve construction of new structures that could lead to construction debris or materials being inadvertently carried into streams and watercourses or resulting in potential urban pollutants in stormwater runoff from new development. Thus, Project impacts to surface and groundwater quality during construction and operations would be less than significant. No mitigation is required.

[43] Ventura Countywide Municipal Stormwater Resource Plan, January 12, 2023.

[44] Los Angeles Regional Water Quality Control Board, Water Quality Control Plan, Los Angeles Region, Basin Plan, September 11, 2014.

Mitigation Measures: No mitigation measures are required.

b. A project may result in a significant impact if it would substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

No Impact. The Project site is located in the vicinity of Conejo Valley Groundwater Basin (CVGB). The nearest point of the Project site is approximately 277 feet northwest of the basin boundary.[45] The Project consists of infrastructure improvements along an existing unimproved access road used for wastewater system maintenance. Project activities include the installation of a manhole, culvert and headwall improvements, and paving of approximately 260 linear feet of steep, unpaved roadway to provide stable, year-round access. All construction would be temporary and short-term in duration, and development would not involve deep excavation or the installation of features that extract or rely on groundwater. While the Project would result in a minor increase in impervious surface due to limited concrete paving, the scale of this change is minimal and would not affect groundwater recharge within the CVGB. Additionally, the Project would not use groundwater for construction or operation, and no new water supply wells are proposed. Therefore, the Project would not result in the depletion of groundwater supplies nor interfere with groundwater recharge in a way that would impede sustainable groundwater management of the CVGB. No impact would occur, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

c.i. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on site.

Less than Significant Impact. The Project site includes an existing unimproved access road and associated wastewater infrastructure, and is surrounded by open space. A streambed regulated by the CDFW, runs generally parallel to the access road. This streambed exhibits intermittent and ephemeral flow regimes, depending on seasonal precipitation and local topography.[46] Tributaries in the area vary in condition, some currently include culverts, while others remain unculverted and flow across or adjacent to the access road. Project activities include the installation of a manhole, culvert and headwall improvements, and paving of approximately 260 linear feet of steep, unpaved roadway to provide stable, year-round access. These improvements are designed to control stormwater flows and reduce erosion along the roadway. While the addition of 260 linear feet of paved surface would increase impervious area and site runoff, the proposed improvements would not substantially alter the existing drainage patterns. Additionally, the Project would implement standard BMPs (See Section III.c, Air Quality) during construction to control sediment and protect nearby waterways. Therefore, the Project would not result in substantial on- or off-site erosion or siltation, nor would it exceed the capacity of existing stormwater drainage facilities. As such, impacts related to drainage pattern alteration, erosion, and runoff are considered less than significant. No mitigation is required.

c.ii. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would

[45] USGS Groundwater Ventura County, Accessed November 2025 at: https://www.arcgis.com/apps/mapviewer/index.html?layers=7ffa450168a847ccad1d460d8c5414c4

[46] Jurisdictional Delineation and Habitat Assessment for the Arroyo Conejo Utility and Road Maintenance Project, prepared by Rincon Consultants, Inc., August 2025 (see Appendix C.1).

substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Less than Significant Impact. The Project site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space. A streambed regulated by the CDFW runs generally parallel to the access road and exhibits intermittent and ephemeral flow regimes, depending on seasonal precipitation and local topography. Tributaries in the area vary in condition, some currently include culverts, while others remain unculverted and flow across or adjacent to the access road. According to the Thousand Oaks General Plan Safety Element, the western end of the Project site,[47] where the new manhole would be installed, is located within an 100-year flood zone.[48] The National Flood Hazard Layer designates the western end of the Project site as being located in Zone A, which is a high-risk flood area with a one percent annual chance of flooding, also known as the 100-year flood.[49]

The Project includes installation of a manhole, culvert and headwall improvements, and paving of approximately 260 linear feet of steep, previously unpaved roadway to improve year-round access and reduce surface erosion. While the paving would slightly increase impervious surface area and runoff, the improvements are designed to maintain existing drainage patterns and would not result in obstruction of flows or flood hazards. Furthermore, the limited scope and temporary nature of the construction activities would not contribute to long-term flooding risk. The Project does not propose any grading or development that would substantially alter the course of any stream or river or significantly increase runoff in a manner that would cause on- or off-site flooding. Therefore, impacts related to surface runoff and flooding are considered less than significant, and no mitigation is required.

c.iii. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would create or contribute runoff which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Less than Significant Impact. The Project site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space. A streambed regulated by the CDFW, runs generally parallel to the access road. This streambed exhibits intermittent and ephemeral flow regimes, depending on seasonal precipitation and local topography.[50] Tributaries in the area vary in condition, some currently include culverts, while others remain unculverted and flow across or adjacent to the access road. Project activities include the installation of a manhole, culvert and headwall improvements, and paving of approximately 260 linear feet of steep, unpaved roadway to provide stable, year-round access. These improvements are designed to control stormwater flows and reduce erosion along the roadway. While paving this portion of the road would increase impervious surface area and generate a minor increase in stormwater runoff, the amount of additional runoff would be minimal and would not exceed the capacity of existing or planned stormwater drainage systems. The improvements include stormwater conveyance elements (e.g., culverts and headwalls) that are appropriately sized to accommodate expected flows and

[47] Where the Unit W tributary (F08) flows into the Arroyo Canejo (F01). Jurisdictional Delineation and Habitat Assessment for the Arroyo Conejo Utility and Road Maintenance Project, prepared by Rincon Consultants, Inc., August 2025 (see Appendix C.1).

[48] Thousand Oaks, General Plan 2045, Chapter 10, Safety Element, Figure 10.4 FEMA Flood Hazard Zones and Figure 10.5 Dam Inundation, November 2023.

[49] FEMA's National Flood Hazard Layer Viewer, Accessed November 2025 at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-118.86951402661131,34.16720640476013,-118.82797197338869,34.18495866158275.

[50] Jurisdictional Delineation and Habitat Assessment for the Arroyo Conejo Utility and Road Maintenance Project, prepared by Rincon Consultants, Inc., August 2025 (see Appendix C.1).

maintain existing drainage patterns. Additionally, the Project would implement standard construction BMPs to prevent sedimentation and minimize the potential for polluted runoff during construction (See Section III.c, Air Quality). Because no new long-term pollutant sources (e.g., vehicles, chemicals, or structures) would be introduced and the disturbance area is limited, the Project would not generate substantial additional sources of polluted runoff. Therefore, the Project would not exceed stormwater system capacity or result in substantial polluted runoff, and impacts are considered less than significant. No mitigation is required.

c.iv. A project may have a significant impact on surface water hydrology if it would substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner that would impede or redirect flood flows.

Less than Significant Impact. The Project site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space. A streambed regulated by the CDFW, runs generally parallel to the access road. This streambed exhibits intermittent and ephemeral flow regimes, depending on seasonal precipitation and local topography.[51] Tributaries in the area vary in condition, some currently include culverts, while others remain unculverted and flow across or adjacent to the access road. Project activities include the installation of a manhole, culvert and headwall improvements, and paving of approximately 260 linear feet of steep, unpaved roadway to provide stable, year-round access. These improvements are designed to stabilize the road surface and manage drainage without altering the course of any stream or redirecting flood flows. Culvert and headwall upgrades would allow for continued conveyance of surface flows across the roadway consistent with existing conditions. Although the western end of the site is located within a FEMA-designated 100-year flood zone,[52] the Project does not propose any habitable structures or development that would obstruct or impede flood flows. The Project, which is comprised of infrastructure upgrades within an already disturbed area, would not result in changes to drainage patterns or cause redirection of floodwaters. As such, the Project would not substantially impede or redirect flood flows, and impacts would be less than significant. No mitigation is required.

d. A significant impact may potentially occur if a project would risk the release of pollutants from project inundation due to location in a flood hazard, tsunami, or seiche zone.

Less than Significant Impact. According to the Thousand Oaks General Plan Safety Element, the western end of the Project site,[53] where the new manhole would be installed, is located within an 100-year flood zone, but not in a dam inundation area.[54] The National Flood Hazard Layer designates the western end of the Project site, as being located in Zone A, which is a high-risk flood area with a one percent annual chance of flooding, also known as the 100-year flood.[55] Tsunamis, which are sea waves generated by large-scale sea floor displacements (such as from large earthquakes), and seiche, which is the oscillation of the surface of an enclosed water body generated by an earthquake, are unlikely to affect the Project site, as it is not located

[51] Jurisdictional Delineation and Habitat Assessment for the Arroyo Conejo Utility and Road Maintenance Project, prepared by Rincon Consultants, Inc., August 2025 (see Appendix C.1).

[52] FEMA's National Flood Hazard Layer Viewer, Accessed November 2025 at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-118.86951402661131,34.16720640476013,-118.82797197338869,34.18495866158275.

[53] Where the Unit W tributary (F08) flows into the Arroyo Canejo (F01). Jurisdictional Delineation and Habitat Assessment for the Arroyo Conejo Utility and Road Maintenance Project, prepared by Rincon Consultants, Inc., August 2025 (see Appendix C.1).

[54] Thousand Oaks General Plan 2045, Chapter 10, Safety Element, Figure 10.4 FEMA Flood Hazard Zones and Figure 10.5 Dam Inundation, November 2023.

[55] FEMA's National Flood Hazard Layer Viewer, Accessed November 2025 at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-118.86951402661131,34.16720640476013,-118.82797197338869,34.18495866158275.

on the coast (approximately 19 miles from the coast) and no lakes or reservoirs are located in the Project vicinity [Bard Lake is located approximately seven (7) miles to the northeast]. The Project consists of infrastructure improvements along an existing access road used for wastewater system maintenance. No new habitable structures or long-term uses would be introduced, and construction activities are limited, short-term, and within a previously disturbed area. Although a portion of the site lies within a flood hazard zone, the nature and design of the proposed improvements do not introduce pollutants that would be at risk of mobilization during a flood or inundation event. Therefore, the Project would result in a less than significant impact related to pollutant release from flooding, tsunami, or seiche events. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

e. A project may have a significant impact if it conflicted with or obstructed implementation of a water quality control plan or sustainable groundwater management plan.

Less than Significant Impact. As described by the General Plan 2045 Draft EIR,[56] the City overlies the Conejo Basin and Thousand Oaks Area Basin, both of which are classified as a Very Low Priority basin by the California Department of Water Resources. The Sustainable Groundwater Management Act (SGMA) requires local agencies to form groundwater sustainability agencies to manage groundwater resources in High and Medium Priority basins. Accordingly, the Conejo Basin and Thousand Oaks Area Basin, including the Project site, are not subject to a sustainable groundwater management plan. Therefore, the Project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

The Project site is located in the jurisdiction of the Los Angeles RWQCB, whose Basin Plan functions as a master water quality control planning document. This plan outlines beneficial uses, water quality objectives, and programs of implementation to protect regional water quality. As previously discussed, the Project would implement appropriate BMPs during construction in compliance with the Basin Plan and the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures (See Section III.c, Air Quality). Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan groundwater sustainability plan, and impacts would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

[56] Thousand Oaks, 2045 General Plan Update Draft EIR, November 2023.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would be sufficiently large or otherwise configured in such a way as to create a physical barrier within an established community.

No Impact. The Project site is located along the Box Canyon access road, approximately 200 feet northwest of Calle Las Trancas and Calle Pecos, and contains existing PWD wastewater infrastructure, including an eight (8) - inch pipeline and maintenance access structures. The site lies within the Conejo Canyons area, a largely undeveloped region of approximately 3,641 acres characterized by steep canyons, plateaus, and riparian corridors. Specifically, the Project is situated within the Arroyo Conejo area, defined by natural canyon features shaped by historical creek erosion. Given the Project's remote location, lack of surrounding development, and its role in maintaining existing infrastructure, it would not create any physical barriers or otherwise divide an established community. Therefore, the Project would result in no impacts related to the division of a community. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project causes a significant environmental impact due to an inconsistency with applicable land use plans, policies or regulations that are adopted for the purpose of avoiding or mitigating an environmental effect.

No Impact. The Project site includes an existing unimproved access road and associated wastewater infrastructure and is surrounded by open space and low-density residential development. The area is zoned Open Space (O-S)[57] and has a General Plan land use designation of Open Space.[58] The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. All work would be temporary and short-term in duration. Construction within the Project area would utilize power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools for vegetation clearing and access preparation. The Project does not include grading, construction of habitable or vertical structures, or permanent expansion of the disturbance footprint.

The Project has been designed to avoid unnecessary impacts to surrounding natural resources and includes BMPs to protect water quality and prevent erosion (See Section III.c, Air Quality). As such, the Project

[57] Thousand Oaks Public Map Browser, Accessed October 2025 at: https://gis.toaks.gov/portal/apps/experiencebuilder/experience/?id=09b08b5afd1241288e2f303726a125b2.
[58] Thousand Oaks General Plan 2045, Chapter 4, Land Use, adopted December 5, 2023.

would not conflict with General Plan 2045 goals and policies related to stormwater management, erosion control, or watershed protection.

The City's General Plan 2045 Conservation and Open Space Element includes policies aimed at protecting biological resources, such as sensitive habitats, special-status species, wildlife corridors, and riparian areas. These policies emphasize the avoidance and mitigation of impacts from development and infrastructure improvements, particularly in open space areas. To ensure consistency with these goals, a JDHA was prepared for the Project area, which evaluated potential biological resource impacts. As discussed in Section IV, Biological Resources, the JDHA concluded that potential impacts to sensitive habitats and species can be effectively avoided or minimized through the implementation of Project BMPs and mitigation measures, such as vegetation protection protocols, construction timing restrictions, and adherence to local tree preservation standards. Additionally, the Project would obtain any required permits (e.g., Oak Tree Permit) prior to construction, in compliance with City ordinances.

In addition to the General Plan, the Project has been reviewed for consistency with other applicable local and regional plans, including the City's Tree Preservation Ordinance, Conejo Open Space Conservation Agency (COSCA) Management Plan, and the SCAG RTP/SCS. The Project would not conflict with these plans or regulations, as it is a minor infrastructure upgrade that avoids habitat fragmentation, implements BMPs to protect water quality, and complies with tree preservation requirements. Therefore, the Project would not result in a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impacts would occur and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact Analysis

a-b. A significant impact may occur if a project site is located in an area used or available for extraction of a regionally important mineral resource, or if a project would convert an existing or future regionally important mineral extraction use to another use or would affect access to a site used or available for regionally important mineral resource extraction.

No Impact. According to the Department of Conservation California Geological Survey,[59] the Project site is located within a Mineral Resource Zone (MRZ)-3, which are areas containing known or inferred construction aggregate resources of undetermined mineral resource significance. The Project site is not designated as a locally important mineral resource recovery site as delineated on a local general plan or other land use plan. No mineral resources are known to exist within the Project site, the Project site is not currently used for mineral extraction, and the Project would not result in the loss of availability of known mineral resources or locally important mineral resource recovery site. As such, the Project would result in no impacts associated with the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

[59] California Department of Conservation, California Geological Survey, Mineral Resource Zone Map for Portland Cement Concrete Aggregate in the Western Ventura County and Simi Production-Consumption Regions, Special Report 253, Plate 1, 17/11/2022.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a. A project may result in a significant noise impact by generating a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance.

Less than Significant Impact. The Project would not result in construction of new structures or introduction of persons that would result in a permanent increase in ambient noise levels. However, construction activities would result in a temporary increase in noise levels. The nearest sensitive receptors to construction noise is the low-density residential areas primarily composed of single-family homes, located directly north of the Project site.

The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include the installation of a manhole, culvert and headwall improvements, and concrete paving of approximately 260 linear feet of steep roadway. Construction would involve the use of hand tools, power pruners, hedge trimmers, weed whips, chainsaws, and light-duty equipment such as skip loaders and bobcats for surface preparation and paving. No extensive grading, pile driving, or heavy-duty construction is proposed, and no new buildings or other permanent structures would be constructed. All construction activities would be temporary and are required to comply with the City of Thousand Oaks' construction noise limitations, which restrict construction activity to between 7:00 A.M. and 7:00 P.M.[60] Compliance with these noise limits ensures that noise impacts remain within acceptable levels. Therefore, the Project would not result in substantial temporary or permanent increase in ambient noise levels, and impacts would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant noise impact may occur if a project would expose people to or generate excessive ground-borne vibration or ground-borne noise levels.

[60] City of Thousand Oaks Municipal Code Chapter 11, Section 8-11.01.

No Impact. The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. All work would be temporary and short-term in duration. Construction within the Project area would utilize power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools for vegetation clearing and access preparation. Surface scraping for concrete paving would be completed using standard equipment such as skip loaders and bobcats. The Project would not involve the use of pile driving, explosives, or other heavy equipment typically associated with the generation of excessive ground-borne vibration or noise. Therefore, the Project would not expose people to or generate excessive ground-borne vibration or ground-borne noise levels, and no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A project located within two miles of a public airport or public use airport may result in a significant impact if it would expose people residing or working in the project area to excessive noise levels.

No Impact. The Project site is not located within two (2) miles of a public use airport and is not located with an airport land use plan. The closest airport to the Project site is the Hollywood Burbank Airport, which is located approximately 44 miles east of the Project site. No impacts would occur and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would induce substantial unplanned population growth in an area, either directly or indirectly.

No Impact. The City of Thousand Oaks had a population of approximately 122,468 persons in 2025.[61] The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. The Project does not include any new residential, commercial, or public infrastructure development that would support new housing or increase capacity for growth. Therefore, the Project would not directly induce population growth. While the Project may generate a small number of temporary construction jobs, these are expected to be filled by the existing local or regional workforce and would not result in new housing demand or indirect population growth. Accordingly, the Project would not result in any direct or indirect inducement of substantial population growth, and no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project would result in the displacement of existing housing units or people, necessitating the construction of replacement housing elsewhere.

No Impact. The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. The Project would not result in demolition of existing housing. Therefore, the Project would not displace people or housing, resulting in no impacts. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

[61] State of California Department of Finance, Demographics, Estimates E1, Accessed November 2025 at: https://dof.ca.gov/forecasting/demographics/estimates-e1/.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XV. PUBLIC SERVICES.				
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☐	☒
c. Schools?	☐	☐	☐	☒
d. Parks?	☐	☐	☐	☒
e. Other public facilities?	☐	☐	☐	☒

Impact Analysis

a. A project may have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation, or relocation of an existing facility to maintain service, the construction of which could cause significant environmental impacts.

Less than Significant Impact. The Project site is located within the City and is served by the Ventura County Fire Department (CVFD), which consists of approximately 658 employees and 34 fire stations throughout the County and serves approximately 840,000 people.[62] The VCFD provides fire protection, medical aid, rescue, and other services to the County as well.

The VCFD has a goal of a first unit on scene within 8 minutes and 30 seconds for suburban areas 90 percent of the time and first unit on scene in 12 minutes for rural areas 90 percent of the time.[63] The strategy of crew deployment is to spread crews across a community for quick response to keep emergencies small and with positive outcomes, without spreading the crews so far apart that they cannot amass together quickly during a major emergency. Actual VCFD response levels are dependent on type of incident location, weather conditions, existing or potential emergencies, resources available and information provided.

The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Activities include the installation of a new manhole, culvert and headwall upgrades, and concrete paving. Two (2) VCFD stations are located within three (3) driving miles of the Project site. Fire Station 30 is the nearest station, located at 325 West Hillcrest Drive, approximately 2.2 driving miles from the Project site. Station 30 is also the headquarters for Division 3 and Battalion 3. Station 30 is staffed daily by three (3) firefighters and the chief officers, and it is equipped with a fire engine,

62 Ventura County Fire Department, About the VCFD, Accessed November 2025 at: https://fire.venturacounty.gov/about-vcfd/.

63 City of Thousand Oaks, Latigo Hillcrest Project Environmental Impact Report, July 2023.

battalion vehicle, paramedic squad vehicle, and brush engine.[64] The second closest station to the Project site is Fire Station 34, located at 2977 Mountclef Boulevard, approximately 3.1 driving miles from the Project site. The station is staffed with a single engine crew with three (3) firefighters.[65]

The Project site is surrounded by the Arroyo Conejo OSU and is adjacent to low-density residential areas, primarily composed of single-family homes. The area is currently served by the VCFD, and no new residential, commercial, or habitable structures are proposed as part of the Project. The Project involves limited infrastructure improvements, specifically, the installation of a manhole, culvert and headwall upgrades, and paving of an existing access road used for wastewater system maintenance. These improvements would not introduce new population, increase fire risk, or create demand for expanded fire protection services.

Given the Project's proximity to existing VCFD fire stations, which ensures adequate response times, and the capacity of current fire protection personnel and facilities to serve the area, no new or expanded VCFD facilities would be required. Therefore, the Project would not result in the need for new or physically altered fire protection facilities that could cause an environmental impact. Impacts would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A project may have a significant impact if it requires new or expanded police station facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for police protection.

No Impact. The Project site is served by the Ventura County Sheriff's Department (VCSD) for law enforcement and police service. The VCSD East County Police Services and Thousand Oaks Police Department share a 58,000-square-foot facility located at 2101 East Olsen Road, which is located approximately 6.5 driving miles from the Project site. The station is staffed with six (6) full-time patrol cars and six (6) 12-hour cars, which totals 12 cars staffed by 12 officers at heightened hours. The VCSD's average response time in the City is two (2) to three (3) minutes for "priority one," or emergency-related, calls.[66] The Project involves limited infrastructure improvements along an existing unimproved access road used for wastewater system maintenance. It does not include the construction of habitable structures or introduce new residential or commercial land uses. Therefore, the Project would not result in an increased population or generate additional demand for police services. Therefore, the Project would not require additional police protection or result in the need for new or physically altered police facilities, no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A significant impact may occur if a project includes substantial employment or population growth, which could generate a demand for school facilities.

No Impact. The Conejo Valley Unified School District (CVUSD) provides public education facilities within the City. The CVUSD maintains 17 elementary schools, one (1) kindergarten through 8th grade school, four (4) middle schools, three (3) comprehensive high schools, one (1) online-blended school (grades 8 through 12), and one (1) continuation school. In addition, the CVUSD also offers preschool, early childcare, transitional kindergarten, magnet schools, a homeschool program, the Century Academy, and other

64 Ventura County Fire Department, Station 30, Accessed November 2025 at: https://fire.venturacounty.gov/station-30/.
65 Ventura County Fire Department, Station 34, Accessed November 2025 at: https://fire.venturacounty.gov/station-34/.
66 City of Thousand Oaks, Latigo Hillcrest Project Environmental Impact Report, July 2023.

academic alternatives, including adult education opportunities.[67] The Project involves limited infrastructure improvements along an existing unimproved access road used for wastewater system maintenance. It does not include the construction of habitable structures or introduce new residential or commercial land uses. Therefore, the Project would not result in an increased population or generate additional students for CVUSD. As a result, the Project would result in no impacts regarding school facilities, and no mitigation would be required.

Mitigation Measures: No mitigation measures are required.

d. A significant impact may occur if the recreation and park services available could not accommodate a project-related population increase and the proposed project resulted in the construction of new recreation and park facilities that create significant environmental impacts.

No Impact. The Conejo Recreation and Park District (CRPD) provides the City of Thousand Oaks with parks and recreation services. Park facilities within vicinity of the Project site include Conejo Community Park, Conejo Creek North Park, Thousand Oaks Community Park, and Wildwood Regional Park.[68] The Project involves limited infrastructure improvements along an existing unimproved access road used for wastewater system maintenance. It does not include the construction of habitable structures or introduce new residential or commercial land uses. Therefore, the Project would not result in an increased population that would utilize recreation and park services. As a result, the Project would result in no impacts regarding recreation and park facilities, and no mitigation would be required.

Mitigation Measures: No mitigation measures are required.

e. A significant impact may occur if a project would generate a volume of demand on existing library services or other public services that would necessitate the construction of new or physically expanded library facilities or other public facilities, such public roadways.

No Impact. The City has a City-owned library system that is funded by an assessment of homeowners. The main library facility in the City is the Grant R. Brimhill Library, located at 1401 East Janss Road. The library system also includes the Newbury Park Branch Library, located at 2331 Borchard Road. The Grant R. Brimhill Library is located closer to the Project site (located approximately 3.2 driving miles from the Project site) than the Newbury Park Branch Library. The Project involves limited infrastructure improvements along an existing unimproved access road used for wastewater system maintenance. It does not include the construction of habitable structures or introduce new residential or commercial land uses. Therefore, the Project would not result in an increased population that would utilize library services.

Furthermore, the Project proposes no changes to public roads. During construction, equipment and vehicle staging is anticipated to be accommodated primarily on-site. The Project would not necessitate the construction of new or physically expanded public facilities, including public roadways. The Project would result in no impacts related to library services and other public facilities, including public roads. No mitigation would be required.

Mitigation Measures: No mitigation measures are required.

[67] Conejo Valley United School District, About Us, Accessed November 2025 at: https://www.conejousd.org/about-us/about-us-homepage.

[68] Conejo Recreation and Park District, Parks, Accessed November 2025 at: https://www.crpd.org/parks-facilities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Analysis

a-b. A significant impact may occur if a project includes substantial employment or population growth, which would increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or require the construction or expansion of recreational facilities that may have an adverse physical effect on the environment.

No Impact. In 1962, two (2) years before the incorporation of the City, the CRPD was established as a special district to create local parks and recreation programs for the growing population of the Conejo Valley, including areas now incorporated into the City.[69] Today, the CRPD provides park and recreational services throughout a 65-square-mile service area that generally corresponds with the City's Planning Area (some residents in the Sphere of Influence area along Potrero Road are not served by the CRPD). The CRPD provides numerous recreational facilities within the area for a variety of active and passive recreation opportunities.[70] Park facilities within vicinity of the Project site include Conejo Community Park, Conejo Creek North Park, Thousand Oaks Community Park, and Wildwood Regional Park.[71]

The Project involves limited infrastructure improvements along an existing unimproved access road used for wastewater system maintenance. It does not involve construction of habitable structures, nor does it propose new residential or commercial land uses that would induce population growth or increase demand for parks or recreational services. As such, the Project would not contribute to the physical deterioration of existing recreational facilities or necessitate the construction or expansion of recreational amenities. No impacts to recreation facilities would occur, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

[69] Conejo Recreation and Park District, Administration, Accessed November 2025 at: https://www.crpd.org/about.
[70] Thousand Oaks, General Plan 2045, November 2023.
[71] Conejo Recreation and Park District, Parks, Accessed November 2025 at: https://www.crpd.org/parks-facilities.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

No Impact. The Project site contains PWD infrastructure [eight (8) - inch diameter wastewater piping and maintenance access structures] located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. The General Plan land use designation for the Project site is Open Space, and the City zoning for the Project site is O-S. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. There are no bus stops or other public transit facilities in the vicinity of the Project site.

The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance, including installation of a new manhole, culvert and headwall improvements, and limited concrete paving along the access road. Construction activities would be temporary and short in duration and would primarily involve vegetation clearing using hand tools and light equipment (e.g., skip loaders, bobcats) for surface scraping and site preparation. The Project does not involve major grading, the construction of buildings, or the introduction of new uses that would increase travel demand.

As the work is confined to an existing maintenance access road and does not alter the design, function, or capacity of public roadways or transit infrastructure, the Project would not conflict with any City or County circulation plans, including the General Plan Circulation Element, Thousand Oaks Active Transportation Plan, or other applicable policies related to transit, roadway, bicycle, or pedestrian systems. Therefore, the Project would result in no impacts with respect to circulation-related programs or policies. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project would conflict or be inconsistent with the CEQA Guidelines, Section 15064.3, subdivision (b).

Less than Significant Impact. On September 27, 2013, Governor Jerry Brown signed SB 743, which went into effect in January 2014. SB 743 directed the Governor's Office of Planning and Research to develop revisions to the CEQA Guidelines by July 1, 2014 to establish new criteria for determining the significance of transportation impacts and define alternative metrics for traffic levels of service (LOS). This started a process that changed transportation impact analysis under CEQA. These changes include elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts for land use projects and plans in California. The updated text of the new CEQA Guidelines Section 15064.3 relates to the determination of the significance of transportation impacts, alternatives, and mitigation measures. Specifically, CEQA Guidelines Section 15064.3 establishes VMT as the most appropriate measure of transportation impacts. In November 2018, the California Natural Resources Agency finalized the updates to the CEQA Guidelines, and the updated guidelines became effective on December 28, 2018.

Accordingly, the City's Administrative Policy and Procedure No. 12-14.009 on VMT Analysis for CEQA Compliance (Adopted July 1, 2020) states that a project will be determined to have a less than significant impact, and no further transportation impact analysis will be required, if it meets the following screening criteria: if it generates less than 100 P.M. peak hour trips based on the ITE 10th Edition Trip Generation Manual or most current edition published at the time the Project application is submitted (now the 12th edition).

The Project involves infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Key activities include installation of a new manhole, culvert and headwall improvements, and concrete paving. These improvements are intended to enhance access and ensure continued maintenance of existing wastewater infrastructure.

Construction would be temporary and short in duration, occurring over approximately six (6) months beginning in mid-2026. An estimated eight (8) - person crew would conduct work during weekday hours. As the Project does not involve new habitable structures, changes to land use, or activities that would generate long-term operational trips, it would not result in a permanent increase in vehicle trips or associated VMT. Any increase in vehicle trips during construction would be temporary, minimal, and limited to construction-related vehicle and equipment access. Therefore, the Project would not conflict with or be inconsistent with the City's adopted VMT thresholds under CEQA Guidelines Section 15064.3(b) and would result in a less-than-significant impact. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A significant impact may occur if a project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

No Impact. The Project involves infrastructure improvements along an existing unimproved access road used exclusively for wastewater system maintenance. Activities include installation of a new manhole, culvert and headwall improvements, and limited concrete paving to support maintenance vehicle access. These improvements are designed to enhance site accessibility and safety for routine maintenance operations and do not introduce new geometric design features (such as sharp curves or dangerous intersections) or uses that are incompatible with the site's function. The Project does not involve changes to public roadways or the introduction of land uses that would conflict with existing traffic patterns. As a result, the Project would not substantially increase hazards due to design features or incompatible uses, and there would be no impacts. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A significant impact may occur if a project would result in inadequate emergency access.

No Impact. The Project consists of infrastructure improvements along an existing, unimproved access road used for wastewater system maintenance. Proposed activities include installation of a new manhole, culvert and headwall upgrades, and limited concrete paving to improve long-term site access. Although Camino Dos Rios, located approximately 0.4 driving miles south of the Project site, is identified as an emergency evacuation route in the City's emergency planning documents, the Project would not obstruct or modify this or any other emergency or evacuation route. All work would be limited to a non-public maintenance access road and would not occur within public streets or alter existing circulation patterns.[72] Construction activities would be temporary and short-term and would not interfere with emergency ingress or egress for nearby properties or the broader area. Therefore, the Project would not result in inadequate emergency access, and no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

[72] Thousand Oaks General Plan 2045, Appendix B: Emergency Evacuation Analysis, November 2023.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☒	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision "c" of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision "c" of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Impact Analysis

This analysis is based on a Cultural Resources Phase I Assessment[73] (provided in Appendix D) prepared by Envicom for the Project, which included record searches by the SCCIC and NAHC, a review of historic maps and aerial images, and a pedestrian survey of the Project site. The record searches examined the Project site, plus a 0.25-mile Study Area around the Project site to account for cultural resources that may be immediately adjacent to the Project site and to provide regional context. Refer to Section V, Cultural Resources, for additional detail.

a. and b. A significant impact may occur if a project would cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 and that is listed, or eligible for listing, in the California Register of Historical Resources, or in a local register of historical resources; or that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant.

Potentially Significant Unless Mitigation Incorporated. As discussed in Section V, Cultural Resources, the results of the SCCIC and NAHC database record searches were negative for cultural resources within the Project site; however, the Project site is located within a region known to be sensitive for prehistoric Native American cultural resources. The historic maps and aerial photograph databases were also negative

[73] Envicom Corporation, Cultural Resources Phase I Assessment for Box Canyon Manhole & Road Improvement Project, November 2025 (Appendix D of this document).

for older historic cultural resources being located within the Project site. Additionally, the pedestrian survey was negative for cultural resources, including tribal cultural resources.

Although the SCCIC and NAHC record searches did not yield positive results for cultural resources at the Project site or the adjacent surroundings, the NAHC provided a list of tribes that may have knowledge of tribal cultural resources in the surrounding area. Envicom did not contact the tribes on the NAHC list, as consultation with tribal representatives is the responsibility of the Lead Agency under AB 52. As applicable, the NAHC letter and this IS/MND shall be made a part of the Native American AB 52 consultation record.

On December 11, 2025, the City PWD sent letters to the Native American tribes that are culturally affiliated with the Project area, notifying the tribes of the Project, as required under AB 52. No response/request for consultation was received from on the Project. The City PWD closed consultation on February 17, 2026. The relevant consultation correspondences are provided in Appendix B, Tribal Consultation.

No tribal cultural resources have been identified within the Project site or immediately surrounding the Project site. Nevertheless, the Mitigation Monitoring and Reporting Program of the City 2045 General Plan Update Final EIR includes a mitigation measure that addresses the unanticipated discovery of tribal cultural resources. As the Project involves ground disturbance and the potential to encounter previously undiscovered buried cultural resources of Native American origin, Mitigation Measure **MM-TCR-1** is required. Project impacts to tribal cultural resources would be less than significant following implementation of Mitigation Measure **MM-TCR-1**.

Mitigation Measures

MM-TCR-1: **Suspend Work Around Tribal Cultural Resources Identified During Construction.** In the event that cultural resources of Native American origin are identified during ground disturbance during construction of a project implemented under the City of Thousand Oaks 2045 General Plan Update, all earth-disturbing work in the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and, thus, significant under the California Environmental Quality Act, a mitigation plan shall be prepared and implemented in accordance with State guidelines and in consultation with local Native American group(s). The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, the plan shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c. Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Impact Analysis

a. A significant impact may occur if a project would require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects.

No Impact. The Project site is located within the service area of several public utilities. The City is supplied with potable water through four (4) purveyors, which include the City of Thousand Oaks Municipal Service Center, California American Water Company-Ventura District, California Water Service Company, and Camrosa Water District.[74] The California American Water Company serves the Project site. Wastewater from the site is collected by the City and conveyed to the Hill Canyon Treatment Plant. Because the area is already developed with surrounding residential uses, existing water and wastewater infrastructure is already in place near the Project site.

The Project site contains PWD infrastructure [eight (8) - inch diameter wastewater piping and maintenance access structures] located along the Box Canyon access road. The Project consists of several key construction

[74] City of Thousand Oaks, Water Purveyors in the City of Thousand Oaks Map, November 9, 2009.

activities designed to improve access and upgrade wastewater infrastructure. These activities include the installation of new stormwater infrastructure, such as culverts and headwalls; the replacement of ten (10) feet of eight (8) - inch diameter existing wastewater pipeline; the concrete paving of an existing unpaved access road; and the installation of a new manhole to enhance system accessibility. In total, the Project includes ten (10) specific infrastructure components, each involving the installation, rehabilitation, or replacement of existing sewer infrastructure and associated roadway improvements. These upgrades would occur entirely within the existing access corridor and would not require the extension of utility services beyond what currently exists.

Electricity and natural gas in the region are provided by Southern California Edison and Southern California Gas Company, respectively. However, the Project site does not currently have electrical service, and no connection is proposed or required for construction, which would use small-scale, non-continuous equipment. The Project would also not connect to any telecommunications infrastructure, nor require new or expanded service.

As the Project involves minor upgrades to existing infrastructure, it would not result in the construction of new or expanded water, wastewater treatment, stormwater drainage, electrical, natural gas, or telecommunications facilities that could cause significant environmental effects. Therefore, no impacts would occur, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A significant impact may occur if a project did not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

No Impact. In the City, retailers include the City of Thousand Oaks Municipal Service Center, California American Water Company, California Water Service Company, and Camrosa Water District. As previously stated, the California American Water Company is the retailer of water to the Project site. These purveyors receive water on a wholesale basis from the Calleguas Municipal Water District (CMWD), which obtains its supply primarily from the Metropolitan Water District of Southern California (MWD). MWD sources its water from the State Water Project and the Colorado River Aqueduct, while CMWD receives water exclusively from the State Water Project. Treated water is stored locally at Lake Bard (10,000 acre-feet capacity) and the Las Posas Aquifer Storage and Recovery Well Field.[75]

The 2020 Urban Water Management Plan (UWMP) provides an assessment of water availability, supply, and demand for the California American Water Company until 2045 for dry and normal years. The UWMP projects that the water supply for 2025 normal year, dry year, and multiple dry years will be 18,559, 18,586, and 18,559 AF, respectively.[76] The Project consists of infrastructure upgrades to an existing wastewater access road, including culvert and manhole installation, limited pipeline replacement, and paving. The Project does not include new development, habitable structures, or increased population, and therefore would not result in any increase in water demand. As the Project would not require water service, it would not place any additional burden on the City's water supplies, even during dry years. Therefore, the Project would result in no impacts related to water supply availability. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

[75] California American Water Company, 2020 Urban Water Management Plan, June 2021.
[76] California American Water Company, 2020 Urban Water Management Plan, June 2021.

c. A significant impact may occur if a project would result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve a project's projected demand in addition to the provider's existing commitments.

No Impact. The City currently serves the wastewater collection needs of the Project area, and all wastewater is conveyed to the Hill Canyon Treatment Plant. The facility currently treats an average of eight million gallons per day (mgd) of wastewater, with the capacity to treat 14 mgd, leaving approximately six (6) mgd of available capacity.[77] The Project consists of infrastructure upgrades to an existing wastewater access road, including culvert and manhole installation, limited pipeline replacement, and paving. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. The Project does not include new development, habitable structures, or land uses that would generate wastewater. As such, it would not increase demand for wastewater treatment services or require any expansion of capacity at the Hill Canyon Treatment Plant. Therefore, the Project would result in no impacts related to wastewater treatment capacity. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A significant impact may occur if a project were to increase solid waste generation to such a degree that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste.

Less than Significant Impact. Solid waste generated within the City is recycled, reused, and transformed at waste-to-energy facilities or disposed of at landfills. The primary landfill used for waste generated within the City is the Calabasas Landfill,[78] which serves the Project area. The Calabasas Landfill has a maximum permitted throughput of 3,500 tons per day and is anticipated to reach maximum final capacity in the year 2029.[79]

The Project consists of infrastructure upgrades to an existing wastewater access road, including culvert and manhole installation, limited pipeline replacement, and paving. Solid waste generated during construction would be limited and primarily consist of vegetation, sediment, and construction debris. Some vegetative material may be transported to an offsite facility for chipping or decomposition, while the remainder would be disposed of at the Calabasas Landfill. Given the small scale and short duration of the Project and the remaining capacity at the Calabasas Landfill, there would be adequate capacity to accommodate the limited waste generated. The Project would not conflict with applicable solid waste policies or objectives, nor would it result in a significant burden on landfill infrastructure. Therefore, the Project would result in a less-than-significant impact related to solid waste generation and landfill capacity. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

e. A significant impact may occur if a project would generate solid waste not disposed of in accordance with applicable regulations.

No Impact. The Project involves minor infrastructure improvements along an existing wastewater maintenance access road in the Box Canyon area. Solid waste generated during construction would be

[77] City of Thousand Oaks, Hill Canyon Treatment Plant Master Plan, March 2020.
[78] City of Thousand Oaks, Solid Waste Information, Accessed November 2025 at: https://toaks.gov/trash.
[79] Cal Recycle, SWIS Facility/Site Activity Details Calabasas Landfill (19-AA-0056), Accessed November 2025 at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3579?siteID=1041.

minimal and primarily consist of vegetation, sediment, and limited construction debris. The Project would comply with all applicable solid waste regulations during construction, including CALGreen Code requirements for construction waste reduction and recycling and AB 939, which mandates diversion of solid waste from landfills through source reduction, recycling, and composting. No operational solid waste generation is anticipated, as the Project does not involve new buildings or land uses. Therefore, the Project would not conflict with any federal, State, or local solid waste regulations, and no impacts would occur. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or land classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Impact Analysis

The City is located within Ventura County, situated within the Conejo Valley, a high plateau surrounded by hills. The City covers an area of approximately 55 square miles, with the bulk of development located within the floor of the valley. The valley is roughly nine (9) miles inland from the Pacific Ocean, bordered by the Conejo Hills to the west/northwest, the Santa Monica Mountains to the south, and the Simi Hills to the north and east. Elevations in the valley range from 600 to 900 feet above average mean sea level (AMSL), with nearby peaks rising up to an additional 1,000 feet. Wildfires are of particular concern in areas designated as a VHFHSZ in Southern California. As shown on the City's General Plan Safety Element[80] and CalFire Maps,[81] the Project site is located within land classified as a VHFHSZ.

The Wildland-Urban Interface (WUI) is the transition zone between human development and natural, undeveloped land. It is the area where structures intermingle with wildland vegetation or are in the vicinity of large areas of wildland vegetation. The WUI is where the majority of wildfire building losses occur, because it creates a condition where fire can move easily between structural and vegetative fuel. California addresses the WUI issue through identification and regulation of Fire Hazard Severity Zones (FHSZs). Although the CBC defines the WUI as any area within a FHSZ, many areas in the State within a FHSZ would not be considered WUI, according to the latest research on the topic.[82] This includes the Project site

[80] City of Thousand Oaks, General Plan 2045, Figure 10.6: Fire Hazard Severity Zones, November 2023.

[81] CalFire, Fire Hazard Severity Zones, Find Your Fire hazard Severity Zone (FHSZ), Accessed November 2025 at: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones.

[82] University of Wisconsin, Madison SILVIS LAB, Wildland-Urban Interface Change 1990-2020, Accessed November 2025, at: http://silvis.forest.wisc.edu/data/wui-change/.

location, which is predominantly located within the Arroyo Conejo OSU, but the site is just south of a low-density residential area, primarily composed of single-family homes. It is the larger open space area located to the south of these areas that brings the Project site into a VHFHSZ.

The City located within the jurisdiction of the Ventura County Fire Prevention District (VCFPD), and fire prevention and suppression services are provided by the VCFD. As described in response to Question XV.a., Public Services, the VCFD has approximately 658 employees and 34 fire stations throughout Ventura County.[83] Battalion 3 commands the Conejo Valley area, and its headquarters is located at Fire Station 30 at 325 West Hillcrest Drive in the City. The Battalion Chief commands the eight fire stations located in the Conejo Valley that serve the City. The battalion headquarters, which is the nearest fire station, are roughly 2.2 driving miles from the Project site.

The VCFD has a goal of a first unit on scene within 8 minutes and 30 seconds for suburban areas 90 percent of the time and first unit on scene in 12 minutes for rural areas 90 percent of the time.[84] The strategy of crew deployment is to spread crews across a community for quick response to keep emergencies small and with positive outcomes, without spreading the crews so far apart that they cannot amass together quickly during a major emergency. Actual VCFD response levels are dependent on type of incident location, weather conditions, existing or potential emergencies, resources available and information provided.

Wildfires near a VCFD station are first addressed by that station. Response levels are based on type of incident, location, weather conditions, existing or potential emergencies, resources available and the information the VCFD is working with. Staffing levels and the staffing of specialized resources are adjusted according to existing or potential conditions. The closest available resource, plus the closest available resources of the type needed, respond to incidents. The response team to a wildland fire is five (5) Engines, one (1) Battalion Chief, and one (1) water tender.[85] Once on the site, personnel determine the needs of the incident and responses are adjusted accordingly. In extraordinary wildfire circumstances mutual aid and automatic aid agreements are key for a rapid response, and this is true for all firefighting operations throughout the State.

Camino Dos Rios, located approximately 0.4 driving miles south of the Project site, runs west to east and provides direct access to Lynn Road and the Ventura Freeway (Highway 101). This route would serve as the primary emergency access to the Project site. According to the City's Safety Element, Camino Dos Rios, Lynn Road, and Highway 101 are all designated evacuation routes.

State Regulations

The Governor's Office of Emergency Services (OES) oversees and coordinates emergency response preparedness of other State agencies and produces the California State Hazard Mitigation Plan. The 2023 State Hazard Mitigation Plan represents the State's primary hazard mitigation guidance document that includes discussions on wildfire and structural fire hazards and provides mitigations for effective wildfire suppression planning. The State Hazard Mitigation Plan also includes goals and objectives related to reducing risks associated with wildfire. The OES also regulates the Standardized Emergency Management System (SEMS), which creates the statewide framework within which the State, counties, and local governments coordinate responses during emergency events.

[83] Ventura County Fire Department, About the VCFD, Accessed November 2025 at: https://fire.venturacounty.gov/about-vcfd/.

[84] City of Thousand Oaks, Latigo Hillcrest Project Environmental Impact Report, July 2023.

[85] Ventura County Fire Department, Emergency Response, Accessed November 2025 at: https://vcfd.org/services/operations/emergency-response/.

CalFire is the California Department of Forestry and Fire Protection. It is dedicated to the fire protection and stewardship of over 31 million acres of the State's wildlands. Sections 51175 – 51189 of the California Government Code define CalFire's responsibility for identifying FHSZs throughout California. The FHSZs on CalFire maps are based on fuel loading, slope, fire history, weather, and other factors, as directed by the California PRC, Sections 4201 – 4204, and the California Government Code, Sections 51175 – 51189. FHSZs are ranked from Moderate to Very High and are designated within a Federal Responsibility Area, State Responsibility Area (SRA), or Local Responsibility Area (LRA), which indicate the jurisdiction as belonging to a federal agency, CalFire, or local agency, respectively. The agency that performs firefighting activities can be different from the responsible agency, if there is a contract agreement in place. Local agencies have the responsibility to designate, by ordinance, VHFHSZ within their jurisdictions, per Sections 51178.5 and 51179 of the Government Code. The Project site is located within a VHFHSZ, as stated above, as well as an LRA.

The Board of Forestry and Fire Protection (Board) is a Governor-appointed body within CalFire. It is responsible for developing the general forest policy of the State, determining guidance policies for CalFire, and represents the State's interest in federal forestland within California. The Board is charged with developing policy to protect all wildland forest resources in California not under federal jurisdiction. The Board is also responsible for reviewing the safety element of cities or counties that contain VHFHSZs. The Board responds with findings and recommended changes regarding policies and land use in VHFHSZs that will protect life, property, and natural resources from unreasonable risks associated with wildfires, and the methods and strategies for wildfire risk reduction and prevention within VHFHSZs.

a. A project may have a significant impact if it would substantially impair an adopted emergency response plan or emergency evacuation plan.

Less than Significant Impact. The Project site is located within an LRA and VHFHSZ. However, the Project does not involve the development of new residential, commercial, or habitable structures and would not introduce new population or permanent uses. The proposed improvements are limited to wastewater infrastructure upgrades, including installation of a manhole, culvert and headwall enhancements, and paving of an existing maintenance access road. These activities are intended to support routine maintenance operations and do not alter or obstruct emergency access routes. While the site is in a fire-prone area, the Project would not increase fire risk or create new demand for fire protection services. In addition, it would not interfere with or impede implementation of the City's adopted emergency response or evacuation plans. Therefore, the Project would result in a less-than-significant impact related to emergency planning. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

b. A project may have a significant impact if, due to slope, prevailing winds, and other factors, the project would exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire.

Less than Significant Impact. Although the Project is located within a VHFHSZ, it consists solely of infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance. Construction activities would be short-term in nature and limited to non-habitable improvements, such as installation of a manhole, culvert and headwall improvements, and concrete paving. The Project does not include any new buildings or structures intended for human occupancy.

Construction activities would be short-term and limited in scope, primarily involving hand tools, small, mechanized equipment, and rubber-tracked vehicles, which pose a low ignition risk. All work would be conducted in compliance with standard fire safety protocols and vegetation management practices, further

minimizing potential wildfire ignition sources. The Project would not introduce new ignition risks, permanent populations, or land uses that would exacerbate wildfire risk or increase exposure to wildfire-related air pollutants. In addition, existing VCFD fire stations in the Project vicinity would serve the Project site, as they do in the existing condition. VCFD Fire Station No. 30, currently located at 325 West Hillcrest Drive, is nearest to the Project site, located approximately 2.2 driving miles away. Based on the limited scope of work, the absence of habitable structures, and adherence to fire-safe construction practices, the Project would not exacerbate wildfire risks. Therefore, impacts would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A project may have a significant impact if it would require the installation of associated infrastructure that may exacerbate fire risk or may result in temporary or ongoing impacts to the environment.

Less than Significant Impact. The Project consists of infrastructure upgrades along an existing unimproved access road used for wastewater system maintenance in the Box Canyon area. Key improvements include the installation of a new manhole, culvert and headwall enhancements, and concrete paving to support ongoing utility access. These improvements are limited in scope, occur entirely within a previously disturbed corridor, and do not involve new utility extensions, fuel breaks, or infrastructure that would significantly alter fire risk conditions. Construction activities would comply with all applicable State and City fire safety regulations, including those related to equipment use, vegetation management, and work within fire-prone areas. As such, the Project would not exacerbate wildfire risk or result in significant temporary or ongoing environmental impacts from the installation or maintenance of infrastructure. Impacts would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

d. A project may have a significant impact if it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Less than Significant Impact. According to the Thousand Oaks General Plan Safety Element, the Project site is located within a landslide risk zone.[86] The National Flood Hazard Layer designates the western end of the Project site, where the manhole is to be installed, as being located in Zone A, which is a high-risk flood area with a one percent annual chance of flooding, also known as the 100-year flood.[87] The Project involves limited infrastructure improvements within a previously disturbed maintenance access corridor and does not include any buildings, habitable structures, or permanent occupancy. Improvements consist of culvert and headwall upgrades, manhole installation, and access road paving, which are intended to improve drainage and infrastructure resilience. These activities would not alter existing topography in a way that would increase landslide risk or significantly change drainage patterns that could lead to flooding or post-fire slope instability. Given the nature and scope of the work, the Project would not expose people or structures to significant risks related to flooding, landslides, or runoff-induced hazards. Therefore, impacts would be less than significant, and no mitigation is required.

Mitigation Measures: No mitigation measures are required.

[86] Thousand Oaks General Plan 2045, Chapter 10, Safety Element, Figure 10.2, adopted December 5, 2023.

[87] FEMA's National Flood Hazard Layer Viewer, Accessed November 2025 at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-118.86951402661131,34.16720640476013,-118.82797197338869,34.18495866158275.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☐	☒	☐
c. Does the project have environmental effects that cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact Analysis

a. A significant impact may occur if a project would significantly degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Potentially Significant Unless Mitigation Incorporated. As discussed in Sections IV, Biological Resources; V, Cultural Resources; VII, Geology and Soils, and XVIII, Tribal Cultural Resources Project impacts to these resources would be less than significant following the implementation of mitigation measures that address impacts to biological resources, archaeological resources, paleontological resources, and tribal cultural resources. Therefore, the Project would not significantly degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. The Project impacts to biological, archaeological, paleontological, and tribal cultural resources would be less than significant following implementation of Mitigation Measures **MM-BIO-1** through **MM-BIO-7**, **MM-CUL-1**, **MM-GEO-1**, and **MM-TCR-1**.

Mitigation Measures

The Project would be required to implement Mitigation Measures **MM-BIO-1** through **MM-BIO-7**, **MM-CUL-1**, **MM-GEO-1**, and **MM-TCR-1** to reduce impacts to biological, archaeological, paleontological, and tribal cultural resources to a less than significant level.

b. A significant impact may occur if the impacts of a project, in conjunction with the impacts of related projects, would result in impacts that are less than significant when viewed separately but significant when viewed together.

Less than Significant Impact. As detailed in the analyses provided throughout Section 4.0, Initial Study/Mitigated Negative Declaration, the Project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated for all environmental issues. Where appropriate, detailed cumulative impacts are addressed, as for air quality (Section III), greenhouse gas emissions (Section VIII), and noise (Section XIII). As discussed throughout this document, through required regulatory compliance, none of the Project's impacts would be significant and unavoidable, including cumulative impacts. The Project's contribution to cumulative impacts would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

c. A significant impact may occur if a project has the potential to result in significant impacts to humans either directly or indirectly.

Less than Significant Impact. Impacts to human beings are generally related to air quality, hazards and hazardous materials, excessive noise or vibration, transportation/circulation safety, and wildfire. As detailed in the analyses provided throughout Section 4.0, Initial Study/Mitigated Negative Declaration, the Project would not result, either directly or indirectly, in substantial adverse effects related to these hazards. As all Projects impacts to human beings would be less than significant through required regulatory compliance; impacts to human beings would be less than significant. No mitigation is required.

Mitigation Measures: No mitigation measures are required.

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6.0 PREPARERS

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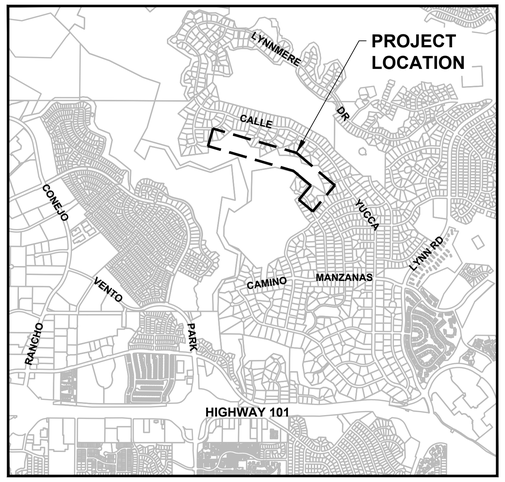
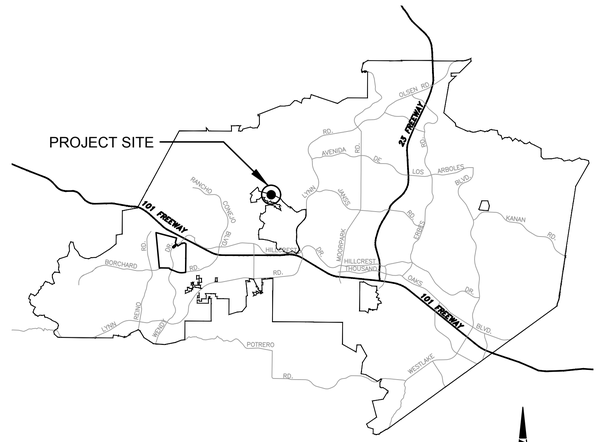
APPENDIX A

Entitlement Package



LOCATION
SCALE: N.T.S.

City of Thousand Oaks



VICINITY MAP
SCALE: N.T.S.

PUBLIC UTILITIES WITHIN CITY OF THOUSAND OAKS

WATER:
California American Water Company
2439 W. Hillcrest Drive
Newbury Park, Ca. 91320
Thomas Boyle
805-498-1266, ext. 2802

Calleguas Municipal Water District
2100 East Olsen Road
Thousand Oaks, Ca. 91360
Kristine McCaffrey
805-579-7173

WASTEWATER:
City of Thousand Oaks
2100 East Thousand Oaks Boulevard
Thousand Oaks, Ca. 91362
Patrick McCulloch
805-376-5060

GAS:
Southern California Gas Company
9400 Oakdale Ave
Chatsworth, CA 91311
Kevin Edwards
818-701-3322

TELEPHONE:
Frontier
201 Flynn Road
Camarillo, Ca. 93010
Thomas Pearson
805-445-9116

CABLE TV:
Time Warner
2525 Knoll Drive
Ventura, Ca. 93003
Patricia Robertson
805-732-8160

Verizon/Frontier
Jon Trelatsky
201 Flynn Road
Camarillo, CA 93012
805-388-2266

ELECTRICITY:
Southern California Edison Company
3589 Foothill Drive
Thousand Oaks, Ca. 91361
Bob Migliore
805-494-7013

NOTICE TO CONTRACTOR:
CONTRACTOR SHALL POSSESS A VALID CLASS "A" GENERAL ENGINEERING LICENSE

NOTICE TO CONTRACTOR:
IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CALL THE USA UNDERGROUND ALERT FOR LOCATION OF EXISTING UNDERGROUND UTILITIES NO LESS THAN TWO DAYS NOR MORE THAN SEVEN DAYS PRIOR TO CONSTRUCTION.
1-800-422-4133
THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY DAMAGE DONE TO EXISTING UTILITIES DURING CONSTRUCTION

NOTICE TO CONTRACTOR:
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF PRECAST ITEMS.

BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

CI - 5684
SPECIFICATION NO. 2022 / 2023-25

CITY COUNCIL
MIKEY TAYLOR, MAYOR
BOB ENGLER, MAYOR PRO TEM
AL ADAM DAVID NEWMAN C. TIE GUTIERREZ

CITY MANAGER
ANDREW POWERS

PUBLIC WORKS DIRECTOR
NADER HEYDARI, PE

CITY ENGINEER
H. TED GERBER, PE

SHEET INDEX		
SHT. NO.	DWG. NO.	DESCRIPTION
1	G-01	COVER SHEET
2	G-02	KEY MAP, COORDINATES LIST AND ABBREVIATIONS
3	G-03	GENERAL NOTES AND WASTEWATER GENERAL NOTES
4	C-01	STA 1+00 TO STA 13+00
5	C-02	STA 13+00 TO STA 25+00
6	C-03	STA 25+00 TO STA 32+13
7	C-04	DETAIL SHEET
8	C-05	DETAIL SHEET

CERTIFICATE OF "RECORD DRAWINGS"

I _____ HEREBY CERTIFY, BASED ON MY FIELD OBSERVATION OR INFORMATION PROVIDED BY THE OWNER AND GENERAL CONTRACTORS THAT THE WORK ON SHEET NO'S _____ THROUGH _____ MARKED AS "RECORD DRAWING" HAS BEEN CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THESE PLANS, SPECIFICATIONS, REVISIONS, CHANGE ORDERS, AND FIELD CHANGES.

REGISTERED CIVIL ENGINEER (SIGNATURE) | RCE NUMBER | EXP. DATE

DATE

G-01

811 Know what's below. Call before you dig.
CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE
		-		-		

DATE _____ DESIGNED
DATE _____ DRAFTED BY
DATE _____ CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

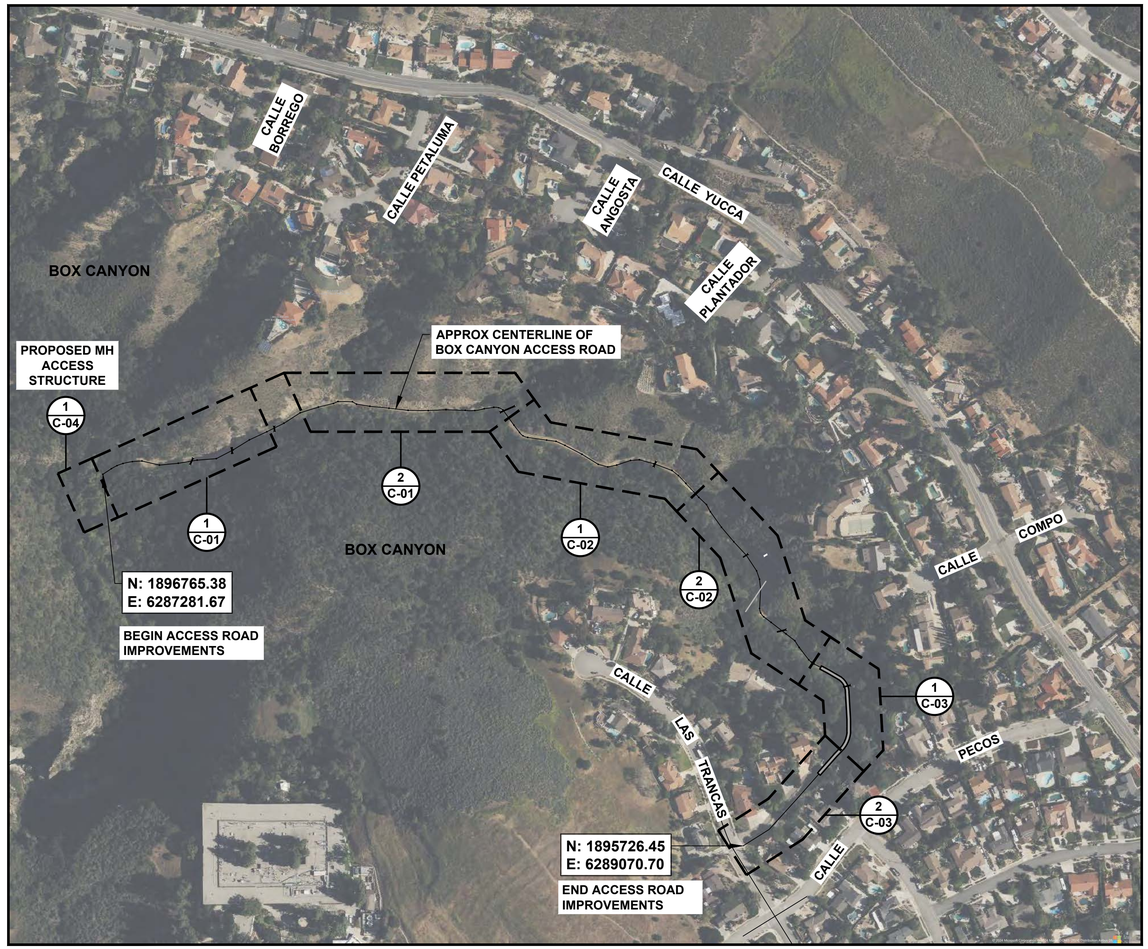
PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800

REGISTERED ENGINEER DATE

CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER DATE
REVIEWED BY: ENGINEERING DIVISION MANAGER DATE
APPROVED BY: NADER HEYDARI, CITY ENGINEER DATE

CITY OF THOUSAND OAKS
BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION
COVER SHEET
CITY OF THOUSAND OAKS DWG. 23-005A
SHEET 1 OF 8

DWG: P:\projects\vnclst8-14 hclp project management\design\data\vnclo mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BRR BIG.dwg USER: ASmith
DATE: JU 19, 2021 12:50pm XREFS:



KEY MAP 1 -
SCALE: N.T.S.

COORDINATES OF SURVEY CONTROL POINTS :

Point No.	Northing(Y)	Easting(X)	Elev(Z)
50	1895708.941	6289055.563	721.77
51	1896068.118	6288893.160	698.27
54	1896786.894	6287267.649	373.53
55	1896795.934	6287438.423	392.23
56	1896973.849	6287955.194	465.50
57	1895803.222	6289172.721	708.79
59	1895939.561	6289294.676	688.07
60	1896032.977	6289362.236	660.44
61	1896184.661	6289361.693	636.78
63	1896258.623	6289241.276	610.87
64	1896404.949	6289112.810	592.12
65	1896490.640	6289115.269	586.03
66	1896628.200	6289003.134	560.28
67	1896770.585	6288888.489	553.52
68	1896808.342	6288760.840	543.24
69	1896783.227	6288693.455	539.55
70	1896855.882	6288557.497	524.88
200	1896820.270	6287615.059	410.42
201	1896930.164	6287823.672	454.88
202	1896938.058	6288146.063	487.39
203	1896947.428	6288332.293	501.65
204	1896944.802	6288405.474	506.90
205	1896867.148	6288468.657	519.82

ABBREVIATIONS

AC	ASPHALT CONCRETE
AP	ASSESSOR PARCEL
BC	BEGIN CURVE
BRM	BERM
CL	CENTERLINE
CONC	CONCRETE
CONST	CONSTRUCTION
CVLT	COMMUNICATIONS VAULT
DWG	DRAWING
EC	END CURVE
ELEV	ELEVATION
EMH	ELECTRICAL MANHOLE
EP	EDGE OF PAVEMENT
EPB	EXISTING PULL BOX
EX	EXISTING
EXIST	EXISTING
EXP	EXPIRATION
FNC	FENCE
FS	FINISH SURFACE
FT	FEET
FTG	FOOTING
GI	GRATE INLET
HND	HANDRAIL
KSI	KIPS PER SQUARE INCH
MIN	MINIMUM
MISC	MISCELLANEOUS
N.T.S.	NOT TO SCALE
N	NORTH
NO	NUMBER
OC	ON CURVE
POL	POLE
RCE	REGISTERED CIVIL ENGINEER
REV	REVISION
RWT	RETAINING WALL TOP
SCO	SEWER CLEANOUT
SMH	SEWER MANHOLE
SF	SQUARE FEET
SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
SQ	SQUARE
STA	STATION
STD	STANDARD
TBD	TO BE DETERMINED
TC	TOP OF CURB
TCB	TOP OF CATCH BASIN
TMH	TELEPHONE MANHOLE
TP	TOP OF PAVEMENT
TYP	TYPICAL
W	WEST
WMT	WATER METER TOP
WWTP	WASTEWATER TREATMENT PLANT

G-02

811 Know what's below. Call before you dig.
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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE
		-		-		

DATE _____ DESIGNED
DATE _____ DRAFTED BY
DATE _____ CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800

REGISTERED ENGINEER DATE

CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER DATE
REVIEWED BY: ENGINEERING DIVISION MANAGER DATE
APPROVED BY: NADER HEYDARI, CITY ENGINEER DATE

CITY OF THOUSAND OAKS

BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

KEY MAP, COORDINATES LIST AND ABBREVIATIONS

CITY OF THOUSAND OAKS DWG. 23-005A

SHEET 2 OF 8

DWG: P:\projects\tmcts\8-14 hctp project management\\design\data\tmcto mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BDR BIO.dwg
DATE: Jul 19, 2021 12:50pm
XREFS:
USER: ASmith

GENERAL WASTEWATER NOTES

1. CONTRACTOR SHALL NOTIFY THE CITY OF THOUSAND OAKS (805) 497-8611 FIVE (5) DAYS PRIOR TO COMMENCING CONSTRUCTION.

2. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF THOUSAND OAKS UTILITIES DEPARTMENT WASTEWATER DESIGN & CONSTRUCTION STANDARDS ADOPTED MAY 8, 1979, AND A S AMENDED.

3. (NOTE CONCERNING PIPE)

4. WARNING: CONNECTION TO EXISTING WASTEWATER SHALL BE DONE ONLY IN THE PRESENCE OF THE CITY OF THOUSAND OAKS UTILITIES DEPARTMENT INSPECTOR.

5. THE LOCATION OF AND EXISTENCE OR NON-EXISTENCE OF UNDERGROUND UTILITIES HAS BEEN DETERMINED TO THE BEST OF THE ENGINEER'S ABILITY, BUT IT SHALL BE THE SOLE DUTY OF THE CONTRACTOR TO VERIFY THE LOCATION OF THE EXISTING UTILITIES AND TO TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THESE UTILITIES. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY DAMAGE DONE TO EXISTING UTILITIES DURING CONSTRUCTION.

6. SEPARATION BETWEEN WASTEWATER AND WATER LINE SHALL BE IN ACCORDANCE WITH PLATE #30 OF THE CITY OF THOUSAND OAKS CONSTRUCTION STANDARDS.

7. ALL TRENCH BACKFILL AND COMPACTION IN PUBLIC RIGHT-OF-WAY THE PIPE ZONE WILL BE UNDER THE SUPERVISION OF THE CITY OF THOUSAND OAKS DEPARTMENT OF PUBLIC WORKS.

8. THE CONTRACTOR SHALL MAINTAIN A RECORD OF THE LOCATIONS OF ALL WASTEWATER LATERALS, TEES AND STUBOUTS. THIS RECORD SHALL BE DELIVERED TO THE DEVELOPER'S ENGINEERS PRIOR TO FINAL PAYMENT BEING AUTHORIZED.

9. BACKWATER DEVICES SHALL BE INSTALLED WHERE NOTED OR INDICATED.

10. THE CONTRACTOR SHALL MARK THE LOCATION OF ALL WASTEWATER LATERALS WITH THE LETTER "S" AT LEAST 2" HIGH CAST INTO THE CURB.

11. ALL LATERALS TO NEW PIPELINES ARE TO BE TIED INTO MAIN LINE THROUGH USE OF FITTINGS. CUT-IN SADDLES ARE NOT ALLOWED.

12. THE WASTEWATER SYSTEM SHALL BE COMPLETED AND ACCEPTED BY THE CITY COUNCIL PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

13. WASTEWATER LINES WILL BE INTERNALLY INSPECTED BY A CITY TELEVISION CREW AT THE OWNER / DEVELOPER'S EXPENSE. IF ABS PIPE IS USED, JOINTS MUST BE CLOSED AND ENDS OF PIPE MUST BE WELL COATED WITH CEMENT (NOTE 13 ONLY APPLIES IF ABS PIPE IS USED).

14. THE HOUSE LATERALS SHALL BE EXTENDED BEYOND THE STREET RIGHT-OF-WAY TO EDGE OF P.S.E. (PUBLIC SERVICE EASEMENT)

G-03

811 Know what's below. Call before you dig.
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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE
		-		-		

DATE ____ DESIGNED
DATE ____ DRAFTED BY
DATE ____ CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800

REGISTERED ENGINEER DATE

CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER DATE
REVIEWED BY: ENGINEERING DIVISION MANAGER DATE
APPROVED BY: NADER HEYDARI, CITY ENGINEER DATE

CITY OF THOUSAND OAKS

BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

GENERAL NOTES AND WASTEWATER GENERAL NOTES

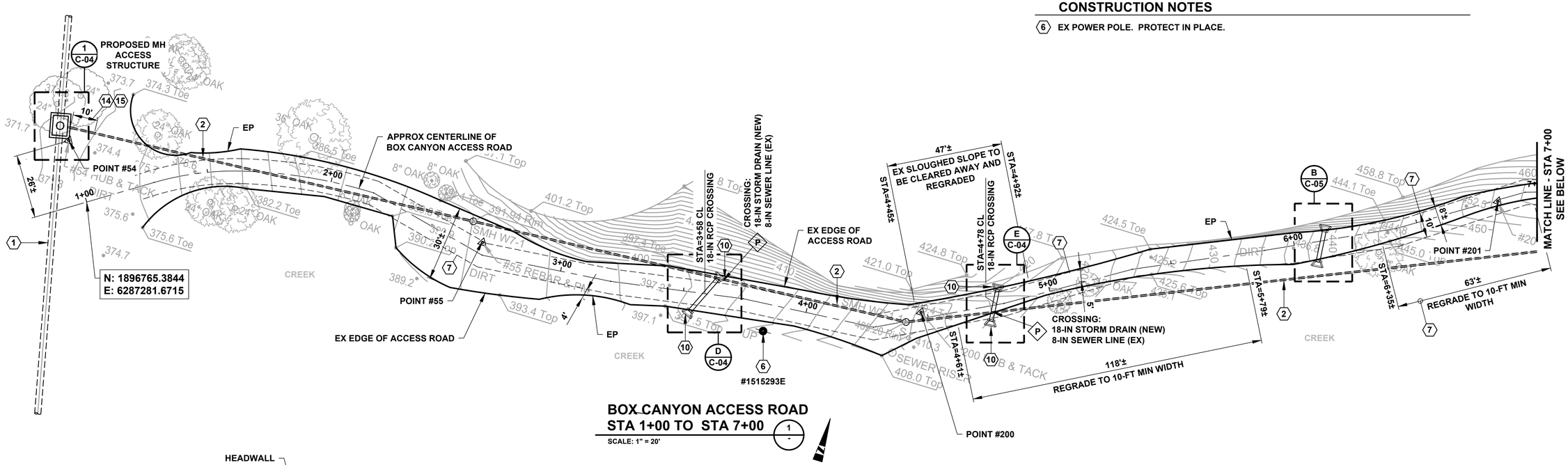
CITY OF THOUSAND OAKS DWG. 23-005A

SHEET 3 OF 8

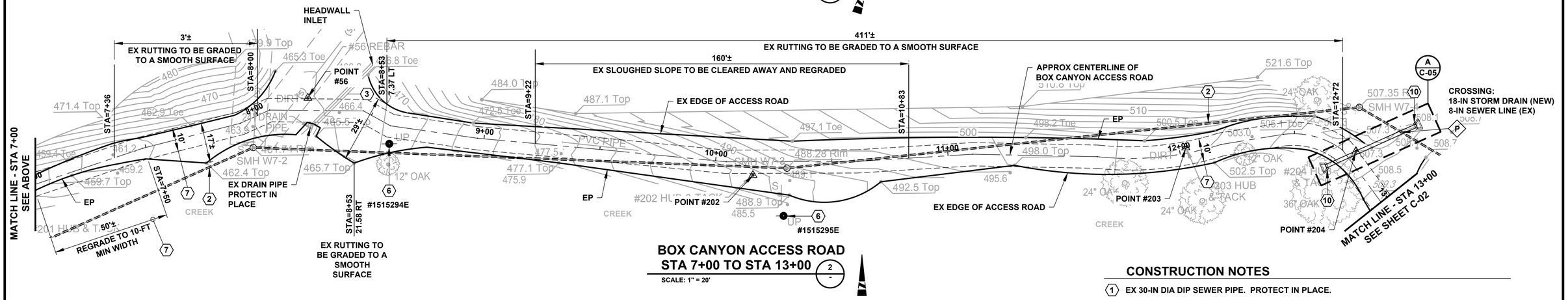
DWG: P:\projects\mcto18-14 hctp project management\design\data\mcto mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BDR BIO.dwg USER: ASmith
DATE: Jul 19, 2021 12:50pm XREFS:

CONSTRUCTION NOTES

6 EX POWER POLE. PROTECT IN PLACE.



BOX CANYON ACCESS ROAD
STA 1+00 TO STA 7+00
SCALE: 1" = 20'



BOX CANYON ACCESS ROAD
STA 7+00 TO STA 13+00
SCALE: 1" = 20'

CONSTRUCTION NOTES

1. EX 30-IN DIA DIP SEWER PIPE. PROTECT IN PLACE.
2. EX 8-IN DIA PVC SEWER PIPE. PROTECT IN PLACE.
3. EX 24-IN DIA DRAIN PIPE. PROTECT IN PLACE.
6. EX POWER POLE. PROTECT IN PLACE.
7. LIMITS OF 10-FT MIN WIDTH ACCESS ROAD TO BE REGRADED. REGRADE AREA TO THE EX EDGE OF UNIMPROVED ROAD AS SHOWN ON PLANS, MAY BE WIDER THAN 10-FT. REMOVE AND DEPOSE EX DEBRIS.
9. INSTALL 18-IN DIA RCP STORM DRAIN PIPE.
10. INSTALL OLDCASTLE PRECAST CONC HEADWALL.
14. REMOVE APPROX 10 LF OF EX 8-IN AC PIPE. ANY REMAINING AC PIPE OUTSIDE OF THE PROPOSED STRUCTURE IS TO BE REMOVED.
15. INSTALL APPROX 10 LF OF 8-IN SDR 26 PVC PIPE.

LEGEND

P POTHOLE LOCATION FOR EXISTING PIPELINE INVERT ELEVATIONS PRIOR TO CONSTRUCTION.

20' 10' 0 20' 40'
SCALE IN FEET

C-01

811 Know what's below. Call before you dig.
CALL 811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE

DATE ____ DESIGNED
DATE ____ DRAFTED BY
DATE ____ CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800
REGISTERED ENGINEER DATE

CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER DATE
REVIEWED BY: ENGINEERING DIVISION MANAGER DATE
APPROVED BY: NADER HEYDARI, CITY ENGINEER DATE

CITY OF THOUSAND OAKS

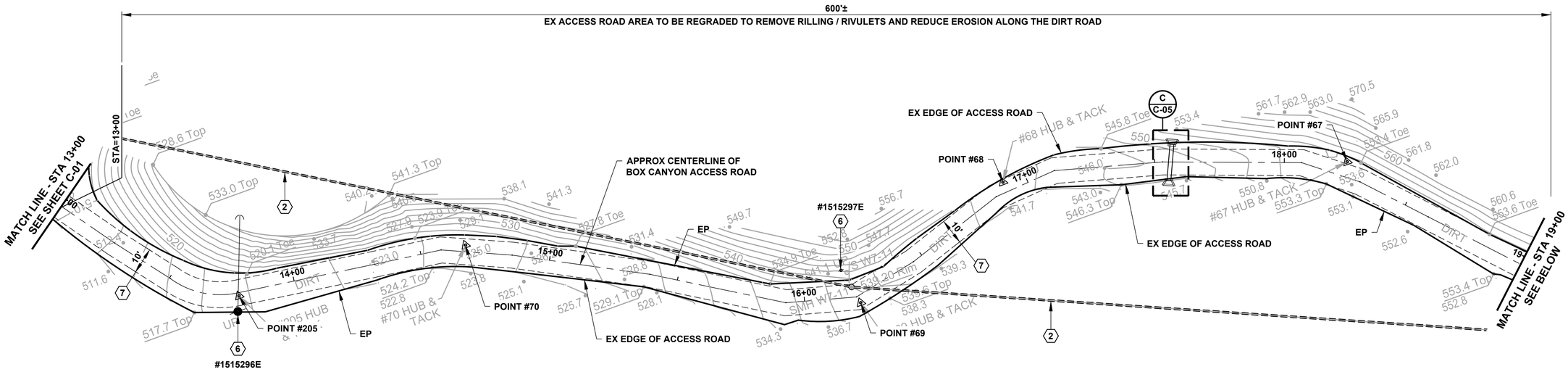
BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

STA 1+00 TO STA 13+00

CITY OF THOUSAND OAKS DWG. 23-005A

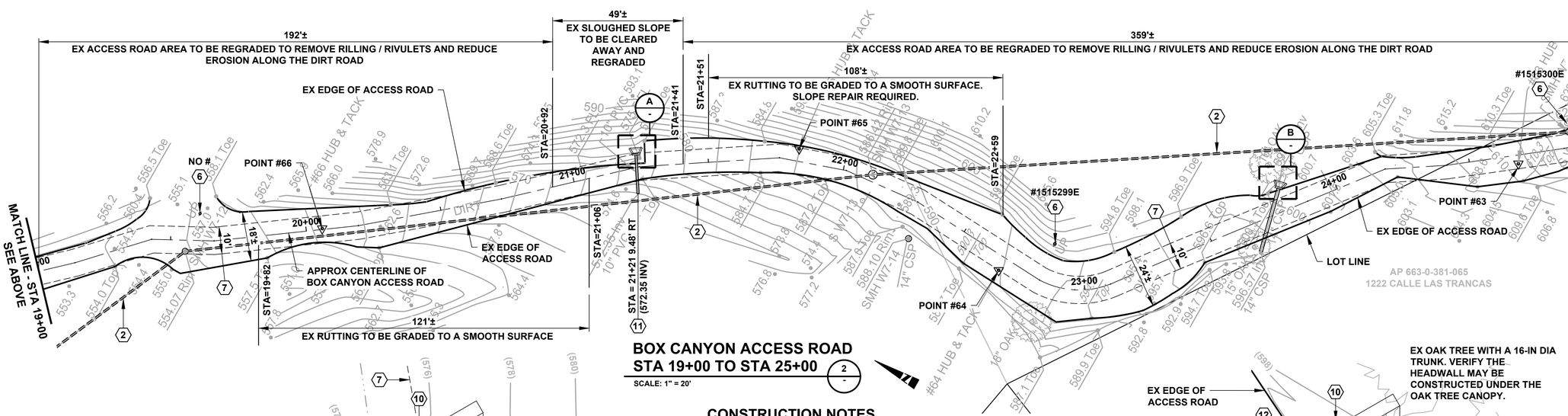
SHEET 4 OF 8

DWG: P:\projects\mcto18-14 hctp project management\design\data\mcto mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BDR BIO.dwg USER: ASmith
DATE: Jul 19, 2021 12:50pm XREFS:



BOX CANYON ACCESS ROAD
STA 13+00 TO STA 19+00

SCALE: 1" = 20'



BOX CANYON ACCESS ROAD
STA 19+00 TO STA 25+00

SCALE: 1" = 20'

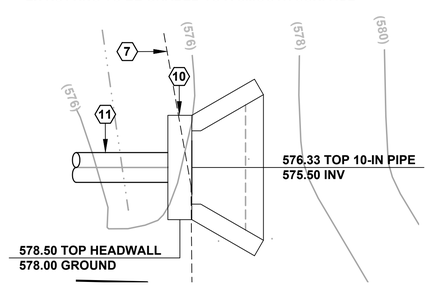
CONSTRUCTION NOTES

2. EX 8-IN DIA PVC SEWER PIPE. PROTECT IN PLACE.
6. EX POWER POLE. PROTECT IN PLACE.
7. LIMITS OF 10-FT MIN WIDTH ACCESS ROAD TO BE REGRADED. REGRADE AREA TO THE EX EDGE OF UNIMPROVED ROAD AS SHOWN ON PLANS, MAY BE WIDER THAN 10-FT. REMOVE AND DEPOSE EX DEBRIS.
11. EX 10-IN DIA DRAIN PIPE TO BE REPLACED IN KIND. APPROX 17± LF.
12. EX 14-IN DIA DRAIN PIPE TO BE CLEARED OF DEBRIS.

LEGEND

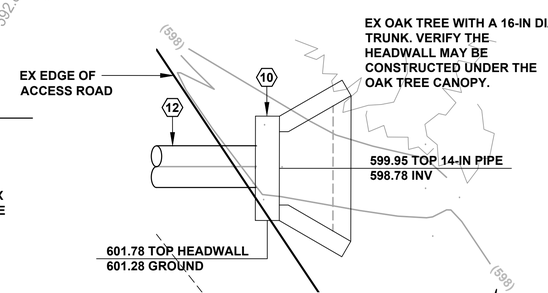
P. POTHOLE LOCATION FOR EXISTING PIPELINE INVERT ELEVATIONS PRIOR TO CONSTRUCTION.

20' 10' 0 20' 40'
SCALE IN FEET



DETAIL A

SCALE: 1" = 2'



DETAIL B

SCALE: 1" = 2'

C-02

CALL 811
AT LEAST TWO DAYS BEFORE YOU DIG
Know what's below. Call before you dig.
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE

DATE ____ DESIGNED
DATE ____ DRAFTED BY
DATE ____ CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800

REGISTERED ENGINEER DATE

CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER DATE
REVIEWED BY: ENGINEERING DIVISION MANAGER DATE
APPROVED BY: NADER HEYDARI, CITY ENGINEER DATE

CITY OF THOUSAND OAKS

BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

STA 13+00 TO STA 25+00

CITY OF THOUSAND OAKS DWG. 23-005A

SHEET 5 OF 8

DWG: P:\projects\nrcto18-14 hctp project management\design\data\nrcto mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BDR BIO.dwg USER: ASmith
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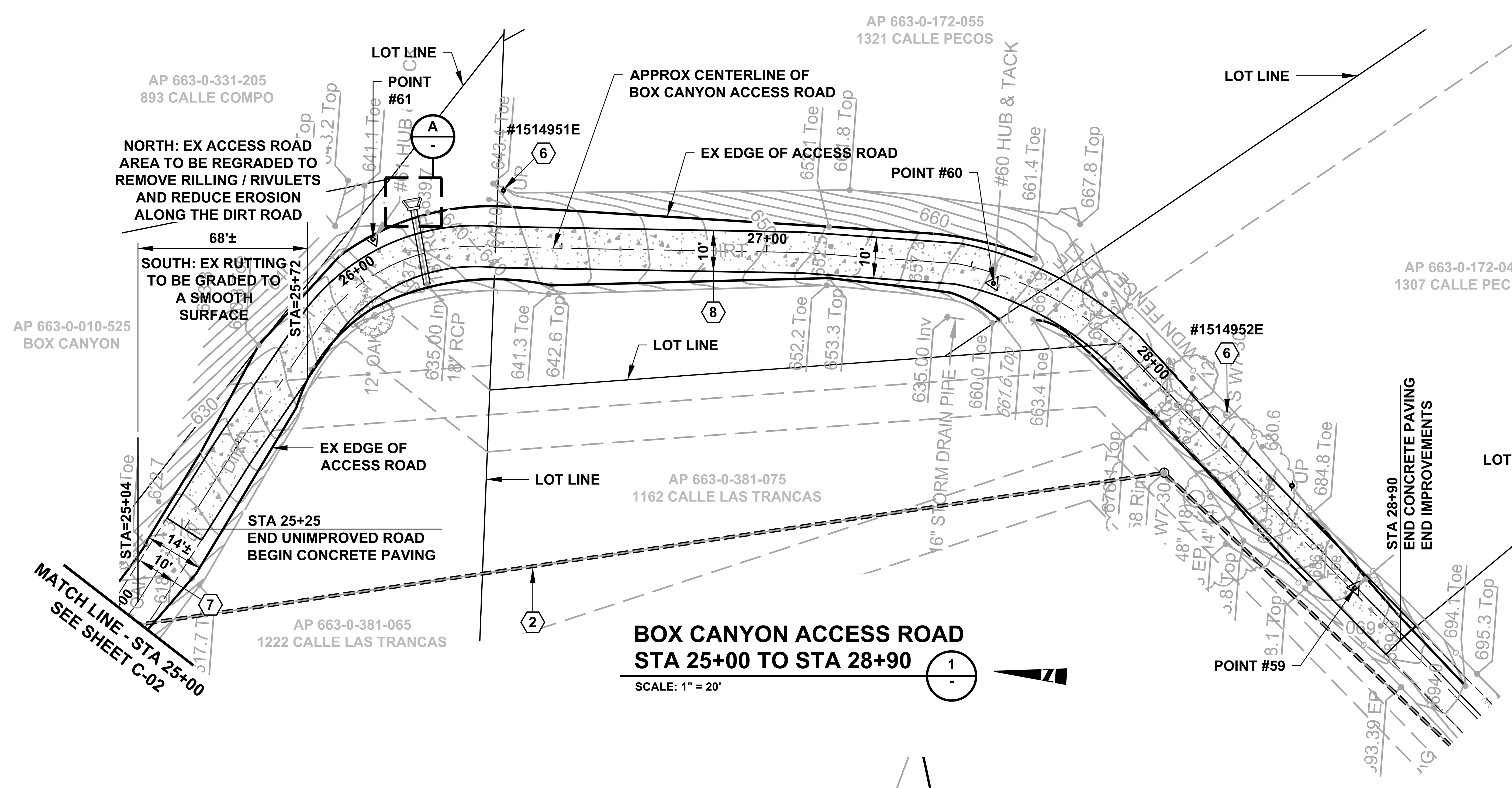
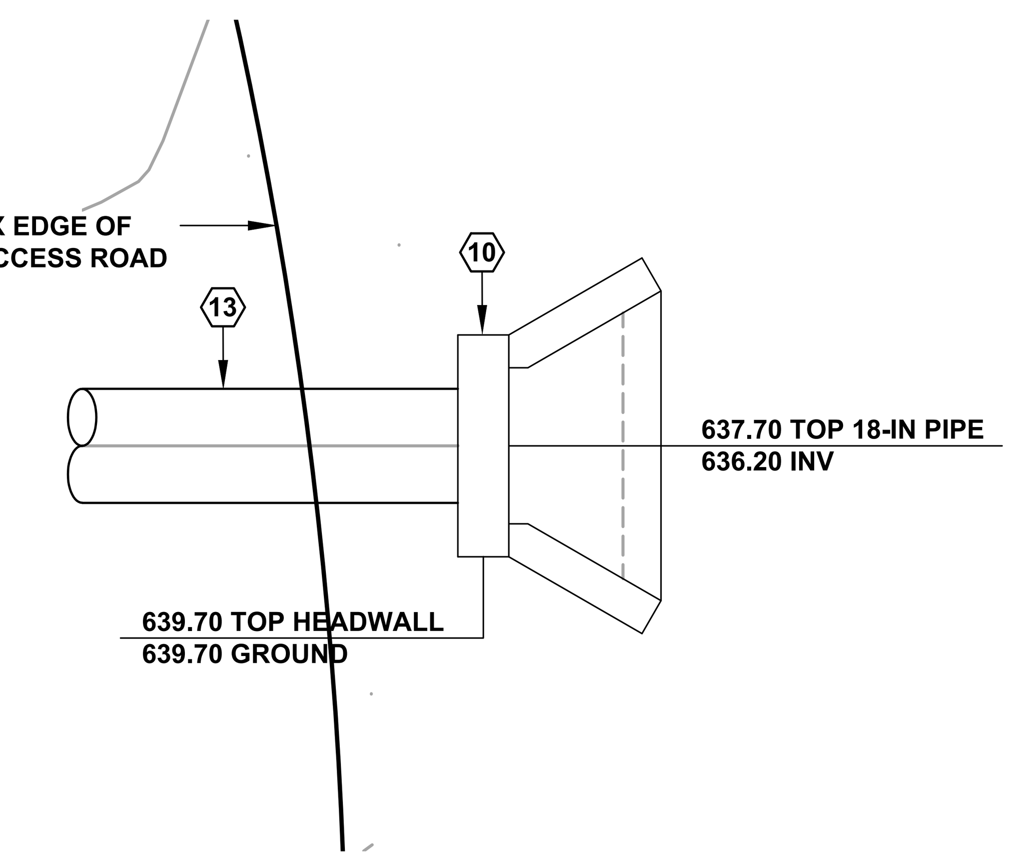


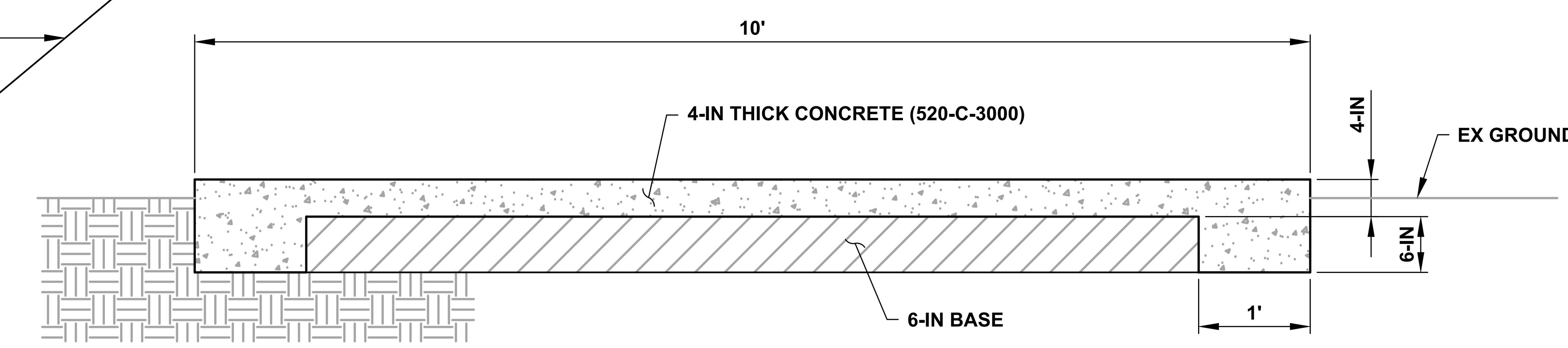
BOX CANYON ACCESS ROAD
STA 25+00 TO STA 28+90

SCALE: 1" = 20'



DETAIL A

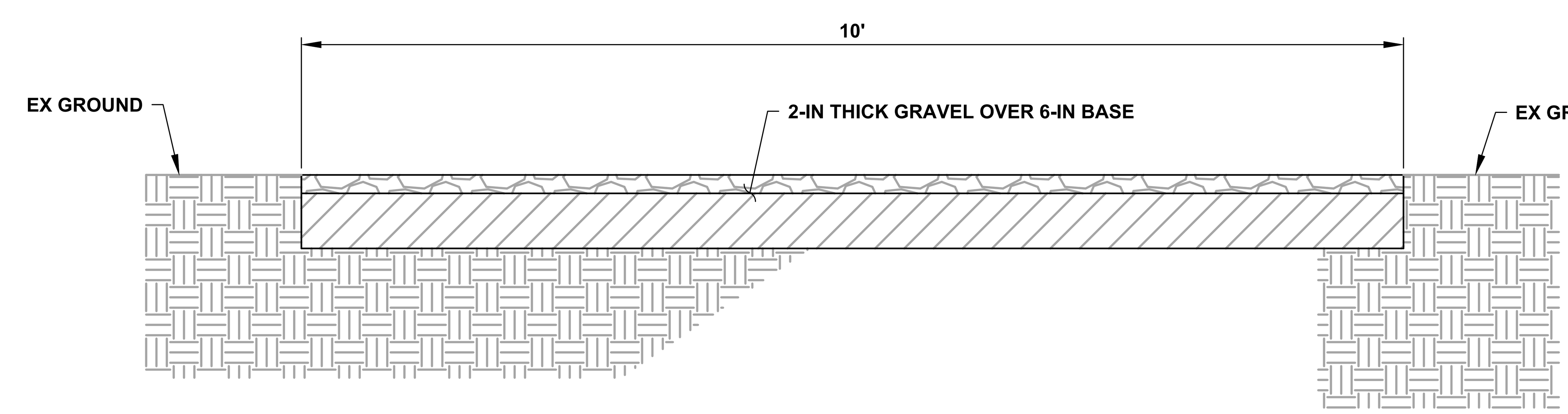
SCALE: 1" = 2'



NOTES:
1. XX

10-FT WIDE CONCRETE PAVING DETAIL

SCALE: 1" = 1'



NOTES:
1. XX

10-FT WIDE UNIMPROVED ROADWAY DETAIL

SCALE: 1" = 1'

CONSTRUCTION NOTES

- (2) EX 8-IN DIA PVC SEWER PIPE. PROTECT IN PLACE.
- (6) EX POWER POLE. PROTECT IN PLACE.
- (7) LIMITS OF 10-FT MIN WIDTH ACCESS ROAD TO BE REGRADED. REGRADE AREA TO THE EX EDGE OF UNIMPROVED ROAD AS SHOWN ON PLANS, MAY BE WIDER THAN 10-FT. REMOVE AND DEPOSE EX DEBRIS.
- (8) 10-FT WIDE CONCRETE PAVEMENT. SEE A/-
- (10) INSTALL OLDCASTLE PRECAST CONC HEADWALL.
- (13) EX 18-IN DIA DRAIN PIPE TO BE CLEARED OF DEBRIS.

LEGEND

(P) POTHOLE LOCATION FOR EXISTING PIPELINE INVERT ELEVATIONS PRIOR TO CONSTRUCTION.

20' 10' 0 20' 40'
SCALE IN FEET

DWG: P:\projects\mcto18-14 hctp project management\design\data\mcto mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BDR BIO.dwg USER: ASmith
DATE: Jul 19, 2021 12:50pm XREFS:

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UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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DATE ____
DESIGNED
DATE ____
DRAFTED BY
DATE ____
CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800
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CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER DATE
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C-03

CITY OF THOUSAND OAKS

BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

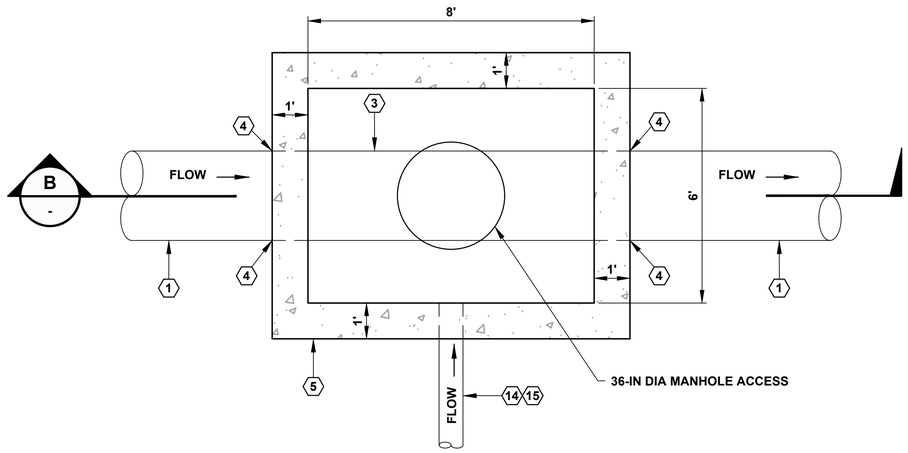
STA 25+00 TO STA 28+90

CITY OF THOUSAND OAKS DWG. 23-005A

SHEET 6 OF 8

CONSTRUCTION NOTES

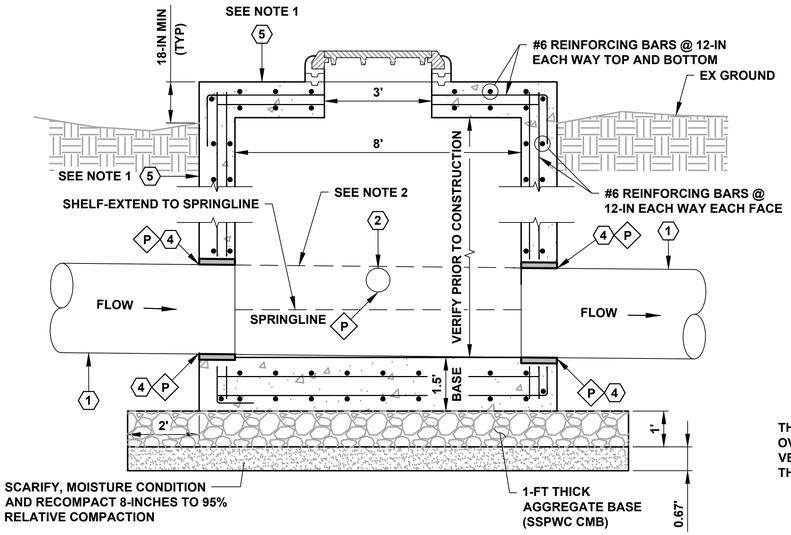
1. EX 30-IN DIA DIP SEWER PIPE. PROTECT IN PLACE.
2. EX 8-IN DIA PVC SEWER PIPE. PROTECT IN PLACE.
4. 30-IN PIPE WALL PENETRATION. SEE C/-
5. 8 X 6-FT INTERIOR DIMENSIONS FOR A POURED CONCRETE SEWER STRUCTURE.
7. LIMITS OF 10-FT MIN WIDTH ACCESS ROAD TO BE REGRADED. REGRADE AREA TO THE EX EDGE OF UNIMPROVED ROAD AS SHOWN ON PLANS, MAY BE WIDER THAN 10-FT. REMOVE AND DEPOSE EX DEBRIS.
9. INSTALL 18-IN DIA RCP STORM DRAIN PIPE.
10. INSTALL OLDCASTLE PRECAST CONC HEADWALL.
14. REMOVE APPROX 10 LF OF EX 8-IN AC PIPE. ANY REMAINING AC PIPE OUTSIDE OF THE PROPOSED STRUCTURE IS TO BE REMOVED.
15. INSTALL APPROX 10 LF OF 8-IN SDR 26 PVC PIPE.



STRUCTURE DETAIL

SCALE: 1" = 2'

A/-

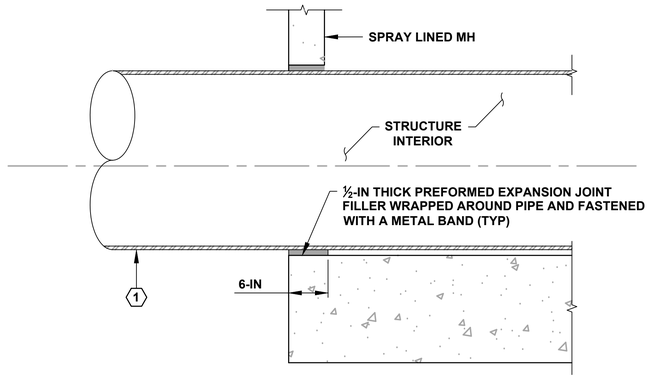


NOTES:
1. STRUCTURE AND MH TO BE CONSTRUCTED AROUND THE EX 30-IN DIA DIP PIPE AT THE EX 8-IN DIA PVC INTERSECTION.
2. TOP OF EX 30-IN DIA DIP PIPE TO BE CUT OFF TO THE STRUCTURE SHELF.

CROSS SECTION B

SCALE: 1" = 2'

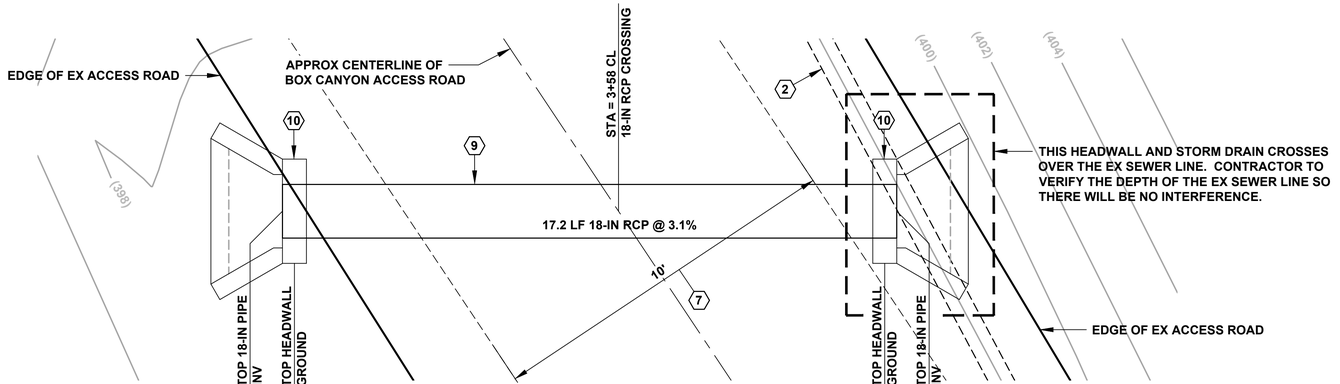
B/-



WALL PENETRATION

SCALE: N.T.S.

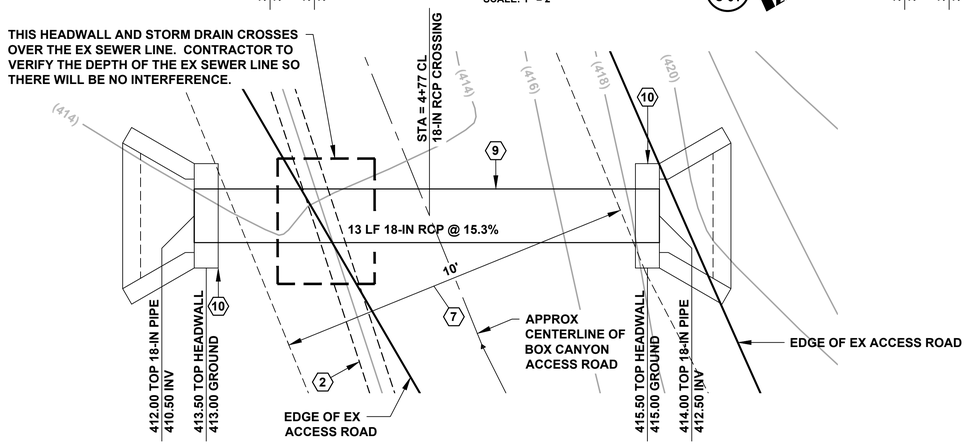
C/-



DETAIL D

SCALE: 1" = 2'

D/C-01



DETAIL E

SCALE: 1" = 2'

E/C-01

ELEVATIONS FOR THE HEADWALL AND STORM DRAIN ARE ESTIMATED TO REFLECT THE CLEARING AND REGRADING REQUIRED.

LEGEND

P — POTHOLE LOCATION FOR EXISTING PIPELINE INVERT ELEVATIONS PRIOR TO CONSTRUCTION.

C-04

811 Know what's below. Call before you dig.
CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE
		-		-		

DATE / DESIGNED
DATE / DRAFTED BY
DATE / CHECKED

REGISTERED PROFESSIONAL ENGINEER — JONATHON M. TURNER — No. 60214 EXP. 6/30/26 — CIVIL — STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800

REGISTERED ENGINEER — DATE

CITY OF THOUSAND OAKS
REVIEWED BY: PROJECT ENGINEER — DATE
REVIEWED BY: ENGINEERING DIVISION MANAGER — DATE
APPROVED BY: NADER HEYDARI, CITY ENGINEER — DATE

CITY OF THOUSAND OAKS

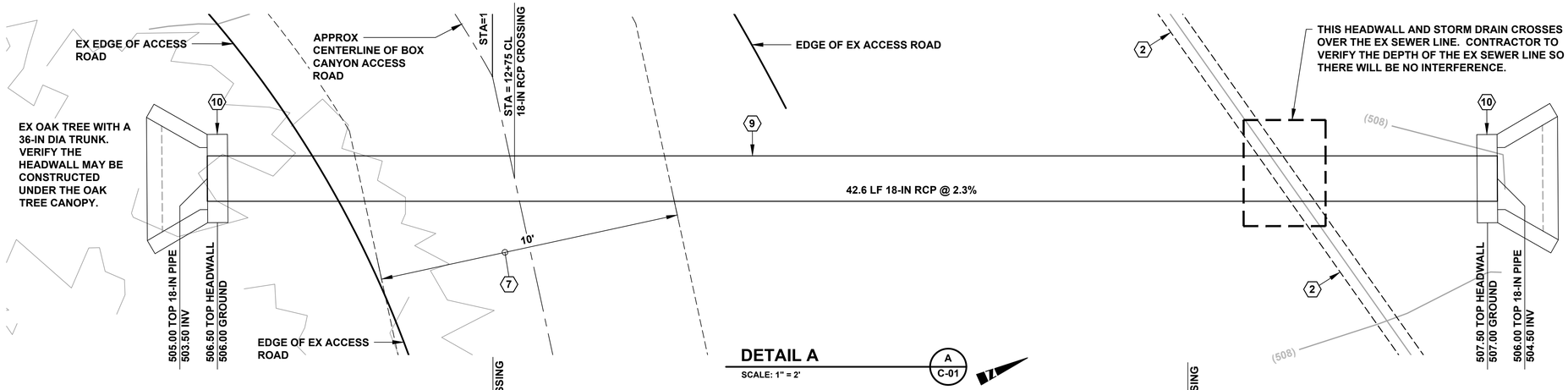
BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

DETAIL SHEET

CITY OF THOUSAND OAKS DWG. 23-005A

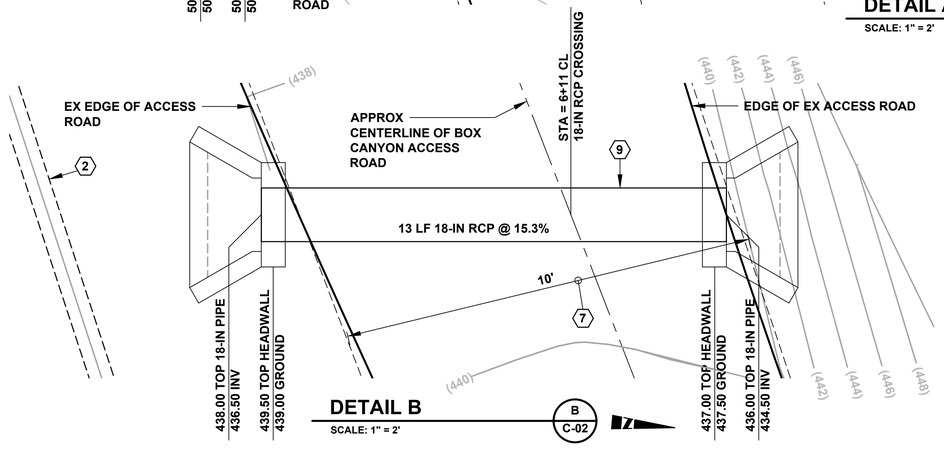
SHEET 7 OF 8

DWG: P:\projects\vnclo18-14 hcbp project management\design\data\vnclo mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BIR BIO.dwg
DATE: Jul 19, 2021 12:50pm
USER: ASmith
XREFS:



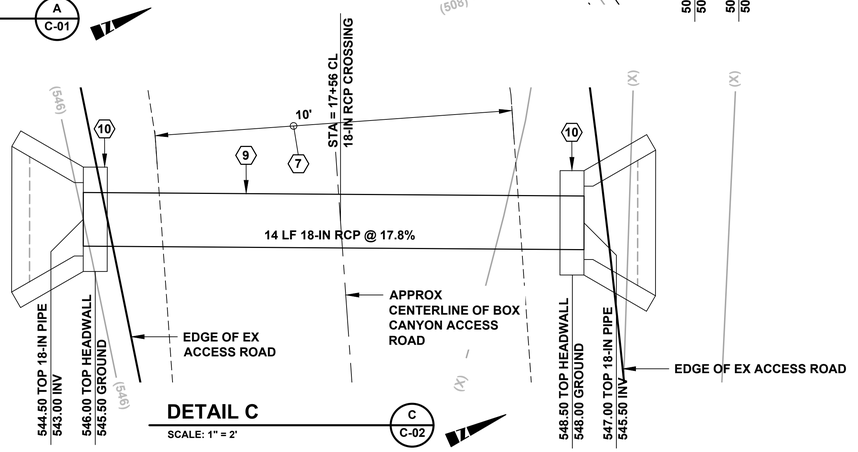
DETAIL A

SCALE: 1" = 2'



DETAIL B

SCALE: 1" = 2'



DETAIL C

SCALE: 1" = 2'

CONSTRUCTION NOTES

(2) EX 8-IN DIA PVC SEWER PIPE. PROTECT IN PLACE.

(7) LIMITS OF 10-FT MIN WIDTH ACCESS ROAD TO BE REGRADED. REGRADE AREA TO THE EX EDGE OF UNIMPROVED ROAD AS SHOWN ON PLANS, MAY BE WIDER THAN 10-FT. REMOVE AND DEPOSE EX DEBRIS.

(9) INSTALL 18-IN DIA RCP STORM DRAIN PIPE.

(10) INSTALL OLDCASTLE PRECAST CONC HEADWALL.

LEGEND

(P) POTHOLE LOCATION FOR EXISTING PIPELINE INVERT ELEVATIONS PRIOR TO CONSTRUCTION.

C-05

811 Know what's below. Call before you dig.

CALL 811 AT LEAST TWO DAYS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION	R.C.E.	DATE	C.T.O.	DATE
		-		-		

DATE ____ DESIGNED

DATE ____ DRAFTED BY

DATE ____ CHECKED

REGISTERED PROFESSIONAL ENGINEER JONATHON M. TURNER No. 60214 EXP. 6/30/26 CIVIL STATE OF CALIFORNIA

PREPARED BY
PHOENIX CIVIL ENGINEERING, INC.
535 E. MAIN STREET
SANTA PAULA, CA 93003
(805) 658-6800

REGISTERED ENGINEER DATE

CITY OF THOUSAND OAKS

REVIEWED BY: PROJECT ENGINEER DATE

REVIEWED BY: ENGINEERING DIVISION MANAGER DATE

APPROVED BY: NADER HEYDARI, CITY ENGINEER DATE

CITY OF THOUSAND OAKS

BOX CANYON ACCESS ROAD IMPROVEMENTS AND MANHOLE INSTALLATION

DETAIL SHEET

CITY OF THOUSAND OAKS DWG. 23-005A

SHEET 8 OF 8

DWG: P:\projects\tmct18-14 hclp project management\\design\data\tmcto mcc bioreactor ci 5440\cad\external references\dwg\24x36 T OAKS BIR BIO.dwg USER: ASmith
DATE: Jul 19, 2021 12:50pm XREFS:

APPENDIX B

Tribal Consultation

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Blvd. | Thousand Oaks, CA 91362
Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Santa Ynez Band of Chumash Indians
Amanda Dobrov, Cultural Resources Archeologist
PO Box 517, Santa Ynez, CA 93460
adobrov@chumash.gov

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Amanda Dorbrov:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

The Box Canyon Manhole and Road Improvements Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City of Thousand Oaks PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately 10 feet of existing asbestos cement 8-inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three additional upstream headwalls for three existing storm drain culverts.

Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Public Works Department. The goal of AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify any Tribal Cultural Resources (TCRs), as defined in PRC Section 21074, located within the Project development footprint, and if such resources are identified, to work with Tribes to identify mitigation measures capable of avoiding or substantially lessening potential significant impacts to those identified TCRs, in accordance with PRC Section 21080.3.2.

Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map

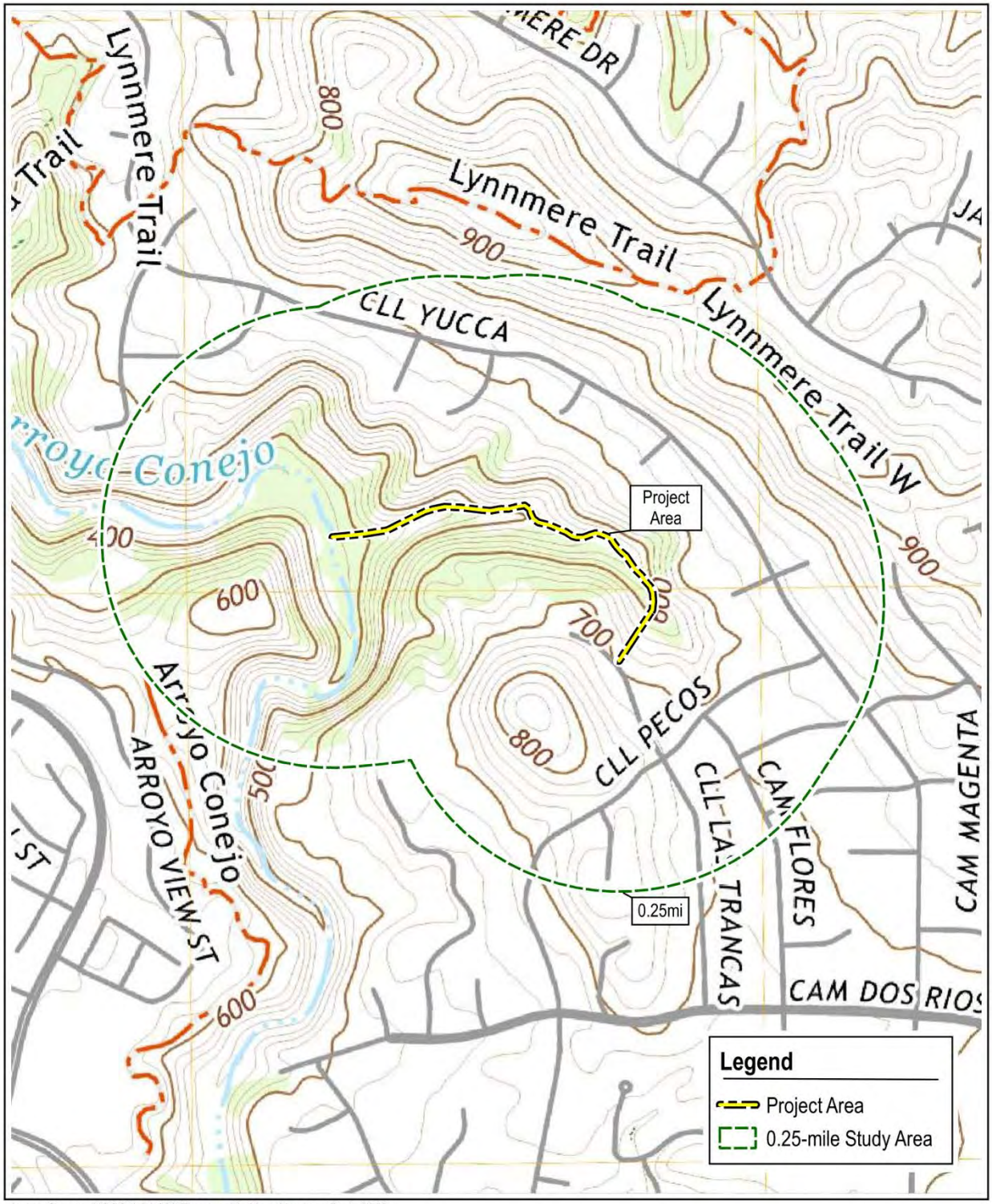


Image Source: USGS 1:24,000 Topographic Map: Newbury Park, 2022.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

toaks.gov

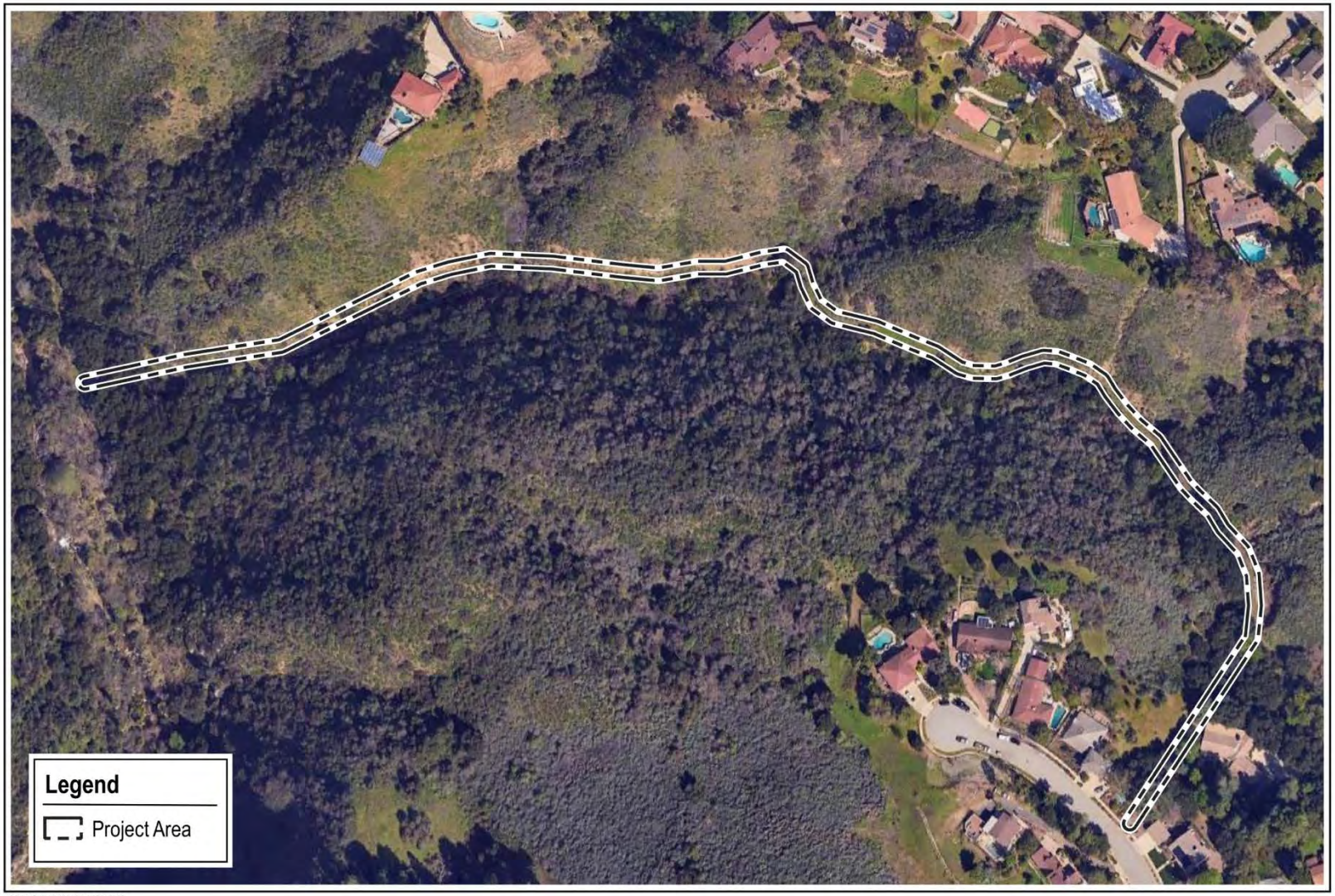


Image Source: Google Earth, 2023.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

toaks.gov

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Blvd. | Thousand Oaks, CA 91362
Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Santa Ynez Band of Chumash Indians
CRM Consultation
PO Box 517, Santa Ynez, CA 93460
CRMConsultation@chumash.gov

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear CRM Consultation:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

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Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map

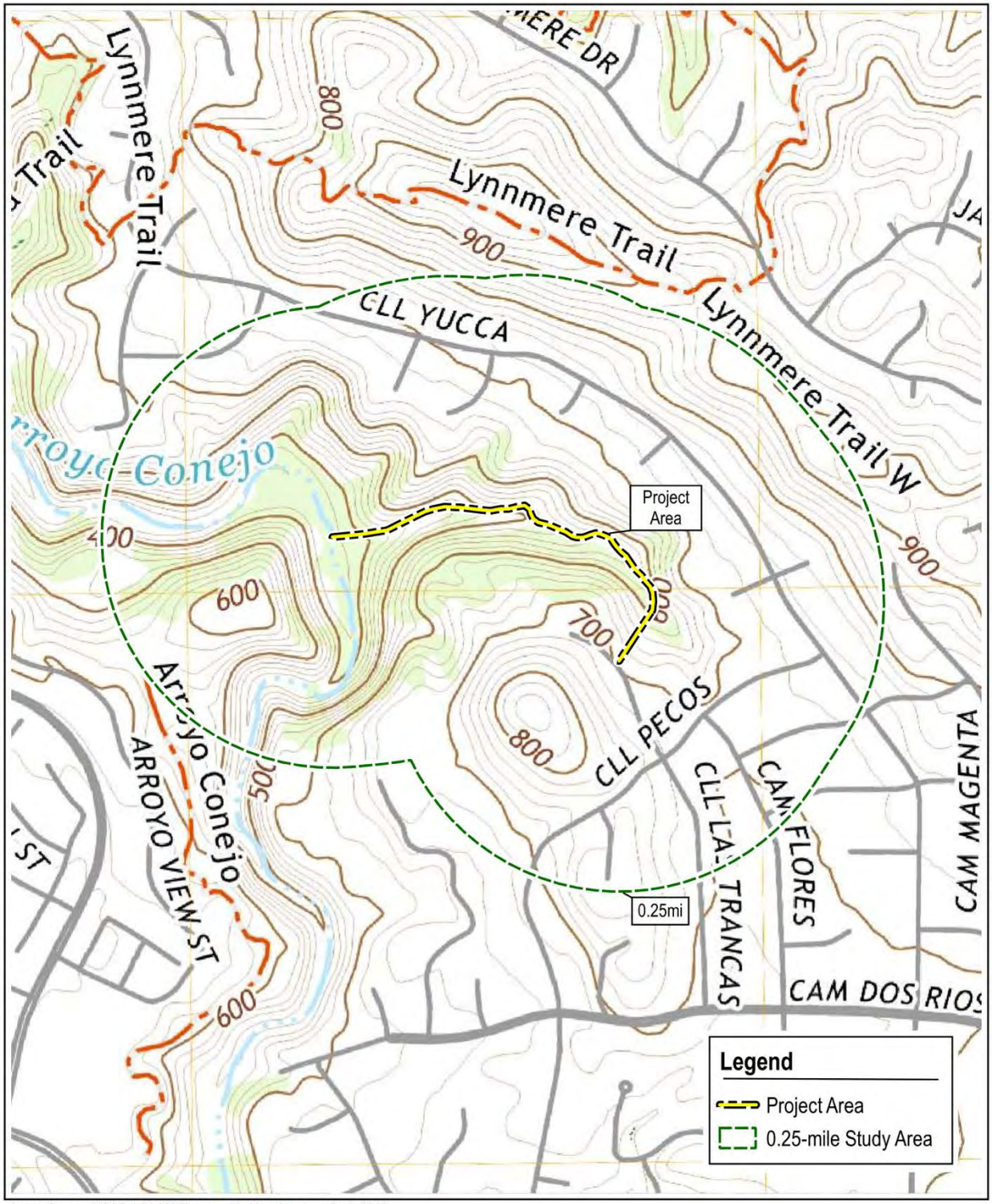

Image Source: USGS 1:24,000 Topographic Map: Newbury Park, 2022.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

toaks.gov

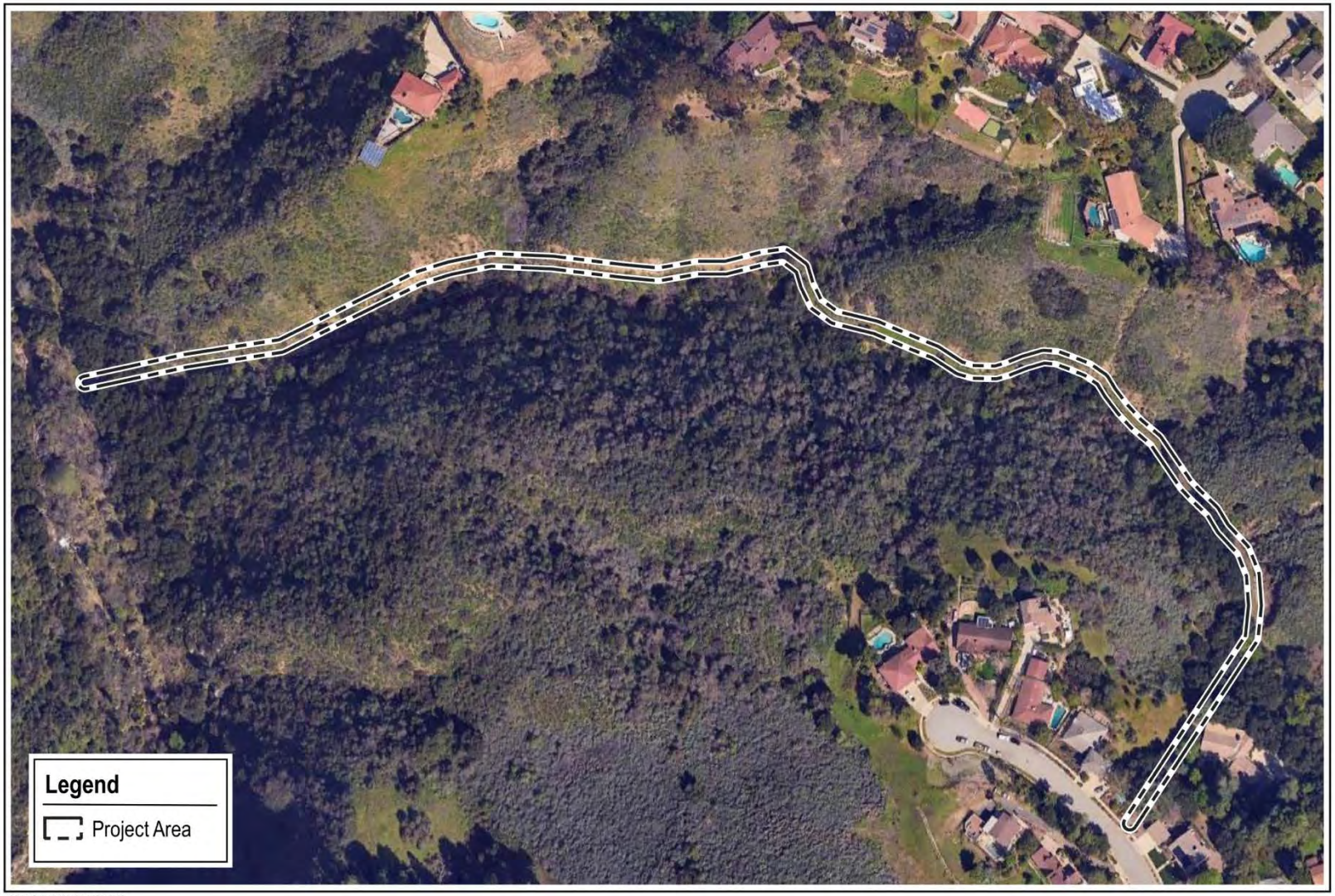

Image Source: Google Earth, 2023.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

toaks.gov

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Blvd. | Thousand Oaks, CA 91362
Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Coastal Band of the Chumash Nation
Janet Hall, CBCN Cultural Resources Manager
1529 West Lemon Ave.
Lompoc, Ca, 93436
tasinhall@yahoo.com

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Janet Hall:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

The Box Canyon Manhole and Road Improvements Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City of Thousand Oaks PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately 10 feet of existing asbestos cement 8-inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three additional upstream headwalls for three existing storm drain culverts.

Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Public Works Department. The goal of AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify any Tribal Cultural Resources (TCRs), as defined in PRC Section 21074, located within the Project development footprint, and if such resources are identified, to work with Tribes to identify

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Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map

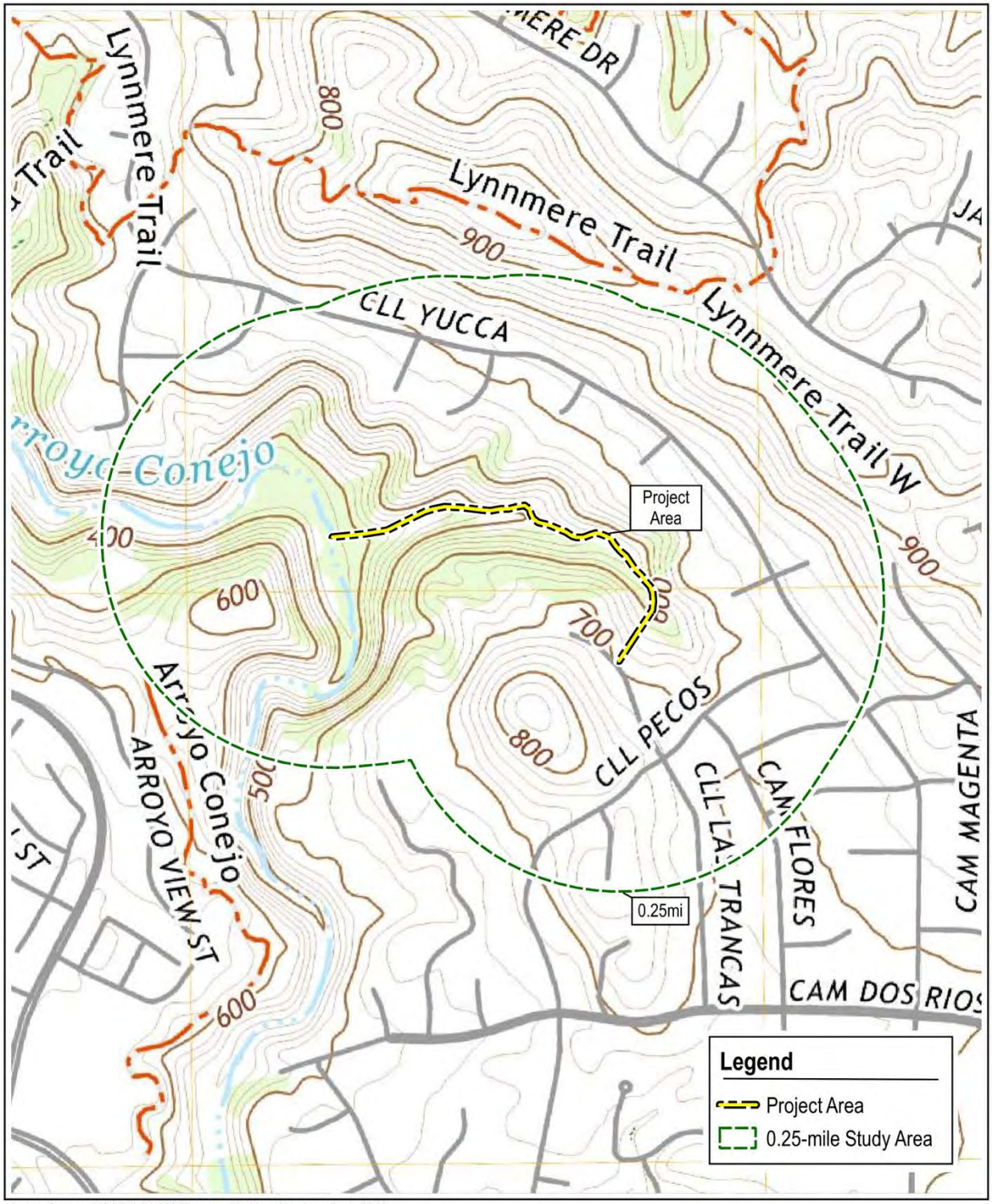

Image Source: USGS 1:24,000 Topographic Map: Newbury Park, 2022.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

toaks.gov

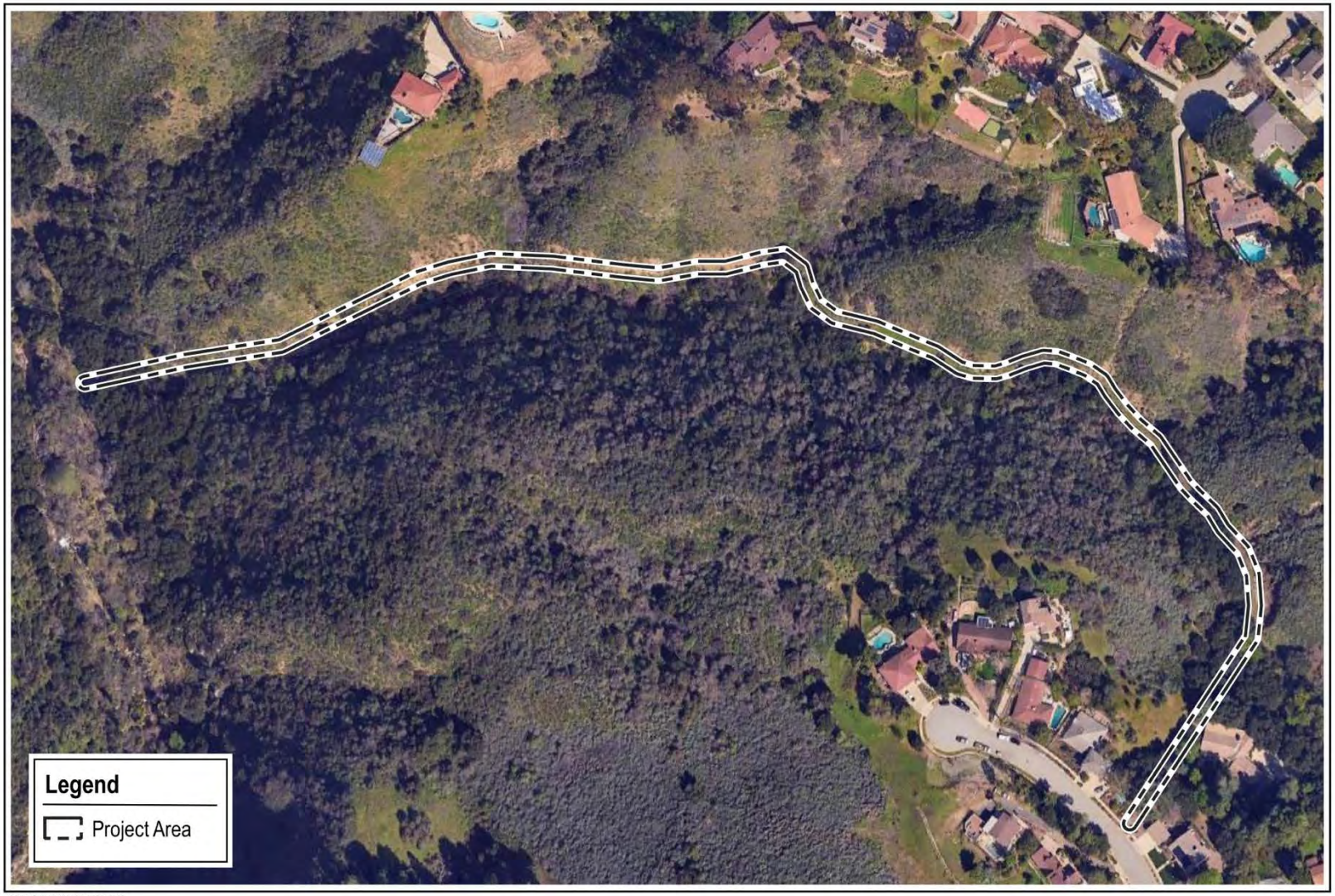

Image Source: Google Earth, 2023.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

toaks.gov

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Blvd. | Thousand Oaks, CA 91362
Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Barbareno/Ventureno Band of Mission Indians
Cultural Resource Committee
c/o BVBMI Chair Vestuto
PO Box 364
Ojai, CA, 93024
Via email: cr@bvbmi.com

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Chair Vestuto:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

The Box Canyon Manhole and Road Improvements Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City of Thousand Oaks PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately 10 feet of existing asbestos cement 8-inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three additional upstream headwalls for three existing storm drain culverts.

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Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map

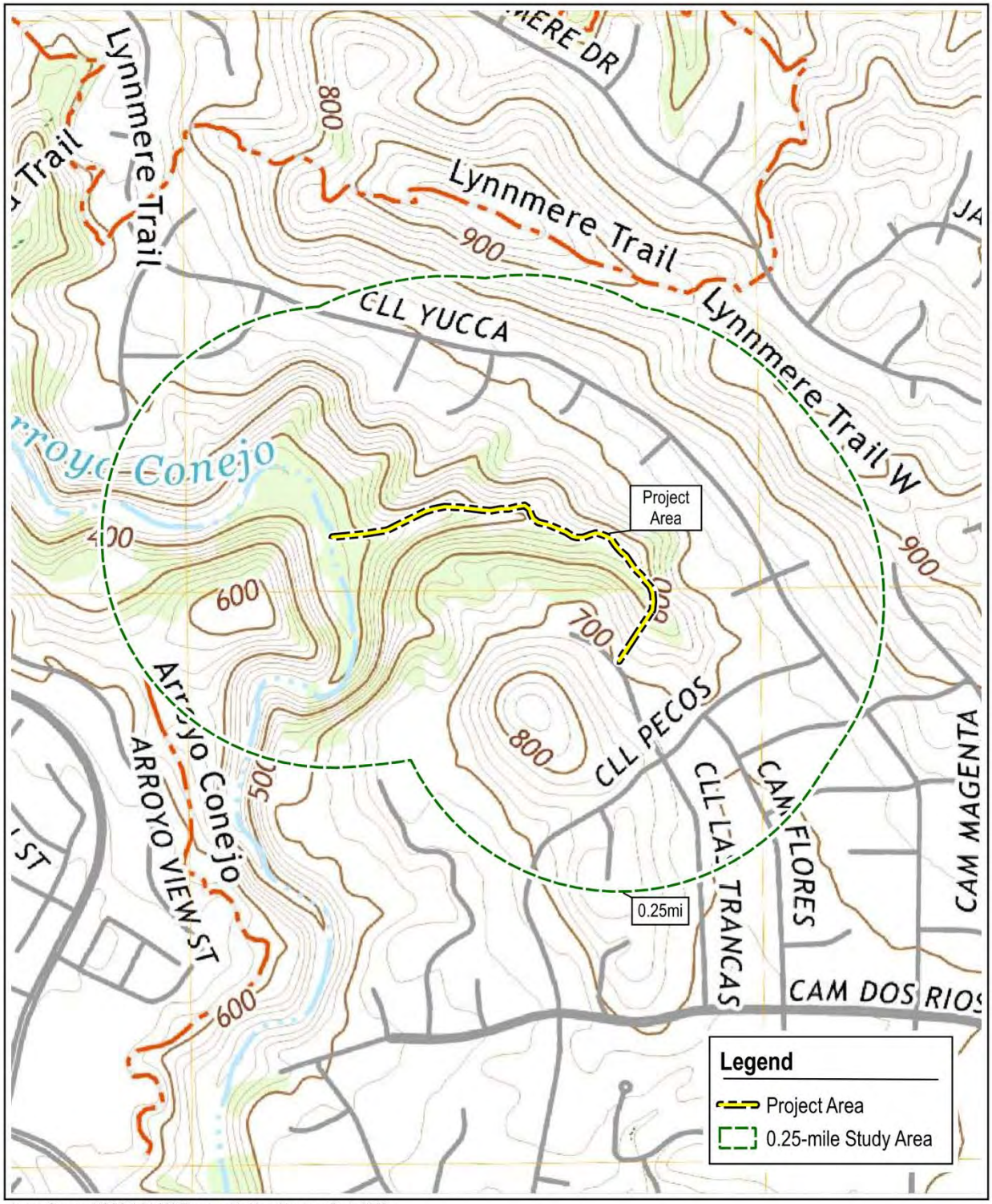

Image Source: USGS 1:24,000 Topographic Map: Newbury Park, 2022.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

toaks.gov

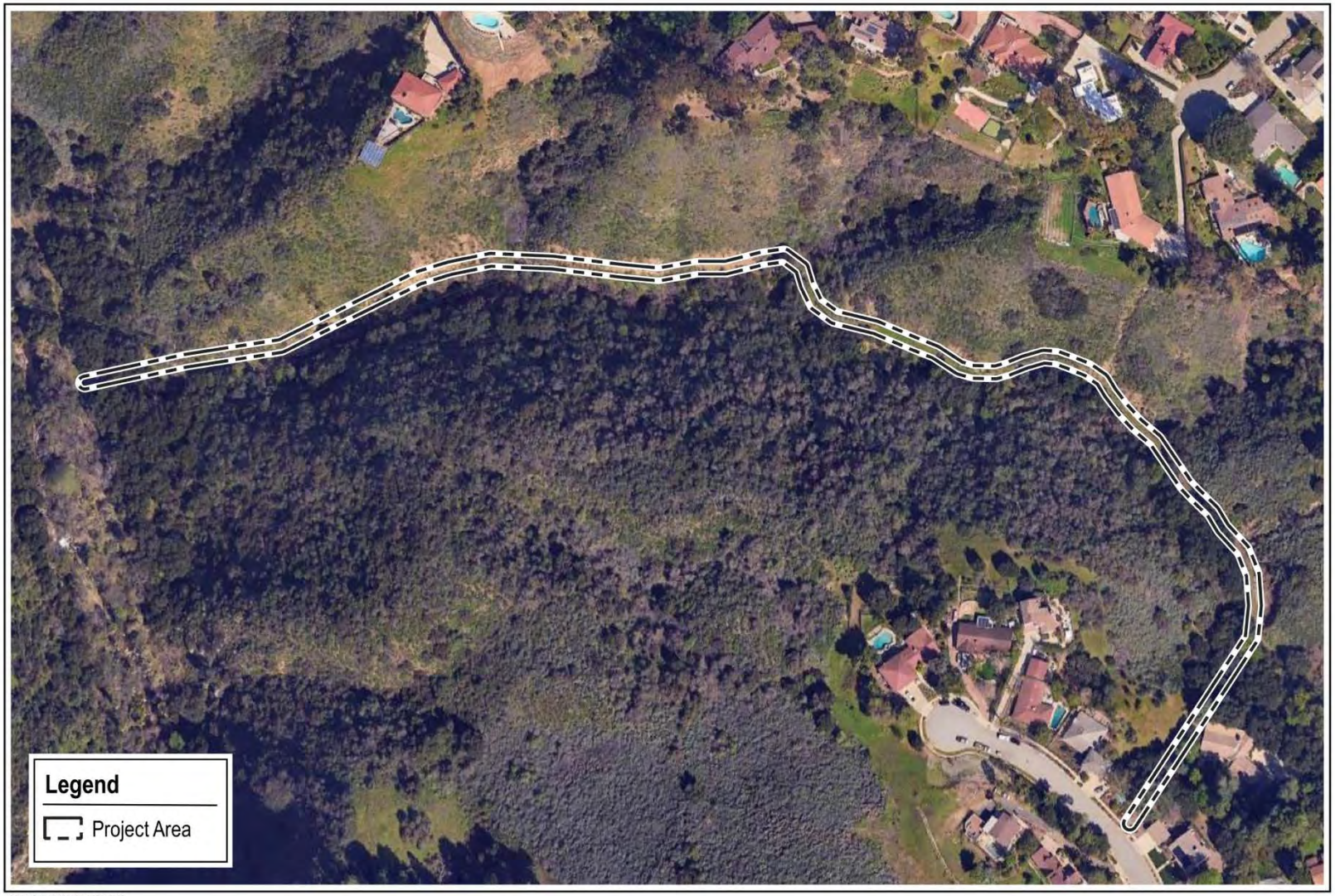

Image Source: Google Earth, 2023.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

toaks.gov

City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Blvd. | Thousand Oaks, CA 91362
Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Coastal Band of the Chumash Nation
Mati Waiya, Tribal Chair
16500 S Mountain Drive
Santa Paula, CA, 93060
tribalchair@coastalband.org

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Mati Waiya:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

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Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Public Works Department. The goal of AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify any Tribal Cultural Resources (TCRs), as defined in PRC Section 21074, located within the Project development footprint, and if such resources are identified, to work with Tribes to identify

mitigation measures capable of avoiding or substantially lessening potential significant impacts to those identified TCRs, in accordance with PRC Section 21080.3.2.

Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map

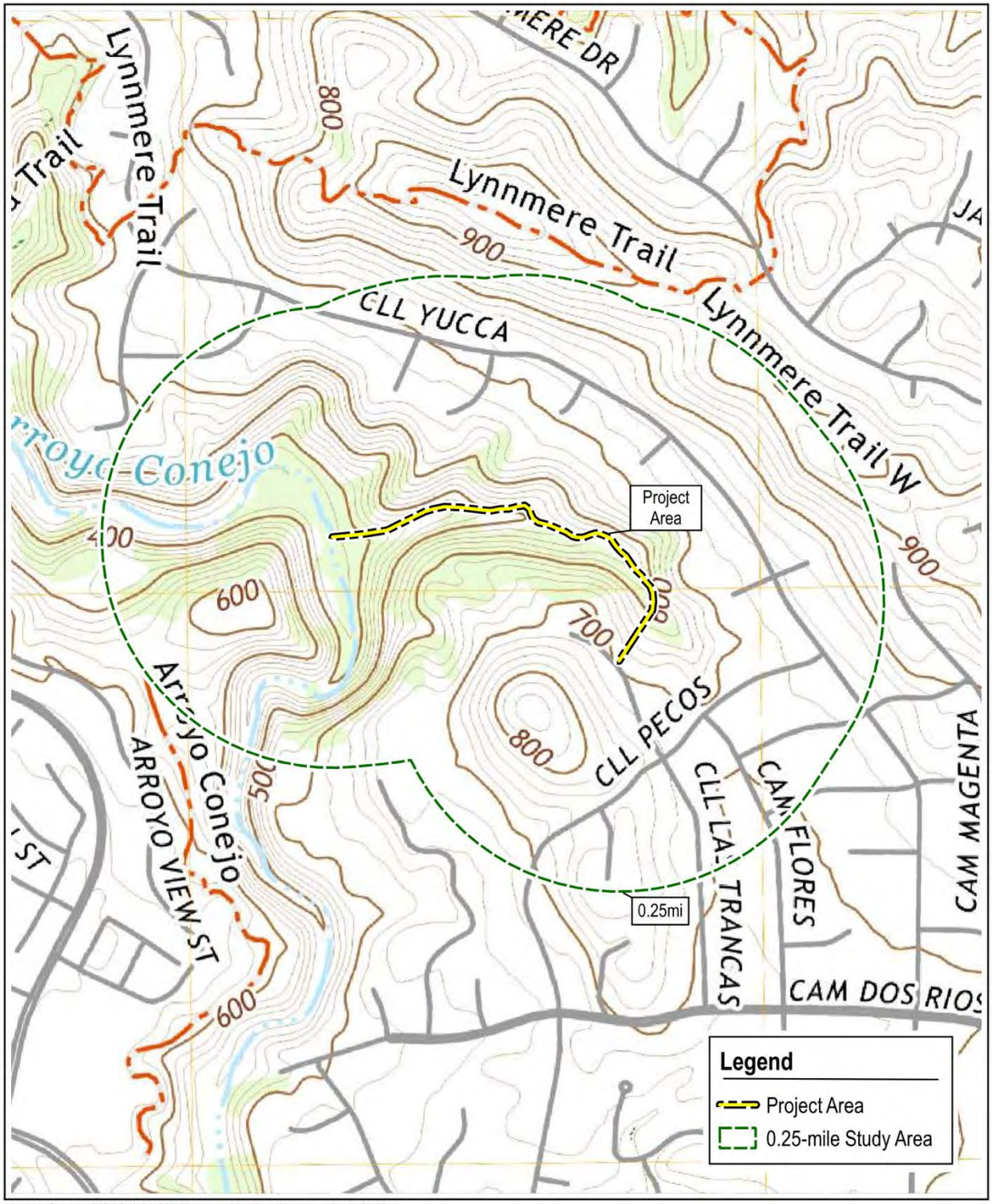

Image Source: USGS 1:24,000 Topographic Map: Newbury Park, 2022.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

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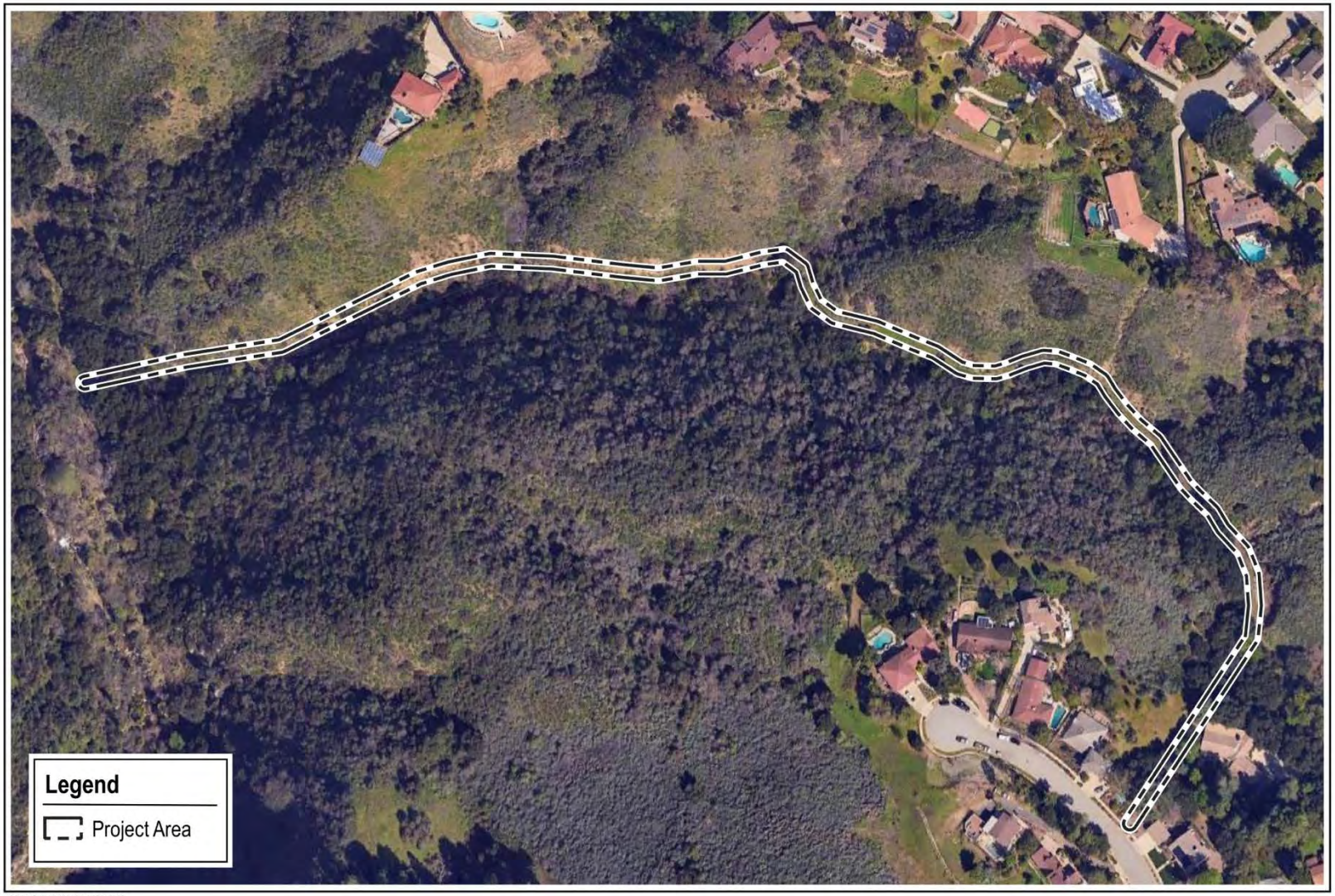

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BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

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City of Thousand Oaks

Public Works Department

2100 Thousand Oaks Blvd. | Thousand Oaks, CA 91362
Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Coastal Band of the Chumash Nation
Michael Khuz-Zarate, CBCN Vice Chairman
5151 W Vartikian Ave.
Fresno, CA, 93722
mkhus70@gmail.com

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Michael Khuz-Zarate:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

The Box Canyon Manhole and Road Improvements Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City of Thousand Oaks PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately 10 feet of existing asbestos cement 8-inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three additional upstream headwalls for three existing storm drain culverts.

Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Public Works Department. The goal of AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify any Tribal Cultural Resources (TCRs), as defined in PRC Section 21074, located within the Project development footprint, and if such resources are identified, to work with Tribes to identify

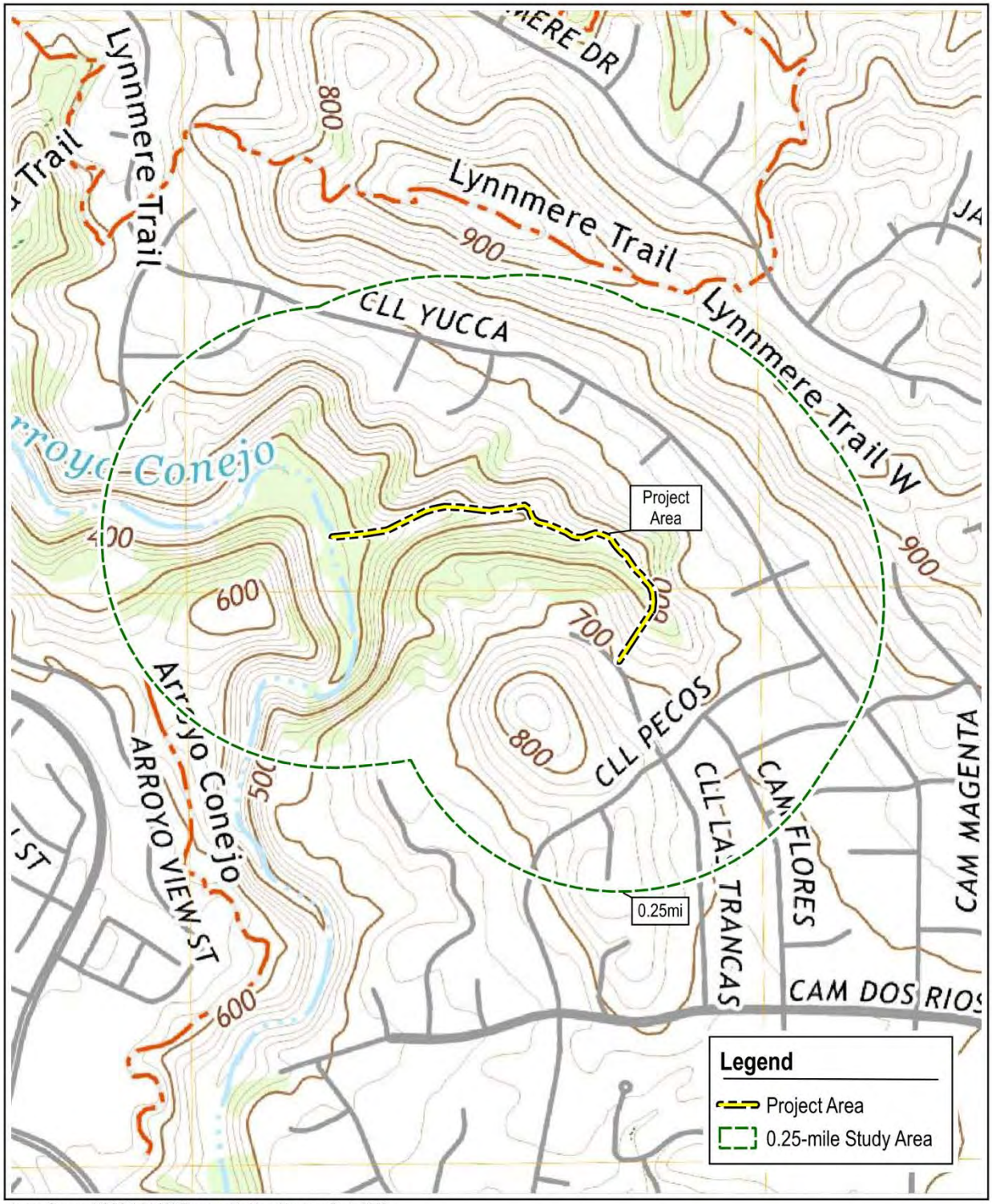
mitigation measures capable of avoiding or substantially lessening potential significant impacts to those identified TCRs, in accordance with PRC Section 21080.3.2.

Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map



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BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

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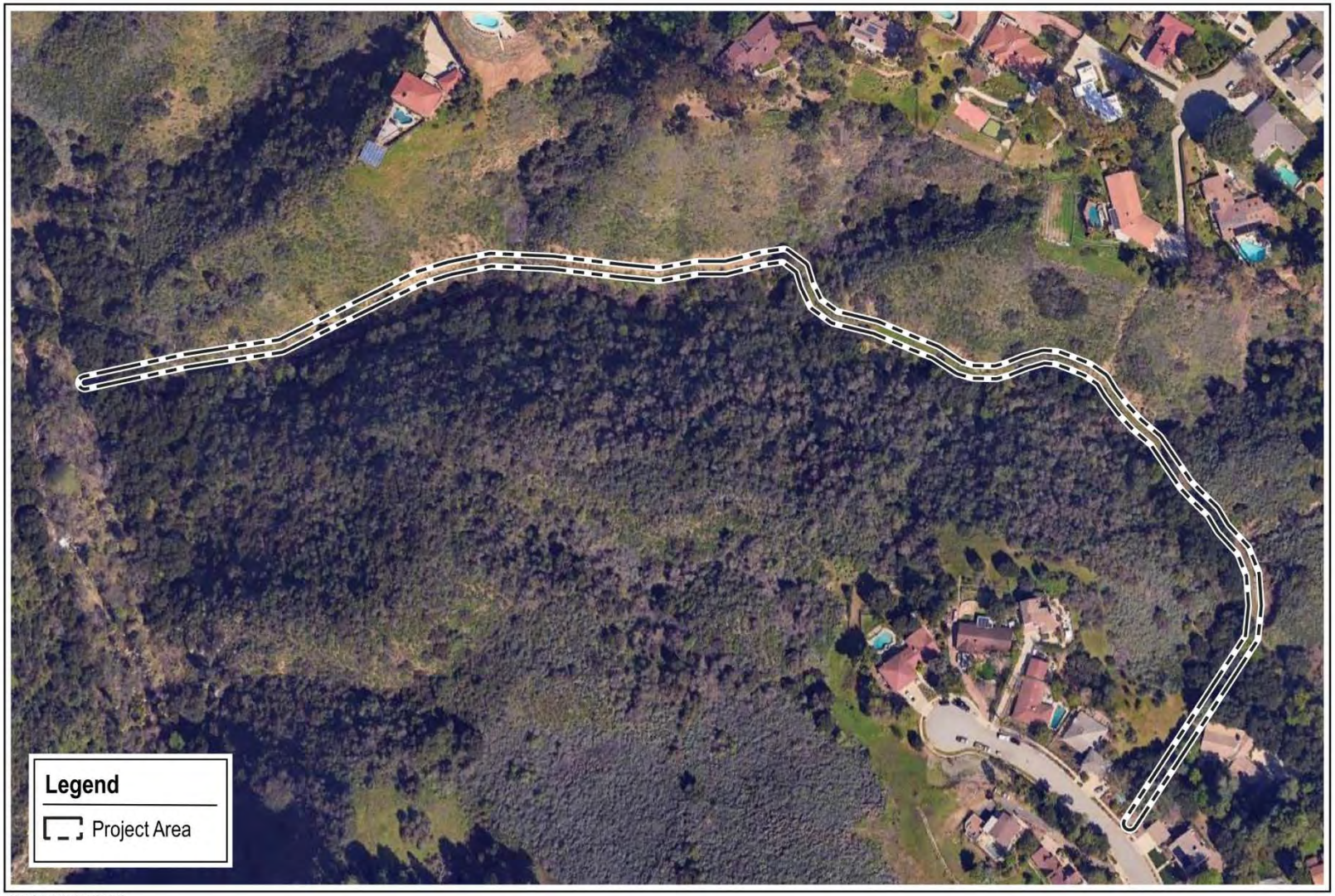

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BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

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Public Works Department

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Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Santa Ynez Band of Chumash Indians
Nakia Zavalla, Tribal Historic Preservation Officer
PO Box 517, Santa Ynez, CA 93460
nzavalla@chumash.gov

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Nakia Zavalla:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

The Box Canyon Manhole and Road Improvements Project involves infrastructure upgrades and maintenance activities along the Box Canyon access road, which serves as a critical component of the City of Thousand Oaks PWD wastewater conveyance system. The purpose of the Project is to improve long-term access for maintenance vehicles, improve side canyon drainage transport across the access road, and ensure the continued reliability of the City's wastewater infrastructure. Proposed improvements include the installation of a new manhole and replacement of approximately 10 feet of existing asbestos cement 8-inch diameter wastewater piping at the proposed manhole structure to facilitate maintenance and inspection of the wastewater system, and the concrete paving of approximately 260 linear feet of roadway segment of the existing, steep unpaved access road to provide stable, year-round access. To address stormwater management and erosion control, the Project also includes the installation of five new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls, as well as the construction of three additional upstream headwalls for three existing storm drain culverts.

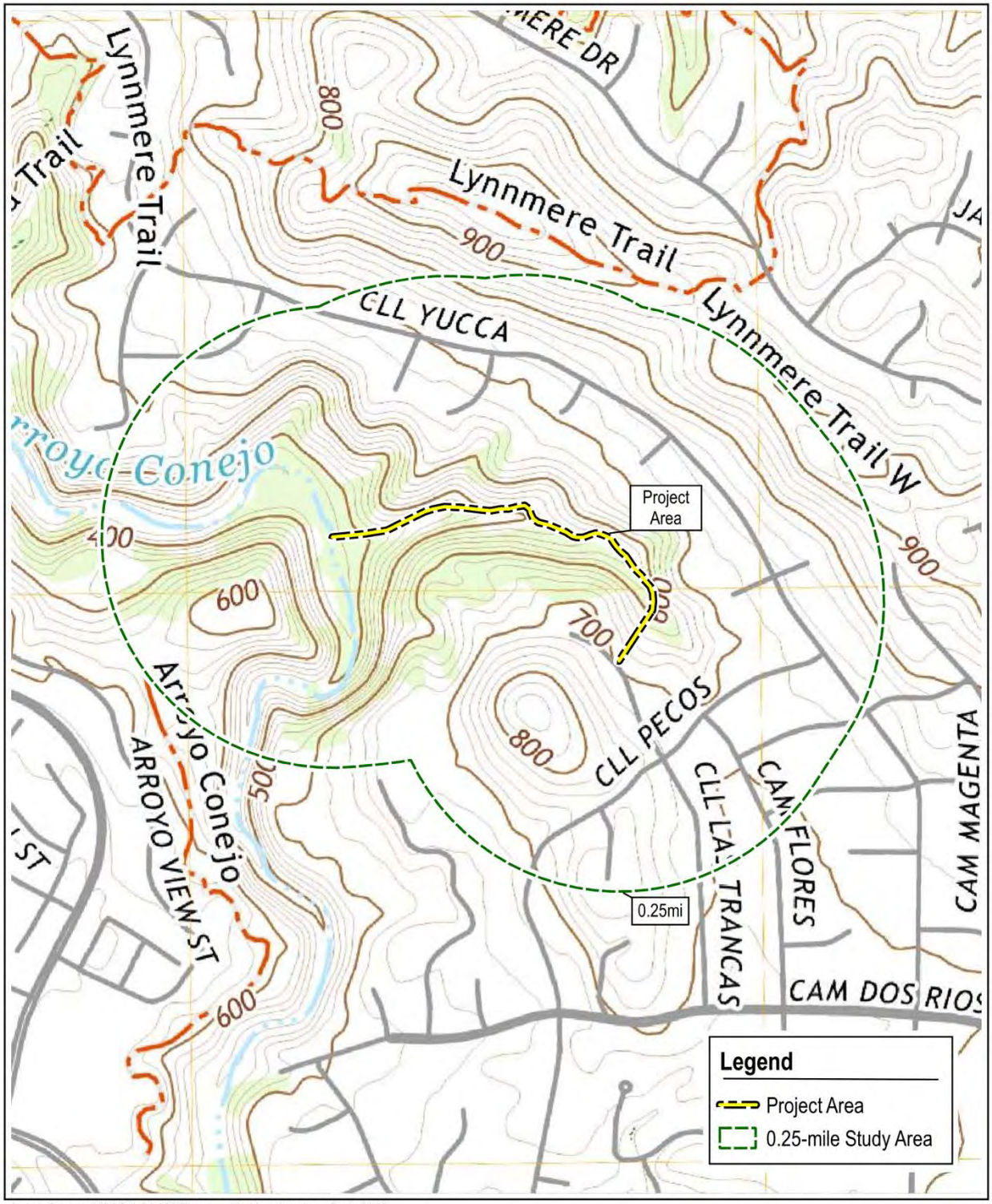
Pursuant to Public Resources Code (PRC) Section 21080.3.1(b), you have 30 days from the receipt of this letter to request Assembly Bill 52 consultation, in writing, with the City of Thousand Oaks Public Works Department. The goal of AB 52 Consultation is for lead agencies to consult with California Native American Tribes to identify any Tribal Cultural Resources (TCRs), as defined in PRC Section 21074, located within the Project development footprint, and if such resources are identified, to work with Tribes to identify mitigation measures capable of avoiding or substantially lessening potential significant impacts to those identified TCRs, in accordance with PRC Section 21080.3.2.

Your Tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed Project. If you require any additional information or have any questions, please contact me at 805-376-5060 or via e-mail at PMcCulloch@toaks.gov. Thank you for your assistance.

Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map



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BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

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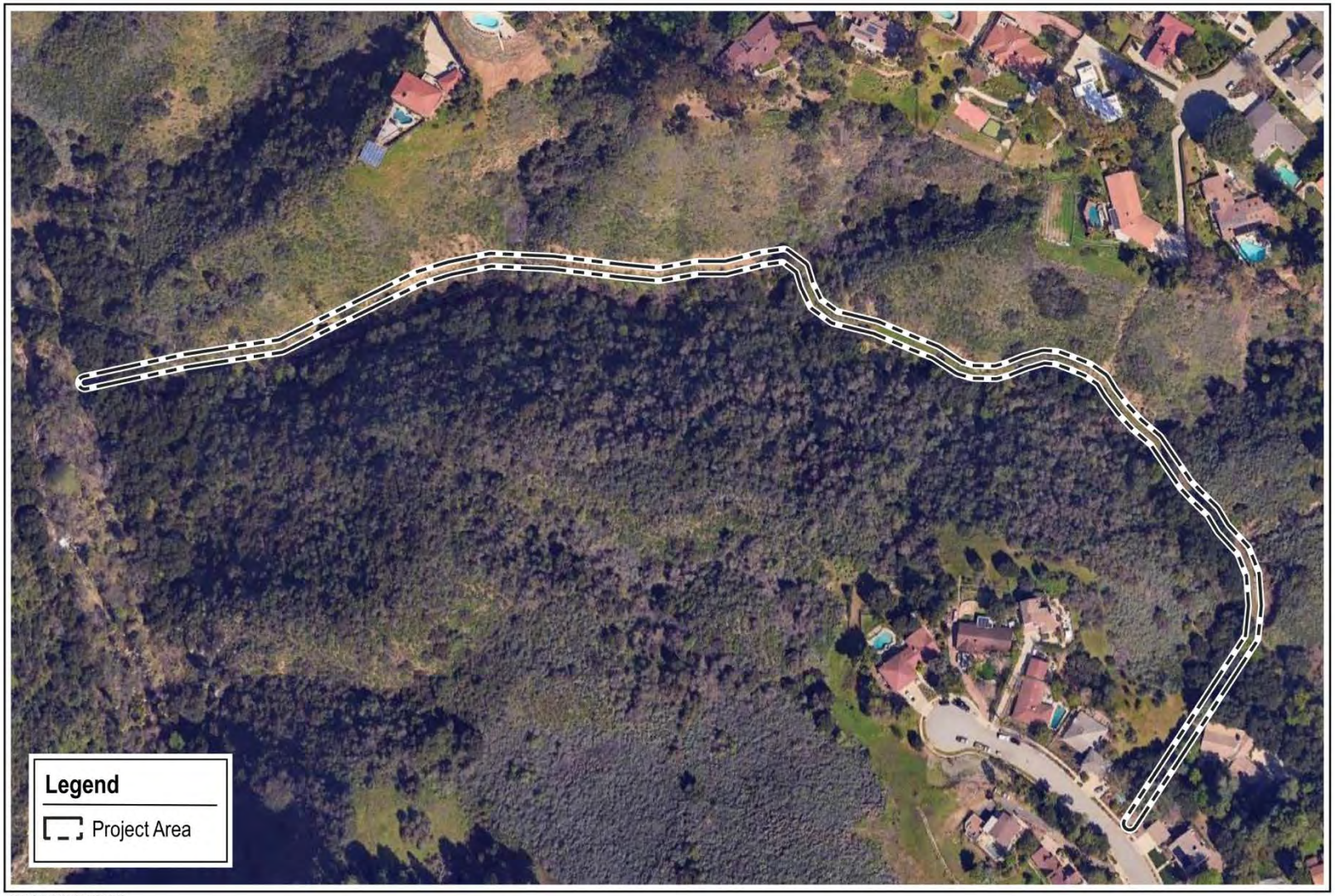

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BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

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Public Works Department

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Phone 805/449-2100 | Fax 805/449-2475 | www.toaks.gov

Nader Heydari
Director

December 11, 2025

Northern Chumash Tribal Council
Violet Walker, Chairperson
P.O. Box 6533
Los Osos, CA, 93412
violetsagewalker@gmail.com

RE: Assembly Bill 52 Tribal Consultation – Box Canyon Manhole and Road Improvements Project

Dear Violet Walker:

This letter is to inform you that the City of Thousand Oaks (City) has determined that a project application has been submitted for a proposed Public Works Department (PWD) development project (Project) and that the City is preparing an Initial Study/Mitigated Negative Declaration in accordance with the California Environmental Quality Act (CEQA) to assess the potential environmental effects of the proposed Project. The Project site is located within the City of Thousand Oaks and lies primarily within the Arroyo Conejo Open Space area. The site contains PWD infrastructure (8-inch diameter wastewater piping and maintenance access structures) located along the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. While the site is primarily located within the City of Thousand Oaks, access is provided through the Lynn Ranch community, which lies within unincorporated Ventura County. See Figures 1 and 2 for a Project location map and site map.

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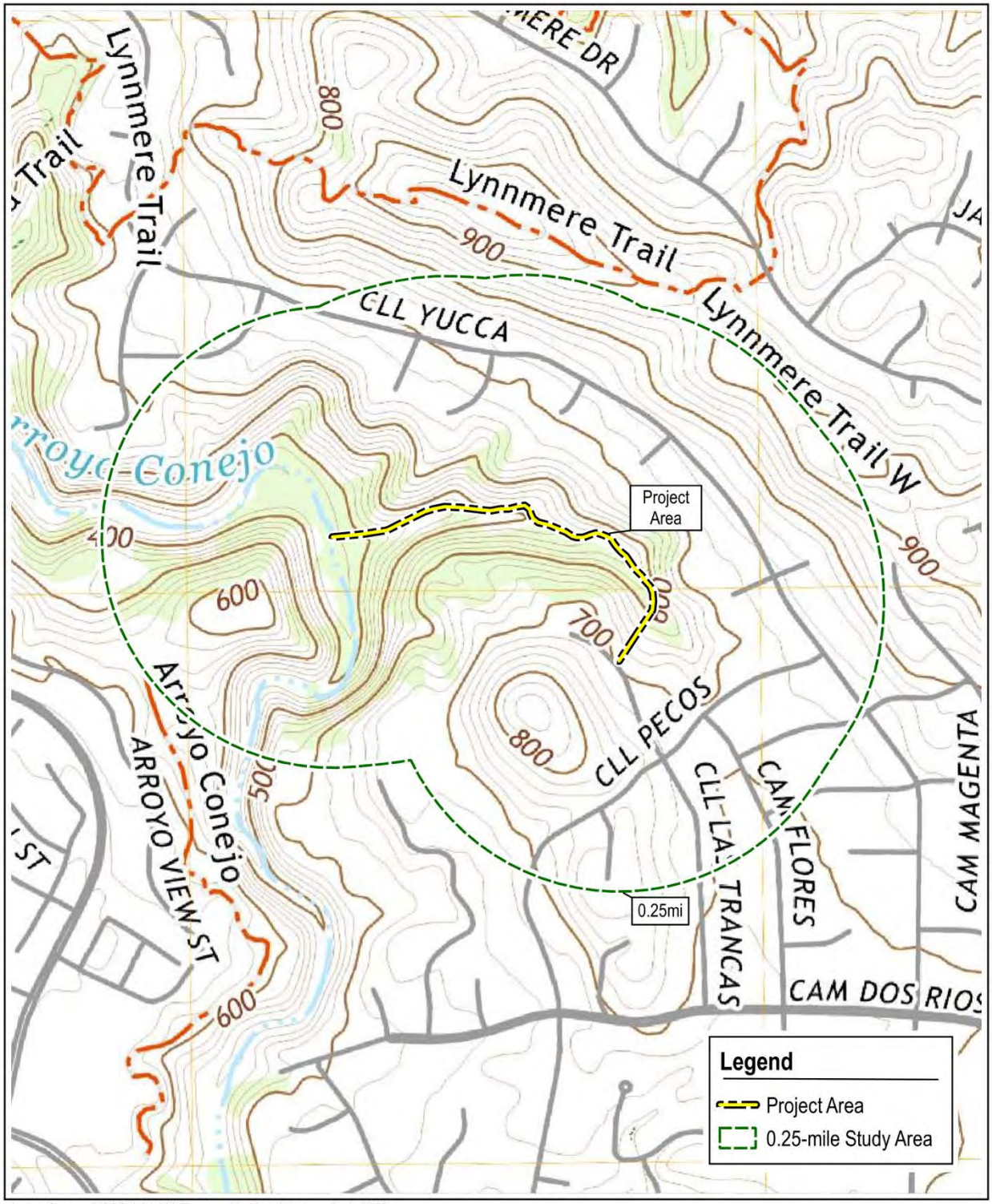
Sincerely,

Patrick McCulloch
Utilities Maintenance Supervisor
Public Works Department
City of Thousand Oaks

Enclosures: Project Location Map, Project Site Map



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BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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USGS Map with Project Area and 0.25-mile Study Area

FIGURE 1

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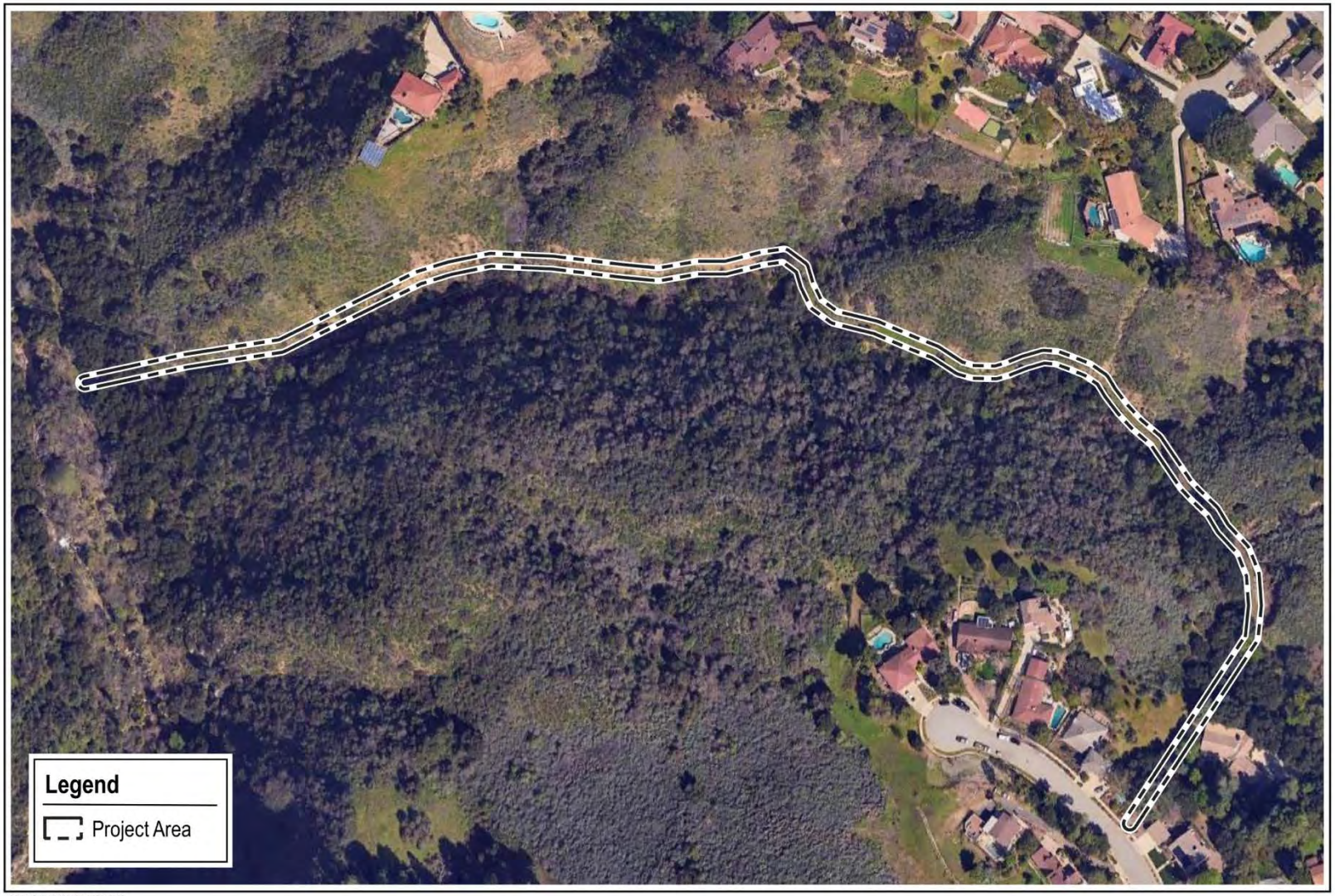

Image Source: Google Earth, 2023.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

toaks.gov

APPENDIX C.1

Jurisdictional Delineation and Habitat Assessment

Arroyo Conejo Utility and Road Maintenance Project

Jurisdictional Delineation and Habitat Assessment

prepared for

City of Thousand Oaks
2100 East Thousand Oaks Boulevard
Thousand Oaks, California 91362

prepared by

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

August 2025

RINCON CONSULTANTS

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Appendix H Jurisdictional Delineation Map Book
Appendix I Jurisdictional Delineation Datasheets

1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by the city of Thousand Oaks to prepare this Jurisdictional Delineation and Habitat Assessment Report (Report) for the Arroyo Conejo Utility and Road Maintenance Project, located in the City of Thousand Oaks, Ventura County, California. The Project consists of maintaining access along 7 miles of existing right of way consisting of access roads for two pipelines (wastewater interceptor Unit W and Unit Y) and 20 facilities (e.g., manholes, valves, etc.). The Study Area covered in this report includes Unit W and Unit Y access roads and facilities (Project Site) and a 100-foot buffer. This report is intended to assist the City in identifying the existing biological resources within the Study Area and is intended to be referenced to support aquatic resources permitting for the maintenance project.

1.1 Project Background

Based on construction as-built plans, the Unit W wastewater pipeline was constructed in 1962, and the Unit Y pipeline was constructed in 1960. The Conejo Valley Sanitary District owned and maintained the pipelines before the City's Public Works Department (PWD) took over in 1964. The PWD has been responsible for maintaining the access roads, pedestrian pathways, and pipeline infrastructure since taking over from the Conejo Valley Sanitary District. The Unit Y and W pipelines are responsible for transmitting the City of Thousand Oaks' sewage to the Hill Canyon Treatment Plant (HCTP). The service area covers approximately 55 square miles, with approximately 35,000 service connections, collecting wastewater from a population of approximately 130,000 people. To continue safe service, regular maintenance of the pipelines and their associated access roads and pathways is required. Efficient and reliable access is also a necessity to allow for the continued and consistent inspection of the pipelines and their associated infrastructure during and following flood events or other natural disasters.

1.2 Project Location

The Project site is located within the City of Thousand Oaks, Ventura County, California (Figure 1). The Unit Y portion of the Project is located within the City designated Wildwood Park Open Space[1] and Unit W is located primarily within the City designated Arroyo Conejo Open Space and partially within the Conejo Canyons Open Space. The Project is in Sections 5 - 8 of Township (T) 1 North (N), Range (R) 19 West (W); Section 36 of T2N, R20W; and Section 31 of T2N, R19W, and within the U.S. Geological Survey (USGS) Newbury Park, California, 7.5-minute quadrangle. The Unit W portion of the Project is centered at approximately 34.201237°N, 118.912922°W and consists of eight utility facility sites and approximately 3.9 miles of road segments. The Unit Y portion of the Project is centered at approximately 34.214970°N, 118.905494°W and consists of twelve utility facility sites and approximately 4.1 miles of road segments. A map depicting an overview of the Project and Study Area is provided in Figure 2.

[1] Thousand Oaks' Open Space System was conceptualized in the mid-1960s, at the very beginning of the City's development process, to be a continuous and contiguous "ring" of green around the perimeter of the City. Open space also defines the edge where development ends and natural land begins, thus preventing the sprawl of urbanization.

Figure 1 Regional Location

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24-16512 BIO
Fig 1 Regional Location

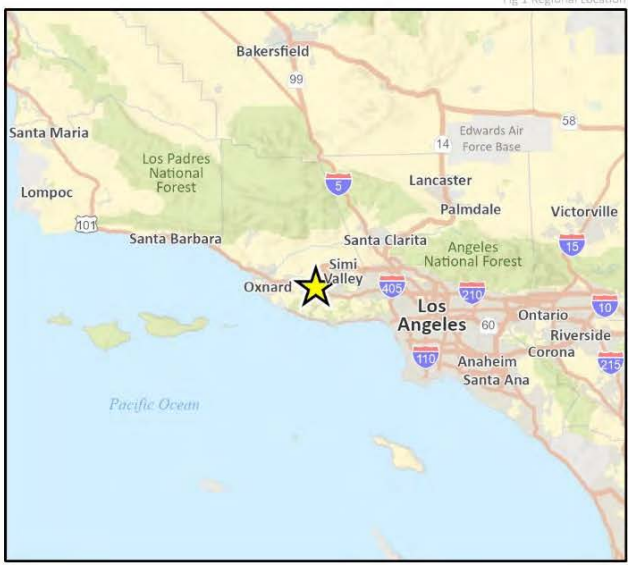
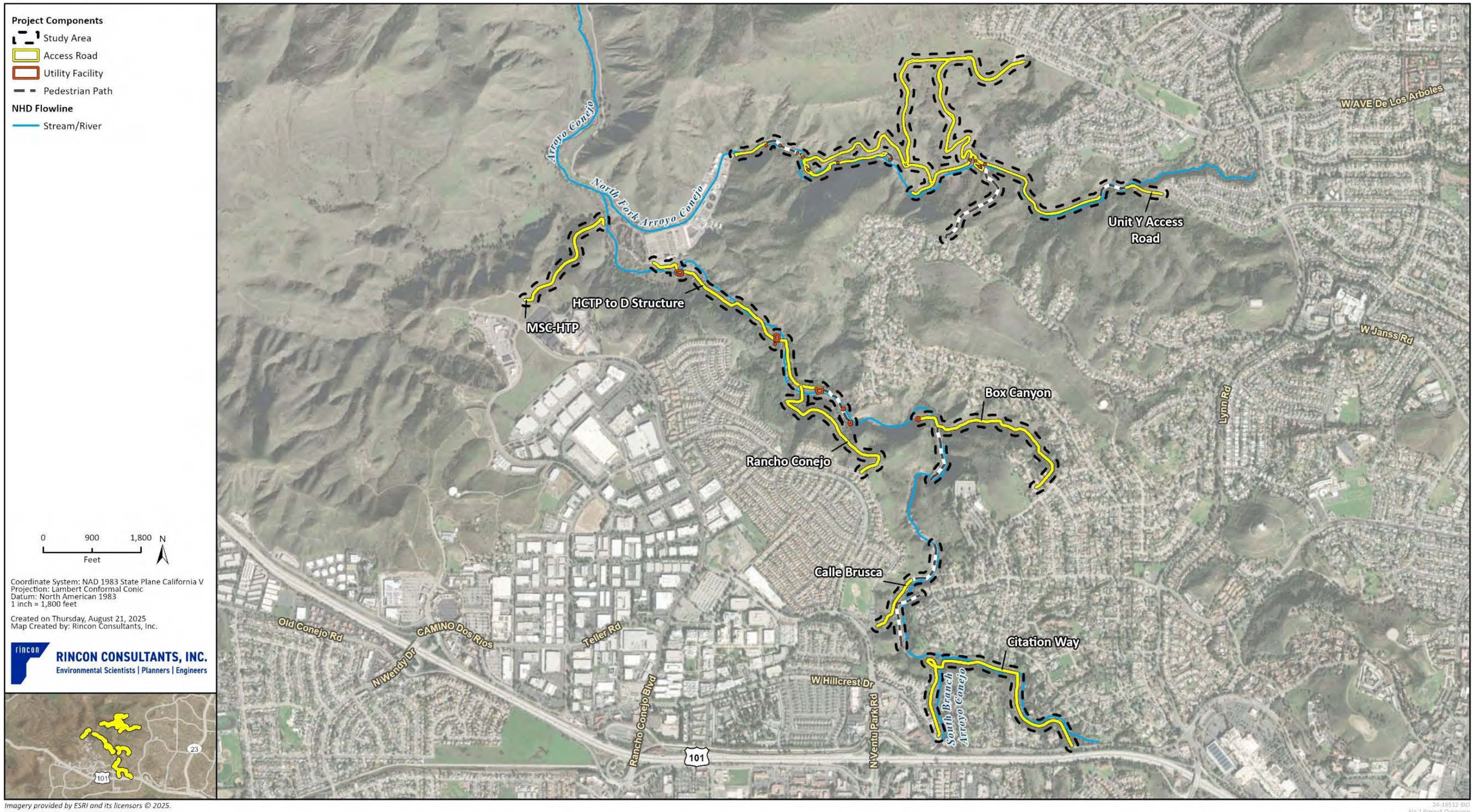


Figure 2 Project and Study Area Overview



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Additional data provided by NHD, 2025.

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Fig 2 Project Overview

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1.3 Project Description

To continue servicing the City's wastewater needs, PWD must conduct regular maintenance and inspections along wastewater interceptor Unit W and Y. Wastewater interceptor Unit W and Y, and their related facilities contain an approximately 7-mile network of PWD easements (existing access roads). The Project site is inclusive of all of Unit Y and W's existing access roads, pedestrian access paths, and utility facilities (e.g., pipeline cleanout access points, valves, manholes). Maintenance for access to some facilities may require relocation of native sediment to accommodate periodic visual inspections. Sediment that is removed will be relocated to an appropriate location adjacent to the facility. No more than 0.01 acre or 50 linear feet of sediment will be removed per year.

The project also includes temporary access across Arroyo Conejo Creek at four locations and two HCTP to D Structure access road temporary access road rebuilds totaling an area of 0.335 acre. All other stream crossings, utility facilities, access roads, and pedestrian pathways will be maintained to preserve function and will not increase the existing disturbance footprint.

Each of the Project's individual 20 utility facilities and seven distinct access road segments are depicted in Appendix A and are summarized in Table 1 along with their associated routine maintenance activities. Details regarding the best management practices (BMPs), maintenance activities required for each facility and access road segment, and equipment involved are described further below. Maintenance activities will begin immediately following receival of all appropriate permits and will continue indefinitely through the term of the permits.

Table 1 Project Elements

Unique Identifier	Work Summary
Utility Facilities	
Unit W	
W/F Structure Valves	Routine minor vegetation maintenance (trimming) surrounding the facilities to maintain temporary pedestrian access for inspections. Occasional sediment/debris removal following flood events to accommodate temporary pedestrian access for inspections.
A Structure Valve	
Shapell Lateral Valves	
Shapell Manhole	
D Structure Valves	
Calle Salto Lateral	
Rancho Conejo Lateral	
J Structure Valve	
Unit Y	
Cleanout #3	Routine minor vegetation trimming surrounding the facilities to accommodate inspections/pedestrian access. Occasional sediment/debris removal following flood events to accommodate inspections/pedestrian access.
Cleanout #4	
Manhole AA	
Manhole BB	
Manhole CC	
Manhole A37-1	
Manhole A37-A	
Manhole Y1	
Manhole Y2	

Unique Identifier	Work Summary
Manhole Y3	
Manhole Y10	
Y Structure	
Access Roads	
MSC-HTP	Minor surface scraping of existing access road and light trimming.
HCTP to D Structure	Minor road surface scraping and light vegetation trimming to maintain existing road width. Rebuilding washed out portion of the road for access at the D Structure Four temporary fill creek crossings will be created to facilitate heavy-duty truck and equipment access.
Rancho Conejo	Minor road surface scraping and light trimming One existing creek crossing will be maintained
Box Canyon	Light vegetation trimming. Addition of fill in erosional gullies and maintenance/replacement of existing culverts. Surface scraping to maintain access road condition. One existing creek crossing will be maintained.
Calle Brusca	Minor surface scraping of existing access road and light vegetation trimming to maintain clearance.
Citation Way	Minor surface scraping of existing access road and light vegetation trimming to maintain clearance. Three existing creek crossings will be maintained.
Unit Y Roads	Minor surface scraping of existing access road and light vegetation trimming to maintain clearance. Two existing creek crossings will be maintained.
Pedestrian Pathways	
Unit Y Pathways	Light trimming as needed.
Unit W Pathways	

Best Management Practices

- All access road maintenance will take place outside of the wet season.
- All access road trimming will occur within the limits of the existing access roads.
- Only minor shrub and tree branch trimming will be required, all approximately less than 2 inches in diameter. Entire tree and shrub removal will not be required.
- Road surface scraping will occur within the existing limits of the access roads and will be limited to smoothing out potholes and erosional features, their width will not extend. Existing grade will be preserved.
- A water truck will be utilized to mitigate dust during all surface scraping operations
- Creek crossing maintenance will be limited to the smoothing out of bank scouring to accommodate continued vehicle access. Occasional native cobble rearrangement may be necessary to maintain access road clearance.
- Block nets will be installed prior to temporary fill creek crossing installations along Arroyo Conejo upstream and downstream of each crossing.

- Construction personnel and equipment will be free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil) prior to entering the Project Area. All potentially contaminated equipment will be carefully cleaned prior to the initiation of Project activities.
- Materials shall be stored at least 50 feet from streams and wetlands, as feasible, or equipment will utilize secondary containment.
- Any substances that could be hazardous to wildlife resulting from Project-related activities shall be prevented from contaminating the soil and/or entering waterways.
- Project activities will take place during the daytime.

Facilities Maintenance Activities

All Project Facilities

- City staff will perform periodic inspections of existing wastewater infrastructure bi-monthly and post-storm events. Will drive area with pickup trucks and walk to sites inaccessible by pickup truck. Inspections are done visually, and pictures are taken.
- All facilities will require routine minor vegetation maintenance to accommodate inspections/ pedestrian access.
- Occasional sediment/debris removal following flood events to accommodate inspections/ pedestrian access.

Unique Facility Activities

- **D-Structure:** Flow transfer occurs once per year at the D structure. Staff will use pickup trucks to access the valves and operate them with a valve key to transfer flow from the 42-inch sewer main to the old 30-inch sewer main. A backhoe and hydro combination truck will be used to reach the D-Structure. The backhoe will remove the lid from the D-Structure, and the hydro combination truck will vacuum out debris.
- **Shapell Manhole**: an approximately 300 long pedestrian access pathway will be maintained to access the Shapell Manhole.
- **J-Structure:** Bi-annual hydro-cleaning with pickup truck and pull trailer hydrojetter. One vent filter is serviced every 4 months. Hand tools are used to open the valve.
    - During flow transfer of Unit W 42-inch to 30-inch line, staff switch flows at the J-Structure using an electric valve turning tool and generator.
- **Tunnel door**: The tunnel hatch is opened once a year to inspect the lateral. The hatch is opened with a battery-powered tool, and a vent is placed in the hatch to ventilate the tunnel.
- **Y Structure**: The Y Structure Valve will be exercised to switch flow to parallel line. Vacuum/relief pressure from cleanout structure near HCTP. Hydro combination truck and suction hose will be utilized.

MSC to HCTP Access Road

- Road surface scraping to smooth out the trail down to the bridge.
- Light trimming along the road to maintain vehicle access.
- Removal of dead/fallen trees and/or vegetation drift from access road as needed.
- Existing creek crossing will be abandoned. City staff will use the bridge to cross the creek.

HCTP to D Structure Access Road

- City staff will perform periodic inspections of existing wastewater infrastructure along this segment bi-monthly and post-storm events. Will drive area with pickup trucks and walk to sites inaccessible by pickup truck. Inspections are done visually, and pictures are taken.
- Road surface scraping to smooth out the existing trail. Four existing creek crossings will be maintained.
- Existing culverts and drainage features will be cleared out or repaired as necessary.

- Two sections of the existing access road that washed out during previous storm events will be temporarily reestablished with gravel fill (1-to-2-inch diameter rock) to accommodate safe vehicular access during periodic inspections. 0.019 acre, 130 linear feet, and 80 cubic yards (cy) at the D-Structure location will be required to rebuild the washed out portion of the access road and 0.11 acre, 120 linear feet, and 100 cy will be required at the A-Structure location. Once maintenance activities are complete at both the A and D structures, the rock will be removed.
- Four temporary fill creek crossings will be created to facilitate hydro truck and equipment access for annual flow transfer and maintenance of the D-Structure. No excavation or dewatering of Arroyo Conejo will be required for the four temporary creek crossings. A combination of mechanical equipment and hand tools will be used during installation. To protect wildlife, nets will be installed prior to crossing installation upstream and downstream of each crossing. For sediment and erosion control, gravel bags will be placed downstream prior to the placement of temporary culverts and rock. Once gravel bags are in place, engineering fabric will be laid across each creek crossing location. Pipe culverts will then be positioned on top of the fabric, aligned with the natural flow of the creek. A layer of 4- to 6-inch gravel will be placed over the culverts to create a stable surface for vehicle access. After maintenance work is completed (estimated to take approximately two to three weeks) all temporary materials, including rock, pipe culverts, and engineering fabric, will be removed. The gravel bags downstream will then be taken out, followed by the removal of the upstream and downstream nets. In-stream work will only be conducted in the dry season, and a dump truck, wheeled loader, and heavy equipment will be used for installation. Estimated quantities of each crossing are provided below and are depicted on pages 7 – 8 of Appendix A.
    - Creek Crossing 1 crosses Arroyo Conejo just south of the HCTP and connects through the washed-out portion of the access road at the A Structure. Creek Crossing 1 will necessitate 85 linear feet, 0.029 acre, and 40 cy of fill. Both the creek crossing and the washout rebuild will necessitate a total of 0.139 acre, 120 linear feet, and 140 cy of fill.
    - Creek Crossing 2 crosses Arroyo Conejo southeast of Crossing 1 and will necessitate 0.029 acre, 85 linear feet, and 60 cy of fill.
    - Creek Crossing 3 crosses Arroyo Conejo approximately 400 feet southeast of Crossing 2 and will necessitate 0.029 acre, 85 linear feet, and 55 cy of fill.
    - Creek Crossing 4 crosses Arroyo Conejo just east of the Shapell Lateral Valves and will necessitate 0.028 acre, 80 linear feet, and 55 cy of fill.
- Minor vegetation trimming to maintain vehicle access.
- Removal of dead/fallen trees and/or vegetation drift from the access road as needed.

Rancho Conejo Access Road

- Minor vegetation trimming to maintain vehicle access.
- Road surface scraping to smooth out the existing access road.
- Existing culverts and drainage features will be cleared out or repaired as necessary.
- One existing creek crossing that connects this segment to the HCTP to D Structure access road will be maintained.
    - Approximately 100 square feet of invasive giant reed (*Arundo donax*) removal at the stream crossing will be required to maintain access.

- Removal of dead/fallen trees and/or vegetation drift from the access road and around structures as needed.

Box Canyon Access Road

- City staff will use this access road to access the J Structure and the tunnel door at Box Canyon.
- Road surface scraping to smooth out the existing access road. One existing creek crossing will need to be periodically maintained.
- Periodic addition of fill to smooth out erosional gullies.
- Maintenance and/or replacement of failed culvert(s).
- Vegetation trimming to maintain vehicle access.
- Herbicide application for poison oak encroaching into the access roads. Spraying occurs every few years.
- Removal of dead/fallen trees and/or vegetation drift from the access road and around structures as needed.

Box Canyon to Tunnel Door Segment

- **Tunnel inspection.** Staff will walk to the tunnel and perform an entry to inspect approximately 1,100 feet of pipe that runs through the rockface of the canyon.

Calle Brusca Access Road

- The City will utilize the road to perform periodic inspections of existing wastewater infrastructure bi-monthly and post-storm events. Will drive area with pickup trucks and walk to sites inaccessible by pickup truck. Inspections are done visually, and pictures are taken.
- Road surface scraping to smooth out the existing access road along the northern portion.
- Minor vegetation trimming to maintain vehicle access along the southern portion. Any trees needing trimming will be limited to branches that are two inches in diameter or less.
- Pedestrian access along the northern portion to the southern tunnel door.
- Removal of dead/fallen trees and/or vegetation drift from the access road and around structures as needed.
- Existing culverts and drainage features will be cleared out or repaired as necessary.
- One vent filter is serviced every 4 months.
- Hydro cleaning maintenance bi-annually for pipeline in existing access road.

Camino Dos Rios/Calle Brusca

- Minimal vegetation trimming along existing access road leading up to Arroyo Conejo to accommodate continued vehicle access and for pedestrian access along the west bank of Arroyo Conejo.
- Inspection of one structure visually.
- Paint over graffiti along pipeline infrastructure.

Citation Way Access Road

- City staff will perform periodic inspections of existing wastewater infrastructure monthly and post-storm events. Will drive area with pickup trucks and walk to sites inaccessible by pickup truck. Inspections are done visually, and pictures are taken.
- Paint over graffiti along pipeline infrastructure.
- Minor vegetation trimming to maintain vehicle access.
- Road surface scraping to smooth out existing access road. Three existing creek crossings will be maintained.
- Existing culverts and drainage features will be cleared out or repaired as necessary.
- One flow meter along this lateral will be maintained periodically.

Unit Y Access Roads

- City staff will use the Unit Y existing access roads to perform periodic inspections of existing wastewater infrastructure bi-monthly and post-storm events. Will drive area with pickup trucks and walk to sites inaccessible by pickup truck. Inspections are done visually, and pictures are taken.
- Road surface scraping to smooth out the existing access road. Two existing creek crossings will be maintained.
- Existing culverts and drainage features will be cleared out or repaired as necessary.
- Seven vent filters along Unit Y are serviced every 4 months.

Equipment Used

- **Utility facility access.** Pick-up trucks will travel the access roads during maintenance activities and for inspections.
- **Vegetation removal.** Power pruners, hedge trimmers, weed whips, chainsaws, and various hand tools.
- **Road surface scraping.** Standard skip loader and bobcats will be utilized during road surface scraping. Water trucks will be utilized to maintain dust. Creek crossings will be maintained with the use of backhoes and bobcats.
- **Vent filter and flow meter maintenance**: Hand tools
- **Painting.** Hand tools
- **Hydro cleaning**. Trailer hydrojetter. Hydro-Combination Trucks.
- **CCTV Van.** CCTV box van will travel access roads during pipeline inspections infrequently or when pipeline issues arise.

2 Methodology

2.1 Regulatory Overview

Regulatory authority over biological resources is shared by federal, state, and local authorities. Regulated resources studied and analyzed herein include potentially affected biological resources identified in the California environmental Quality Act (CEQA) Appendix G, including special-status plant and animal species, nesting birds and raptors, riparian habitat or other sensitive natural plant communities, federal and state jurisdictional waters and wetlands, wildlife movement, conflicts with local policies or ordinances protecting biological resources, such as a protected tree policy or ordinance, and conflicts with any local, regional, or state habitat conservation plan.

2.2 Definition of Special-Status Species

For the purposes of this project and in accordance with CEQA, special-status species include:

- Species listed as threatened or endangered under the federal Endangered Species Act (ESA);
- Species listed as candidate, threatened, endangered, or rare by CDFW under the California Endangered Species Act (CESA) or Native Plant Protection Act;
- Plant species occurring on lists 1 and 2 of the CDFW and California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) system;
- Wildlife species designated as Fully Protected (FP) or Species of Special Concern (SSC) by the CDFW; and
- Species designated as sensitive or protected by the City and/or otherwise protected through ordinance or local policy.

2.3 Literature Review

Prior to visiting the Study Area, Rincon reviewed previous PWD permits and associated reports for maintenance projects within the Study Area, aerial imagery, publicly available literature, and agency databases. These resources were reviewed to understand the context of the biological resources within the Study Area and to identify special-status species and other sensitive biological resources that have been previously documented in the region. The following resources were reviewed:

- Aerial imagery of the Study Area in Google Earth (Google Earth Pro 2025).
- The California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2025) for records of special-status plant species within the *Newbury Park*, *California* USGS quadrangle, and the eight surrounding quadrangles (*Simi, Moorpark, Santa Paula, Thousand Oaks, Camarillo, Point Dume, Point Mugu,* and *Triunfo Pass*)
- The California Natural Diversity Database (CNDDB; CDFW 2025) for records of special-status species within the *Newbury Park, California* USGS and eight surrounding quadrangles
- The United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC; USFWS 2025a) for a list of federally threatened and endangered species with known or expected ranges overlapping or near the Study Area
- Consortium of California Herbaria (CCH; Consortium of California Herbaria 2025)
- eBird. An online database of bird distribution and abundance (eBird 2025)

- iNaturalist (iNaturalist 2025)
- The USFWS Critical Habitat Portal (USFWS 2025b) for information on federally designated critical habitat areas; and
- The information available in peer-reviewed journals and standard reference materials (Jameson and Peeters 2004; Calflora 2023; Holland 1986; Baldwin et al. 2012; Sawyer et al. 2009; Stebbins 2003; Sibley 2016)
- SWCA Environmental Consultants Biological Resources Assessment (SWCA 2022a) and Jurisdictional Delineation Reports for the Unit W and Unit Y (SWCA 2022b)
- Padre Associates, Inc. Unit W Wastewater Interceptor Condition Assessment Biological Resources Study (Padre 2022) and its associated Lake or Streambed Alteration Agreement (CDFW 2022)

To aid in characterizing the nature and extent of jurisdictional waters potentially occurring within the Study Area, the following additional resources were also reviewed:

- The most recent *Newbury Park, California* USGS 7.5-minute topographic quadrangle map (USGS 2025)
- The U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA, NRCS 2025a)
- The USFWS National Wetlands Inventory (NWI; USFWS 2025c)
- The USGS National Hydrography Dataset (NHD; USGS 2025)
- The State Soils Data Access (SDA) Hydric Soils List (USDA, NRCS 2025b)

2.4 Field Survey

Unit Y and most of Unit W were surveyed for potentially jurisdictional waters and sensitive biological resources by SWCA Environmental Consultants in 2022. Rincon conducted supplemental surveys for biological resources and potentially jurisdictional waters in three additional Unit W areas in 2025. SWCA utilized a study area buffer of 100 ft for Unit W. They utilized a 10 ft study area buffer for Unit Y's access roads and a 25 ft buffer for Unit Y's utility facilities. Rincon utilized a 100 ft study area buffer for the supplemental survey areas and extrapolated SWCAs Unit Y Study Area data to 100 ft to provide greater context. Details of the field survey dates and unit areas that were surveyed by SWCA and Rincon are summarized in Table 2. The results of SWCA's field surveys were reviewed for accuracy by Rincon and are incorporated into this report.

Table 2 Survey Dates and Firm

Dates	Firm	Unit
January 25 – 26, 2022; February 1-4, 8, 2022; May 31, 2022; and June 1-3, 9, 10, 16, 17, 2022	SWCA Environmental Consultants	Unit W
October 25, 27, and 28, 2022		Unit Y
January 7, 2025	Rincon Consultants, Inc.	Unit W: Rancho Conejo, Box Canyon, and Calle Brusca pedestrian pathways

Field Reconnaissance Survey

A field reconnaissance-level survey was conducted to characterize existing conditions within the Study Area and to investigate the presence, or potential presence, of sensitive biological resources, including special-status plant and wildlife species, riparian habitat and sensitive natural plant communities, and nesting bird habitat. Biological resources observed were documented and vegetation communities/land cover types within the Study Area were recorded using aerial photography and a global positioning system (GPS) unit. Representative photographs of the site were taken and are included in Appendix B and a compendium of the plant and wildlife species observed within the Study Area is included in Appendix C.

Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California,* Second Edition (Baldwin et al. 2012). Plant species were identified to the lowest practical taxonomic level. The vegetation classification system used to characterize vegetation was based on *A Manual of California Vegetation*, Second Edition (Sawyer et al. 2009), and was modified as-needed based on dominant species to describe any atypical communities . Wildlife identification and nomenclature followed standard reference texts, including *Sibley Birds West: Field Guide to Birds of Western North America* (Sibley 2016), *Field Guide to Western Reptiles and Amphibians* (Stebbins 2018), and the *Peterson Field Guide Mammals of North America* (Reid 2006). The habitat requirements for regionally occurring special-status-species were assessed and compared to the type and quality of the habitats observed within the Study Area during the field survey.

Jurisdictional Delineation

A jurisdictional delineation (JD) survey was conducted that followed federal and state policies, methods, and guidelines to identify and delineate potential jurisdictional waters, which are summarized in the subsections below and in detail in Appendix D. Photographs of potential jurisdictional waters and the surrounding areas were captured and are provided in Appendix B of this report. As part of the JD, the conditions of potentially jurisdictional waters were characterized and noted, and associated vegetation and hydrologic features (e.g., ordinary high-water mark, hydrophytic plants, hydric soils, etc.) were documented. The extent of potential jurisdictional waters and ordinary high-water mark (OHWM) sample points were collected and mapped in the field with the use of a GPS unit capable of sub-meter accuracy. The results of the JD are included in this report.

Wetland Waters of the United States

Potential wetland features were evaluated for the presence of wetland indicators; specifically, hydrophytic vegetation, hydric soils, and wetland hydrology, according to routine delineation procedure within the *Wetlands Delineation Manual* (USACE 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a). The 2022 National Wetland Plant List was used to determine the indicator status of the vegetation examined by the following indicator status categories: Upland (UPL), Facultative Upland (FACU), Facultative (FAC), Facultative Wetland (FACW), and Obligate Wetland (OBL; Lichvar et al. 2020). If a potential wetland is present within the Study Area, representative sample points were taken in areas most likely to exhibit wetland characteristics (i.e., the prevalence of hydrophytic vegetation and suitable landform) and examined in the field for potential wetland indicators. Sample points were not conducted in areas with an obvious prevalence of upland vegetation or in areas where the landform would not support wetland features. Adjacent wetlands are “waters of the U.S.” only if there is a

continuous surface connection between the potential wetland and a navigable or relatively permanent water body (United States Environmental Protection Agency [EPA] 2023).

Non-Wetland Waters of the United States

The lateral limits of USACE jurisdiction for non-wetland waters were determined by the presence of physical characteristics indicative of the OHWM. The OHWM was identified in accordance with the applicable Code of Federal Regulations (CFR) sections (33 CFR 328.3 and 33 CFR 328.4) and Regulatory Guidance Letter 05-05 (USACE 2005), as well as in reference to various relevant technical publications, including, but not limited to, *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). The regulations were also reviewed to determine any non-jurisdictional features (e.g., erosional features, roadway ditches excavated in upland areas, etc.). OHWM data points were evaluated using the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010) for the streams.

Additionally, Rincon evaluated sources of water, streamflow period, connections to Navigable Waters or Traditional Navigable Waters (TNWs), and other factors that qualify as "waters of the U.S." under current USACE regulations (33 CFR 328.3), including, but not limited to, the recent *Sackett v. EPA* Supreme Court ruling and the conforming *Revised Definition of Waters of the United States* (conforming rule, EPA (EPA 2023). A more detailed regulatory definition of USACE jurisdiction is provided in Attachment 4.

Waters of the State

The limits of non-wetland "waters of the State," as defined under the Porter-Cologne Water Quality Control Act, were determined to be coterminous with USACE non-wetland waters (i.e., limited by the OHWM) based on current interpretation of jurisdiction by the State Water Resources Control Board (SWRCB) and the Los Angeles Regional Water Quality Control Board (RWQCB). However, non-wetland waters of the State included all waters exhibiting an OHWM and not only those that were tributaries to navigable waters or that supported "relatively permanent" flows.

Additionally, potential State wetland features were evaluated pursuant to *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019) which acknowledges that wetland waters of the State should be delineated using the standard USACE wetland delineation procedures and states that the SWRCB takes jurisdiction over isolated wetlands.

CDFW Streambed

The extent of potential streambeds, streambanks, and riparian habitat subject to CDFW jurisdiction under Section 1600 et seq. of the CFGC was delineated by reviewing the topography and morphology of potentially jurisdictional features to determine the outer limit of riparian vegetation, where present, or the tops of banks for stream features.

3 Existing Site Conditions

3.1 Climate, Topography, and Land Use

The regional climate of Thousand Oaks is characterized by warm, dry summers and mild, wet winters. Thirty-year climatological normal for Thousand Oaks indicates an annual average precipitation of 15.55 inches, with average August maximum temperatures at 82.2°F, and average December minimum temperatures at 45.6°F (PRISM Climate Group 2025). The Study Area contains rolling hills and canyons, ranging from 230 to 730 feet in elevation, that are located within undeveloped open space.

Unit W

Most of the Unit W portion of the Study Area is located within the City designated Arroyo Conejo Open Space and Conejo Canyons Open Space preserves. The Study Area within Unit W contains rolling hills and canyons. Natural open space surrounds the northern half of the Study Area while residential neighborhoods surround the southern half. Unit W's existing access roads transverse throughout this portion of the Study Area and Unit W's laterals and associated infrastructure are generally located throughout the Study Area's canyons, below ground.

Unit Y

The Unit Y portion of the Study Area is located within the City designated Wildwood Regional Park open space. The Study Area within Unit Y contains rolling hills and canyons and is generally bound by natural open space on all sides with residential neighborhoods located to the east and a portion of the south. Unit Y's and Wildwood Regional Parks' existing access roads run throughout this portion of the Study Area and Unit Y's laterals and associated infrastructure are generally located below ground of the Study Area's canyons. Wildwood Regional Park is frequently used by the public for recreation; including but not limited to hiking, mountain biking, and camping.

3.2 Soils

The Study Area contains 27 different USDA NRCS soil map units (USDA, NRCS 2025a; Table 3). Many of the soil units are comprised from Mesozoic and tertiary sedimentary rocks and some Miocene volcanic rocks (Griffith 2016). The second most prevalent soil type within the Study Area, Riverwash, is included on the NRCS Hydric Soils List (USDA, NRCS 2025b). The Study Area's soil map units are depicted in Appendix E.

Table 3 Soil Types within the Study Area

Soil Unit Name	Soil Map Unit Symbol
Calleguas very channery loam, 30 to 50 percent slopes	CaF
Cibo clay, 5 to 15 percent slopes	CmD
Gilroy loam, 15 to 50 percent slopes, very rocky	GvF
Gilroy-Cibo complex, 5 to 15 percent slopes	GtD
Gullied land	GxG
Hambright rocky clay loam, 30 to 50 percent slopes	HbF
Hambright very rocky loam, 15 to 75 percent slopes	HaG
Hambright very rocky loam, 15 to 75 percent slopes	HaG
Huerhuero very fine sandy loam, 5 to 9 percent slopes, eroded	HuC2
Igneous rock land	IrG
Linne silty clay loam, 15 to 30 percent slopes, eroded	LeE2
Linne silty clay loam, 30 to 50 percent slopes, eroded	LeF2
Linne silty clay loam, 9 to 15 percent slopes, eroded	LeD2
Metz loamy sand, loamy substratum, 0 to 2 percent slopes	MfA
Millsholm loam, 15 to 50 percent slopes	MhF
Rincon silty clay loam, 15 to 30 percent slopes, eroded	RcE2
Rincon silty clay loam, 2 to 9 percent slopes, MLRA 19	RcC
Rincon silty clay loam, 9 to 15 percent slopes, eroded, warm MAAT, MLRA 19	RcD2
*Riverwash	Rw
San Benito clay loam, 50 to 75 percent slopes, MLRA 20	ScG
San Benito clay loam, 30 to 50 percent slopes, MLRA 20	ScG
Santa Lucia shaly silty clay loam, 50 to 75 percent slopes	SeG
Topdeck loam, 10 to 35 percent slopes	1159
Urban land-Typic Xerorthents, very gravelly-Topdeck complex, 10 to 35 percent slopes	1259
Vina gravelly loam, 2 to 9 percent slopes	VnC
Vina loam, 2 to 9 percent slopes	VaC
Vina silty clay loam, 2 to 9 percent slopes	VsC

**hydric soil*

3.3 Hydrology

The Study Area is in the Upper Conejo Arroyo Watershed (Hydrologic Unit Code -12 180701030104). Arroyo Conejo conveys flow through the Unit W portion of the Study Area in a north-northeast direction where it merges with Arroyo Santa Rosa and becomes Conejo Creek. Conejo Creek then drains into Calleguas Creek, which eventually enters the Pacific Ocean from an estuary at Mugu Lagoon. The north fork of Arroyo Conejo (NFAC) conveys flow in a west-southwestern direction through the Unit Y portion of the Study Area where it merges with Arroyo Conejo just northwest of the HCTP. Various tributaries of Arroyo Conejo and NFAC drain the surrounding hillsides into these perennial streams and transverse through the Study Area. The hydrology details of the Unit W and Unit Y Study Area are provided below. Summaries of the streams and their potential jurisdictional

extents are described in the Jurisdictional Waters section of this report. Representative photographs are provided in Appendix B.

Unit W

Aquatic resources mapped within the Study Area consist of the perennial Arroyo Conejo (F1), which flows from southeast to northwest within or along all of the Unit W facility sites and access roads (crossing them 11 separate times). Sixteen (16) tributaries of Arroyo Conejo (F02 – F16 and F26) drain the surrounding hillsides and travel through a portion of the Unit W Study Area before converging with Arroyo Conejo. Only one of these tributaries, the South Branch of Arroyo Conejo (F12), contains perennial flow; six of Arroyo Conejo's tributaries contain intermittent flow[2]; and 10 tributaries contain ephemeral flow[3].

Unit Y

Aquatic resources mapped within the Unit Y Study Area consist of the perennial NFAC (F17), which flows from east to west throughout the lowland portions of the Unit Y Study Area. NFAC contains eight tributaries (F18 – F24) that drain the surrounding hillsides and travel through a portion of the Unit Y Study Area before converging with NFAC. Of these eight tributaries, one is intermittent tributary (F18), and the remaining seven are ephemeral.

3.4 Vegetation Communities and Land Cover Types

A total of 26 vegetation communities and land cover types were documented within the Study Area. Table 4 lists each vegetation community and land cover type documented and provides their approximate acreage in the Study Area, percent area covered, and whether they are considered sensitive by CDFW. Appendix F depicts the locations of the vegetation communities and land cover types. Representative photographs are provided in Appendix B.

As previously indicated, the vegetation classification used for this analysis is based on *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009). The land cover types that are not described in MCV2 were classified using conventional naming practices (i.e., Developed – Disturbed, Open Water, and Ornamental Landscaping).

Of the 26 vegetation communities/land cover types, 23 are described in MCV2. Of the 23 described within MCV2, three are considered semi-natural vegetation communities and are dominated by non-native plants. The remaining 20 vegetation communities are considered natural/native and all generally contain moderate-to-high quality habitat with low levels of disturbance. Of the 20 natural vegetation communities, 8 are considered sensitive by CDFW as indicated in Table 4 below.

[2] For the purposes of this report, intermittent streams are defined as streams that contain at least seasonal flow (i.e., three months or greater) during years of average rainfall.
[3] For the purposes of this report, ephemeral streams are defined as streams that contain anything less than seasonal flow during years of average rainfall.

Table 4 Vegetation Communities/Land Cover Types within the Study Area

Name	Approximate Size (acres)	Approximate Percent Area	Sensitive?
Vegetation Communities			
Bigpod Ceanothus Chaparral (*Ceanothus megacarpus* Shrubland Alliance)	1.53	1	No
Black Cottonwood Forest & Woodland (*Populus trichocarpa* Forest & Woodland Alliance)	3.03	1	Yes
Black Sage Scrub (*Salvia mellifera* Shrubland Alliance)	3.03	1	No
Bush Mallow Scrub (*Malacothamnus fasciculatus* Shrubland Alliance)	3.56	2	No
California Brittle Bush - Ashy Buckwheat Scrub (*Encelia californica - Eriogonum cinereum* Shrubland Alliance)	2.18	1	Yes
California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance)	1.8	1	No
California Sagebrush - (Purple Sage) Scrub (*Artemisia californica – (Salvia leucophylla)* Shrubland Alliance*)*	38.19	17	No
California Sagebrush – Black Sage Scrub (*Artemisia californica - Salvia mellifera* Shrubland Alliance)	2.13	1	No
California Sycamore - Coast Live Oak Riparian Woodlands (*Platanus racemosa - Quercus agrifolia* Woodland Alliance)	40.56	18	Yes
California Walnut Groves (*Juglans californica Forest & Woodland Alliance*)	5.45	2	Yes
Coast Live Oak Woodland & Forest (*Quercus agrifolia* Forest & Woodland Alliance)	38.94	17	No
Coast Prickly Pear Scrub (*Opuntia littoralis - Opuntia oricola-Cylindropuntia prolifera* Shrubland Alliance)	2.02	1	Yes
Coyote Brush Scrub (*Baccharis pilularis* Shrubland Alliance)	0.46	<1	No
Fremont Cottonwood Forest & Woodland (*Populus fremontii- Fraxinus velutina - Salix gooddingii* Forest & Woodland Alliance)	0.72	<1	Yes
Goodding's Willow - Red Willow Riparian Woodland & Forest (*Salix gooddingii - Salix laevigata* Forest & Woodland Alliance)	10.23	4	Yes
Lemonade Berry Scrub (*Rhus integrifolia* Shrubland Alliance)	9.63	4	Yes
Mulefat thickets (*Baccharis salicifolia* Shrubland Alliance)	0.31	<1	No
Scrub Oak Chaparral (*Quercus berberidifolia* Shrubland Alliance)	22.74	10	No
Sugarbush Chaparral (*Rhus ovata* Shrubland Alliance)	2.1	1	No
Upland Mustards or Star Thistle Fields (*Brassica nigra – Centaurea (solstitialis, melitensis)* SemiNatural Alliance)	3.61	2	No
Wild Oats & Annual Brome Grasslands (*Avena spp. - Bromus spp.* Herbaceous Semi-Natural Alliance)	9.27	4	No
Land Cover Types			
Developed - Disturbed	25.61	11	N/A
Open Water	0.39	<1	N/A
Ornamental Landscaping	2.78	1	N/A

3.5 General Wildlife

Common Southern California riparian woodland, cismontane woodland, coastal scrub, chaparral, and grassland terrestrial and avian wildlife species were observed during field surveys. A complete list of all plant and wildlife species observed in the Study Area is provided in Appendix C.

4 Sensitive Biological Resources

This section discusses sensitive or regulated biological resources that were observed or otherwise have potential to occur within the Study Area. The potential for a special-status species to occur within the Study Area was based upon known ranges and habitat preferences for the species, species occurrence records (e.g., CNDDB) in the vicinity, occurrences documented in available reports from nearby projects, and the field survey results. The potential for each special-status species to occur in the Study Area and/or Project site was evaluated according to the following criteria:

- **No Potential**. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on the site if present.
- **Low Potential**. Few of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not very likely to occur on the site.
- **Moderate Potential**. Some of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. There are confirmed extant populations in the regional vicinity without barriers to dispersal. The species has a moderate probability of occurring on the site.
- **High Potential**. All the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. There are confirmed extant populations in the immediate vicinity without barriers to dispersal. The species has a high probability of occurring on the site.
- **Present**. Species was observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last five years) with no significant changes to the site.

4.1 Special-Status Species

A total of 72 special-status species were assessed based on the results of the literature and database review. Of the 72 species that have been previously documented in the region, two are considered present within the Study Area, 10 have a high potential to occur, and 11 have a moderate potential to occur. The remaining 49 species were determined to have a low potential or no potential to occur and therefore are not expected to occur due to such factors as a lack of suitable habitat elements (e.g., vegetation, soil, elevation, aspect, past disturbances, etc.) and/or the Study Area being located outside of the species' known range. Details of the 23 special-status species that are present or that have moderate or high potential to occur are provided in Table 5 below. Appendix G provides species-specific habitat requirements and an analysis of potential occurrence within the Study Area for all 72 species analyzed.

Table 5 Special-Status Species Present or Likely to Occur in the Study Area

Name	Status[1]	Habitat Requirements	Potential to Occur	Habitat Suitability/Observations
Plants				
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	CRPR 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevations: 15-1475ft. (5-450m.) Blooms Apr-Jun.	Moderate	A 2016 CNDDB occurrence is only 0.62mi from Study Area. Potentially suitable habitat located in scrub and *Optunia* patches within Study Area. Nearby occurrence notes steep rocky area with *Artemisia californica, Opuntia littoralis, Eriogonum fasciculatum*. This is similar to the on-site conditions.
Chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr (May).	High	A 2016 CNDDB population occurrence is located in the northern portion of the Study Area. Suitable habitat was observed in this portion of the Study Area.
Conejo buckwheat (*Eriogonum crocatum*)	SR; CRPR 1B.2	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops; rocky sites. Elevations: 165-1905ft. (50-580m.) Blooms Apr-Jul.	Moderate	The northern portion of Study Area is in the middle of this species geographic range, with the range shaped in an arch from Mountclef Ridge to Conejo Mountain. 2012 CNDDB occurrence notes it is found in similar habitat to the project area: riparian vegetation with coastal sage scrub further upland.
Conejo dudleya (*Dudleya parva*)	FT; CRPR 1B.2	Perennial herb. Coastal scrub, valley and foothill grassland. In clay or volcanic soils on rocky slopes and grassy hillsides. Elevations: 195-1475ft. (60-450m.) Blooms May-Jun.	Moderate	The Study Area generally lacks the open volcanic rocky habitat this species is found in, but clay/gravelly microhabitats exist where species in same genus flourish, *D. lanceolata & D. pulverulenta.* General coastal scrub and grassland is present.
Lyon's pentachaeta (*Pentachaeta lyonii*)	FE; SE; CRPR 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. Elevations: 100-2265ft. (30-690m.) Blooms (Feb)Mar-Aug.	High	There are several overlapping 1996 and 1997 occurrences within the northern portion of the Project Area. Suitable habitat including openings in grassland and the understory of scrub are located within this portion of the Study Area. Additionally Critical habitat for Lyon's pentachaeta overlaps with the Study Area.
Ojai navarretia (*Navarretia ojaiensis*)	CRPR 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Elevations: 900-2035ft. (275-620m.) Blooms May-Jul.	Moderate	Although the Study Area is below the documented elevational range of the species, there is a 2014 CNDDB population at 650ft, only 0.6 mi southwest of the Study Area. The population is in coastal scrub and grassland habitats with *Eriogonum fasciculatum, Artemisia californica, and/or Eriogonum cinereum* present as common associates, all of which occurs within the Study Area.
Sonoran maiden fern (*Pelazoneuron puberulum* var. *sonorense*)	CRPR 2B.2	Meadows and seeps (seeps, streams). Along streams, seepage areas. 50-610m. Blooms Jan-Sep.	Moderate	Seeps and stream sides present within the Study Area. Multiple observations within 9 quad search area.
Invertebrates				
Crotch's bumble bee (*Bombus crotchii*)	SCE	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Moderate	Upland areas in the Study Area provide suitable habitat for the species and several of the required food plant genera were detected during the field survey. CNDDB shows a 2020 occurrence approximately 4 miles southwest of the project.
Monarch butterfly (*Danaus plexippus plexippus* pop. 1)	FPT	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Moderate (migrating)	Overwintering groves are absent from the Study Area. However, migrating individuals from coastal overwintering groves could stop within the Study Area to oviposit and feed on the milkweed documented within the Study Area.
Fish				
Arroyo chub (*Gila orcuttii*)	SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	High	Arroyo Conejo is known to support the species. CNDDB shows a 2000 occurrence overlapping with the project and indicates the population is a transplant outside of its native range. Arroyo chub are considered somewhat common within this watershed.
Reptiles				
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Present	Several individuals were observed throughout the natural vegetation communities within the Study Area during the 2022 field surveys.
Coast horned lizard (*Phrynosoma blainvilli*)	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	High	There is suitable habitat in the upland areas of Study Area. CNDDB shows a 2007 occurrence located approximately 2.5 miles north of the Study Area.
Southern California legless lizard (*Anniella stebbinsi*)	SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	High	Suitable sandy and loamy soils were found in the Study Area. CNDDB shows several occurrences of California legless lizard and Southern California legless lizard within the vicinity of the Project Area.

Name	Status[1]	Habitat Requirements	Potential to Occur	Habitat Suitability/Observations
Southwestern pond turtle (*Actinemys pallida*)	FPT; SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. Occurs in southern California from Monterey County south to Los Angeles, Riverside, and San Diego Counties into northern Baja California, Mexico.	High	The species was observed basking in the Arroyo Conejo during surveys conducted by Bowland & Associates on July 17 and 18, 2012. The species was not observed during the 2022 surveys. Suitable habitat occurs within the perennial streams of the Study Area.
Two-striped gartersnake (*Thamnophis hammondii*)	SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	High	There is suitable habitat in the Study Area near Arroyo Conejo and its intermittent and perennial tributaries. CNDDB shows a 1995 occurrence located approximately 3.5 miles west of the Study Area.
Birds				
Burrowing owl (*Athene cunicularia*)	SCE; SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	High	Suitable grassland habitat is located within the upland portions within the northern portion of the Unit Y Study Area. There are eBird observations located within this area (eBird 2025).
Coastal California gnatcatcher (*Polioptila californica californica*)	FT; SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	High	The upland portions of the Study Area provide suitable coastal scrub habitat to support the species. CNDDB shows a 2016 occurrence approximately 280 feet west from the western limits of the Study Area. An additional 2019 occurrence is located approximately 0.5 miles south of the Study Area.
Least Bell's vireo (*Vireo bellii pusillus*)	FE; SE	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Present	The riparian habitat associated with the Study Area's perennial and intermittent streams provide suitable nesting and foraging habitat. CNDDB shows a 2008 occurrence approximately 1.3 miles north of the Study Area along Arroyo Santa Rosa. An additional occurrence, from 2017 is located approximately 2.7 miles from the Study Area along Conejo Creek. Focused surveys were conducted by Rincon in 2022 and identified one individual male (Werner 2022).
White-tailed kite (*Elanus leucurus*)	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Moderate	Suitable habitat is present within the Study Area and multiple eBird observations have been made within Wildwood Park (eBird 2025).
Yellow warbler (*Setophaga petechia*)	SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	High	The riparian habitat associated with Arroyo Conejo provides suitable nesting and foraging habitat. Multiple individuals have been documented within the nine quad search area.
Mammals				
Western red bat (*Lasiurus blossevillii*)	SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Moderate	Oak trees may provide suitable roosting habitat. The species could also utilize the Study Area for foraging. CNDDB shows a 2004 occurrence approximately 8.5 miles southeast of the Study Area.
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Occurs in scrub habitats of southern California from San Luis Obispo County to San Diego County.	Moderate	Rocky areas and hillslopes within the Study Area would provide suitable habitat for the species. Additionally, several middens were found during the survey, however species identification cannot be established without small mammal trapping. CNDDB shows a 2016 occurrence located approximately 3 miles southwest of the Study Area.
American badger (*Taxidea taxus*)	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Moderate	Upland areas in the Study Area provide suitable habitat for the species. The species is infrequently observed but has a wide distribution. CNDDB shows a 2013 occurrence located 4.8 miles west of the Study Area.

[1] CRPR = California Rare Plant Rank listing FE = Federally Endangered FP = State Fully Protected FPT = Federal Proposed Threatened FT = Federally Threatened SCE = State Candidate Endangered SE = State Endangered SR = State Rare SSC = CDFW Species of Special Concern ST = State Threatened

4.2 Nesting Birds

Throughout the Study Area, there is suitable nesting bird habitat for many bird species protected by the MBTA. The riparian corridor associated with Arroyo Conejo and NFAC provides ample suitable trees and shrubs for a variety of nesting birds and several inactive nests were observed in these trees during the field surveys. Upland coastal sage scrub and chaparral habitats also provide suitable nesting habitat to numerous passerine species and the steep rocky cliffs surrounding Arroyo Conejo provide suitable nesting platforms for raptors such as red-tailed hawks (*Buteo jamaicensis*) and great horned owls (*Bubo virginianus*) (as do oak trees and trees within the riparian woodland) A small sample of common species expected to nest in the Study Area include, but are not limited to, California scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), bushtit (*Psaltriparus minimus*), mourning dove (*Zenaida macroura*), red-tailed hawk, and great horned owl.

4.3 Wildlife Movement and/or Migration

Aquatic, avian, and terrestrial wildlife are likely to utilize the riparian corridors of the Study Area regularly for local and regional movement. The upland portions of the Study Area are also likely to support wildlife movement on a local and regional scale.

4.4 Critical Habitat

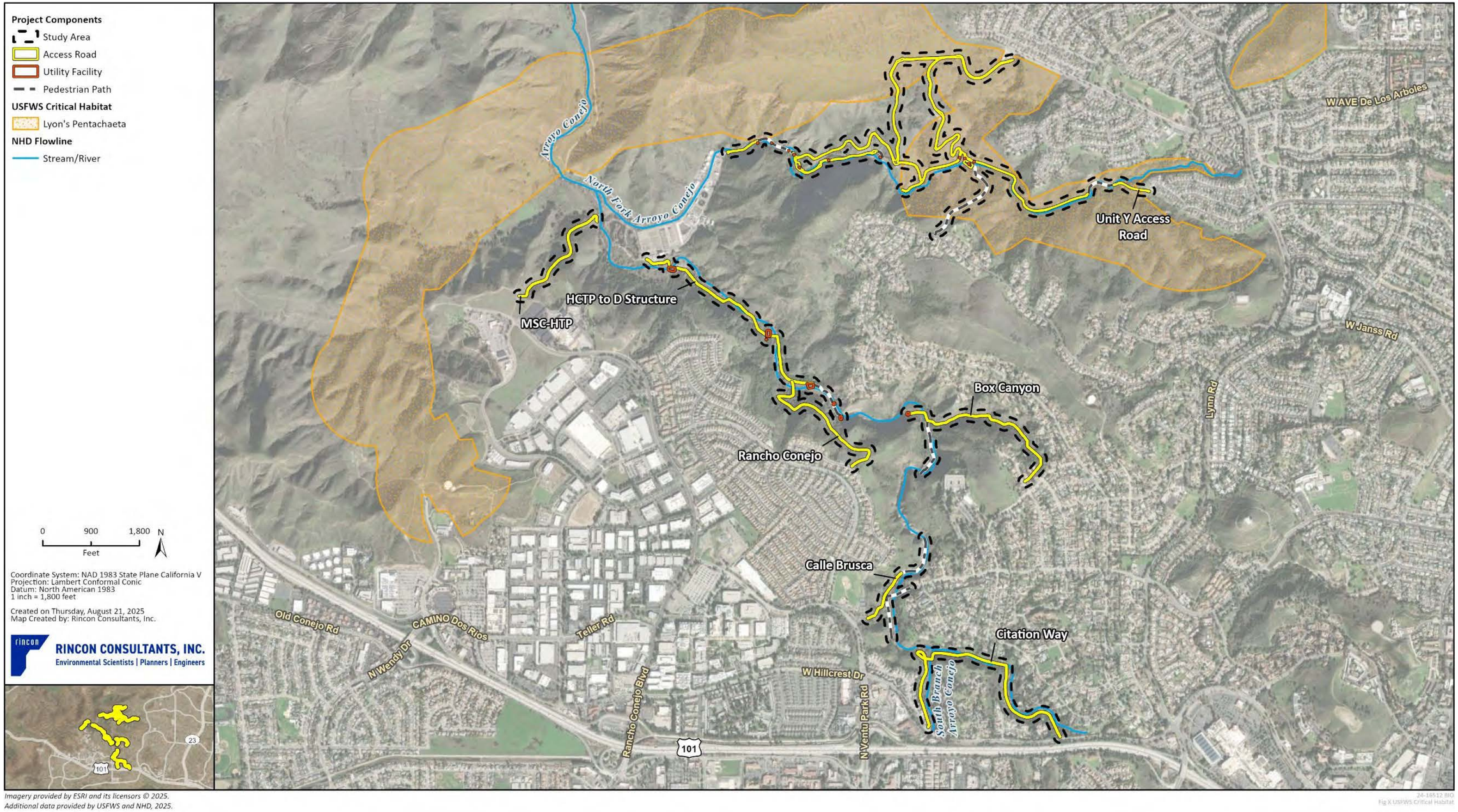
The results of the literature review show USFWS-designated critical habitat for Lyon's pentachaeta overlapping with a majority of the Unit Y portion of the Study Area (Figure 3). No other USFWS designated critical habitat is located within or immediately adjacent to the Study Area.

4.5 Potentially Jurisdictional Waters

Based on the results of the field delineation, 28 potential jurisdictional waters are present in the Study Area[4]. All 28 features are potentially jurisdictional to CDFW and the Los Angeles RWQCB, while only nine are potentially jurisdictional to the USACE. Summaries of each agency's potential jurisdictional extents are provided in the subsections below, locations of each features potential jurisdictional limits are provided in Appendix H, measurements of each potential jurisdictional feature is provided in Table 6, representative photographs are provided in Appendix B, and wetland and OHWM datasheets are provided in Appendix I. Descriptions of the potential jurisdictional features are provided following the agency summaries below.

[4] The findings and conclusions presented in this report, including the location and extent of areas subject to regulatory jurisdiction, represent the professional opinion of the consultant biologists. These findings and conclusions should be considered preliminary and at final discretion of the applicable resource agency.

Figure 3 Critical Habitat



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Additional data provided by USFWS and NHD, 2025.

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Fig X USFWS Critical Habitat

Table 6 Potential Jurisdictional Features in the Study Area

		USACE Waters of the U.S.		SWRCB Waters of the State		
Feature	Flow Regime	Non-wetland Waters of the U.S. (ac./linear ft.)	Wetland Waters of the U.S. (ac./linear ft.)	Non-wetland Waters of the State (ac./linear ft.)	Wetland Waters of the State (ac./linear ft.)	CDFW Jurisdictional Streambed (ac./linear ft.)
F01	Perennial	14.56/12,923	0/0	14.56/12,923	0/0	31.07/13,059
F02	Ephemeral	0/0	0/0	0.04/252	0/0	0.75/279
F03	Ephemeral	0/0	0/0	0.03/310	0/0	0.12/310
F04	Intermittent	0.01/144	0/0	0.01/144	0/0	0.05/144
F05	Ephemeral	0/0	0/0	0.03/450	0/0	1.41/450
F06	Ephemeral	0/0	0/0	0.03/247	0/0	0.10/253
F07	Ephemeral	0/0	0/0	0.01/103	0/0	0.04/103
F08	Intermittent	0.31/2,629	0/0	0.31/2,629	0/0	1.03/2,629
F09	Ephemeral	0/0	0/0	0.02/430	0/0	0.38/430
F10	Ephemeral	0/0	0/0	0.01/144	0/0	0.05/144
F11	Ephemeral	0/0	0/0	<0.001/37	0/0	0.01/43
F12	Intermittent	1.51/1,559	0/0	1.51/1,559	0/0	2.56/1,565
F13	Ephemeral	0/0	0/0	0.01/169	0/0	0.06/169
F14	Ephemeral	0/0	0/0	0.01/113	0/0	0.04/119
F15	Intermittent	0.03/107	0/0	0.03/107	0/0	0.07/113
F16	Intermittent	0.03/62	0/0	0.03/62	0/0	0.07/62
F17	Perennial	5.86/9,281	0/0	5.86/9,281	0/0	22.11/9,756
F18	Intermittent	0.23/357	0/0	0.23/357	0/0	0.86/357
F19	Ephemeral	0/0	0/0	0.01/125	0/0	0.05/125
F20	Ephemeral	0/0	0/0	0.07/101	0/0	0.16/106
F21	Ephemeral	0/0	0/0	0.01/111	0/0	0.15/111
F22	Ephemeral	0/0	0/0	0.02/184	0/0	0.06/184
F23	Ephemeral	0/0	0/0	0.02/503	0/0	0.16/510
F24	Ephemeral	0/0	0/0	0.04/676	0/0	0.22/676
F25	Ephemeral	0/0	0/0	<0.001/15	0/0	0.005/15
F26	Intermittent	0.02/143	0/0	0.02/143	0/0	0.06/143
HS01	Seep	0/0	0/0	0/0	0.03/148	0/0
HS02	Seep	0/0	0/0	0/0	0.001/19	0/0
Total		**22.56/27,205**	**0/0**	**22.93/31,173**	**0.04/167**	**61.37/31,853**

USACE Waters of the United States

The Study Area contains 22.56 acres/27,205 linear feet of potential non-wetland waters of the U.S. (WOTUS). Non-wetland WOTUS were determined by the OHWM limits for F01, F04, F08, F12, F15 - F18, and F26. All nine of these features meet the definition of non-wetland WOTUS due to them being either perennial or relatively permanent waters that are tributaries of a Traditional Navigable Water (i.e., the Pacific Ocean).

The Study Area contains approximately 0 acres/0 linear feet of potential wetland WOTUS. Features meeting the criteria to be considered wetland WOTUS within the Study Area exhibited all three wetland parameters: dominance of hydrophytic vegetation, wetland hydrology, and hydric soils; along with having a direct surface connection to a non-wetland WOTUS. The three WOTUS were identified along terraces of the two perennial streams (F17 and F18) within the Study Area.

RWQCB Waters of the State

The Study Area contains approximately 22.93 acres/31,173 linear feet of potential non-wetland waters of the state. Non-wetland waters of the state were identified for all streams exhibiting an OHWM within the Study Area regardless of their flow regime. Therefore, all 27 of the streams within the Study Area meet the definition of non-wetland WOTUS.

The Study Area contains approximately 0.04 acre/167 linear feet of potential wetland waters of the state. The three wetland WOTUS along the perennial stream terraces also meet the criteria to be considered wetland waters of the state, along with two isolated wetlands, which are located along the shoulders of the MSC - HCTP and Citation Way access roads.

CDFW Streambed

The Study Area contains approximately 61.37 acres/31,853 linear feet of potential CDFW jurisdictional streambed. CDFW streambed extends to the top of bank or edge of riparian canopy, whichever is greater, for all potential jurisdictional streams (F01 – F27). Most ephemeral streams did not support riparian vegetation and were therefore delineated to the top of bank; in comparison to the perennial and intermittent streams, which were delineated to the extent of the riparian canopy, when present.

Potential Jurisdictional Features Descriptions

Arroyo Conejo (F01)

Surface hydrologic indicators that were used to delineate F01 include racking, water marks, sediment sorting, bank shelving and terrace formation. F01 has numerous secondary channels in the Study Area. These secondary channels are generally characterized as having ephemeral to intermittent flow regimes. Terraces and riparian vegetation generally separate the primary channel from the secondary channels. F01 has been hydrologically impacted throughout portions of the Study Area through the addition of concrete fill and structures. F01 has been anthropogenically/hydrologically impacted upstream of the Study Area through culverting, bank hardening, and other flood control and energy dissipating structures. Several man-made structures including wastewater facilities and energy dissipators are located within the OHWM limits of F01.

Due to its perennial nature, F01 supports a robust riparian vegetation community that consists mostly of California sycamore - coast live oak riparian woodlands. It is dominated by California sycamore (*Platanus racemosa* [FAC]), red willow (*Salix laevigata* [FACW]), and arroyo willow (*Salix*

lasiolepis [FACW]). The shrub layer consists primarily of mulefat (*Baccharis salicifolia* [FAC]). Other vegetation communities prevalent immediately along the F01 banks and terraces include Goodding's willow - red willow riparian woodland and forest and Fremont cottonwood forest and woodland. They are dominated by arroyo willow, red willow, and Fremont cottonwood (*Populus fremontii* [FAC]). The herbaceous strata varied but generally consisted of cattails (*Typha* sp. [OBL]), watercress (*Nasturtium officinale* [OBL]), and seep monkey flower (*Erythranthe guttata* [OBL]) within the limits of the OHWM. Non-native plants immediately along the banks of F01 include exotic giant reed (*Arundo donax* [FACW]), water speedwell (*Veronica anagallis-aquatica* [OBL]) and annual beard grass (*Polypogon monspeliensis* [FACW]).

14 wetland determination sample points (SP; SP01 – SP10, SP14 - SP15, SP17, and SP20) were examined within and adjacent to F01; however, all wetland sample points resulted in negative results. Due to stream conditions and topography, wetland determination sample points were generally examined in low terraces below the OHWM of the primary channel or below the OHWM of the secondary channels. A few were examined immediately above the OHWM in areas with a dominance of hydrophytic vegetation. In general, soils examined below the OHWM were consistent with sand, sandy clay, or sandy loam textures. Sample points examined above the OHWM limits generally consisted of silty clay or sandy clay loam textures. Sediment deposits (B2) and Drift deposits (B3) were the most consistently observed surface hydrologic indicators. Due to the presence of boulders, cobbles, concrete and tree roots, many sample plots depths were limited by these restricting layers.

Unit W Tributaries of Arroyo Conejo (F02 - F16)

Most of these tributaries were determined to have either ephemeral or intermittent flow regimes, with the intermittent flow regimes supporting riparian communities and/or with the presence of flowing water. Several stretches of these streams generally consisted of heavily incised bed and bank development, along with other hydrological indicators such as drift deposits and sediment deposits.

Three wetland determination sample points were examined within the OHWM of select tributaries of F01 (SP18, SP19, and SP21). SP18 was examined within a low terrace below the OHWM of F12 adjacent to the stream crossing with Citation Way. All three wetland parameters were observed at SP18; it is dominated by hydrophytic vegetation, a high-water table begins at 5 inches below the soil surface (high water-table; Indicator A1), and loamy mucky mineral is present as the hydric soil indicator (F1). The wetland boundaries associated with SP18 were restricted to the terrace within F12 with similar topographic profile and hydrophytic forb coverage. SP19 was also examined in the OHWM of F12 and served as a corresponding out-pit to SP18 since no hydric soils were observed. SP21 was examined within the low-flow channel of F08, which generally parallels the Box Canyon access road. SP21 only exhibited hydrology in the form of secondary indicators: sediment deposits (indicator B2) and drift deposits (indicator B3). Due to the lack of dominance of hydrophytic vegetation and hydric soil indicators, wetlands were presumed absent. Soils across all tributaries varied; however, the most encountered textures included sandy loam, sandy clay, and silty clay loam.

North Fork of Arroyo Conejo (NFAC; F17)

Surface hydrologic indicators that were used to delineate the stream included racking, water marks, sediment sorting, and terrace formation. F17 has been hydrologically impacted throughout portions of the Study Area through the addition of concrete fill and structures.

F17 supports a robust riparian corridor supporting two distinct vegetation communities: California sycamore - coast live oak riparian woodlands and Fremont cottonwood forest and woodland. Dominant species associated with F17 include California sycamore, red willow, and coast live oak. The shrub layer consists primarily of poison oak (*Toxicodendron diversilobum* [FACU]). The herb strata within the limits of the OHWM includes mugwort (*Artemisia douglasiana* [FAC]) and yerba mansa (*Anemposis californica* [OBL]).

Three wetland determination sample points (SP22, SP23, and SP24) were examined in and adjacent to F17. A wetland was identified at one of three sample points, SP22. SP22 was examined within a low terrace beneath the OHWM of F17. A second paired pit (SP23) was examined at a terrace above the OHWM. SP23 did not exhibit any wetland indicators; therefore, wetlands were assumed to be restricted to the location of SP22. SP24 was examined on a terrace adjacent to the OHWM at a separate location than SP22 and SP23. SP24 exhibited wetland hydrology but is not dominated by hydrophytic vegetation and does not contain hydric soils. In general, the soil examined at these three locations consisted of a loamy clay texture.

Perennial Tributary of NFAC (F18)

F18 supports a robust riparian canopy characterized as a California sycamore - coast live oak riparian woodland within the Study Area. Dominant species within the tree stratum include red willow, arroyo willow, Fremont cottonwood, and California sycamore. Shrubs consist largely of immature arroyo willow and poison oak. The herbaceous strata consisted of watercress and non-native invasive celery (*Apium graveolens* [No Indicator; riparian associate]) within the limits of the OHWM.

Two paired wetland determination sample points (SP25 and SP26) were examined in and adjacent to F18 within the Study Area. SP25 was examined within a terrace adjacent to the OHWM on the eastern bank of F18. SP25 exhibited wetland hydrology, hydric soils, and a dominance of hydrophytic vegetation and was therefore assumed to be within a wetland. A paired pit (SP26) was examined on a higher terrace on the western bank of F18. SP26 did not exhibit any wetland indicators and was therefore assumed to be within a non-wetland. Wetlands within F18 were extrapolated to all terraces with similar topographic, hydrologic, and vegetated composition as the terrace associated with SP25.

Ephemeral and Intermittent Tributaries of NFAC (F19 – F26)

F19 receives flow from a storm drain located along Velarde Drive and supports an ephemeral hydrologic flow regime. Flow is conveyed along F19 southwest to NFAC. A culvert facilitates flow under a project access road. F19 supports a well-defined and shared OHWM/top of bank with an approximate width of 4 feet.

F20 is an ephemeral tributary of F18 in the northeastern edge of the Study Area. F20 exhibits stream morphology upslope and downslope of the access road. The low-flow portion of the stream is significantly lower, approximately four feet, than the intersecting access road elevation. It is likely that the portion of F20 upslope of the access road could terminate where it abuts the access road. This is further supported by observed surface soil cracking which suggests ponding upslope of the access road. The portion of F20 downslope of the access road may be sustained by erosional flow collected on the access road. F20 supports sparse mulefat upslope of the access road and coyote bush (*Baccharis pilularis* [No Indicator]) and coast prickly pear (*Opuntia littoralis* [No Indicator]) on the downslope side of the access road.

F21 and F22 are the same stream that intersects the Study Area in two separate locations. F21 is the headwater of the stream and F22 is the lower reach of the stream that converges into NFAC. F21 intersects the Project Area at its northernmost extent and appears to receive its hydrologic input from road run-off. Downslope of the access road F21 contains a defined OHWM and hydrophytic vegetation in the form of mulefat. Upslope of the access road is a swale lacking stream morphology that is dominated by lemonade berry (*Rhus integrifolia* [No Indicator]) and non-native upland annual grasses. F21 conveys flow downslope in a southerly direction for approximately 0.4 miles before intersecting another project access road and turning into F22. F22 exhibits a well-defined and shared OHWM/top of bank. Its OHWM indicators include a bed and bank, drift deposits, and sediment sorting.

F23 is an ephemeral stream that intersects the Project Area at two distinct locations, which are approximately 300 feet apart. F23 receives hydrologic input from its natural upstream reach as well as from flow conveyed via roadside erosional gullies. The flow is then conveyed downslope for approximately 300 feet at which point the ephemeral feature intersects the Project Area at the second point. F23 exhibits a well-defined bed and bank but does not support riparian vegetation. It supports upland vegetation including lemonade berry and purple sage (*Salvia leucophylla* [No Indicator]).

F24 is the southernmost feature in the Study Area. The feature is a concrete v-ditch that receives flow from a series of culverts that concentrate flow from other v-ditches. These v-ditches were seemingly established to prevent erosion from the surrounding residential developments. The v-ditch parallels an existing access pathway in the southern portion of the Unit Y Study Area and crosses through a culvert beneath it. Flow from the v-ditch continues in a northerly direction after crossing beneath the access road and converges with NFAC.

F25 is an ephemeral stream with an approximately two-foot wide shared OHWM and top of bank width. F25 results from concentrated flow along an existing access road. The OHWM develops where the existing access road ends. The feature does not support riparian vegetation and is surrounded by upland species including purple sage, lemonade berry, and non-native annual upland grasses. F25 does not appear to directly connect to the NFAC.

Hillside Seeps

Two hillside seeps (HS01 and HS02) were observed in the Study Area. HS01 is located along the road shoulder on the southwestern hillslope adjacent to MSC-HTP. HS02 is located along Citation Way near a private residence. In both instances, groundwater was observed dripping from the hillside into the road shoulder. HS01 contains a wide array of hydrophytic vegetation including arroyo willow, mule fat, wild celery, mugwort, willow herb (*Epilobium ciliatum* [FACW]), and flatsedge (*Cyperus* sp. [FACW]). Vegetation within HS02 was considered problematic and comprised mostly of non-native species associated with the surrounding residential area, including but not limited to American ash (*Fraxinus americana* [FACU]). Vegetation in the herb strata at HS02 was sparse and consisted mostly of wild celery along with an unidentified moss.

Three wetland determination sample points (SP11 – SP13) were examined in association with HS01. SP11 was examined in the wettest portion of the seep. SP11 demonstrated 1 cm of Muck (A9) as the hydric soil indicator. The hydrology indicator at SP11 included saturation (indicator A3) at the soil surface. SP12 was examined outside of the seep, but still within an area with a dominance of hydrophytic vegetation. SP12 exhibited a depleted matrix as the hydric soil indicator (indicator F3) and biotic crust (indicator B12) was observed as the primary hydrological indicator. SP13 was examined on a hillslope southwest of HS01 and contains mugwort and other upland species as the

dominants. None of the three wetland parameters were met at SP13. The wetland boundary associated with HS01 was generally limited to the extent of the dominant hydrophytic forbs and surface hydrology observed at both SP11 and SP12. The seep overflows during and shortly following precipitation events and sheet flows across the access road and down the adjacent hillside into F02.

A wetland determination sample point (SP16) was examined in association with HS02. SP16 was examined in a shallow depression along Citation Ways Road shoulder and contained surface soil saturation. The Loamy Mucky Mineral hydric soil indicator (indicator F1) was observed at SP16. Hydrological indicators observed include surface water (indicator A1), water-stained leaves (indicator B9), and presence of reduced iron (indicator C4). Vegetation at SP16 is considered problematic due to the prevalence of nonnative species, including ornamental trees that lack wetland indicator statuses. In lieu of hydrophytic vegetation, the presence of ground moss provided evidence supporting the wetland conditions necessary to satisfy the vegetation parameter. Given this condition, in conjunction with the observed hydric soil and wetland hydrological indicators, wetlands were assumed present at SP16. Wetlands at SP16 were limited to a relatively shallow depression along the shoulder of Citation Way. HS02 conveys flow through a culvert to F01 when ponding.

4.6 Resources Protected by Local Policies and Ordinances

Protected Trees

The City of Thousand Oaks Oak Tree Preservation and Protection policy protects healthy oak trees (*Quercus* spp.) that exceeds 2 inches in diameter. Additionally, the City of Thousand Oaks Landmark Tree Preservation and Protection policy protects Landmark trees. Landmark trees include California sycamores that exceed a 12-inch diameter at breast height (DBH) and California bay laurels (*Umbellularia californica*), Southern California black walnuts (*Juglans californica*), and toyons (*Heteromeles arbutifolia*) that exceed an 8-inch DBH. Historic trees and City designated Landmark trees are also protected. A detailed summary of each of these policies is provided in Appendix D.

The Study Area contains oaks, California sycamore, California bay laurel, Southern California black walnut, and toyon that meet the trunk diameter size criteria as specified in the tree preservation ordinances of the City of Thousand Oaks.

City of Thousand Oaks General Plan

The Conservation Element of the Thousand Oaks General Plan (City of Thousand Oaks 2013) helps identify human activities that affect natural resources both directly and indirectly and define various policies and implementation measures by which these natural resources can be conserved within the Planning Area. Local policies that may be considered as part of the proposed project review are provided below; Project applicability explanations are provided beneath each policy. Detailed summaries of each potentially applicable Conservation Element Policies are provided in Appendix D.

- **CO-10:** Streams and creeks should be protected as open space and maintained in as natural a state as possible, and appropriate measures taken to manage urban runoff, in order to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value. This will contribute to the regional effort to improve the quality of Calleguas Creek, Malibu Creek and Mugu Lagoon.

Multiple streams and creeks run through the Study Area, and the Project site transverses them on multiple occasions. Additionally, all streams within the Study Area drain into Mugu Lagoon.

- **CO-21:** The City shall encourage the proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and undeveloped open space lands.

  The Study Area contains native plant communities within undeveloped open space lands of the City's Planning Area.

- **CO-23:** Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for protection, restoration or enhancement, in order to maintain biodiversity, biological productivity and ecological integrity of natural open space areas.

  Wildlife movement corridors and streams are located throughout the Study Area.

- **CO-25:** The City should foster a holistic approach to conservation of wildlife resources including consideration of biological crusts and pollinator species in recognition of the many important functions they perform in a healthy ecosystem.

  Biological crusts are likely located within the Study Area along with multiple pollinator species.

- **CO-26:** Isolation and fragmentation of natural open space areas should be prevented wherever possible.

  Natural open space areas are located throughout the Study Area.

- **CO-27:** Since natural streams often serve as important movement corridors for wildlife, they should be preserved wherever it is feasible to do so.

  Natural streams are located throughout the Study Area.

- **CO-29:** Continue to protect oak and landmark trees and their habitat in recognition of their historic, aesthetic and environmental value to the citizens of Thousand Oaks, in particular Valley Oak habitat.

  Oak and landmark trees and their habitat are located throughout the Study Area.

- **CO-30:** Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, biodiversity and aesthetic value.

  Two seeps are located within the Study Area.

- **CO-32:** The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (USFWS and CDFW), the CNPPS, and the County of Ventura and the City of Thousand Oaks.

  Threatened, endangered, rare, and special status wildlife species are known to occur or have the potential to occur within the Study Area.

5 Impact Analysis

Impacts to regulated biological resources are analyzed in the subsections below. Impact avoidance and minimization measures (AMM) are included in Section 6.

5.1 Special-Status Species

Special-Status Plant Species

Seven special-status plant species have a moderate or high potential to occur within the Study Area (Table 5). However, it is unlikely that special-status plant species are located within the Project site's existing access roads, pedestrian pathways, and facilities since they have been previously developed and disturbed. Additionally, vegetation trimming to maintain access to utility facilities and along the disturbed margins of the access roads would be minor and would not expand the disturbance footprint. Although it is unlikely for special-status plant species to be present where operations and maintenance activities will occur, if present, direct impacts could occur. Additionally, indirect impacts could also occur through habitat modification resulting from the introduction of invasive plants during construction and fugitive dust generated from large equipment. Potential impacts to these species would be avoided and/or minimized through implementation of avoidance and minimization measure (AMM) BIO-3 and BIO-6 in Section 6, which involves conducting pre-construction surveys to flag special-status plant species for avoidance prior to initiating vegetation trimming and surface scraping and delivering a worker environmental awareness training. Indirect impacts would be reduced and/or avoided by implementing the Project in accordance with the City's Construction and Road Standard Manual (City of Thousand Oaks 2018) along with Project-specific BMPs, such as (but not limited to) fugitive dust control and invasive plant prevention measures.

Special-Status Wildlife Species

16 special-status wildlife species are present or have a moderate or high potential to occur within the Study Area (Table 5). Potential impacts to these special-status wildlife species are analyzed below.

Aquatic Species

Arroyo chub (Species of Special Concern), southwestern pond turtle (Federal Proposed Threatened; Species of Special Concern), and two-striped garter snake (Species of Special Concern) have a moderate or high potential to occur within the perennial and intermittent streams throughout the Study Area and where maintenance activities will occur. Southwestern pond turtle and two-striped garter snake also have the potential to occur in the vegetation communities adjacent to the Study Area's streams. These three species could be directly impacted by equipment strikes during creek crossing maintenance. Impacts will not occur because of stranding since dewatering and water diversion are not required for temporary access road installation. Indirect impacts could occur through habitat modification as a result of the introduction of invasive plant species and aquatic habitat modification. Direct impacts to these species would be avoided through implementation of AMM BIO-6 and BIO-7 which involves delivering a worker environmental awareness training and biological monitoring. Indirect impacts would be reduced and/or avoided by conducting the work in

accordance with the City's Construction and Road Standard Manual (City of Thousand Oaks 2018) along with Project-specific BMPs, such as (but not limited to) invasive plant prevention measures, conducting work during the dry season, and limited creek crossing maintenance to smoothly out the scoured banks and occasional cobble rearrangement, when necessary.

Crotch's Bumble Bee

Crotch's bumble bee (CBB; State Candidate Endangered) has a moderate potential to forage, nest, and overwinter within the Study Area. However, it is unlikely that CBB will occur within the existing access roads, pedestrian pathways, and utility facility sites since they are previously developed and disturbed. Additionally, CBB is an aerially mobile species and any individuals traversing through the Project Area during maintenance activities have the capacity to move out of harm's way. Nonetheless, overwintering, foraging, and nesting individuals have the potential to be present. Soil disturbance is not proposed within any of these locations, but it is still possible that nesting or overwintering individuals could be trampled during vegetation trimming. Potential impacts to CBB would be avoided through the implementation of AMM BIO-4 and BIO-6, which involves conducting preconstruction surveys, flagging potential CBB nesting and overwintering sites for avoidance, monitoring nest sites, and revegetation (as needed), and delivering a worker environmental awareness training.

Monarch Butterfly

Foraging and ovipositing individuals of monarch butterfly (Federal Proposed Threatened) have a moderate potential to occur within the Study Area due to the documented presence of milkweed (*Asclepias* spp.) and suitable nectar plants. However, it is unlikely that monarch butterfly will occur within the existing access roads, pedestrian pathways, and utility facility sites within CDFW jurisdiction since they are previously developed and disturbed. Additionally, monarch butterfly is an aerially mobile species and has the capacity to move out of harm's way during maintenance activities. Lastly, milkweed is not expected to grow within CDFW jurisdictional streambed/riparian habitat due to the habitat requirements for this species and its association with dry, barren, slopes/valleys of grasslands and oak savannahs (Jepson 2025). Therefore, impacts to this species are not anticipated.

Terrestrial Reptiles

Coastal whiptail (Species of Special Concern) was confirmed present and Southern California legless lizard (Species of Special Concern) and coast horned lizard (Species of Special Concern) have a moderate or high potential to occur within the Study Area. However, with the exception of moving or basking individuals, these species are unlikely to occur within the existing access roads, pedestrian pathways, and utility facilities that will be maintained due to the developed and disturbed condition of these areas. Additionally, each of these species is highly mobile and has the capacity to move out of harm's way if present during maintenance activities. Therefore, the Project is unlikely to result in impacts to these species. Furthermore, implementation of AMM-BIO 6, which involves delivering a worker environmental awareness training prior to initiating maintenance activities, would ensure impacts to special-status terrestrial reptiles are avoided and/or minimized to the greatest extent feasible.

Birds

Burrowing owl (State Candidate Endangered; Species of Special Concern), coastal California gnatcatcher (Federally Threatened; Species of Special Concern), least Bell's vireo (Federally Endangered; State Endangered), white-tailed kite (Fully Protected), and yellow warbler (Species of Special Concern) are present or have a moderate or high potential to occur within the Study Area. Nesting individuals could be directly impacted by the Project if their nests are removed during vegetation trimming or if they are abandoned due to adjacent maintenance activities. Impacts to burrowing owl would be avoided through implementation of AMM BIO-2 and BIO-6, which involves a preconstruction habitat assessment, focused surveys, monitoring, and burrowing exclusion (as needed) and delivering a worker environmental awareness training. Other special-status birds would be avoided through the implementation of AMM BIO-5 and BIO-6, which involves conducting work outside of the nesting bird season when feasible and conducting pre-activity nesting bird surveys and avoiding active nests during the nesting bird season, and the worker environmental awareness training.

Mammals

Western red bat (Species of Special Concern), San Diego desert woodrat (Species of Special Concern), and American badger (Species of Special Concern) have a moderate or high potential to occur within the Study Area. Western red bat is unlikely to be impacted by the Project since they are a highly mobile aerial species, and roosting individuals have the capacity to move out of harm's way during maintenance activities. Additionally, no trees or other structures capable of supporting a roost are proposed to be removed as part of this Project. Additionally, San Diego desert woodrat and American badger are unlikely to occur within the existing access roads, pedestrian pathways, and utility facilities due to their previously developed and disturbed condition. These are also highly mobile species and individuals would move out of harm's way to avoid being trampled by equipment during maintenance activities. It is unlikely that any woodrat middens would be present along the margins of the access roads or elsewhere where maintenance would occur, and none were observed during the field surveys by Rincon or SWCA. However, if by chance there is a woodrat midden present or a potentially occupied American badger den, they would be avoided through the implementation of AMM BIO-1 and BIO-6, which involves conducting preconstruction surveys and flagging woodrat middens and American badger dens for avoidance prior to maintenance activities and the worker environmental awareness training.

5.2 Nesting Birds

Multiple species of birds protected by the MBTA and raptors protected under CFGC Section 3503 have the potential to nest throughout the Study Area. Direct impacts to nesting birds may occur if active nests are present where maintenance activities occur. Indirect impacts may occur if active nests are located within close vicinity to the Project Area and are abandoned due to visual and acoustic Project-related disturbance. Potential impacts to nesting birds would be avoided with implementation of AMMs BIO-5 and BIO-6, which involves conducting work outside of the nesting bird season or conducting nesting bird surveys ahead of work activities performed during the nesting season and establishing avoidance buffers around any active nests found and the worker environmental awareness training.

5.3 Wildlife Movement and/or Migration

Wildlife movement corridors are located throughout the Study Area. However, impacts are not anticipated since the Project site's existing access roads, pedestrian pathways, and utility facilities are already developed and disturbed.

5.4 Sensitive Natural Communities

Eight sensitive natural communities are located within the Study Area. However, no impacts to sensitive natural communities are anticipated since the Project site's existing access roads, pedestrian pathways, and utility facilities are already developed and disturbed. Therefore, impacts to sensitive natural communities will not occur.

5.5 Critical Habitat

Since no new features or disturbances are being proposed within Lyon's pentachaeta Critical Habitat, no impacts will occur.

5.6 Jurisdictional Waters

Direct Impacts

No new impacts to jurisdiction resources will occur apart from the temporary access road washout rebuilds at the A and D Structure, four temporary fill Arroyo Conejo creek crossings along the HCTP to D Structure access road, and the as-needed sediment removal around existing facilities. The Project is not proposing to extend the limits of its existing access roads, pedestrian pathways, or utility facilities. Any vegetation trimming would be minimal to accommodate temporary access. Tree trimming would be limited to branches that are two inches in diameter or smaller.

Total temporary impacts of 0.226 acre/291 linear feet of waters of the U.S./State and 0.31 acre/291 linear feet of CDFW Streambed are anticipated in association with the installation of the two temporary HCTP to D Structure Access Road rebuilds and the four Arroyo Conejo Creek crossings. Additionally, it is anticipated that some facilities may require removal of sediment accumulated during high flows to accommodate continued maintenance and inspections. The sediment will be relocated to an appropriate location adjacent to the facilities. No more than 0.01 acre or 50 linear feet of sediment will be relocated per year. The temporary impacts associated with the as-needed sediment removal and each creek crossing are summarized in Table 7. The locations/impact footprints of the four crossings and the washed-out road rebuild are depicted in Appendix H.

All other stream crossings, utility facilities, access roads, and pedestrian pathways will be maintained to preserve function and will not increase their disturbance footprint.

Table 7 Temporary Impacts to Jurisdictional Resources

	USACE Waters of the U.S.		SWRCB Waters of the State		CDFW
Project Component	Non-wetland Waters of the U.S. (ac./linear ft.)	Wetland Waters of the U.S. (ac./linear ft.)	Non-wetland Waters of the State (ac./linear ft.)	Wetland Waters of the State (ac./linear ft.)	CFGC 1602 Jurisdictional Streambed (ac./linear ft.)
Temporary Fill Creek Crossing 1/Wash Out Rebuild at A Structure	0.097/118	0/0	0.097/118	0/0	0.138/118
Temporary Fill Creek Crossing 2	0.019/15	0/0	0.019/15	0/0	0.027/15
Temporary Fill Creek Crossing 3	0.022/15	0/0	0.022/15	0/0	0.029/15
Temporary Fill Creek Crossing 4	0.017/15	0/0	0.017/15	0/0	0.027/15
Access Road Wash Out Rebuild at D Structure	0.071/128	0/0	0.071/128	0/0	0.089/128
As-Needed Sediment Removal (Annual Max)	0.01/50	0/0	0.01/50	0/0	0.01/50
Total	**0.236/341**	**0/0**	**0.236/341**	**0/0**	**0.320/341**

Indirect Impacts

Potential indirect impacts may include an increase of sedimentation in streams during surface scraping activities and the potential for toxin laden runoff during maintenance operations. However, these potential indirect impacts would be minimized or avoided during construction in accordance with the City's Road Design and Construction Standards manual (City of Thousand Oaks 2018) along with the implementation of Project-specific BMPs; including (but not limited to):

- Conducting work during the dry season
- Utilizing a water truck during surface scraping operations
- Limited creek crossing maintenance to smoothing out bank scouring and occasional cobble rearrangement
- Storing materials at least 50 feet from streams or having equipment utilize secondary containment
- Preventing hazardous materials from contaminating the soil and/or entering the waterways.

Permits

The appropriate CWA Section 404 Nationwide Permit, Section 401 Water Quality Certification, and CDFW Lake and Streambed Alteration Agreement will be obtained prior to commencement of the Project to authorize temporary impacts to Arroyo Conejo and its tributaries

Temporary Impact Mitigation

The temporary impacts associated with the crushed rock fill that will be temporarily installed within the temporary creek crossings and the access road wash out rebuilds will be removed following completion of W/F Structure, A Structure, and D Structure annual maintenance and/or inspections. Following the completion of maintenance and inspections, the gravel will be removed. Creek contours will remain unaltered.

Sediment removal associated with utility facility access will be relocated to appropriate locations adjacent to the facilities.

Any additional offset requirements associated with a CWA Section 404 Nationwide Permit, Section 401 Water Quality Certification, and CDFW Lake and Streambed Alteration Agreement will be implemented prior to impacting jurisdictional waters.

Riparian Trees

Operation and maintenance activities will be confined to existing access roads, pedestrian access pathways, and utility facilities that have been previously developed and disturbed; therefore, riparian tree removal should not be necessary. Trimming would be limited to branches that are two inches in diameter or smaller. Other vegetation trimming surrounding the utility facilities would be minor and primarily include non-native plants due to their invasive nature.

5.7 Resources Protected by Local Policies and Ordinances

Protected Trees

The Study Area contains native oak trees, California sycamore, California bay laurel, Southern California black walnut, toyon, and other species that are protected in accordance with the City of Thousand Oaks tree protection policies (Appendix D). However, since the Project site is comprised of existing access roads, pedestrian access pathways, and utility facilities removal of protected trees is not required. Some minor trimming of branches to city protected trees may be necessary for the Project; however, trimming would be limited to branches that are two inches in diameter or smaller and would be in compliance with the associated ordinances. Therefore, the Project would not conflict with any local tree protected ordinances.

City of Thousand Oaks General Plan

The Conservation Element of the Thousand Oaks General Plan (City of Thousand Oaks 2013) helps identify human activities that affect natural resources both directly and indirectly and define various policies and implementation measures by which these natural resources can be conserved within the Planning Area. Local policies that may be considered as part of the proposed project review are provided below; Project applicability explanations are provided beneath each policy. Detailed summaries of each potentially applicable Conservation Element Policies are provided in Appendix D.

- **CO-10:** Streams and creeks should be protected as open space and maintained in as natural a state as possible, and appropriate measures taken to manage urban runoff, in order to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value. This will contribute to the regional effort to improve the quality of Calleguas Creek, Malibu Creek and Mugu Lagoon.

  Multiple streams and creeks run through the Study Area and the Project site transverses them on multiple occasions. Additionally, all streams within the Study Area drain into Mugu Lagoon. All streams within the Study Area will remain protected as open space and preserved since the Project's existing footprint will not expand into them. Additionally, conducting maintenance and operation activities in accordance with the City's Road Design and Construction Standards manual (City of Thousand Oaks 2018) along with the implementing the Project-specific built in

BMPs; such as (but not limited to), conducting work during the dry season, utilizing a water truck during grading operations, limited creek crossing maintenance to smoothing out bank scouring and occasional cobble rearrangement, storing materials at least 50 feet from streams or having equipment utilize secondary containment, and preventing hazardous materials from contaminating the soil and/or entering the waterways will protect the natural resources downstream.

- **CO-21:** The City shall encourage proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and undeveloped open space lands.

  The Study Area contains native plant communities within undeveloped open space lands of the City's Planning Area. The Project will take place within existing developed and/or disturbed areas. For the new access path, only minor shrub and tree branch trimming will be required, all approximately less than 2 inches in diameter entire tree and shrub removal will not be required, herbaceous vegetation will remain in place, and existing grade will be preserved. Therefore, the DPW will be conserving native plant communities within the Planning area.

- **CO-23:** Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for protection, restoration or enhancement, in order to maintain biodiversity, biological productivity and ecological integrity of natural open space areas.

  Wildlife movement corridors and streams are located throughout the Study Area. However, impacts are not anticipated since the Project site's existing access roads, pedestrian pathways, and utility facilities are already developed and disturbed. Therefore, impacts to movement corridors and streams will not occur.

- **CO-25:** The City should foster a holistic approach to conservation of wildlife resources including consideration of biological crusts and pollinator species in recognition of the many important functions they perform in a healthy ecosystem.

  Biological crusts are likely located within the Study Area along with multiple pollinator species. However, impacts are not anticipated since the Project site's existing access roads, pedestrian pathways, and utility facilities are already developed and disturbed. Therefore, impacts to sensitive biological crusts and pollinator species are not likely to occur.

- **CO-26:** Isolation and fragmentation of natural open space areas should be prevented wherever possible.

  Natural open space areas are located throughout the Study Area. However, isolation and fragmentation of natural open space will not occur since the Project will take place within existing access roads, pedestrian pathways, and utility facilities that are already developed and disturbed.

- **CO-27:** Since natural streams often serve as important movement corridors for wildlife, they should be preserved wherever it is feasible to do so.

  Natural streams are located throughout the Study Area. However, the Project will take place within existing access roads, pedestrian pathways, and utility facilities that are already developed and disturbed within and adjacent to the natural streams. Therefore, natural streams will be preserved.

CO-29: Continue to protect oak and landmark trees and their habitat in recognition of their historic, aesthetic and environmental value to the citizens of Thousand Oaks; in particular, Valley Oak habitat.

Oak and landmark trees and their habitat are located throughout the Study Area. However, since the Project site is comprised of existing access roads, pedestrian access pathways, and utility facilities, removal of protected trees is not required. Some minor trimming of branches to city protected trees may be necessary for the Project; however, trimming would be limited to branches that are two inches in diameter or smaller and would be in compliance with the associated ordinances. Therefore, the Project would continue to protect oak and landmark trees and their habitat.

- **CO-30:** Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, biodiversity and aesthetic value.

  Two seeps are located within the Study Area. However, the Project footprint will not expand into the seeps; therefore, they will be preserved.

- **CO-32:** The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (USFWS and CDFW), the CNPS, the County of Ventura, and the City of Thousand Oaks.

  Threatened, endangered, rare, and special status wildlife species are known to occur or have the potential to occur within the Study Area. However, with the incorporation of the Project-specific BMPs and AMMs, impacts to these species will be avoided or minimized; they will therefore be protected and/or conserved.

6 Avoidance and Minimization Measures

The AMMs below should be incorporated into the Project design to avoid or minimize impacts to special-status species and other sensitive biological resources.

BIO-1 Pre-construction Surveys

Preconstruction surveys will be conducted by a qualified biologist within CDFW jurisdictional streambed no greater than seven days prior to the initiation of vegetation trimming or ground disturbance activities. Woodrat middens, American badger burrows, and any other regulated biological resource will be flagged for avoidance and work activities at that location will be avoided until a qualified biologist confirms that the sensitive biological resource(s) will not be directly or indirectly impacted by the construction activities.

BIO-2 Burrowing Owl

A burrowing owl habitat assessment will be conducted by a qualified biologist within 500 feet of the Project's work area (survey area) prior to initiation of the Project. If suitable burrowing owl habitat is documented within CDFW jurisdiction, focused burrowing owl surveys will be conducted to determine the presence or absence of the species within the survey area. Surveys will be conducted in accordance with CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012). If burrowing owl is located, CDFW will be notified and occupied burrows will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers, and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFW in the annual mitigation status report. If the burrowing owl is detected in the Project Area but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFW-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFW Staff Report on Burrowing Owl Mitigation (2012).

BIO-3 Rare Plants

Focused rare plant surveys will be conducted prior to Project initiation to verify the presence or absence, estimate the abundance, and map the extent of the special-status plant species that are present or have a high or moderate potential to occur within 50 feet of the Project site. The results of the survey will be used to determine if the Project has the potential to impact these special-status plant species. The surveys should be conducted within the plants' most distinct phenology period to correctly identify the species and in accordance with guidelines published by the CDFW (2018) and CNPS (2001).

If special-status plant species are detected within the Project's work area(s), the limits of their distribution shall be flagged. Flagging shall extend to the furthest extent within the Project Area, but

outside any private property. Results of the surveys shall be provided to CDFW in the annual mitigation status report. Special-status plant species shall be monitored for avoidance to the maximum extent feasible. Take of ESA and CESA listed; candidate, and proposed species or State Rare species will not occur as a result of the Project.

BIO-4 Crotch's Bumble Bee

If Crotch's bumble bee is still considered a CESA candidate species or has been listed as threatened or endangered under CESA at the time vegetation clearance or ground disturbance commences, PWD or its contractor(s) shall implement the following avoidance, minimization, and compensation measures for this species:

- Prior to construction activities or vegetation disturbance, a qualified biologist shall conduct a habitat assessment for Crotch's bumble bee within 50 feet of the Project's work area (survey area). The habitat assessment shall identify potential foraging, nesting, and/or overwintering resources. If suitable habitat is present, those areas shall be avoided to the extent feasible.
- If suitable habitat is unavoidable, prior to the start of initial ground-disturbing activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation), a qualified biologist shall conduct a protocol-level presence/absence survey for Crotch's bumble bee in areas of suitable habitat during the peak active period for Crotch's bumble bee (highest detection probability). The peak active period for Crotch's bumble bee in the Project Area is anticipated to be April through June given the expected desiccation of Crotch's bumble bee floral resources within the project area by mid-summer, though this timing could depend on annual climatic factors. Survey methodology shall be based on Section 4.1.1 of CDFW's 2023 Survey Considerations for CESA Candidate Bumble Bee Species, or the most current CDFW guidance in effect at the time.
- If Crotch's bumble bee is present, the qualified biologist shall identify the location of nests in the survey area, to the extent feasible. If nests are identified, the qualified biologist shall determine the need to establish a no-disturbance buffer around the nest, where feasible, to reduce the risk of disturbance or accidental take. The buffer shall provide at least 50 feet (15 meters) of clearance around active nest entrances. If project component activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, shall expand the buffer zone as necessary to prevent disturbance or take. If establishment of a no disturbance buffer is feasible, construction activities shall not occur within the buffer until a qualified biologist determines the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive, construction activities within the no-disturbance buffer(s) shall be allowed to resume. Otherwise, the no-disturbance buffer shall be maintained for the duration of Project component construction activities in each work area and shall be removed only after the conclusion of all grading, clearing, and construction activities at each construction site.
- If Crotch's bumble bee is determined to be present on the project site, floral resources associated with the species that will be removed or damaged by project construction activities in the areas of the project site where Crotch's bumble bee is detected and documented, shall be replaced at a minimum 1:1 ratio.

BIO-5 Pre-construction Nesting Bird Surveys

To avoid disturbance of nesting birds, including special-status species and birds protected by the MBTA and CFGC Section 3503, Project activities should occur outside of the breeding season for nesting birds (February 1 through August 31), if feasible.

If vegetation trimming or soil disturbing activities occur during the breeding season, a pre-construction nesting bird survey should be conducted no more than seven days prior to the initiation of Project activities. The nesting bird survey shall be conducted on foot inside the Project Area and include a 500-foot buffer for raptors and special-status species a 100-foot buffer for all other species. The survey shall be conducted by a biologist familiar with avian species known to inhabit Southern California. If nests are found, an avoidance buffer of up to 500 feet for raptors and special-status species and up to 100 feet for non-raptors (dependent upon the species, the proposed work activity, and existing disturbances associated with land use outside of the workspace) shall be determined and demarcated by the biologist with construction fencing, flagging, or other means to mark the boundary. Intrusion into the buffer may be conducted if it is determined by the biologist that there is no risk of harm to the nest and work is monitored by the biologist. If the risk of nest abandonment is observed, all construction activities within the buffer shall cease until the nest is no longer active as determined by the biologist.

BIO-6 Worker Environmental Awareness Training

Prior to the initiation of maintenance activities each year, an approved biologist shall present a Worker Environmental Awareness Training (WEAT) to all on-site personnel. The WEAT will educate the personnel on the identification of special-status species and regulated biological resources that are present or have the potential to occur within the Project Area and will cover the applicable regulatory policies and provisions regarding their protection and provide an overview of the Project's AMMs. Furthermore, on-site personnel will be briefed on the reporting process if an inadvertent injury or mortality should occur to a special-status species during construction.

BIO-7 Biological Monitoring

A qualified biologist should monitor all creek crossing maintenance, temporary fill crossing installation and decommissioning, and HCTP to D Structure washed out access road temporary rebuild installation and decommissioning. The biological monitor will conduct clearance sweeps immediately prior to the initiation of construction activities and will monitor for the presence of special-status species in areas where there is a moderate or high potential for presence. Daily monitoring reports will be prepared for each monitoring day. The biological monitor will have authority to halt any action that may result in direct impacts on special-status species or any other sensitive biological resources. If special-status wildlife are observed in work areas and do not readily leave on their own volition, work activities will be temporarily suspended until the animal moves out of harm's way.

7 Limitations

This BRA has been conducted in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources (CDFW 2025). Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Project Features Map Book

Project Components

Study Area

Access Road

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

Created on Thursday, August 21, 2025
Map Created by: Rincon Consultants, Inc.

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Project Components
Study Area
Access Road
Utility Facility
Creek Crossing
Pedestrian Path
NHD Flowline
Stream/River
Cleanout #4
Cleanout_Add_1
North Fork Arroyo Conejo
Unit Y Access Road
Unit Y Access Road
Cleanout #3
Cleanout_Add_2
Y Structure
CC-Y2
Cleanout #1
CC-Y1
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet
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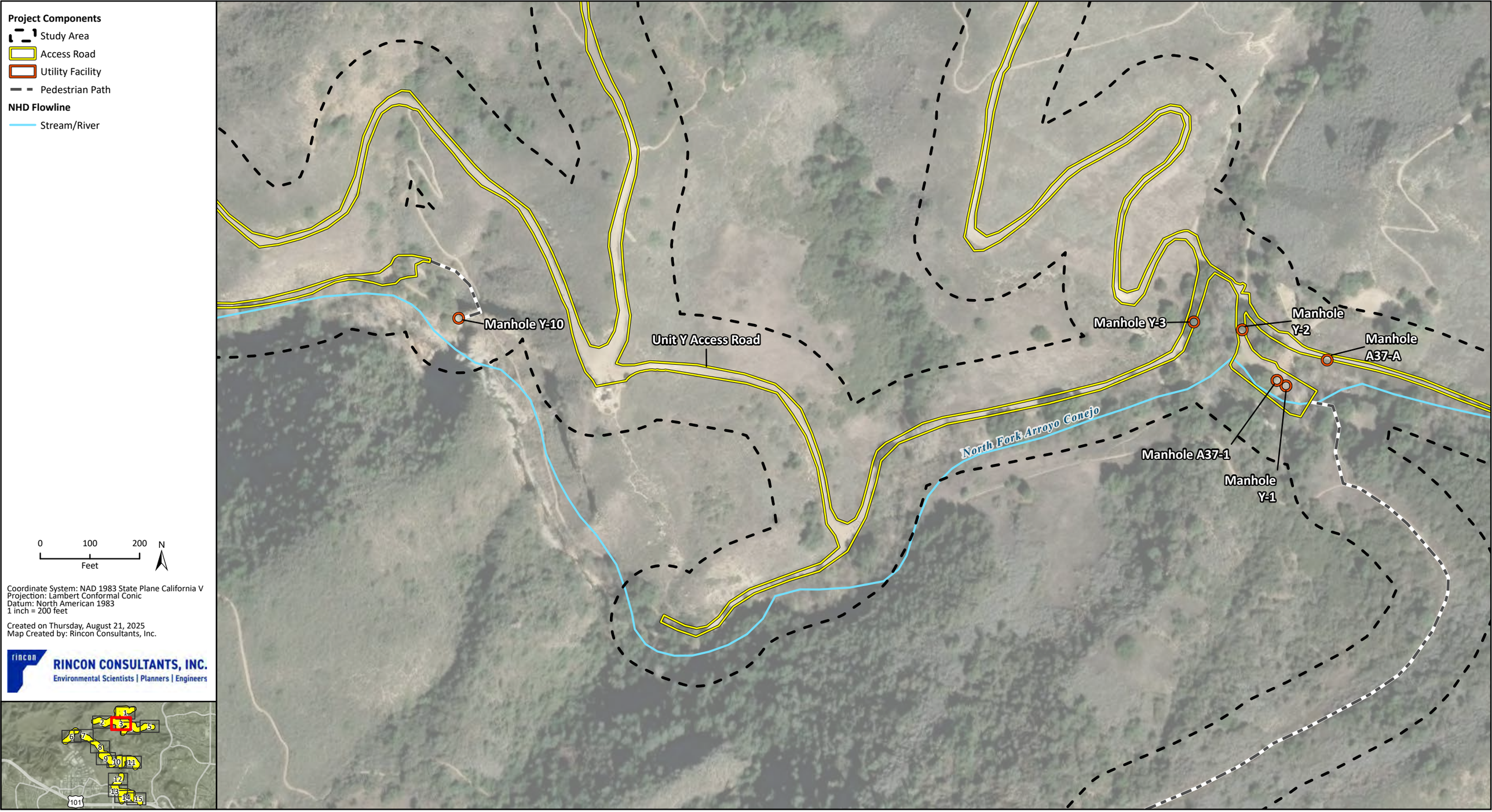
24-16512 BIO
Fig 2 Project Location


Project Components
Study Area
Access Road
Utility Facility
Pedestrian Path
NHD Flowline
Stream/River
Manhole Y-10
Unit Y Access Road
Manhole Y-3
Manhole Y-2
Manhole A37-A
North Fork Arroyo Concjo
Manhole A37-1
Manhole Y-1
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
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Project Components

- Study Area
- Access Road
- Pedestrian Path

NHD Flowline

- Stream/River

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
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Project Components

Study Area

Access Road

NHD Flowline

Stream/River

0 100 200

Feet

N

Coordinate System: NAD 1983 State Plane California V
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Datum: North American 1983
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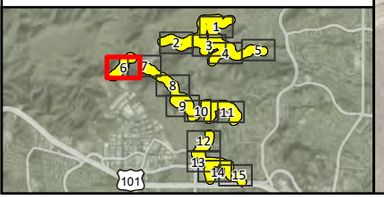

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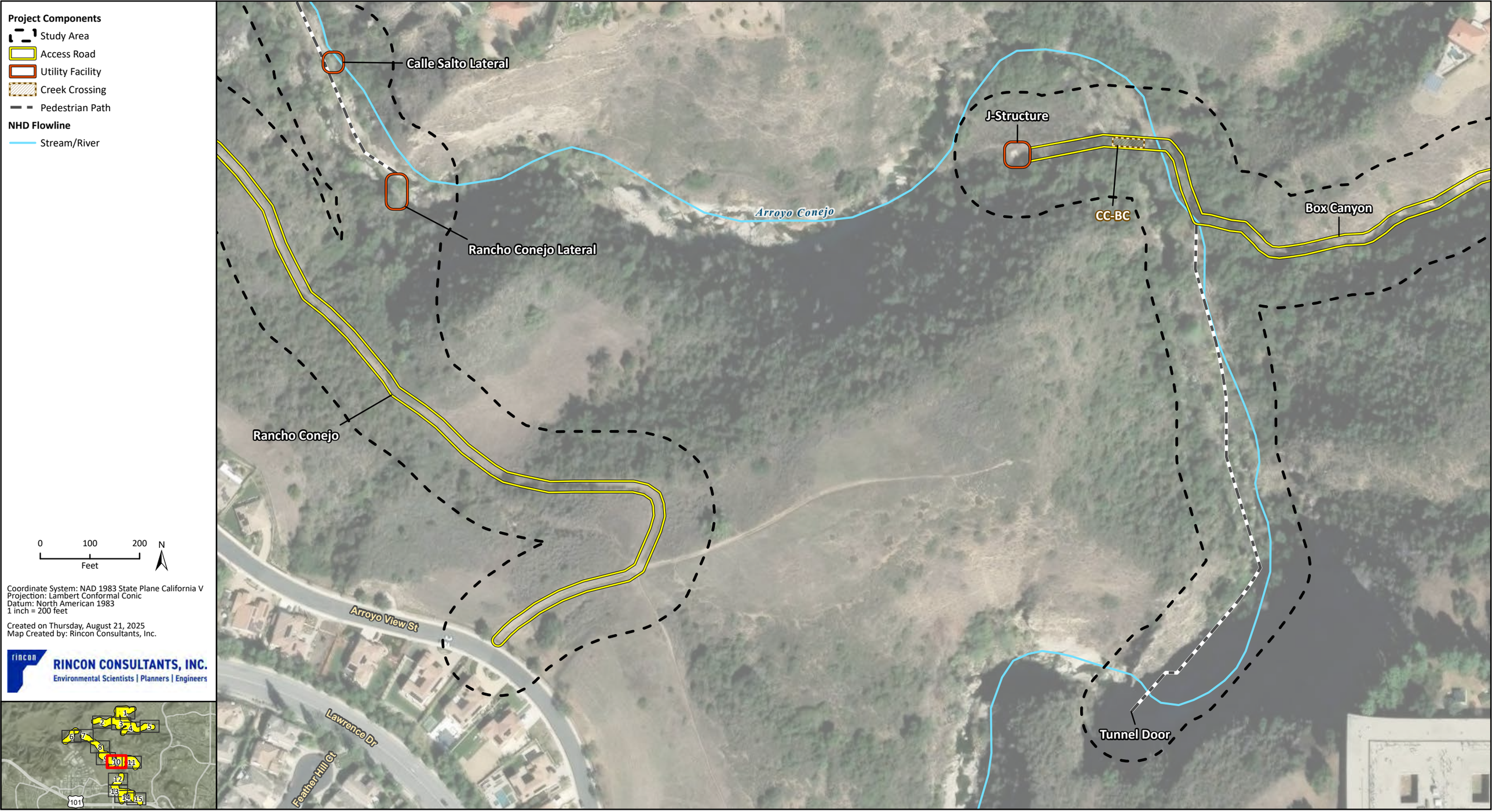

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Project Components

- Study Area
- Access Road
- Pedestrian Path

NHD Flowline

- Stream/River

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
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Appendix B

Site Photographs

Photo 1. Overview of the Coast Live Oak Woodland & Forest present on- site (facing northeast).

Photo 2. Overview of the California Sagebrush – (Purple Sage) Scrub present on-site (facing north).

Photo 3. Overview of the California Sycamore - Coast Live Oak Riparian Woodlands present on-site (facing south, taken in February so sycamore leaves are absent).

Photo 4. Overview of the Goodding's Willow - Red Willow Riparian Woodland & Forest present on-site (facing south).

Photo 5. Overview of the Coast Live Oak Woodland & Forest present on-site (facing south).

Photo 6. Overview of the Coast Live Oak Woodland & Forest in the foreground with Scrub Oak Chaparral in the background present on-site.

Photo 7. Overview of the Coast prickly pear scrub vegetation community present on-site.

Photo 8. Overview of the Upland Mustards or Star-Thistle Fields vegetation community present on-site.

Photo 9. Overview of the California Walnut Groves present on-site.

Photo 10. Overview of the Scrub Oak Chaparral vegetation community present on-site.

Photo 11. Overview of Wild Oats & Annual Brome Grasslands vegetation community present on-site.

Photo 12. Overview of Survey Area near confluence of two drainages. Area consists of Upland Mustards or Star-thistle Fields. Photo facing east- southeast.

Photo 13. Site conditions located in east end of Project Area. Photo facing west-southwest.

Photo 14. Overview of drainage near the east end of the Project Area. Photo facing north. Site supports a Coast Live Oak Woodland & Forest at this location.

Photo 15. Perennial flow in drainage. Photo facing southeast.

Photo 16. Overview of NFAC. Photo facing south-southeast looking towards Paradise Falls waterfall. Photo captured near the central portion of the Project Area.

Photo 17. Bridge supporting access across a perennial feature in the Survey Area. Photo facing southeast.

Photo 18. Example of Mulefat Thickets in Survey Area. Photo facing northwest.

Photo 19. Example of Coast Prickly Pear Scrub on-site. Photo facing east- northeast.

Photo 20. Example of California Sycamore - Coast Live Oak Riparian Woodlands on site. Photo facing northeast.

Photo 21. Cleanout #3. Photo facing northwest.

Photo 22. Cleanout #4. Photo facing east.

Photo 23. Cleanout #5. Photo facing northeast.

Photo 24. Cleanout #5. Photo facing southwest.

Photo 25. Manhole Y-1 and Manhole A37-1. Photo facing south, downslope towards F18.

Photo 26. Manhole A37-A at white post. Photo facing southwest.

Photo 27. Manhole A37-A at white post on right side of the access road. Photo facing east-southeast.

Photo 28. Manhole Y-2 adjacent to F18' steep top of bank. Photo facing west- northwest.

Photo 29. Photo directly adjacent to Manhole Y-2 looking down into F18. Photo facing west.

Photo 30. Manhole Y-3 at white post. Photo facing east towards F18.

Photo 31. Photo looking towards platform supporting Manhole Y-10. Photo facing southeast.

Photo 32. Manhole Y-10 platform. Photo facing southeast.

Photo 33. Photo looking up at platform supporting Manhole Y-10. Photo facing north-northwest.

Photo 34. Y Structure. Photo facing east.

Photo 35. Y Structure. Photo facing west.

Photo 36. Creek Crossing A at NFAC. Photo facing south-southwest.

Photo 37. Creek Crossing A at NFAC. Photo facing north.

Photo 38. Creek Crossing B at NFAC. Photo facing southeast.

Photo 39. Creek Crossing B at NFAC. Photo facing west.

Photo 40. Creek Crossing C at NFAC. Photo facing northwest.

Photo 41. Creek Crossing C at NFAC. Photo facing southeast.

Photo 42. Creek Crossing D at NFAC. Photo facing north.

Photo 43. Creek Crossing D at NFAC. Photo facing south.

Photo 44. Creek Crossing F at NFAC. Photo facing south-southeast.

Photo 45. Photo facing west from Creek Crossing F at NFAC.

Photo 46. OHWM limits of F01 at MSC-HTP crossing to be abandoned.

Photo 47. Overview of Wetland Determination Sampling Pit (SP01) at shovel location, facing southeast. Photo taken January 25, 2022.

Photo 48. Overview of Wetland Determination Sampling Pit (SP02) at shovel location, facing north. Photo taken January 25, 2022.

Photo 49. Overview of MSC-HTP access road across F01, facing southwest. Photo taken January 25, 2021.

Photo 50. Overview of HCTP to D Structure across F01, facing southeast. Photo taken January 25, 2022.

Photo 51. HCTP to D Structure across F01, facing north. Photo taken January 25, 2022.

Photo 52. HCTP to D Structure across F01, facing southeast. Photo taken January 25, 2022.

Photo 53. Overview of HCTP to D Structure across F01, facing southwest. Photo taken February 2, 2022.

Photo 54. Overview of Wetland Determination Sampling Pit (SP09), facing southeast. Photo taken February 02, 2022.

Photo 55. Overview of HCTP to D Structure across F01, facing north. Photo taken January 25, 2022.

Photo 56. Overview of W/F Structure and A Structure, facing northeast. Photo taken January 25, 2022.

Photo 57. Overview of W/F Structure and A Structure, facing east southeast. Photo taken February 2, 2022.

Photo 58. Overview of W/F Structure and A Structure, facing northeast. Photo taken January 25, 2022.

Photo 59. Secondary channel of F01 overlapping with W/F Structure and A Structure, facing west (downstream). Photo taken January 25, 2022.

Photo 60. Secondary drainage of F01 overlaps with HCTP to D access road, facing southwest (downstream). Photo taken June 10, 2022.

Photo 61. Overview of HCTP to D Structure across F01, facing northeast. Photo taken February 1, 2022.

Photo 62. HCTP to D Structure across F01, facing east. Photo taken February 1, 2022.

Photo 63. HCTP to D Structure across F01, facing north northeast. Photo taken February 1, 2022.

Photo 64. Wetland Determination Sampling Pit (SP06), facing east. SP06 examined approximately at red circle. Photo taken February 1, 2022.

Photo 65. Overview of HCTP to D Structure across F01, facing southeast. Photo taken January 25, 2022

Photo 66. HCTP to D Structure across F01, facing southeast. Photo taken June 10, 2022.

Photo 67. Overview of HCTP to D Structure across F01, facing northwest. Photo taken January 25, 2022.

Photo 68. Wetland Determination Sampling Pit (SP07), facing south SP06 examined at shovel location. Photo taken February 1, 2022.

Photo 69. Wetland Determination Sampling Pit (SP10), view facing east. Photo taken February 2, 2022.

Photo 70. Overview of Shappell Lateral Valves, view facing north. Photo taken January 26, 2022.

Photo 71. Overview of Shappell Lateral Valves, facing northeast. Photo taken January 26, 2022.

Photo 72. Wetland Determination Sampling Plot (SP03), view facing north. Photo taken January 25, 2022.

Photo 73. Overview of HCTP to D Structure across F01, view facing northeast. Photo taken January 26, 2022.

Photo 74. Overview of HCTP to D Structure across F01, facing northwest. Photo taken February 2, 2022.

Photo 75. Wetland Determination Sampling Plot (SP08), view facing southeast. Photo taken February 1, 2022.

Photo 76. Overview of Rancho Conejo access road across F01 overlapping secondary channel, view facing south. Photo taken February 2, 2022.

Photo 77. Rancho Conejo access road across F01, view facing southeast. Photo taken January 26, 2022.

Photo 78. Rancho Conejo access road across F01, view facing southwest. Photo taken January 26, 2022.

Photo 79. Rancho Conejo access road across F01, view facing northwest. Photo taken January 26, 2022.

Photo 80. Wetland Determination Sampling Plot (SP05), view facing north. Photo taken January 26, 2022.

Photo 81. Overview of the D Structure, facing southwest. Photo taken January 26, 2022.

Photo 82. D Structure view facing southeast. Photo taken January 26, 2022.

Photo 83. D Structure, view facing northwest. Photo taken January 26, 2022.

Photo 84. D Structure, view facing southeast. Photo taken January 26, 2022.

Photo 85. D Structure, view facing southeast. Photo taken January 26, 2022.

Photo 86. Calle Salto Lateral, view facing west. Photo taken January 26, 2022.

Photo 87. Calle Salto Lateral, view facing southeast. Photo taken January 26, 2022.

Photo 88. Wetland Determination Sampling Plot (SP04), view facing northeast. Photo taken January 26, 2022.

Photo 89. Overview of Rancho Conejo Lateral, facing southeast. Photo taken February 8, 2022.

Photo 90. Rancho Conejo Lateral, view facing east. Photo taken February 8, 2022.

Photo 91. Rancho Conejo Lateral, view facing east. Photo taken February 8, 2022.

Photo 92. Overview of concrete drain in Rancho Conejo Lateral, facing north. Photo taken February 8, 2022.

Photo 93. Overview of J structure, facing south. Photo taken February 4, 2022.

Photo 94. Overview of J Structure, facing west-southwest. Photo taken February 4, 2022.

Photo 95. Box Canyon access road across F01, view facing west. Photo taken February 4, 2022.

Photo 96. Box Canyon access road across F01, view facing east. Photo taken February 4, 2022.

Photo 97. F07, view facing west. Photo taken June 3, 2022.

Photo 98. Wetland Determination Sampling Plot (SP14), view facing southwest. Photo taken February 4, 2022.

Photo 99. Overview of F02, a tributary to F01 that originates from an energy dissipator outlet located near MSC-HTP, view facing north. Photo taken June 9, 2022.

Photo 100. Overview of F03, an ephemeral tributary to F01 that originates from erosional flow from MSC-HTP, facing east. Photo taken June 9, 2022.

Photo 101. Overview of F05, an ephemeral stream, located parallel to Rancho Conejo, facing southwest. Photo taken January 26, 2022.

Photo 102. Overview of F05, an ephemeral stream as it drains into F01, located parallel to Rancho Conejo, facing southwest. Photo taken January 26, 2022.

Photo 103. Overview of F05, an ephemeral stream that crosses under Rancho Conejo via a functional culvert, facing north. Photo taken June 16, 2022.

Photo 104. No hydrological indicators on Rancho Conejo at the location where F05 crosses under access road via culvert, view facing northeast. Photo taken June 16, 2022.

Photo 105. Bed and development of F06 from accumulation of erosional flow from Rancho Conejo, view facing northwest. Photo taken June 16, 2022.

Photo 106. F08, an ephemeral tributary to F01 that parallels Box Canyon, view facing northwest. Photo taken June 3, 2022.

Photo 107. View of F08 that parallels Box Canyon, facing west. Photo taken June 3, 2022.

Photo 108. F08 parallels Box Canyon, view facing west. Photo taken June 3, 2022.

Photo 109. Wetland Determination Sampling Plot (SP21), view facing southwest. Photo taken June 3, 2022.

Photo 110. Functional culvert inlet of F10 under Box Canyon, view facing west (downstream). Photo taken June 3, 2022.

Photo 111. Functional culvert outlet of F10 under Box Canyon draining to F8, view facing west (upstream). Photo taken June 3, 2022.

Photo 112. F11 conveys sheet flow across along Box Canyon to F8, view facing northwest (downstream). Photo taken June 3, 2022.

Photo 113. Upslope portion of F11 is obscured by vegetation. The red lines indicate approximate OHWM boundary of the feature; view facing east (upstream). Photo taken June 3, 2022.

Photo 114. Wetland Determination Sampling Plot (SP20) located in the of F01, view facing west. Photo taken June 3, 2022.

Photo 115. F15 conveying flow northeast to F01 via a concrete culvert under Citation Way. Bed facing north. Photo taken June 1, 2022.

Photo 116. F15 conveying flow northeast to F01 via a concrete culvert under Citation Way. Bed facing southeast. Photo taken June 1, 2022.

Photo 117. F14, an ephemeral stream that crosses under Citation Way via a culvert, view facing southeast (downstream). Photo taken June 2, 2022.

Photo 118. Overview of Citation Way access road across F01, facing northeast. Photo taken June 2, 2022.

Photo 119. Wetland Determination Sampling Plot (SP17), view facing northeast. Photo taken June 2, 2022.

Photo 120. Citation Way access road crossing at F01, view facing northeast. Photo taken June 2, 2022.

Photo 121. Overview of F13, an ephemeral tributary to F01 crossing Citation Way as undefinable sheet flow, view facing southwest. Photo taken June 1, 2022.

Photo 122. Overview of F13, crossing Citation Way as undefinable sheet flow, facing southwest. Photo taken June 1, 2022.

Photo 123. Citation Way access road across F01, view facing northeast. Photo taken June 1, 2022.

Photo 124. Citation Way access road across F01, view facing northeast. Photo taken June 1, 2022.

Photo 125. Overview of Citation Way Road across South Branch Arroyo Conejo (S12), view facing southwest. Photo taken June 1, 2022.

Photo 126. Wetland Determination Sampling Plot (SP18) located on a terrace below the OHWM of F12, view facing north. Photo taken June 2, 2022.

Photo 127. Wetland Determination Sampling Plot (SP19), view facing west. Photo taken June 2, 2022.

Photo 128. Calle Brusca access pathway parallels F01, view facing west. Photo taken May 31, 2022.

Photo 129. Calle Brusca access pathway parallels F01, view facing northeast. Photo taken May 31, 2022.

Photo 130. Tunnel access road parallels F01, view facing north. Photo taken May 31, 2022.

Photo 131. View of F01 from Tunnel access road, view facing east (upstream). Photo taken May 31, 2022.

Photo 132. View of F01 from Tunnel access road, view facing south (upstream). Photo taken May 31, 2022.

Photo 133. View of F01 from Tunnel access road, view facing southeast (upstream). Photo taken May 31, 2022.

Photo 134. View of F01 from Tunnel access road, facing northeast (upstream). Photo taken May 31, 2022.

Photo 135. OHWM limits of F01 within the Calle Brusca access road boundary, view facing southwest. Photo taken May 31, 2022.

Photo 136. Riparian vegetation associated with F1 adjacent to Calle Brusca access road, view facing southwest. Photo taken May 31, 2022.

Photo 137. Example of upland habitat adjacent to Calle Brusca access road, view facing southwest. Photo taken May 31, 2022.

Photo 138. Example of upland habitat adjacent to Calle Brusca access road, view facing south. Photo taken May 31, 2022.

Photo 139. Overview of F17 near the east end of the Project Area. Photo facing north. F17, conveys flow west of the pictured access road. F17 supports an oak woodland at this location.

Photo 140. Perennial flow at F17, approximately 200 feet from the F17-F18 confluence. Photo facing southeast.

Photo 141. Overview of F17. Photo facing south-southeast looking towards Paradise Falls waterfall. Photo captured near the central portion of the Project Area.

Photo 142. Bridge supporting access across F18. Photo facing southeast.

Photo 143. Flow at F18. Photo taken from bridge facing south- southeast.

Photo 144. F19 facing upstream (north-northeast). F19 is deeply incised and showcases a shared OHWM/top of bank.

Photo 145. Culvert inlet facilitating F19 flow across existing access road.

Photo 146. Culvert outlet facilitating F19 flow to F17. Photo facing south- southwest.

Photo 147. F20 riparian vegetation abutting existing access road. No hydrologic connectivity across the road was identified. Photo facing northwest.

Photo 148. Overview of F20 upslope of access road. Photo facing northwest.

Photo 149. Overview of F20 downslope of access road. Dense vegetation obscures hydrology indicators. Photo facing east-northeast.

Photo 150. Start of F21 directly downslope of existing access road. Photo facing west.

Photo 151. North of existing access road, upslope of F21. No hydrology indicators. Area was identified as a non-jurisdictional swale. Photo facing northeast.

Photo 152. F23 culvert inlet providing flow across existing access road. Culvert conveys flow from existing drainage and roadside erosional gully. Photo facing north.

Photo 153. Culvert outlet facilitating F23 flow across existing access road. Photo facing downstream (south).

Photo 154. F23 just before conveying flow onto an existing access road. Photo facing upstream (north).

Photo 155. Water shoot conveying F23 flow away from existing access road and towards F17. Photo facing south-southeast.

Photo 156. Culverts concentrating flow from various sources onto F24, a concrete v-ditch. Photo facing south.

Photo 157. Foot bridge over F24. Photo facing south.

Photo 158. Culvert inlet on east side of access road facilitating F24 flow across the existing access road. Drainage is not concreted downslope of access road. Photo facing north.

Photo 159. F24 culvert outlet approximate location. Dense vegetation and litter obscure culvert outlet. Photo facing northwest.

Photo 160. F25 facing downstream (southeast).

Photo 161. Cleanout #1. Photo facing north-northeast.

Photo 162. SP22 located at shovel location, examined adjacent to F17 OHWM. Photo facing west-southwest.

Photo 163. SP22 located at shovel location, examined adjacent to F17 OHWM. Photo facing west-southwest.

Photo 164. SP23 (paired pit associated with SP22) located on elevated terrace just beyond the F17 OHWM. Photo facing northwest.

Photo 165. SP23 (paired pit associated with SP22) at shovel location examined on elevated terrace just beyond the F17 OHWM. Photo facing northwest.

Photo 166. SP24 examined on terrace adjacent to F17. Photo facing southwest.

Photo 167. SP25 adjacent to F18 OHWM. Photo facing north.

Photo 168. SP26 (paired pit to SP25) examined at orange pole location within F18. Photo facing east.

Photo 169. SP26 (paired pit to SP25) examined at orange pole location within F18. Photo facing east.

Appendix C

Species Compendium

Plant Species Detected in the Study Area

Scientific Name	Common Name	Lifeform	Native Status
Angiosperms (eudicots)			
Amaranthaceae	**Amaranth family**		
Amaranthus sp.	Amaranth	Annual herb	N/a
Anacardiaceae	**Sumac family**		
Malosma laurina	Laurel sumac	Tree, shrub	Native
Rhus integrifolia	Lemonade berry	Shrub	Native
Rhus ovata	Sugar bush	Shrub	Native
Schinus molle	Peruvian pepper tree	Tree	Invasive
Toxicodendron diversilobum	Poison oak	Vine, shrub	Native
Apiaceae	**Umberllifer family**		
Apium graveolens	Celery	Annual, biennial herb	Non-native
Conium maculatum	Poison hemlock	Perennial herb	Invasive
Foeniculum vulgare	Fennel	Perennial herb	Invasive
Sanicula sp.	Sanicle	Perennial herb	Native
Apocynaceae	**Dogbane family**		
Asclepias fascicularis	Narrow leaf milkweed	Perennial herb	Native
Nerium oleander	Oleander	Tree	Invasive
Araliaceae	**Ivy family**		
Hedera helix	English ivy	Vine, shrub	Invasive
Asteraceae	**Sunflower family**		
Achyrachaena mollis	Blow wives	Annual herb	Native
Acourtia microcephala	Sacapellote	Perennial herb	Native
Anthemis cotula	Dog fennel	Annual herb	Invasive
Artemisia californica	Coastal sage brush	Shrub	Native
Artemisia douglasiana	California mugwort	Perennial herb	Native
Baccharis pilularis	Coyote brush	Shrub	Native
Baccharis salicifolia	Mule fat	Shrub	Native
Baccharis sarothroides	Broom baccharis	Shrub	Native
Brickellia californica	California brickellia	Perennial herb	Native
Carduus pycnocephalus ssp. *pycnocephalus*	Italian thistle	Annual herb	Invasive
Centaurea melitensis	Tocalote	Annual herb	Invasive
Corethrogyne filaginifolia	Common sandaster	Perennial herb	Native
Cotula australis	Brass buttons	Annual herb	Non-native
Cotula coronopifolia	Brass buttons	Perennial herb	Invasive
Deinandra fasciculata	Clustered tarweed	Annual herb	Native
Dimorphotheca fruticosa	Trailing african daisy	Perennial herb	Non-native
Encelia californica	Bush sunflower	Shrub	Native
Erigeron canadensis	Canadian horseweed	Annual herb	Native

Scientific Name	Common Name	Lifeform	Native Status
Eriophyllum confertiflorum var. *cofertiflorum*	Golden yarrow	Shrub	Native
Hedypnois rhagadioloides	Crete weed	Annual herb	Non-native
Helminthotheca echioides	Bristly ox-tongue	Annual, perennial herb	Invasive
Heterotheca grandiflora	Telegraph weed	Annual, perennial herb	Native
Isocoma menziesii var. *menziesii*	Menzies' goldenbush	Shrub	Native
Lactuca serriola	Prickly lettuce	Annual herb	Invasive
Matricaria discoidea	Pineapple weed	Annual herb	Native
Pseudognaphalium biolettii	Two-colored rabbit-tobacco	Perennial herb	Native
Pseudognaphalium californicum	Ladies' tobacco	Annual, perennial herb	Native
Pseudognaphalium microcephalum	Wright's cudweed	Perennial herb	Native
Silybum marianum	Milk thistle	Annual, perennial herb	Invasive
Solidago velutina ssp. *californica*	Oreja de liebre	Perennial herb	Native
Soncus oleraceus	Sow thistle	Annual herb	Non-native
Streptanomeria sp.	Wirelettuce	Annual, perennial herb	Native
Uropappus lindleyi	Silver puffs	Annual herb	Native
Xanthium strumarium	Cocklebur	Annual herb	Native
Betulaceae	**Birch family**		
Alnus rhombifolia	White alder	Tree	Native
Boraginaceae	**Borage family**		
Amsinckia intermedia	Common fiddleneck	Annual herb	Native
Cryptantha sp.	Cryptantha	Annual herb	Native
Pectocarya linearis ssp. *ferocula*	Slender comb seed	Annual herb	Native
Phacelia cicutaria	Caterpillar phacelia	Annual herb	Native
Phacelia ramosissima	Branching phacelia	Perennial herb	Native
Phacelia viscida	Sticky phacelia	Annual herb	Native
Brassicaeae	**Mustard family**		
Capsella bursa-pastoris	Shepherd's purse	Annual herb	Non-native
Hirschfeldia incana	Mustard	Perennial herb	Invasive
Nasturium officinale	Watercress	Perennial herb (aquatic)	Native
Raphanus sativus	Jointed charlock	Annual, biennial herb	Invasive
Sisymbrium orientale	Indian hedge mustard	Annual, perennial herb	Non-native
Cactaceae	**Cactus family**		
Cylindropuntia prolifera	Coastal cholla	Shrub (stem succulent)	Native
Opuntia littoralis	Prickly pear	Shrub (stem succulent)	Native
Opuntia oricola	Chaparral pricklypear	Shrub (stem succulent)	Native
Caprifoliaceae	**Honeysuckle family**		
Lonicera subspicata var. *denudata*	Johnston's honeysuckle	Shrub	Native
Symphoricarpos mollis	Snowberry	Shrub	Native

Scientific Name	Common Name	Lifeform	Native Status
Caryophyllaceae	**Carnation family**		
Herniaria hirsuta	Herniaria	Annual herb	Non-native
Polycarpon tetraphylum var. *tetraphyllum*	Four leaved allseed	Annual herb	Non-native
Stellaria media	Chickweed	Annual herb	Non-native
Chenopodiaceae	**Chenopod family**		
Atriplex semibaccata	Australian saltbush	Perennial herb	Invasive
Salsola tragus	Russian thistle	Annual herb	Invasive
Convolvulaceae	**Bindweed family**		
Calystegia macrostegia	Island morning glory	Perennial herb, vine	Native
Convolvulus arvensis	Field bindweed	Perennial herb, vine	Invasive
Crassulaceae	**Stonecrop family**		
Dudleya lanceolata	Southern California dudleya	Perennial herb	Native
Dudleya pulverulenta	Chalk dudleya	Perennial herb	Native
Curcubitaceae	**Gourd family**		
Marah macrocarpa	Chilicothe	Perennial herb, vine	Native
Euphorbiaceae	**Euphorbia family**		
Euphorbia dendroides	Tree spurge	Shrub	Non-native
Euphorbia lathyris	Gopher plant	Annual, perennial herb	Invasive
Euphorbia peplus	Petty spurge	Annual herb	Non-native
Euphorbia spp.	Spurge	Annual herb	Native
Ricinus communis	Castor bean	Shrub	Invasive
Fabaceae	**Legume family**		
Acmispon glaber	Deerweed	Perennial herb	Native
Acmispon maritimus	Coastal lotus	Annual herb	Native
Lotus corniculatus	Bird’s foot trefoil	Perennial herb	Invasive
Lotus tenuis	Narrow-leaf bird’s-foot trefoil	Perennial herb	Non-native
Melilotus albus	White sweetclover	Annual, biennial herb	Invasive
Fagaceae	**Beech family**		
Quercus agrifolia	Coast live oak	Tree	Native
Quercus berberidifolia	Inland scrub oak	Tree	Native
Quercus lobata	Valley oak	Tree	Native
Geraniaeceae	**Geranium family**		
Erodium cicutarium	Coastal heron's bill	Annual herb	Invasive
Grossulariaceae	**Currant family**		
Ribes speciosum	Fuchsia flowered gooseberry	Shrub	Native
Juglandaceae	**Walnut family**		
Juglans californica	Southern California black walnut	Perennial deciduous tree	Native (CRPR 4.2)

Scientific Name	Common Name	Lifeform	Native Status
Lamiaceae	**Mint family**		
Lamium amplexicaule	Henbit	Annual herb	Non-native
Marrubium vulgare	White horehound	Perennial herb	Invasive
Salvia leucophylla	Purple sage	Shrub	Native
Salvia mellifera	Black sage	Shrub	Native
Stachys albens	Cobwebby hedge nettle	Perennial herb	Native
Malvaceae	**Mallow family**		
Fremontodendron californicum	California fremontia	Shrub	Native
Malacothamnus fasciculatus var. *fasciculatus*	Chaparral bush mallow	Shrub	Native
Malva parviflora	Cheeseweed	Annual herb	Non-native
Montiaceae	**Pussypaw family**		
Claytonia parviflora ssp. *parviflora*	Miner's lettuce	Annual herb	Native
Claytonia perfoliata	Miner's lettuce	Annual herb	Native
Myrsinaceae	**Myrsine family**		
Lysimachia arvensis	Scarlet pimpernel	Annual herb	Non-native
Myrtaceae	**Myrtle family**		
Eucalyptus camaldulensis	Red gum	Tree	Invasive
Eucalyptus sp.	Gum tree	Tree	Non-native
Melaleuca viminalis	Weeping bottlebrush	Tree	Non-native
Nyctaginaceae	**Four o'clock Family**		
Bougainvillea spectabilis	Great bougainvillea	Shrub	Non-native
Mirabilis laevis var. *crassifolia*	California four o'clock	Perennial herb	Native
Oleaceae	**Olive family**		
Fraxinus americana	American ash	Tree	Non-native
Fraxinus dipetala	Two petaled ash	Tree, shrub	Native
Fraxinus velutina	Arizona ash	Tree	Native
Olea europaea	Olive	Tree, shrub	Invasive
Onagraceae	**Evening primrose family**		
Clarkia bottae	Punch bowl godetia	Annual herb	Native
Clarkia unguiculata	Woodland clarkia	Annual herb	Native
Epilobium canum ssp. *canum*	California fuchsia	Perennial herb	Native
Epilobium ciliatum ssp. *ciliatum*	Willow herb	Perennial herb	Native
Oenothera elata ssp. *hirsutissima*	Evening primrose	Perennial herb	Native
Oxalidaceae	**Woodsorrel family**		
Oxalis pes-caprae	Bermuda buttercup	Perennial herb	Invasive
Paeoniaceae	**Peony family**		
Paeonia californica	California peony	Perennial herb	Native
Papaveraceae	**Poppy family**		
Eschscholzia californica	California poppy	Annual, perennial herb	Native

Scientific Name	Common Name	Lifeform	Native Status
Phyrmaceae	**Lopseed family**		
Diplacus australis	Southern monkeyflower	Shrub	Native
Erythranthe guttata	Yellow monkeyflower	Annual, perennial herb (rhizomatous)	Native
Plantaginaceae	**Plantain family**		
Keckiella cordifolia	Heart leaved keckiella	Shrub	Native
Plantago major	Common plantain	Perennial herb	Non-native
Veronica anagallis-aquatica	Water speedwell	Perennial herb	Non-native
Platanaceae	**Plane-tree family**		
Platanus racemosa	California sycamore	Tree	Native
Polygonaceae	**Buckwheat family**		
Eriogonum cinereum	Coastal buckwheat	Shrub	Native
Eriogonum elongatum	Longstern buckwheat	Perennial herb	Native
Eriogonum fasciculatum	California buckwheat	Shrub	Native
Persicaria sp.	Smartweed	Annual herb	N/a
Polygonum aviculare ssp. *depressum*	Prostrate knotweed	Annual, perennial herb	Non-native
Rumex conglomeratus	Green dock	Perennial herb	Non-native
Rumex obtusifolius	Broadleaf dock	Perennial herb	Non-native
Rumex sp.	Dock	Perennial herb	N/a
Ranunculaceae	**Buttercup family**		
Clematis lasiantha	Pipestem	Perennial herb, vine	Native
Clematis ligusticifolia	Creek clematis	Perennial herb, vine	Native
Delphinium sp.	Spreading larkspur	Perennial herb	Native
Rhamnaceae	**Buckthorn family**		
Ceanothus megacarpus var. *megacarpus*	Big pod ceanothus	Shrub	Native
Rhamnus crocea	Redberry	Shrub	Native
Rhamnus ilicifolia	Evergreen buckthorn	Shrub	Native
Rosaceae	**Rose family**		
Adenostoma fasciculatum	Chamise	Tree, shrub	Native
Cerocarpus betuloides	Mountain-mahogany	Perennial evergreen shrub	Native
Eriobotrya japonica	Loquat	Tree	Non-native
Heteromeles arbutifolia	Toyon	Shrub	Native
Prunus ilicifolia	Holly leaf cherry	Tree, shrub	Native
Rosa californica	California wild rose	Shrub	Native
Rubus ursinus	California blackberry	Vine, shrub	Native
Rubiaceae	**Bedstraw family**		
Galium aparine	Cleavers	Annual herb	Native

Scientific Name	Common Name	Lifeform	Native Status
Salicaceae	**Willow family**		
Populus fremontii ssp. *fremontii*	Cottonwood	Tree	Native
Populus trichocarpa	Black cottonwood	Tree	Native
Salix exigua	Narrowleaf willow	Tree, shrub	Native
Salix laevigata	Polished willow	Tree	Native
Salix lasiolepis	Arroyo willow	Tree, shrub	Native
Sapindaceae	**Soapberry family**		
Acer negundo	Boxelder	Tree	Native
Koelreuteria bipinnata	Goldenrain tree	Tree	Non-native
Scrophulariaceae	**Figwort family**		
Myoporum parvifolium	Slender myoporum	Tree, shrub	Non-native
Solanaceae	**Nightshade family**		
Datura wrightii	Jimsonweed	Perennial herb	Native
Nicotiana glauca	Tree tobacco	Tree, shrub	Invasive
Solanum xanti	Nightshade	Perennial herb, shrub	Native
Ulmaceae	**Elm family**		
Ulmus parvifolia	Siberian elm	Tree	Non-native
Utricaceae	**Nettle family**		
Hesperocnide tenella	Western stinging nettle	Annual herb	Native
Urtica dioica	Stinging nettle	Perennial herb	Native
Urtica urens	Annual stinging nettle	Annual herb	Non-native
Viburnaceae	**Elder family**		
Sambucus mexicana	Blue elderberry	Shrub	Native
Vitaceae	**Grape family**		
Parthenocissus inserta	Woodbine	Vine, shrub	Non-native
Vitis californica	California wild grape	Vine, shrub	Native
Angiosperms (magnoliids)			
Lauraceae	**Laurel family**		
Umellularia californica	California bay	Tree	Native
Saururaceae	**Lizard's tail family**		
Anemopsis californica	Yerba mansa	Perennial herb	Native
Angiosperms (monocots)			
Agavaceae	**Agave family**		
Agave americana	American century plant	Perennial herb, shrub	Non-native
Chlorogalum pomeridianum var. *pomeridianum*	Common soaproot	Perennial herb	Native
Hersperoyucca whipplei	Chaparral yucca	Shrub	Native
Araceae	**Arum family**		
Lemna minuta	Least duckweed	Perennial herb	Native
Arecaceae	**Palm family**		
Washingtonia robusta	Mexican fan palm	Tree	Invasive

Scientific Name	Common Name	Lifeform	Native Status
Cyperaceae	**Sedge family**		
Bolboschoenus maritimus ssp. *paludosus*	Saltmarsh bulrush	Perennial grasslike herb	Native
Cyperus alternifolius ssp. *flabelliformis*	Umbrella papyrus	Perennial grasslike herb	Non-native
Cyperus eragrostis	Tall cyperus	Perennial grasslike herb	Native
Eleocharis macrostachya	Spike rush	Perennial grasslike herb	Native
Eleocharis sp.	Spikerush	Perennial grasslike herb	Native
Schoenoplectus acutus var. *occidentalis*	Tule	Perennial grasslike herb	Native
Schoenoplectus americanus	Chairmaker's bulrush	Perennial grasslike herb	Native
Juncaceae	**Rushes**		
Juncus balticus	Wire rush	Perennial grasslike herb	Native
Juncus xiphioides	Iris leaved rush	Perennial grasslike herb	Native
Liliaceae	**Lily family**		
Calchortus clavatus var. *clavatus*	Club-haired mariposa lily	Perennial bulbiferous herb	Native (CRPR 4.3)
Poaceae	**Grass family**		
Arundo donax	Giant reed	Perennial grasslike herb	Invasive
Avena fatua	Wildoats	Annual grass	Invasive
Bromus diandrus	Ripgut brome	Annual grass	Invasive
Bromus hordeaceus	Soft chess	Annual grass	Invasive
Bromus rubens	Red brome	Annual grass	Non-native
Elymus condensatus	Giant wild rye	Perennial grass	Native
Festuca perennis	Italian rye grass	Annual, perennial grass	Invasive
Hordeum murinum	Foxtail barley	Annual grass	Invasive
Leptochola fusca	Sprangletop	Annual grass	Native
Melica imperfecta	Coast range melic	Perennial grass	Native
Pennisetum setaceum	Fountaingrass	Perennial grass	Invasive
Polypogon monspeliensis	Annual beard grass	Annual grass	Invasive
Polypogon viridis	Water beard grass	Perennial grass	Non-native
Stipa miliacea var. *miliacea*	Smilo grass	Perennial grass	Invasive
Stipa pulchra	Purple needle grass	Perennial grass	Native
Themidaceae	**Brodiaea family**		
Dipterostemon capitatus	Blue dicks	Perennial herb	Native
Typhaceae	**Cattail family**		
Typha domingensis	Cattail	Perennial herb	Native
Bryophytes (Liverworts)			
Lunulariaceae			
Lunularia cruciate	Crescent-cup liverwort	Liverwort	Non-native
Ferns			
Nephrolepidaceae	**Sword fern family**		
Nephrolepis cordifolia	Fishbone fern	Fern	Non-native

Wildlife Species Detected in the Study Area

Scientific Name	Common Name	Native Status
Class Amphibia (Amphibians)		
Hylidae	**Tree Frogs and Allies**	
Pseudacris hypochondriaca	Baja California tree frog	Native
Ranidae	**Typical frogs**	
Lithobates catesbeianus	American bullfrog	Non-native
Class Aves (Birds)		
Accipitridae	**Hawks, Eagles, and Kites**	
Buteo jamaicensis	Red-tailed hawk	Native
Alcedinidae	**Kingfishers**	
Megaceryle alcyon	Belted kingfisher	Native
Anatidae	**Ducks, Geese, and Swans**	
Aix sponsa	Wood duck	Native
Anas platyrhynchos	Mallard	Native
Bucephala albeola	Bufflehead	Native
Apodidae	**Swifts**	
Aeronautes saxatalis	White-throated swift	Native
Ardeidae	**Herons, Egrets, and Bitters**	
Ardea herodias	Great blue heron	Native
Cardinalidae	**Cardinals and Allies**	
Pheucticus melanocephalus	Black-headed grosbeak	Native
Cathartidae	**New world vultures**	
Cathartes aura	Turkey vulture	Native
Columbidae	**Pigeons and Doves**	
Zenaida macroura	Mourning dove	Native
Corvidae	**Crows, Jays, and Magpies**	
Aphelocoma californica	California scrub-jay	Native
Corvus branchyrhynchos	American crow	Native
Corvus corax	Common raven	Native
Fringillidae	**Finches, Euphonias, and Allies**	
Haemorphous mexicanus	House finch	Native
Spinus psaltria	Lesser goldfinch	Native
Spinus tristis	American goldfinch	Native
Hirundinidae	**Swallows and Martins**	
Stelgidopteryx serripennis	Northern rough-winged swallow	Native
Odontophoridae	**New world quails**	
Callipepla californica	California quail	Native
Mimidae	**Mimic Thrushes or Mimids**	
Mimus polyglottos	Northern mockingbird	
Paridae	**Tits, Chickadees, and Titmice**	
Baeolophus inornatus	Oak titmouse	Native

Scientific Name	Common Name	Native Status
Parulidae	**New world warblers**	
Geothlypis trichas	Common yellowthroat	Native
Leiothlypis celata	Orange-crowned warbler	Native
Setophaga coronata	Yellow-rumped warbler	Native
Passerellidae	**New world sparrows**	
Junco hyernalis	Dark-eyed junco	Native
Melospiza melodia	Song sparrow	Native
Melozone crissalis	California towhee	Native
Pipilo maculatus	Spotted towhee	Native
Phalacrocoracidae	**Typical Cormorants and Shags**	
Phalacrocorax auritus	Double-crested cormorant	Native
Picidae	**Woodpeckers**	
Colaptes auratus	Northern flicker	Native
Dryobates nuttallii	Nuttall's woodpecker	Native
Melanerpes formicivorus	Acorn woodpecker	Native
Sphyrapicus sp.	Sapsucker	Native
Polioptilidae	**Gnatcatchers and Gnatwrens**	
Polioptila caerulea	Blue-grey gnatcatcher	Native
Rallidae	**Rails, Gallinules, and Coots**	
Fulica americana	American coot	Native
Regulidae	**Kinglets**	
Regulus calendula	Ruby-crowned kinglet	Native
Sittidae	**Nuthatches**	
Sitta carolinensis	White-breasted nuthatch	Native
Sylviidae	**Sylviid Warblers and Parrotbills**	
Chamaea fasciata	Wrentit	Native
Trochilidae	**Hummingbirds**	
Selasphorus sasin	Allen’s hummingbird	Native
Troglodytidae	**Wrens**	
Catherpes mexicanus	Canyon wren	Native
Thryomanes bewickii	Bewick's wren	Native
Troglodytes aedon	House wren	
Tyrannidae	**Flycatchers**	
Empidonax difficilis	Pacific-slope flycatcher	Native
Myiarchus cinerascens	Ash-throated flycatcher	Native
Sayornis nigricans	Black phoebe	Native
Sayornis saya	Say’s phoebe	Native

Scientific Name	Common Name	Native Status
Class Insecta (Insects)		
Apidae	**Honey Bees, Bumble Bees, and Allies**	
Apis mellifera	Western honey bee	Non-native
Bombus vosnesenskii	Yellow-faced bumble bee	Native
Chrysomelidae	**Leaf beetles**	
Chrysomelidae sp.	Leaf beetle	N/a
Coccinellinae	**Lady beetles**	
Coccinella septempunctata	Seven-spotted lady beetle	Non-native
Coenagrionidae	**Narrow-winged Damselflies**	
Coenagrionidae sp.	Narrow-winged damselfly	N/a
Cynipidae	**Gall wasps**	
Cynips douglasii	Spined turban gall wasp	Native
Geometridae	**Geometer moths**	
Nemoria leptalea	Emerald moth	Native
Hesperiidae	**Skippers**	
Erynnis tristis	Mournful duskywing	Native
Lygaeidae	**Seed bugs**	
Oncopeltus fasciatus	Large milkweed bug	Native
Papilionidae	**Swallowtails and Parnassians**	
Papilio rutulus	Western tiger swallowtail	Native
Pentatomidae	**Stink bugs**	
Asopinae sp.	Predatory stink bug	N/a
Pieridae	**Whites, Yellows, and Sulfurs**	
Colias sp.	Clouded yellow	N/a
Syrphidae	**Hover flies**	
Copestylum violaceum	Purple bromeliad fly	Native
Tenebrionidae	**Darkling beetles**	
Coelocnemis dilaticollis	California broad-necked darkling beetle	Native
Class Malacostracans		
Cambaridae	**Cambarid crayfishes**	
Camparidae sp.	Crawfish	N/a
Class Mammalia (Mammals)		
Canidae	**Canids**	
Canis latrans	Coyote	Native
Urocyon cinereoargenteus	Gray fox	Native
Cervidae	**Deers**	
Odocoileus hernionus	Mule deer	Native
Cricetidae	**New World Mice and Rats**	
Neotoma sp.*	Pack rat	Native
Leporidae	**Rabbits and Hares**	
Sylvilagus audubonii	Desert cottontail	Native

Scientific Name	Common Name	Native Status
Sciuridae	**Squirrels**	
Otospermophilus beecheyi	California ground squirrel	Native
Class Reptilia (Reptiles)		
Emydidae	**Pond and Box Turtles**	
Trachemys scripta ssp. *elegans*	Red-eared slider	Non-native
Phrynosomatidae	**Phrynosomatid lizards**	
Sceloporus occidentalis	Western fence lizard	Native
Uta stansburiana	Common side-blotched lizard	Native
Teiidae	**Whiptails and Tegus**	
Aspidoscelis tigris stejnegeri	Coastal whiptail	Native

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Appendix D

Regulatory Setting

Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the Study Area include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- Colorado River Regional Water Quality Control Board (waters of the State);
- California Department of Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; nesting birds, marine resources); and
- The City of Coachella

United States Army Corps of Engineers Jurisdiction

The United States Army Corps of Engineers (USACE) is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 CFR Part 328.3 to include navigable, tidal, and interstate waters and certain impoundments, tributaries, and wetlands. The agencies' most recent regulatory definition of the term was promulgated in January 2023, following failed attempts in prior years that had been frustrated by legal challenges. However, in May 2023 the U.S. Supreme Court issued its ruling in *Sackett v. Environmental Protection Agency,* which invalidated portions of the updated regulations. To address this ruling, in September 2023 the agencies issued a "conforming rule" (88 FR 61964-61969) modifying their definition of "waters of the United States" to comport with the Court's ruling. This definition is described in detail below.

Waters of the U.S.

Current USACE and USEPA regulations, reflecting of the January 2023 definition as modified by the September 2023 Conforming Rule, define "waters of the United States" as follows (33 CFR 328.3; see also 88 FR 61964-61969):

(1) Waters which are:

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:

(I) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds, not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

The definition specifies that the following features are not "waters of the United States" even where they otherwise meet the terms of provisions (2) through (5) above:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(c)(1)). As such, waters are recognized in the

field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

Wetlands

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3(c)(1)). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than 50 percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least five percent vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or stream patterns in wetlands.

Limitations on Jurisdiction based on Sackett v. USEPA Supreme Court

On May 25, 2023, the Supreme Court issued its decision on the petition from the Sacketts, a family in Idaho that was subject to a compliance order from the USEPA for backfilling their lot near Priest Lake, which the USEPA claimed contained federally regulated wetlands. The wetlands in question were adjacent to a ditch that fed a creek that ultimately drained into Priest Lake, a navigable water body. The USEPA asserted that the Sacketts had violated the law by filling the wetlands on their property without a permit. The Court's decision addressed controversy over whether, and under what conditions, the CWA reaches navigable waters' tributaries or adjacent wetlands. The Supreme Court's decision in *Sackett* provides definitive guidance to the agencies in determining the limits of their Clean Water Act authority. Major tenets of the decision have been incorporated into the agencies' current regulations through the September 2023 Conforming Rule.

The Court decided:

- "Adjacent wetlands" are WOTUS only if there is a continuous surface connection between the wetland and a navigable or relatively permanent water body, such that it is difficult to determine the boundary between the wetland and the water body. The opinion notes that "temporary interruptions to surface connection may sometimes occur because of phenomena like low tides or dry spells." The agencies addressed this element by defining the term "adjacent" to mean "having a continuous surface connection" in the Conforming Rule.
- The Significant Nexus Standard, introduced by the Court in prior decisions, is not mentioned in the Clean Water Act and should not be used. The Court determined that the standard applies ecological factors whose use in determining jurisdiction is not supported by the statute. The Conforming Rule removed significant nexus considerations from the definition.
- Although jurisdiction over tributaries was not addressed by the Court, the decision stated that "…the [Clean Water Act's] use of "waters" encompasses only those relatively permanent, standing or continuously flowing bodies of water forming geographical features that are described in ordinary parlance as streams, oceans, rivers, and lakes." The Conforming Rule makes clear that only relatively permanent tributaries qualify as "waters of the United States."

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g. riprap, revetment, bulkhead), mooring structures such as pilings, aerial or

subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over "waters of the State," which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant requests a pre-application meeting with the RWQCB, waits no less than 30 days, and then submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a "reasonable period of time" for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. Under current regulations, once initiated, the reasonable period of time cannot be stopped or paused. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 *et seq*.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The State Water Resources Control Board (SWRCB) works in coordination with nine Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality throughout the state. Each RWQCB makes decisions related to water quality for its region, and may

approve, with or without conditions, or deny projects that could affect waters of the State. Their authority to regulate activities that could result in a discharge of dredged or fill material comes from the CWA and the Porter-Cologne Water Quality Act.

The Porter-Cologne Water Quality Act broadly defines waters of the State as "any surface water or groundwater, including saline waters, within the boundaries of the state" (SWRCB 2023). Because the act applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach overlaps and may exceed the boundaries of waters of the United States. For example, Water Quality Order No. 2004-0004-DWQ states that "shallow" waters of the State include headwaters, wetlands, and riparian areas. In practice, the RWQCBs may claim jurisdiction over riparian areas. Where riparian habitat is not present, such as may be the case at headwaters and urbanized areas, jurisdiction is taken to the top of bank. Within the region of the project site, the SWRCB and the local Santa Ana RWQCB have jurisdiction over waters of the State, with federal authority under CWA Section 401 and State authority under the Porter-Cologne Water Quality Act.

The SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the State, for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: a wetland definition; a framework for determining if a feature that meets the wetland definition is a water of the State; wetland delineation procedures; and procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities (SWRCB 2019).

Pursuant to Section 401 of the CWA, projects regulated by USACE must obtain a Water Quality Certification from the RWQCB. This certification ensures the proposed project will uphold State water quality standards. Because California's jurisdiction to regulate its water resources is much broader than that of the federal government, proposed impacts on waters of the State require Water Quality Certification even if the area occurs outside of USACE jurisdiction.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the Colorado River RWQCB, the lateral limits of waters of the State is consistent with the OHWM, similar to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

1. the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
2. the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
3. the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

United States Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements several laws protecting the Nation's fish and wildlife resources, including the Endangered Species Act (ESA; 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act (MBTA; 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. Generally, the USFWS implements the ESA for terrestrial and freshwater species, while the NMFS implements the ESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered animal species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the ESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the Project. The permitting process is used to determine if a Project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the ESA; however, the USFWS and NMFS advise Project applicants that they could be elevated to listed status at any time.

Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

- It occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments;
- Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes; or

- New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or U.S. territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The MBTRA requires the USFWS to publish a list of all non-native, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or U.S. territories is solely the result of intentional or unintentional human-assisted introductions.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is defined as "Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code sec. 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the federal ESA, CESA's protections extend to candidate species during the period

(typically one year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception is situations where a Natural Community Conservation Plan (NCCP) is in place that authorizes take of the fully protected species.

Avian Protection Laws

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act.

Protection of Lakes and Streambeds

California Fish and Game Code section 1602 states that it is unlawful for any person to "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" without first notifying the CDFW of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below:

- The plain language of Section 1602 of CFGC establishes the following general concepts:
  - References “river,” “stream,” and “lake”
  - References “natural flow”
- References “bed,” “bank,” and “channel”
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276); 1987), which interpreted Section 1602’s use of “stream” to be as defined in common law. The Court indicated that a “stream” is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM
- **CDFW regulations** defining “stream” for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation
- **Guidance documents**, including A Field Guide to Lake and Streambed Alteration Agreements (CDFG 1994) and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife

- Biologic components of a stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
- The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

Local Policies and Ordinances

City of Thousand Oaks General Plan

The Conservation Element of the Thousand Oaks General Plan (City of Thousand Oaks 2013) helps identify human activities that affect natural resources both directly and indirectly and define various policies and implementation measures by which these natural resources can be conserved within the Planning Area. The following are local policies that may be considered as part of the proposed project review:

- **CO-10:** Streams and creeks should be protected as open space and maintained in as natural a state as possible, and appropriate measures taken to manage urban runoff, in order to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value. This will contribute to the regional effort to improve the quality of Calleguas Creek, Malibu Creek and Mugu Lagoon.
- **CO-13:** Use of concrete for flood control improvements in natural stream courses should occur only when no reasonable alternatives can be found that would maintain natural hydrological and ecological functions.
- **CO-15:** Every effort shall be made to design and construct stormwater retention and debris basins to minimize any potentially adverse impacts to significant landform features, aquatic resources, and associated native plant and animal communities.
- **CO-21:** The City shall encourage the proper management, conservation and protection of native plant communities throughout the City's Planning Area, including developed areas and undeveloped open space lands.
- **CO-23:** Critical wildlife habitat resources such as movement corridors, surface water impoundments, streams and springs should be given special consideration for protection, restoration or enhancement, in order to maintain biodiversity, biological productivity and ecological integrity of natural open space areas.
- **CO-25:** The City should foster an holistic approach to conservation of wildlife resources including consideration of biological crusts and pollinator species in recognition of the many important functions they perform in a healthy ecosystem.
- **CO-26:** Isolation and fragmentation of natural open space areas should be prevented wherever possible.
- **CO-27:** Since natural stream streams often serve as important movement corridors for wildlife, they should be preserved wherever it is feasible to do so.

- **CO-28:** Urban land uses adjoining natural open space areas should be designed in a manner that is sensitive to the needs of wildlife and avoids or minimizes any potentially adverse impacts to movement corridors.
- **CO-29:** Continue to protect oak and landmark trees and their habitat in recognition of their historic, aesthetic and environmental value to the citizens of Thousand Oaks, in particular Valley Oak habitat.
- **CO-30:** Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, biodiversity and aesthetic value.
- **CO-31:** Encourage the restoration and enhancement of degraded wetland and riparian habitats in order to conserve and protect native plant and animal species, increase biological diversity and productivity, and maintain permanent access for wildlife to surrounding open space.
- **CO-32:** The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Wildlife), the California Native Plant Society (CNPS), the County of Ventura and the City of Thousand Oaks.

City of Thousand Oaks Oak Tree Preservation and Protection

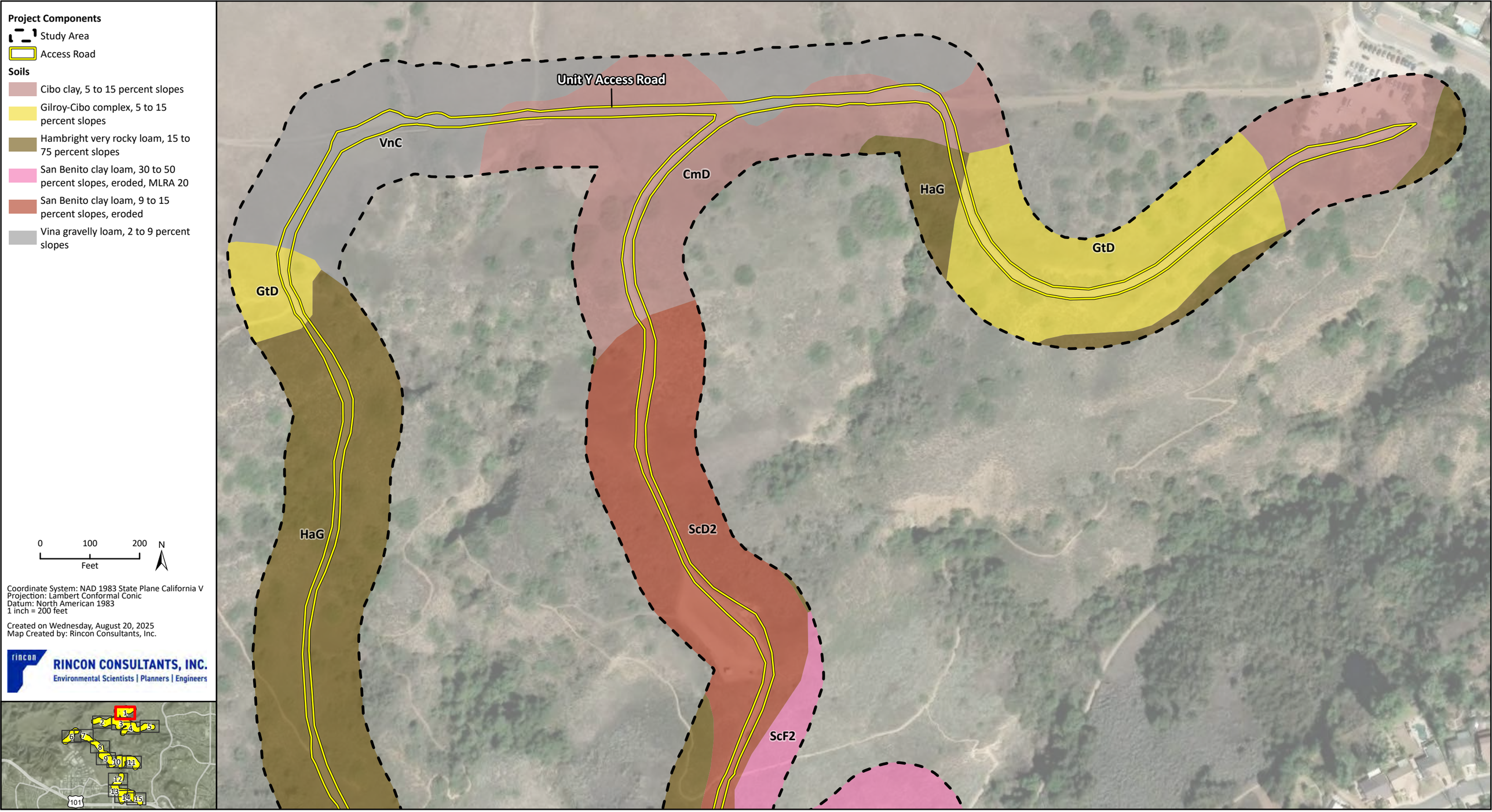
Title 9, Chapter 4, Article 42, Sec.9-4.4200 of The City of Thousand Oaks municipal code contains the Oak Tree Preservation and Protection policy of the City, which requires the preservation of all healthy oak trees. Any oak tree of the genus *Quercus* that exceeds 2 inches in diameter when measured at a point 4.5 feet above the tree's natural grade is protected and requires permitting for removal, cutting, pruning and/or encroachment into the protected zone of the oak tree (5 feet outside of the dripline and extending inwards to the trunk of the tree, but not less than 15 feet from the trunk of an oak tree).

City of Thousand Oaks Landmark Tree Preservation and Protection

Title 9, Chapter 4, Article 43, Sec.9-4.4300 of The City of Thousand Oaks municipal code contains the Landmark Tree Preservation and Protection policy of the City to require the preservation of all landmark trees. Landmark trees are protected and require a permit for removal, cutting, pruning, and/or encroachment into the protected zone (5 feet outside of the dripline and extending inwards to the trunk of the tree, but not less than 15 feet from the trunk of a tree) if the diameter measured at 4.5 feet above the natural grade at the base of a tree exceeds 12 inches for *Platanus racemosa*, (California sycamore), or 8 inches for *Umbellularia californica* (California bay laurel), *Juglans californica* (California black walnut), and *Heteromeles arbutifolia* (toyon). Trees with multiple trunks shall be deemed to have reached maturity if the sum of the diameters of the multiple trunks exceed the required diameter plus 2 inches of a single trunked tree. Landmark trees also include all designated historic trees. Likewise, landmark trees also include any tree(s), of any type, designated as landmark trees by the Planning Commission or City Council during review of any land use entitlement request and which trees are required to be preserved as a condition of that City approved entitlement, land division, or tract map. This designation shall continue whether or not the use for which the entitlement is issued is inaugurated or the land division or tract map is recorded.

Appendix E

Soils Map Book



Project Components

- Study Area
- Access Road

Soils

- Cibo clay, 5 to 15 percent slopes
- Gilroy-Cibo complex, 5 to 15 percent slopes
- Hambright very rocky loam, 15 to 75 percent slopes
- San Benito clay loam, 30 to 50 percent slopes, eroded, MLRA 20
- San Benito clay loam, 9 to 15 percent slopes, eroded
- Vina gravelly loam, 2 to 9 percent slopes

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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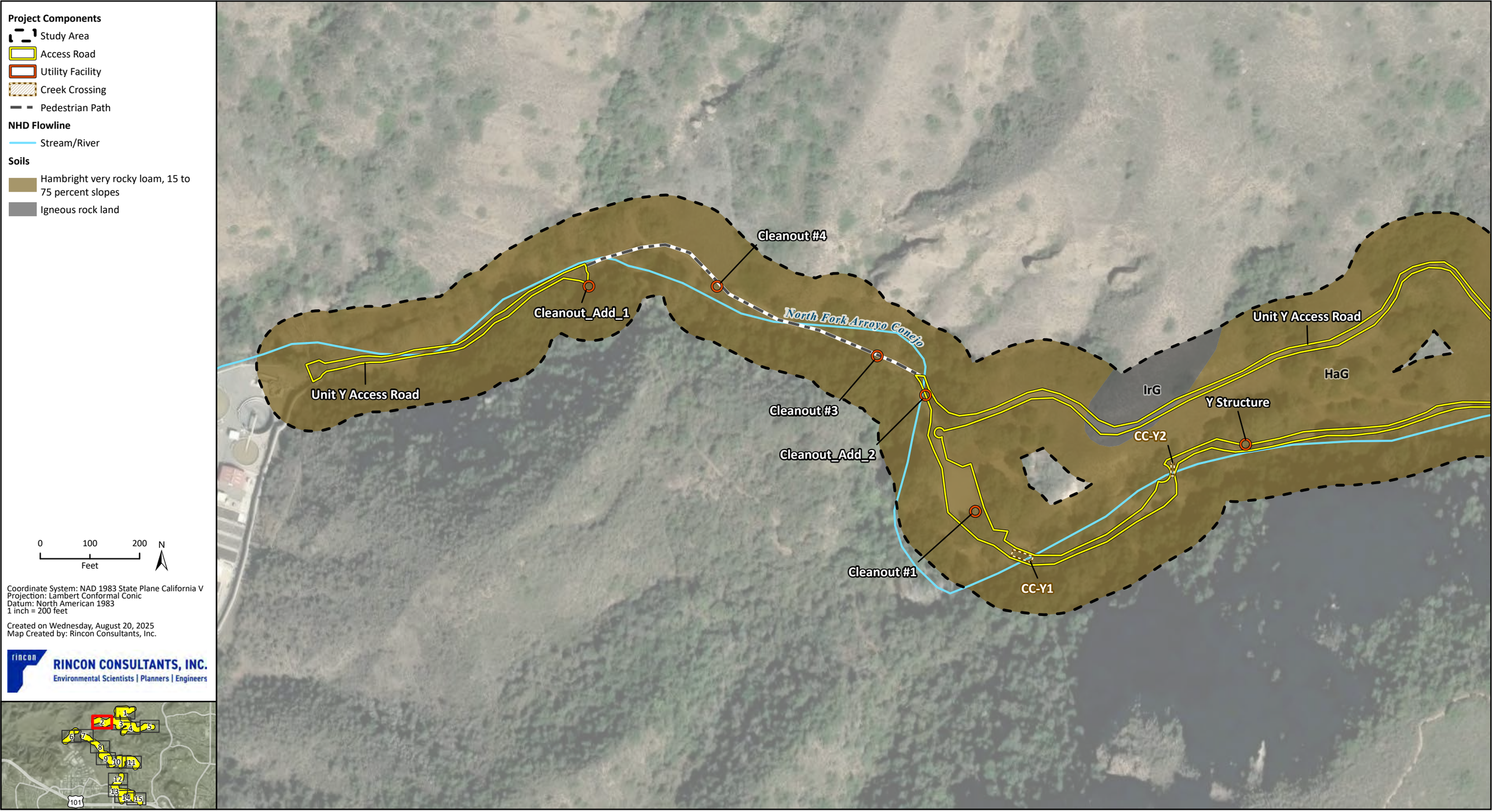

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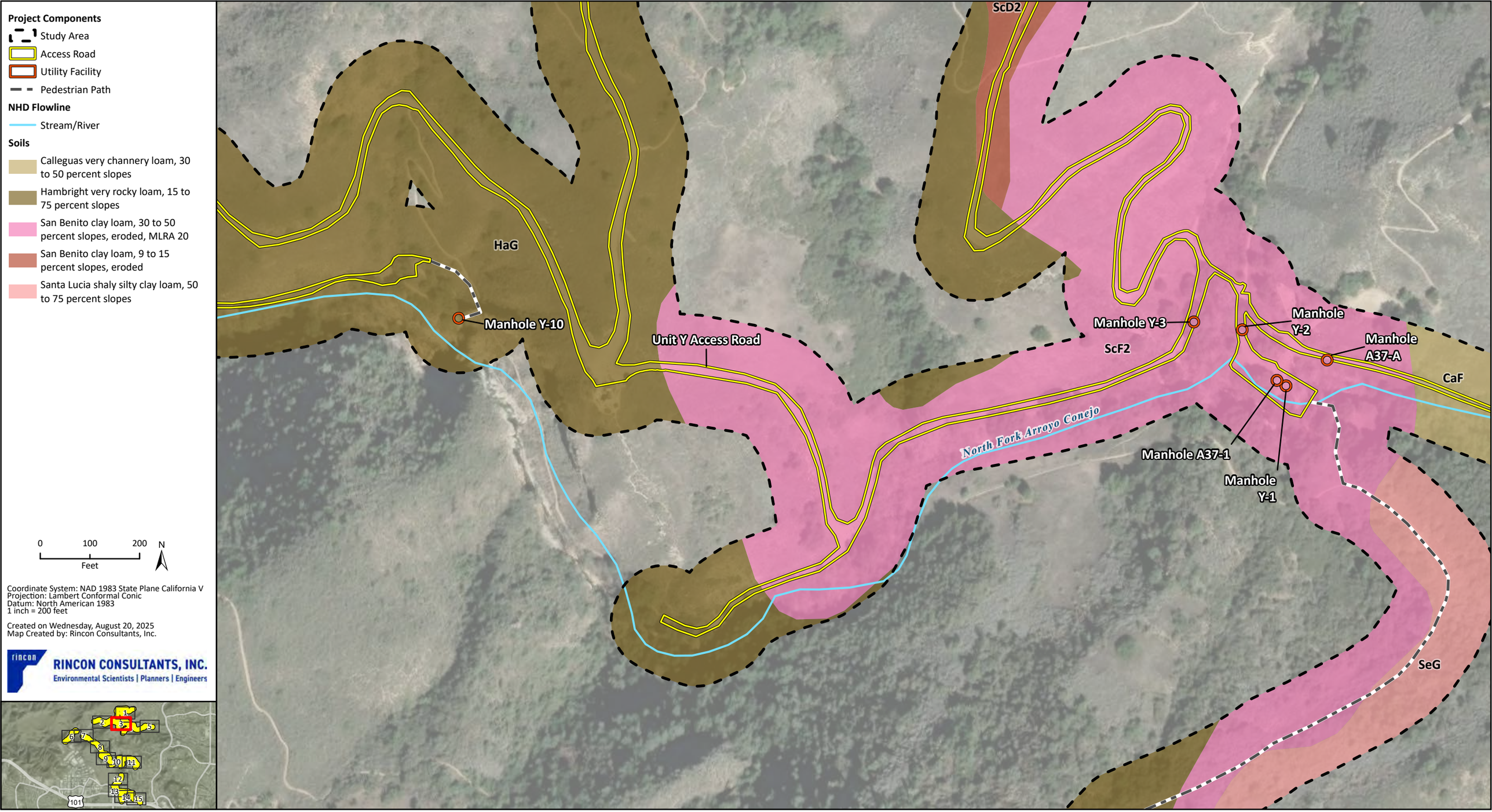

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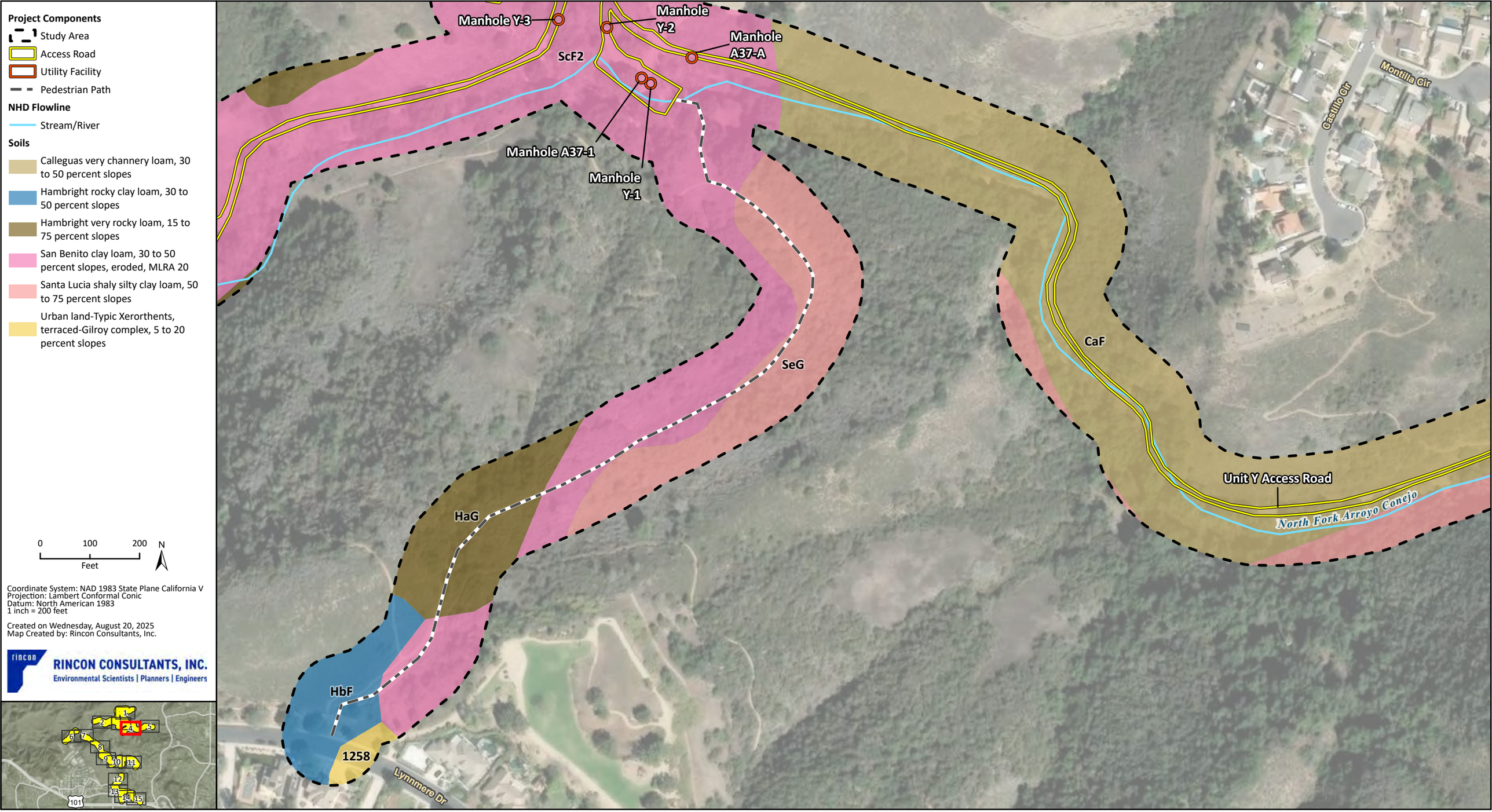
Project Components
Study Area
Access Road
Utility Facility
Pedestrian Path
NHD Flowline
Stream/River
Soils
Calleguas very channery loam, 30 to 50 percent slopes
Hambright rocky clay loam, 30 to 50 percent slopes
Hambright very rocky loam, 15 to 75 percent slopes
San Benito clay loam, 30 to 50 percent slopes, eroded, MLRA 20
Santa Lucia shaly silty clay loam, 50 to 75 percent slopes
Urban land-Typic Xerorthents, terraced-Gilroy complex, 5 to 20 percent slopes
Manhole Y-3
Manhole Y-2
Manhole A37-A
Manhole A37-1
Manhole Y-1
ScF2
SeG
CaF
HaG
HbF
1258
Lynnmere Dr
Castillo Cir
Montilla Cir
Unit Y Access Road
North Fork Arroyo Conejo
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet
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Project Components

- Study Area
- Access Road
- Pedestrian Path

NHD Flowline

- Stream/River

Soils

- Calleguas very channery loam, 30 to 50 percent slopes
- Rincon silty clay loam, 9 to 15 percent slopes, eroded, warm MAAT, MLRA 19
- Santa Lucia shaly silty clay loam, 50 to 75 percent slopes

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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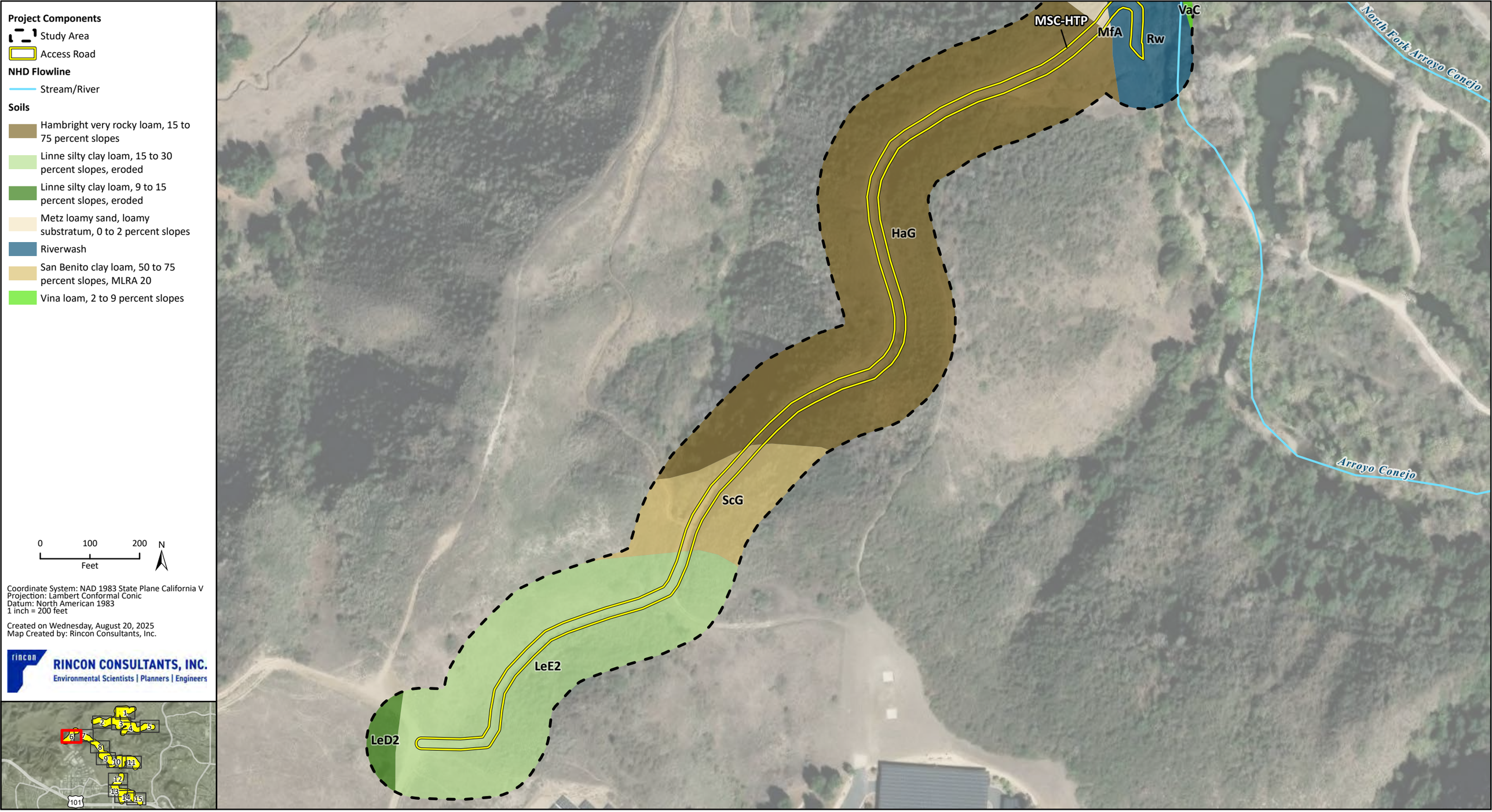

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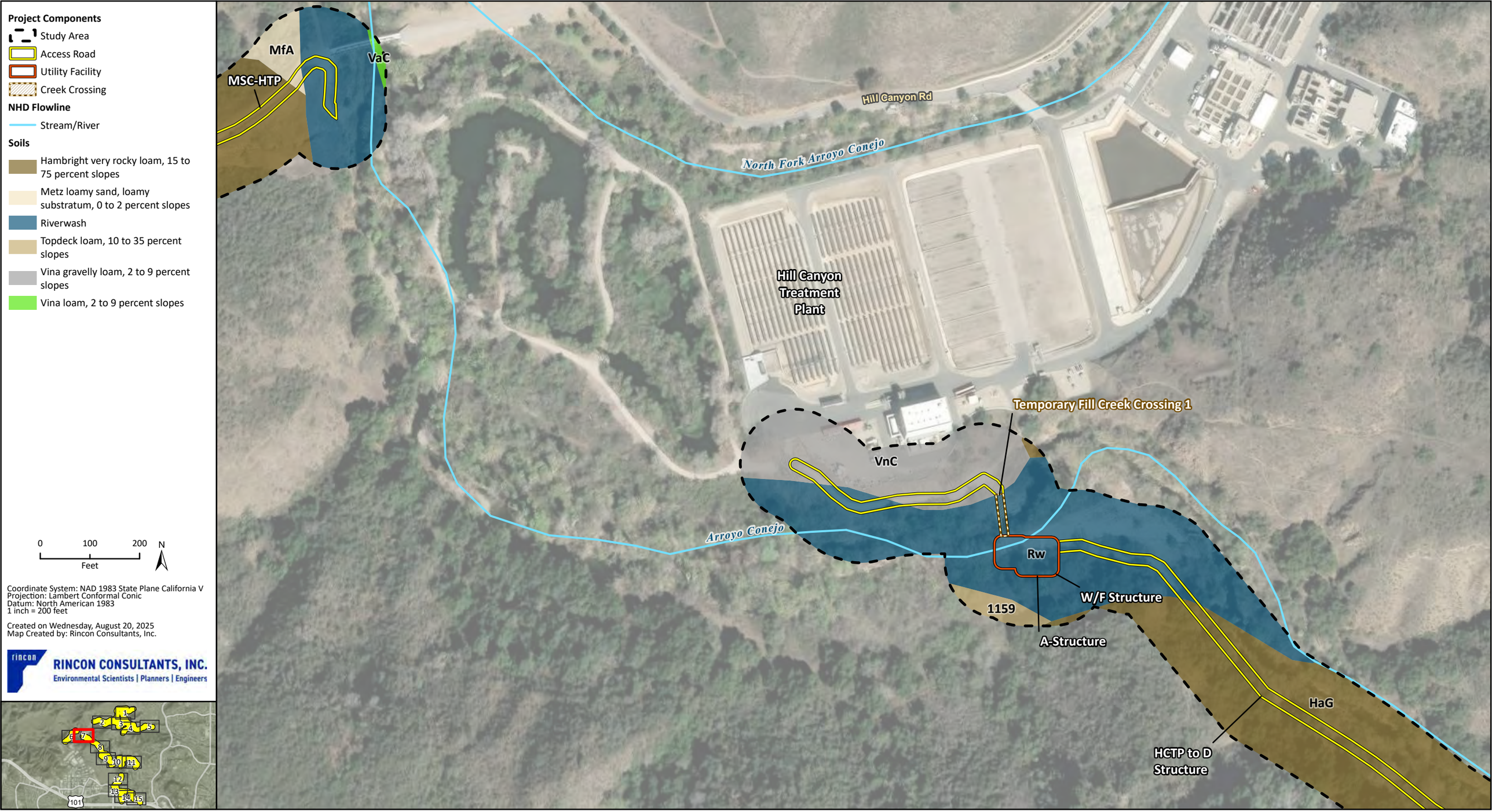

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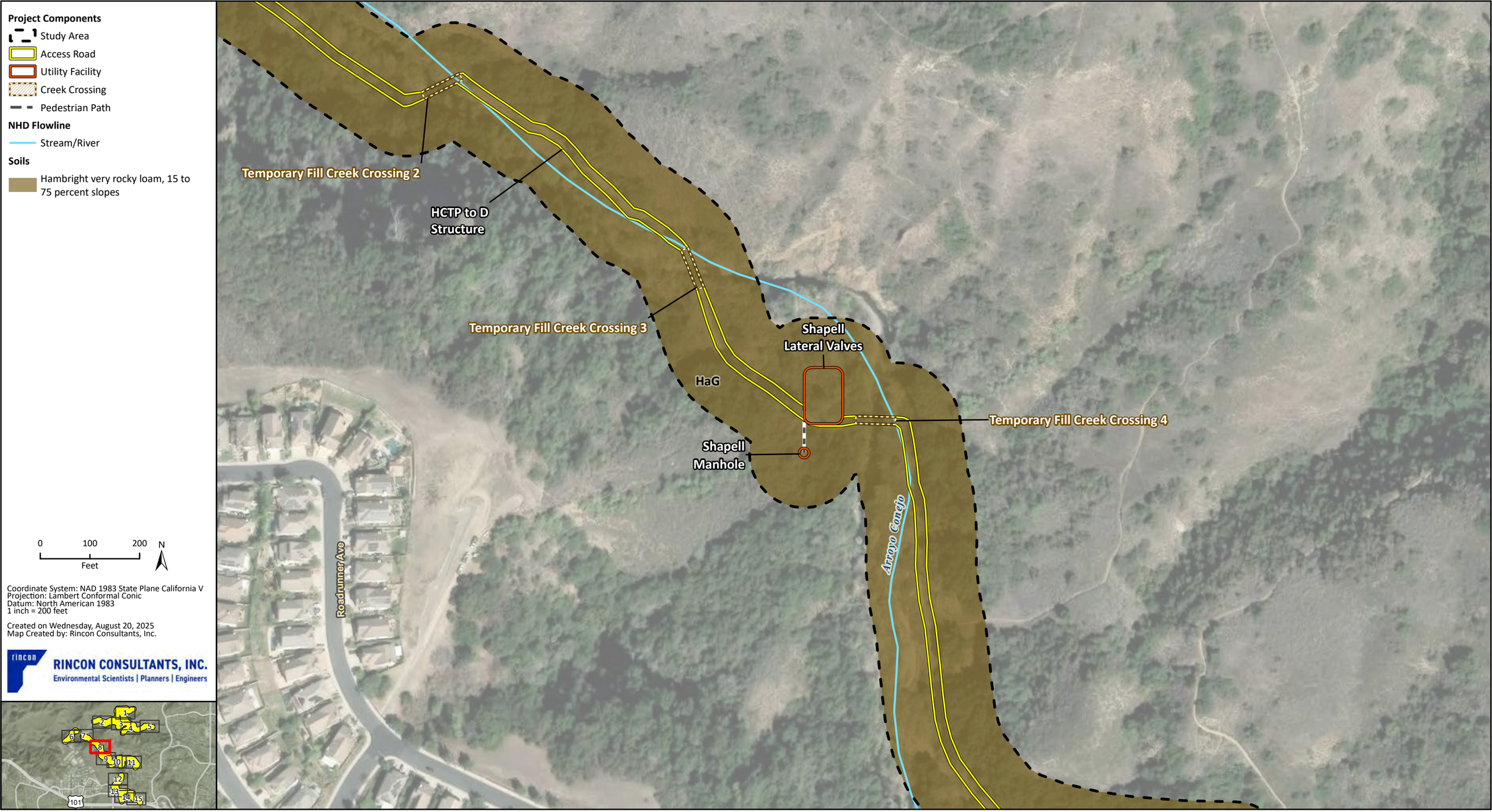

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Project Components

- Study Area
- Access Road
- Utility Facility
- Creek Crossing
- Pedestrian Path

NHD Flowline

- Stream/River

Soils

- Hambright very rocky loam, 15 to 75 percent slopes
- Linne silty clay loam, 30 to 50 percent slopes, eroded
- San Benito clay loam, 50 to 75 percent slopes, MLRA 20

0 100 200 Feet N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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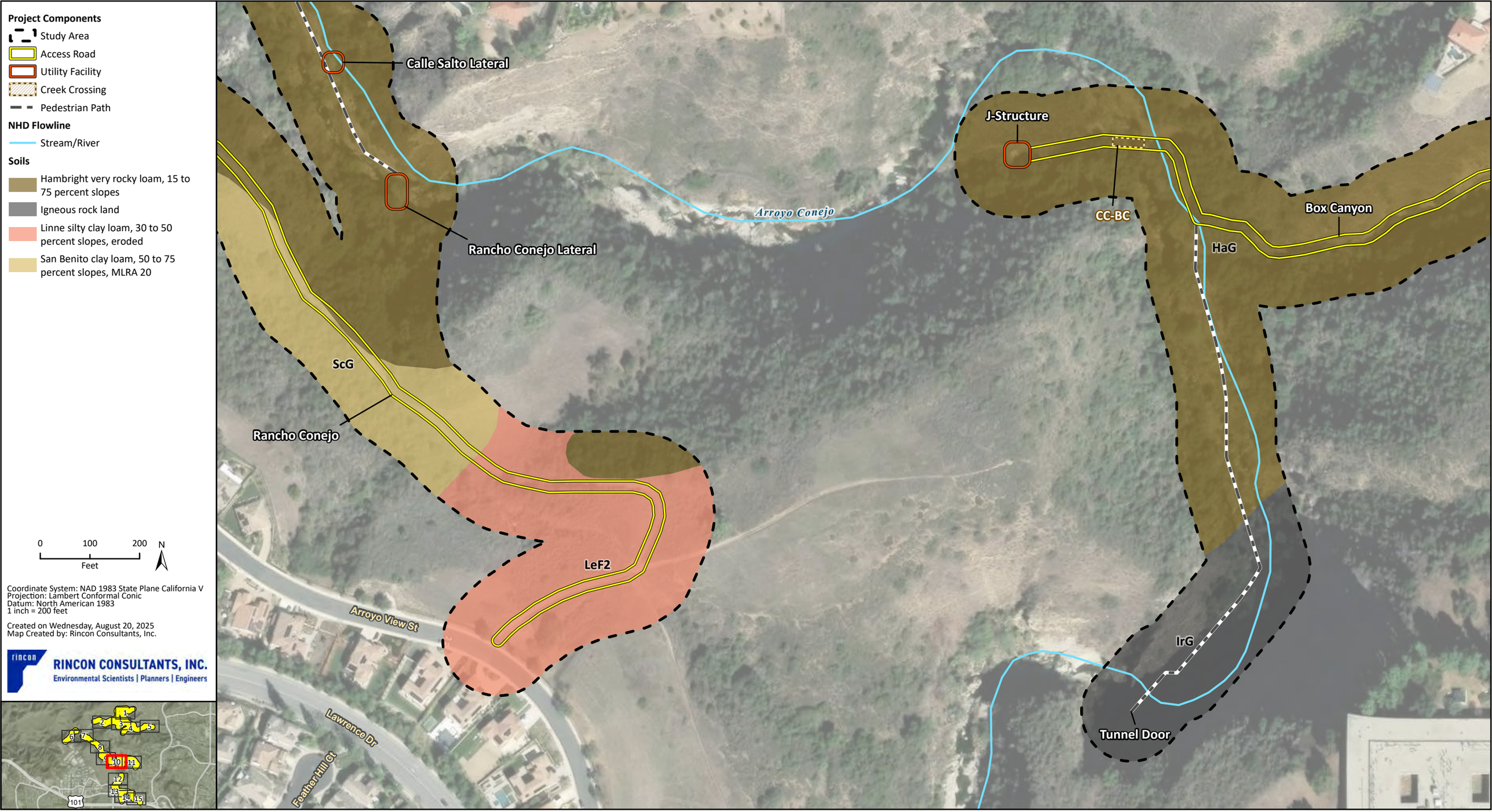

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Project Components
Study Area
Access Road
Pedestrian Path
NHD Flowline
Stream/River
Soils
Gilroy loam, 15 to 50 percent slopes, very rocky
Igneous rock land
Linne silty clay loam, 9 to 15 percent slopes, eroded
Rincon silty clay loam, 15 to 30 percent slopes, eroded
Rincon silty clay loam, 2 to 9 percent slopes, MLRA 19
Blue Canyon St
Del Verde Ct
Lawrence Dr
Honey Creek Ct
Arroyo View St
Tunnel Door
GvF
IrG
Calle Brusca
Arroyo Conejo
GALLE Brusca
CAMINO Dos Rios
RcC
LeD2
GvF
RcE2
GALLE Arroyo
GALLE Las Casas
CAMINO El Carrizo
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet
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Map Created by: Rincon Consultants, Inc.
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24-16512 BIO
Fig 4 Soils

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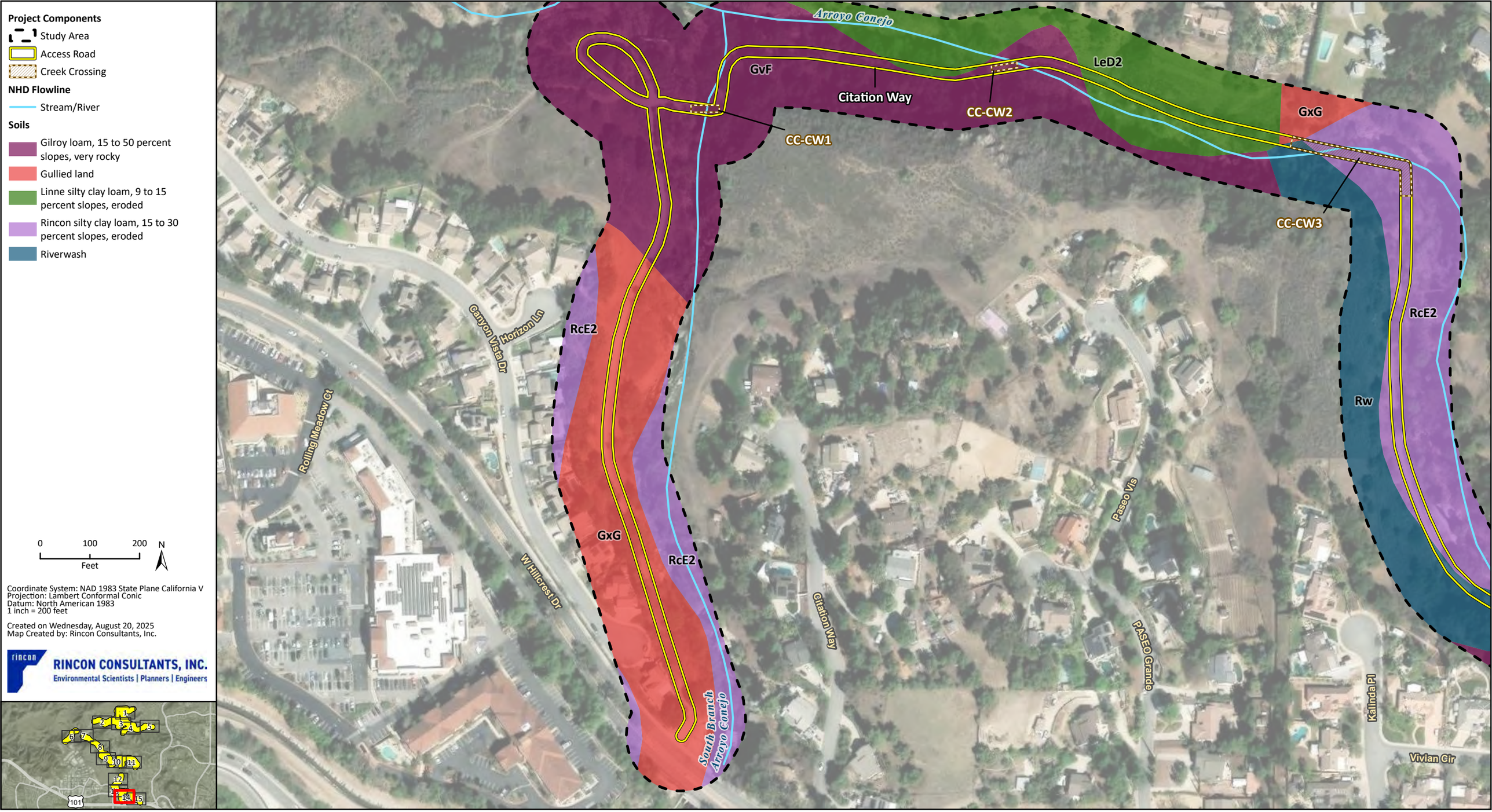

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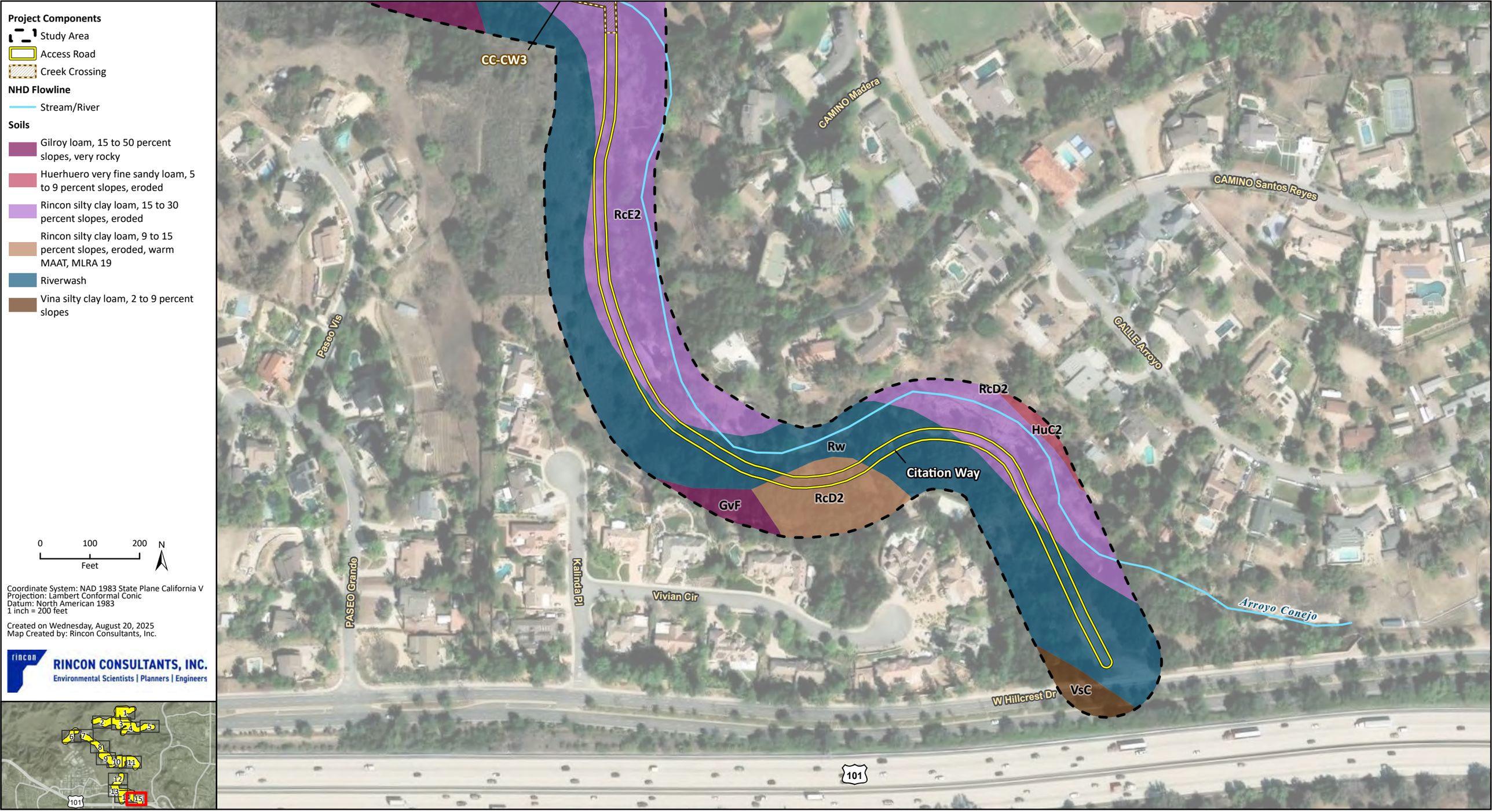

Project Components

- Study Area
- Access Road
- Creek Crossing

NHD Flowline

- Stream/River

Soils

- Gilroy loam, 15 to 50 percent slopes, very rocky
- Huerhuero very fine sandy loam, 5 to 9 percent slopes, eroded
- Rincon silty clay loam, 15 to 30 percent slopes, eroded
- Rincon silty clay loam, 9 to 15 percent slopes, eroded, warm MAAT, MLRA 19
- Riverwash
- Vina silty clay loam, 2 to 9 percent slopes

0 100 200 Feet N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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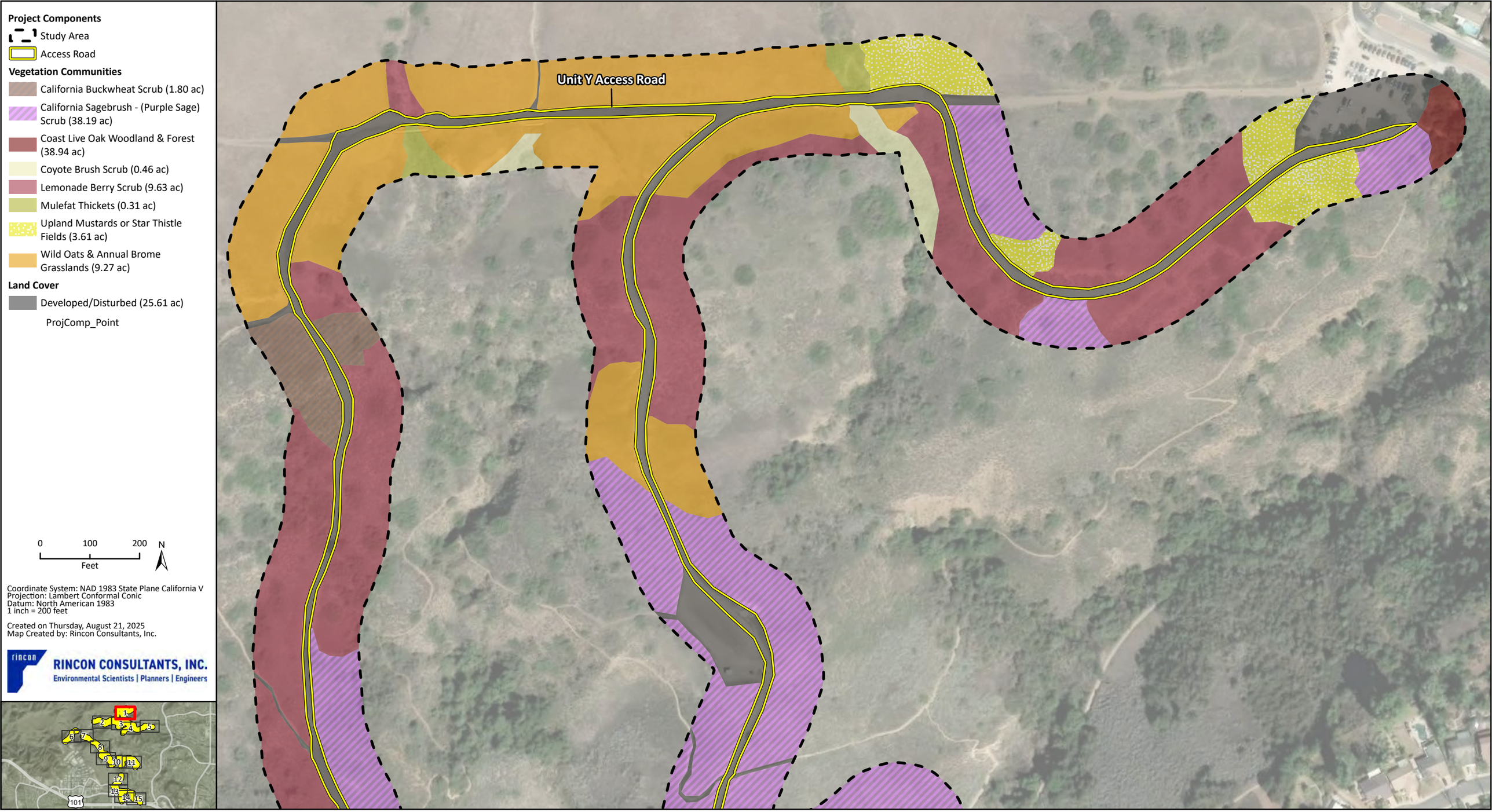
Appendix F

Vegetation Communities and Land Cover Types Map Book



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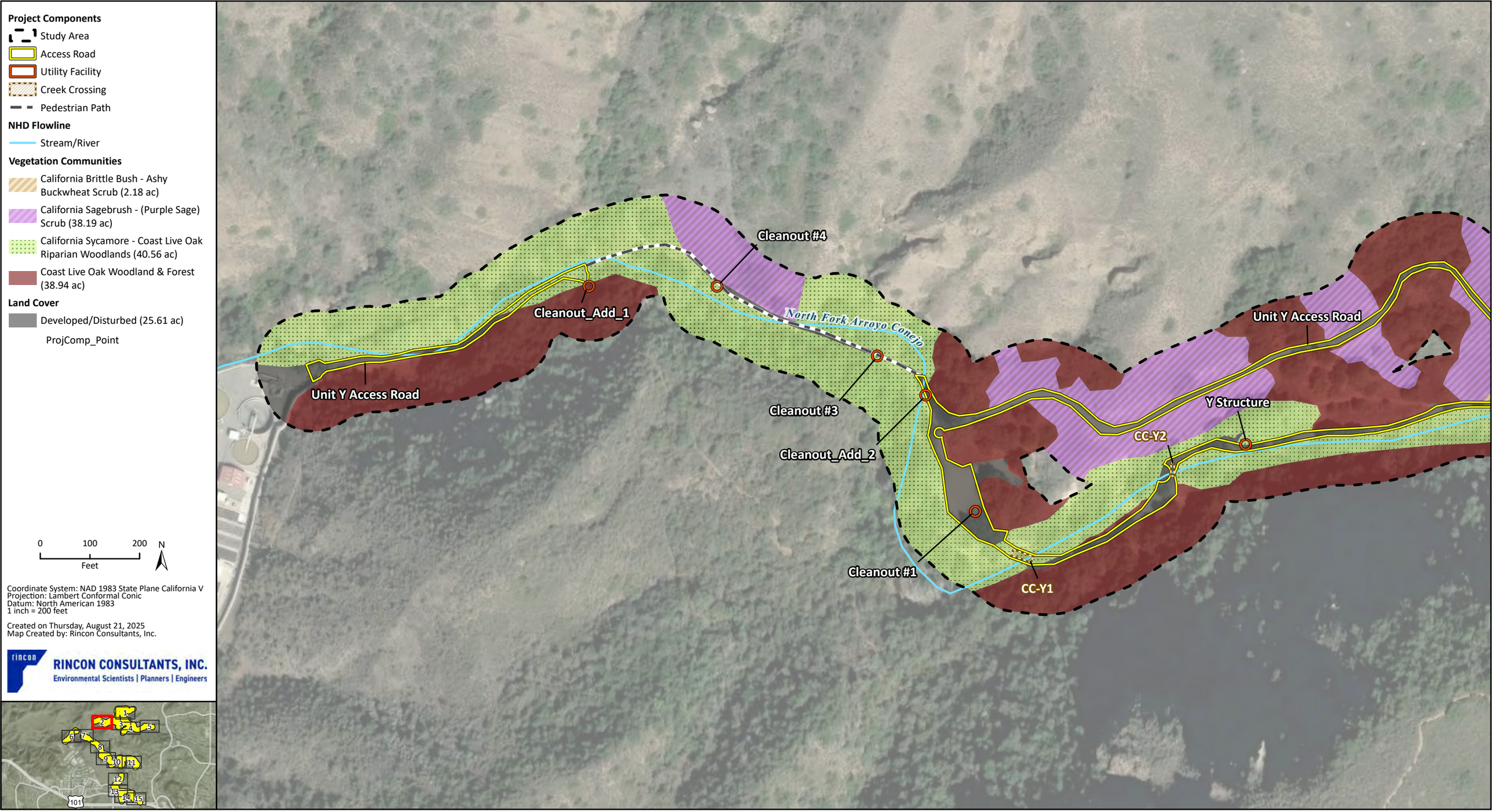

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1 inch = 200 feet

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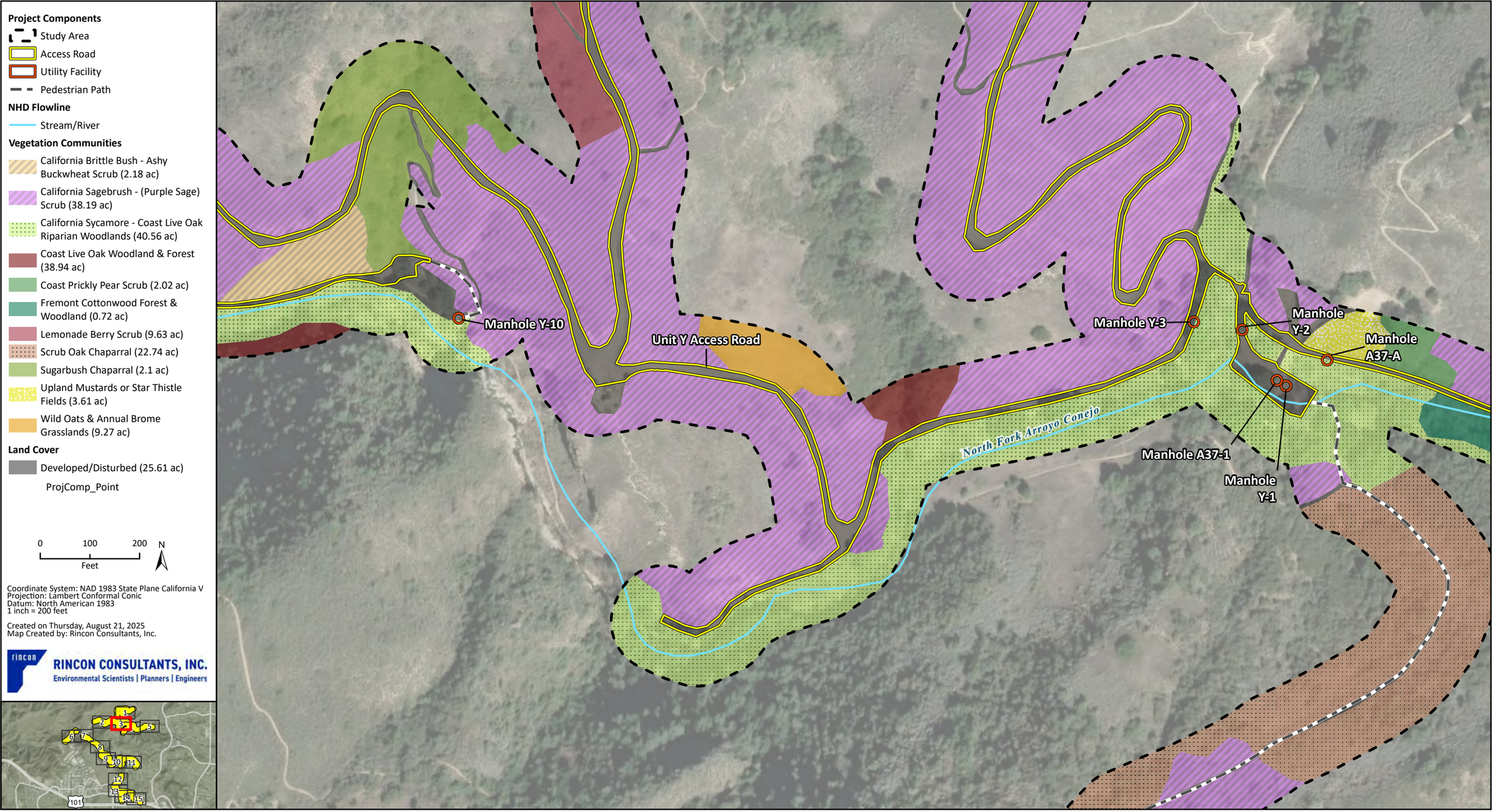

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Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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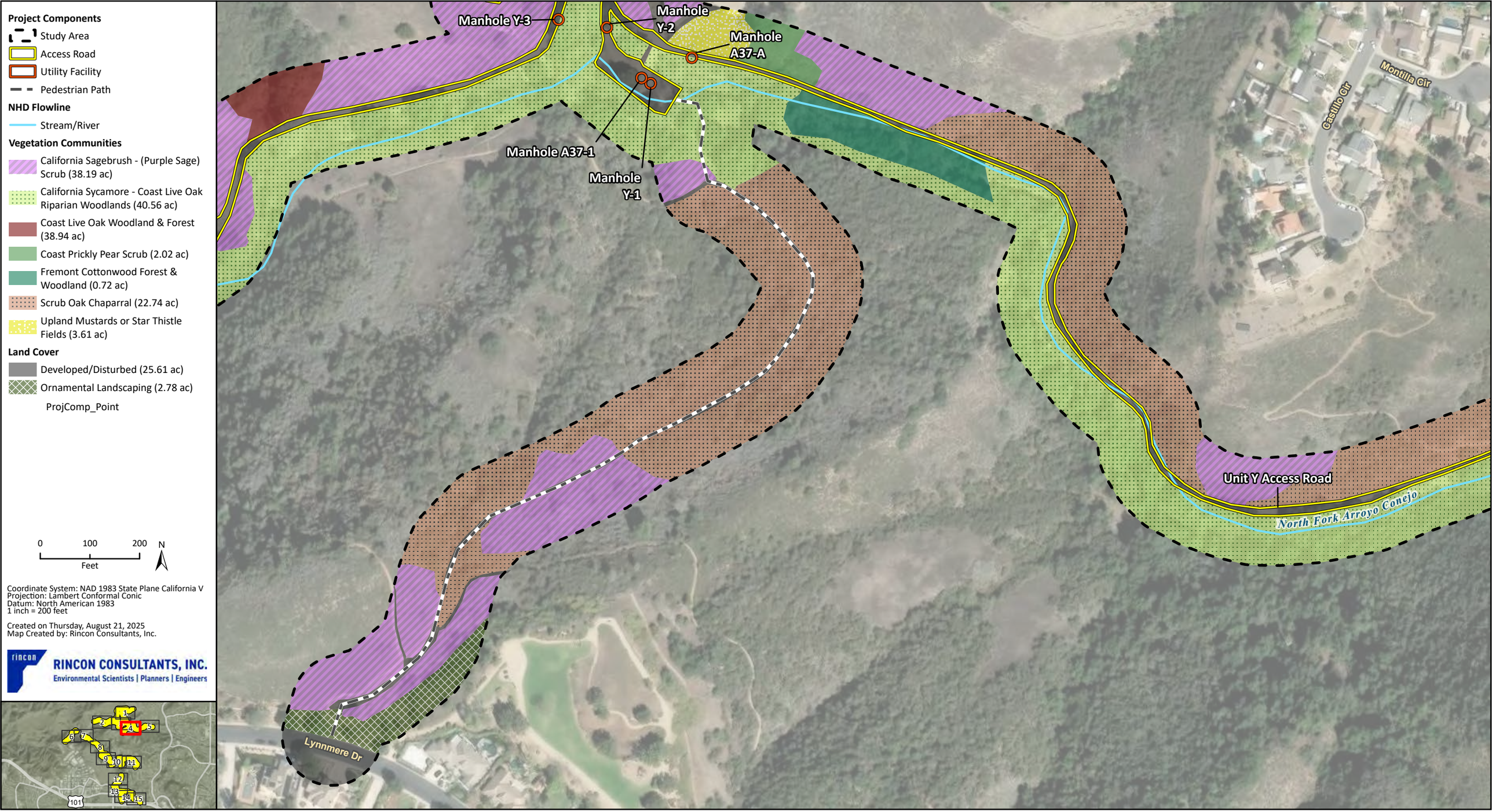

Project Components

- Study Area
- Access Road
- Utility Facility
- Pedestrian Path

NHD Flowline

- Stream/River

Vegetation Communities

- California Sagebrush - (Purple Sage) Scrub (38.19 ac)
- California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Coast Prickly Pear Scrub (2.02 ac)
- Fremont Cottonwood Forest & Woodland (0.72 ac)
- Scrub Oak Chaparral (22.74 ac)
- Upland Mustards or Star Thistle Fields (3.61 ac)

Land Cover

- Developed/Disturbed (25.61 ac)
- Ornamental Landscaping (2.78 ac)

ProjComp_Point

0 100 200 Feet N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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Project Components

- Study Area
- Access Road
- Pedestrian Path

NHD Flowline

- Stream/River

Vegetation Communities

- Black Sage Scrub (3.03 ac)
- California Sagebrush - (Purple Sage) Scrub (38.19 ac)
- California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
- Scrub Oak Chaparral (22.74 ac)

Land Cover

- Developed/Disturbed (25.61 ac)
- ProjComp_Point

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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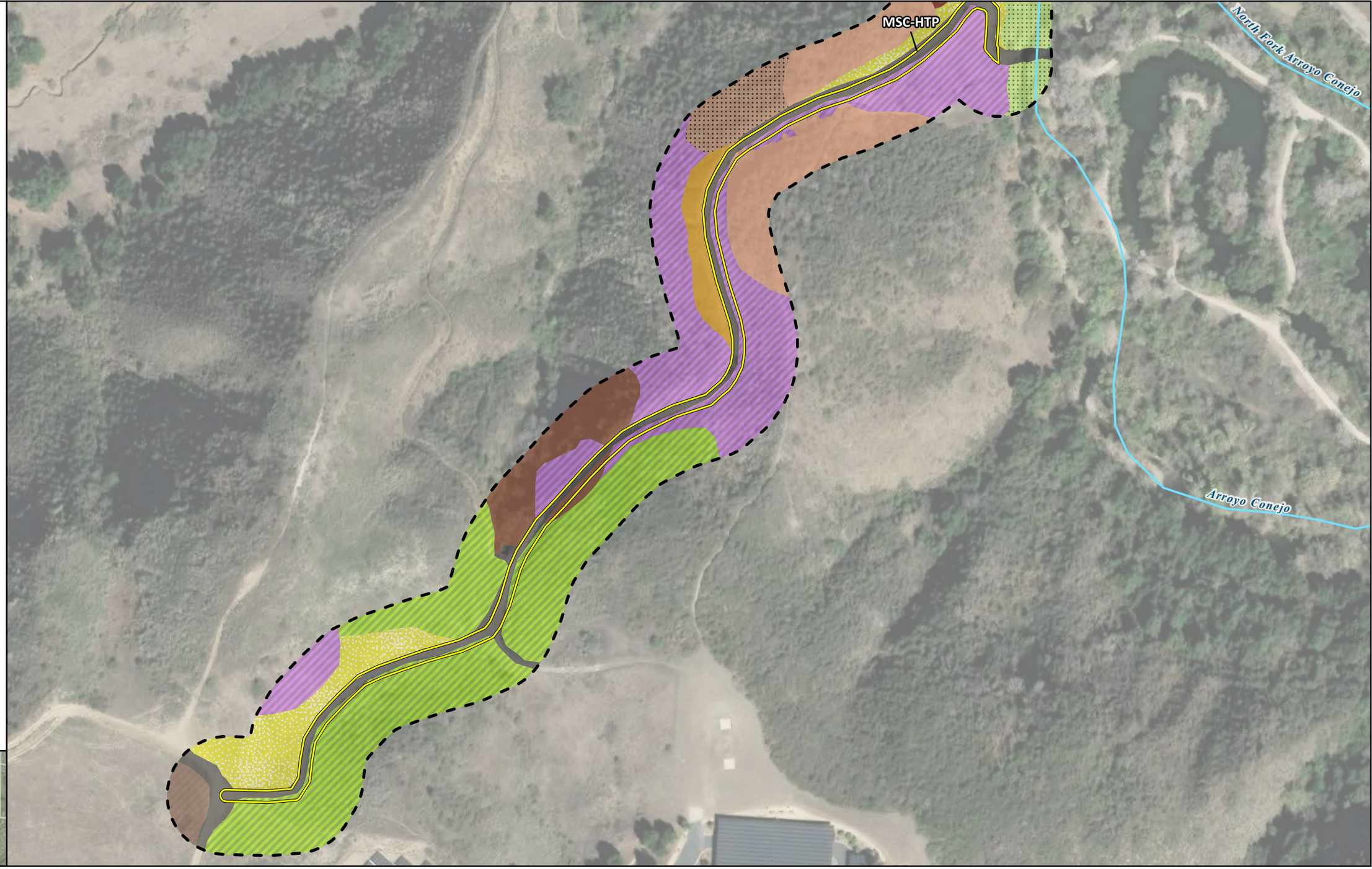

Project Components

- Study Area
- Access Road

NHD Flowline

- Stream/River

Vegetation Communities

- Bigpod Ceanothus Chaparral (1.53 ac)
- Bush Mallow Scrub (3.56 ac)
- California Buckwheat Scrub (1.80 ac)
- California Sagebrush - (Purple Sage) Scrub (38.19 ac)
- California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Fremont Cottonwood Forest & Woodland (0.72 ac)
- Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
- Scrub Oak Chaparral (22.74 ac)
- Upland Mustards or Star Thistle Fields (3.61 ac)
- Wild Oats & Annual Brome Grasslands (9.27 ac)

Land Cover

- Developed/Disturbed (25.61 ac)

ProjComp_Point

0 100 200 Feet N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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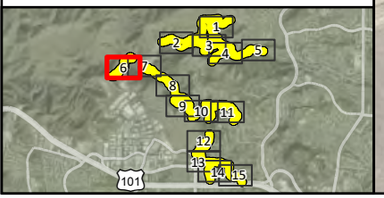

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Additional data provided by NHD, 2025

Project Components

- Study Area
- Access Road
- Utility Facility
- Creek Crossing

NHD Flowline

- Stream/River

Vegetation Communities

- Bigpod Ceanothus Chaparral (1.53 ac)
- California Sagebrush - (Purple Sage) Scrub (38.19 ac)
- California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
- California Walnut Groves (5.45 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Fremont Cottonwood Forest & Woodland (0.72 ac)
- Upland Mustards or Star Thistle Fields (3.61 ac)

Land Cover

- Developed/Disturbed (25.61 ac)
- ProjComp_Point

0 100 200 Feet N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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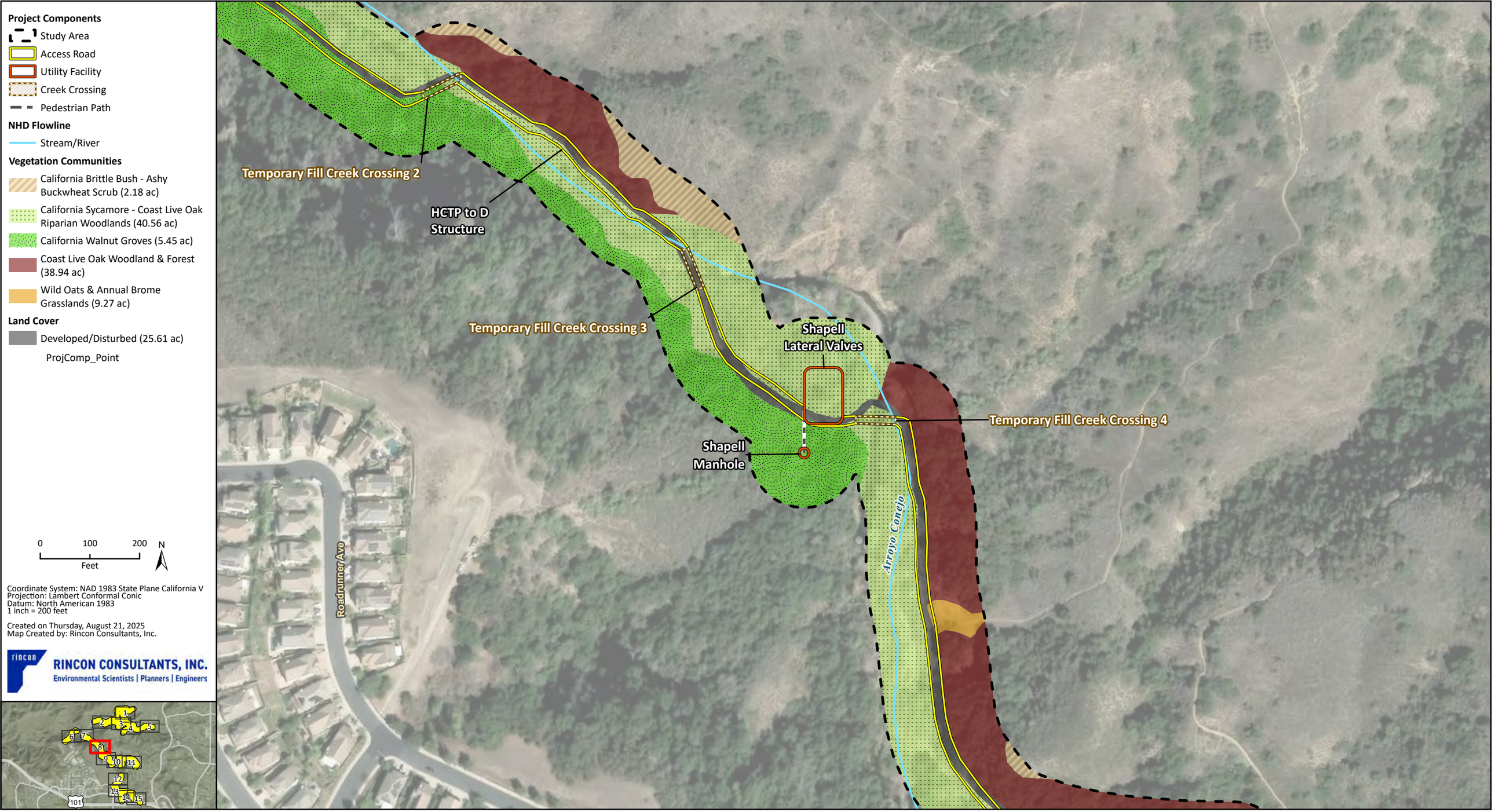

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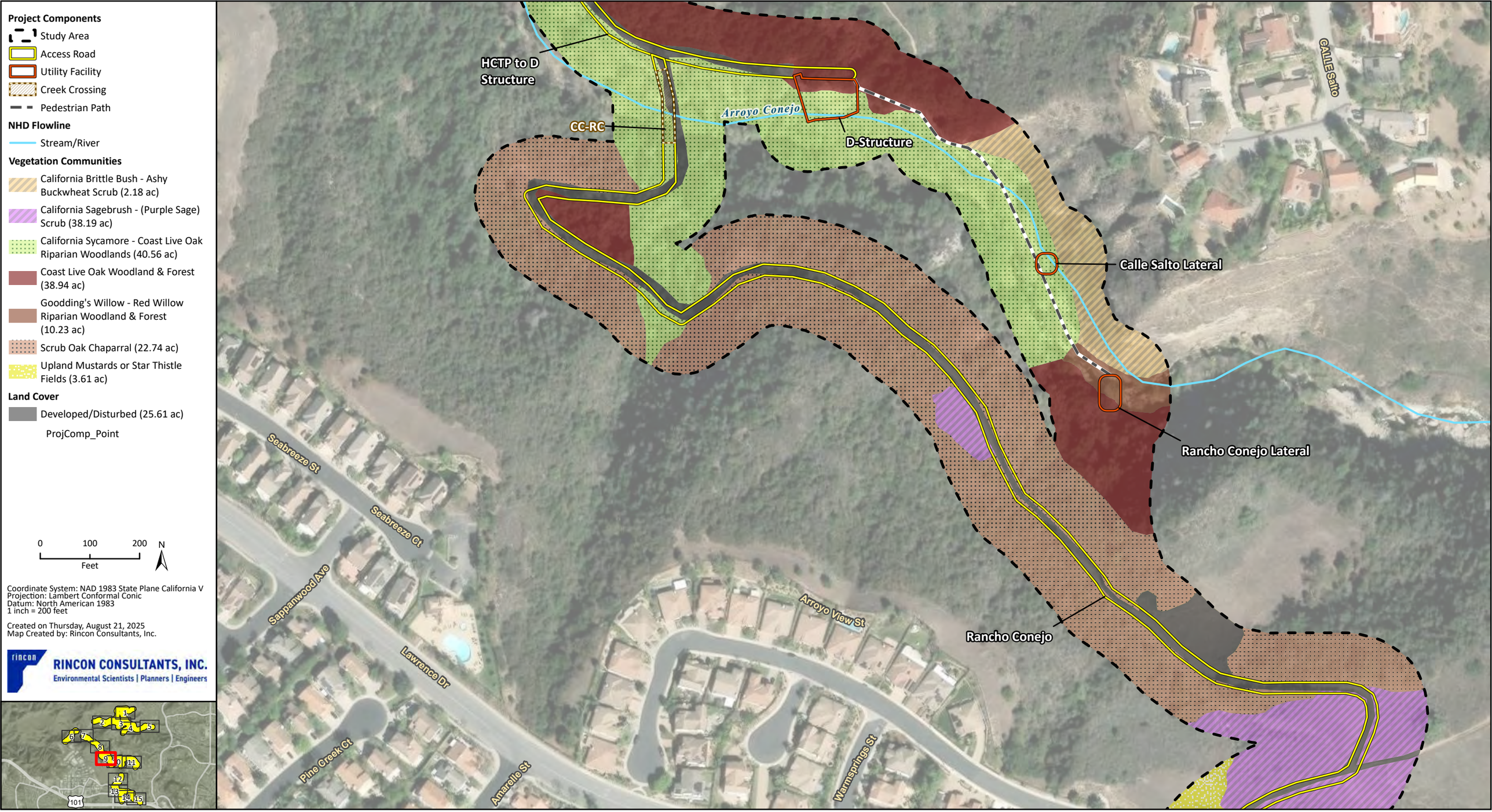

Project Components

- Study Area
- Access Road
- Utility Facility
- Creek Crossing
- Pedestrian Path

NHD Flowline

- Stream/River

Vegetation Communities

- California Brittle Bush - Ashy Buckwheat Scrub (2.18 ac)
- California Sagebrush - (Purple Sage) Scrub (38.19 ac)
- California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
- Scrub Oak Chaparral (22.74 ac)
- Upland Mustards or Star Thistle Fields (3.61 ac)

Land Cover

- Developed/Disturbed (25.61 ac)

ProjComp_Point

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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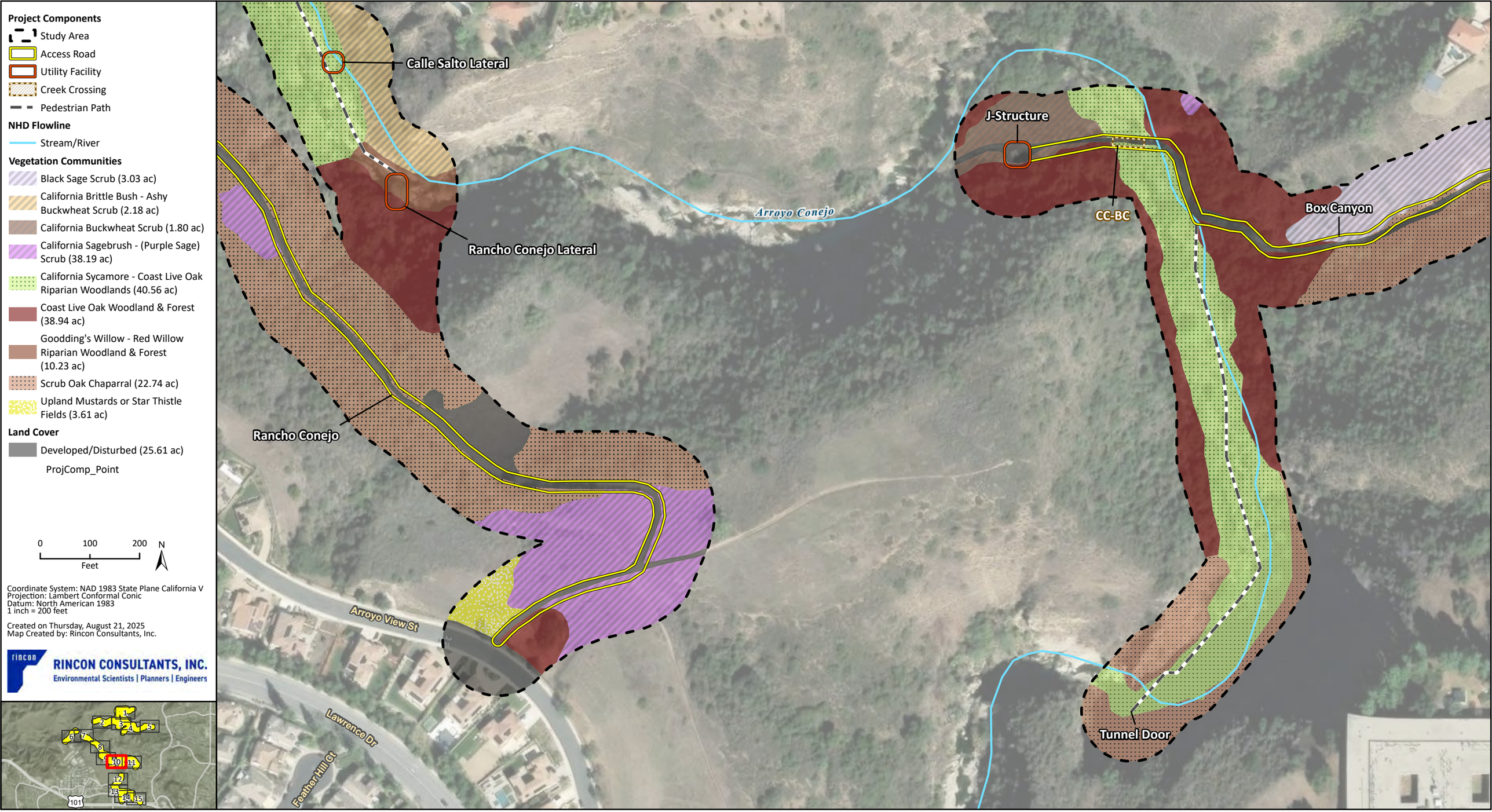
Project Components
Study Area
Access Road
Utility Facility
Creek Crossing
Pedestrian Path
NHD Flowline
Stream/River
Vegetation Communities
Black Sage Scrub (3.03 ac)
California Brittle Bush - Ashy Buckwheat Scrub (2.18 ac)
California Buckwheat Scrub (1.80 ac)
California Sagebrush - (Purple Sage) Scrub (38.19 ac)
California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
Coast Live Oak Woodland & Forest (38.94 ac)
Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
Scrub Oak Chaparral (22.74 ac)
Upland Mustards or Star Thistle Fields (3.61 ac)
Land Cover
Developed/Disturbed (25.61 ac)
ProjComp_Point
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet
Created on Thursday, August 21, 2025
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Calle Salto Lateral
Rancho Conejo Lateral
Arroyo Conejo
J-Structure
CC-BC
Box Canyon
Rancho Conejo
Arroyo View St
Lawrence Dr
Feather Hill Ct
Tunnel Door
101
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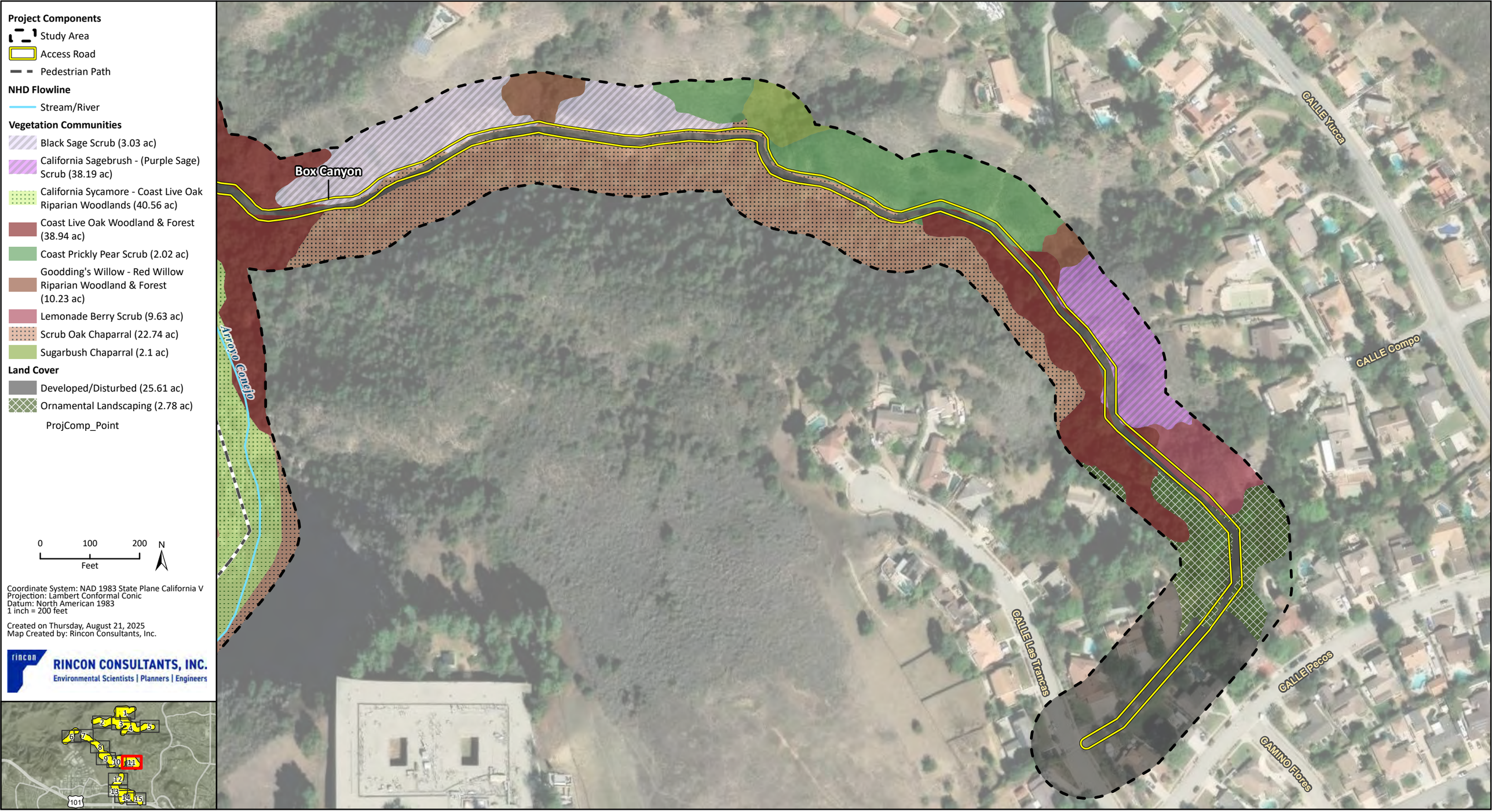
Additional data provided by NHD, 2025
24-16512 BIO
Fig 3 Vegetation and Land Cover



Project Components

- Study Area
- Access Road
- Pedestrian Path

NHD Flowline

- Stream/River

Vegetation Communities

- Black Sage Scrub (3.03 ac)
- California Sagebrush - (Purple Sage) Scrub (38.19 ac)
- California Sycamore - Coast Live Oak Riparian Woodlands (40.56 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Coast Prickly Pear Scrub (2.02 ac)
- Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
- Lemonade Berry Scrub (9.63 ac)
- Scrub Oak Chaparral (22.74 ac)
- Sugarbush Chaparral (2.1 ac)

Land Cover

- Developed/Disturbed (25.61 ac)
- Ornamental Landscaping (2.78 ac)

ProjComp_Point

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

Created on Thursday, August 21, 2025
Map Created by: Rincon Consultants, Inc.

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Project Components
Study Area
Access Road
Pedestrian Path
NHD Flowline
Stream/River
Vegetation Communities
California Sagebrush - (Purple Sage) Scrub (38.19 ac)
California Sagebrush - Black Sage Scrub
Coast Live Oak Woodland & Forest (38.94 ac)
Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
Lemonade Berry Scrub (9.63 ac)
Land Cover
Developed/Disturbed (25.61 ac)
Open Water (0.39 ac)
ProjComp_Point
Tunnel Door
Calle Brusca
Arroyo Conejo
Blue Canyon St
Del Verde Ct
Lawrence Dr
Honey Creek Ct
Arroyo View St
CALLE Brusca
CAMINO Dos Rios
CALLE Arroyo
CALLE Las Casas
CAMINO El Carrizo
0
100
200
Feet
N
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Fig 3 Vegetation and Land Cover

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Project Components

- Study Area
- Access Road
- Creek Crossing

NHD Flowline

- Stream/River

Vegetation Communities

- Black Cottonwood Forest & Woodland (3.03 ac)
- California Buckwheat Scrub (1.80 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
- Wild Oats & Annual Brome Grasslands (9.27 ac)

Land Cover

- Developed/Disturbed (25.61 ac)
- Ornamental Landscaping (2.78 ac)

ProjComp_Point

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
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Project Components

- Study Area
- Access Road
- Creek Crossing

NHD Flowline

- Stream/River

Vegetation Communities

- Black Cottonwood Forest & Woodland (3.03 ac)
- Coast Live Oak Woodland & Forest (38.94 ac)
- Goodding's Willow - Red Willow Riparian Woodland & Forest (10.23 ac)
- Wild Oats & Annual Brome Grasslands (9.27 ac)

Land Cover

- Developed/Disturbed (25.61 ac)
- Ornamental Landscaping (2.78 ac)

ProjComp_Point

0 100 200 Feet N

Coordinate System: NAD 1983 State Plane California V
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Appendix G

Special-Status Species Potential to Occur

Common Name Scientific Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/Observations
Plants and Lichens				
Braunton's milk-vetch *Astragalus brauntonii*	FE/None G2/S2 1B.1	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. Elevations: 15-2100ft. (4-640m.) Blooms Jan-Aug.	**Low**	Virtually all occurrences east of HWY 23 or when not, they are south of 101.
Coulter's saltbush *Atriplex coulteri*	None/None G3/S2 1B.2	Perennial herb. Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Alkaline (sometimes), clay (sometimes). Elevations: 10-1510ft. (3-460m.) Blooms Mar-Oct.	**None**	No coastal dunes or bluff habitat within the Study Area.
Malibu baccharis *Baccharis malibuensis*	None/None G1/S1 1B.1	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub, riparian woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. Elevations: 490-1000ft. (150-305m.) Blooms Aug.	**Low**	Nearest occurrence a 2008 CNDDB site 5.3mi east of Study Area in similar sandy loam, n-facing slope, part shade, chaparral habitat. Most occurrences around the Santa Monica National Rec Area. Documented in the watershed adjacent to the Study Area in 2004.
slender mariposa-lily *Calochortus clavatus* var. *gracilis*	None/None G4T2T3/S2S3 1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, valley and foothill grassland. Shaded foothill canyons; often on grassy slopes within other habitat. Elevations: 1050-3280ft. (320-1000m.) Blooms Mar-Jun(Nov).	**None**	Project site is below the known elevational range of the species.
southern tarplant *Centromadia parryi* ssp. *australis*	None/None G3T2/S2 1B.1	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. Elevations: 0-1575ft. (0-480m.) Blooms May-Nov.	**Low**	Nearest occurrence a 2003 CNDDB record 1.5mi west of Study Area in clay loam, full sun, annual grassland. Could occur on similar grassland/chaparral areas within Study Area. Although, most occurrences in Isla Vista and LA/Huntington Beach areas.
Orcutt's pincushion *Chaenactis glabriuscula* var. *orcuttiana*	None/None G5T1/S1 1B.1	Annual herb. Coastal bluff scrub, coastal dunes. Sandy sites. Elevations: 0-330ft. (0-100m.) Blooms Jan-Aug.	**None**	No coastal dunes or bluff habitat within the Study Area.
salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE/SE G4?T1/S1 1B.2	Annual herb (hemiparasitic). Coastal dunes, marshes and swamps. Limited to the higher zones of salt marsh habitat. Elevations: 0-100ft. (0-30m.) Blooms May-Oct(Nov).	**None**	Study Area is above the known elevational range of the species.
Parry's spineflower *Chorizanthe parryi* var. *parryi*	None/None G3T2/S2 1B.1	Annual herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Openings, Rocky (sometimes), sandy (sometimes). Elevations: 900-4005ft. (275-1220m.) Blooms Apr-Jun.	**None**	Study Area is below the known elevational range of the species.
Santa Susana tarplant *Deinandra minthornii*	None/SR G2/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. Elevations: 920-2495ft. (280-760m.) Blooms Jul-Nov.	**None**	Study Area is below the known elevational range of the species.
dune larkspur *Delphinium parryi* ssp. *blochmaniae*	None/None G4T2/S2 1B.2	Perennial herb. Chaparral, coastal dunes. On rocky areas and dunes. Elevations: 0-655ft. (0-200m.) Blooms Apr-Jun.	**Low**	Vast majority of occurrences from San Luis Obispo and Santa Barbara counties. Ventura occurrences in CCH from 60s/70s
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	None/None G3T2/S2 1B.1	Perennial herb. Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Elevations: 15-1475ft. (5-450m.) Blooms Apr-Jun.	**Moderate**	Most occurrences tend to be closer in proximity to coast, although a 2016 CNDDB occurrence is only 0.62mi from Study Area. Species in same genus found in the Study Area, D. lanceolata and D. pulverulenta. Potentially suitable habitat located in scrub and Optunia patches within Study Area. nearby occurrence notes steep rocky area with Artemisia californica, Opuntia littoralis, Eriogonum fasciculatum. this is similar to on-site conditions.
Agoura Hills dudleya *Dudleya cymosa* ssp. *agourensis*	FT/None G5T1/S1 1B.2	Perennial herb. Chaparral, cismontane woodland. Rocky, volcanic breccia. Elevations: 655-1640ft. (200-500m.) Blooms May-Jun.	**Low**	Study Area generally lacks volcanic outcrops that are common in the vicinity of the site, thus very marginal suitable habitat despite species in same genus found in the Study Area. Virtually all occurrence in Agoura Hills area.
marcescent dudleya *Dudleya cymosa* ssp. *marcescens*	FT/SR G5T2/S2 1B.2	Perennial herb. Chaparral. On sheer rock surfaces and rocky volcanic cliffs. Elevations: 490-1705ft. (150-520m.) Blooms Apr-Jul.	**Low**	Virtually all occurrences found in Santa Monica Mountains in a discrete geologically separated population south of the Study Area.
Santa Monica dudleya *Dudleya cymosa* ssp. *ovatifolia*	FT/None G5T1/S1 1B.1	Perennial herb. Chaparral, coastal scrub. In canyons on volcanic or sedimentary substrates; primarily on north-facing slopes. Elevations: 490-5495ft. (150-1675m.) Blooms Mar-Jun.	**Low**	Virtually all occurrences found in Santa Monica Mountains in a discrete geologically separated population south of the Study Area. 1980 occurrence found 2mi west, but CCH notes indicate close to subspecies cuymosa.

Common Name Scientific Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/Observations
Conejo dudleya *Dudleya parva*	FT/None G1/S1 1B.2	Perennial herb. Coastal scrub, valley and foothill grassland. In clay or volcanic soils on rocky slopes and grassy hillsides. Elevations: 195-1475ft. (60-450m.) Blooms May-Jun.	**Moderate**	Northern portion of Study Area is in the middle of the small species range, with the range shaped in an arch from Mountclef Ridge to Conejo Mountain, with the Study Area in the center. The Study Area generally lacks the open volcanic rocky habitat this species is found in, but clay/gravelly microhabitats exist where species in same genus flourish, D. lanceolata & D. pulverulenta. General coastal scrub and grassland is present.
Verity's dudleya *Dudleya verityi*	FT/None G1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. On volcanic rock outcrops in the Santa Monica Mountains. Elevations: 195-395ft. (60-120m.) Blooms May-Jun.	**Low**	Virtually all occurrences found east of Conejo Mountain, which is ~2.5mi west of survey area. Project site generally lacks the volcanic microhabitat D. verityi is found in.
conejo buckwheat *Eriogonum crocatum*	None/SR G1/S1 1B.2	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops; rocky sites. Elevations: 165-1905ft. (50-580m.) Blooms Apr-Jul.	**Moderate**	Northern portion of Study Area is in the middle of the small species range, with the range shaped in an arch from Mountclef Ridge to Conejo Mountain, with the Study Area in the center. 2012 CNDDB occurrence notes it is found in similar habitat to the project area: riparian vegetation with coastal sage scrub further upland. associated with Dudleya pulverulenta, D. lanceolata.
mesa horkelia *Horkelia cuneata* var. *puberula*	None/None G4T1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660ft. (70-810m.) Blooms Feb-Jul(Sep).	**Low**	No occurrences within 7+ miles. Nearest population north of Simi Valley.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	None/None G4T2/S2 1B.1	Annual herb. Marshes and swamps, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-. Elevations: 5-4005ft. (1-1220m.) Blooms Feb-Jun.	**None**	No saline places or vernal pools within the Study Area. Species does not occur in the Jepson geographic range Study Area is located within.
Payne's bush lupine *Lupinus paynei*	None/None G1Q/S1 1B.1	Perennial shrub. Coastal scrub, riparian scrub, valley and foothill grassland. Sandy. Elevations: 720-1380ft. (220-420m.) Blooms Mar-Apr(May-Jul).	**Low**	All CCH occurrences are north of Las Posas Hills.
white-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	None/None G4T3/S3 1B.3	Perennial herb. Chaparral, cismontane woodland. Dry slopes. Elevations: 165-5005ft. (50-1525m.) Blooms (Apr)May-Aug(Sep-Dec).	**Low**	Species distributed in distinct clusters. Most occur in Simi Hills and Santa Monica Mountains/Boney Mountain. Study Area separated from those populations by city development/infrastructure.
Gerry's curly-leaved monardella *Monardella sinuata* ssp. *gerryi*	None/None G3T1/S1 1B.1	Annual herb. Coastal scrub. Sandy openings. Elevations: 490-805ft. (150-245m.) Blooms Apr-Jun.	**Low**	Although the Study Area is within the Jepson geographic subdivision range (Western Transverse Ranges District, CA floristic province) for the species, there are no recordings of the species south of the Santa Rosa Valley which the Study Area is below, separated geographically by Mountclef Ridge, except a low quality Calflora checklist entry which is quad- wide.
Ojai navarretia *Navarretia ojaiensis*	None/None G2/S2 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Elevations: 900-2035ft. (275-620m.) Blooms May-Jul.	**Moderate**	Although the Study Area is below the elevational range of the species listed by CNPS, there is a 2014 CNDDB population at 650ft, only 0.6mi southwest of the Study Area which is in coastal scrub and grassland habitats in open *Eriogonum fasciculatum, Artemisia californica,* or *Eriogonum cinereum* scrub, which all occur/similar habitat within the Study Area.
chaparral nolina *Nolina cismontana*	None/None G3/S3 1B.2	Perennial evergreen shrub. Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. Elevations: 460-4185ft. (140-1275m.) Blooms (Mar)May-Jul.	**Low**	The cluster of occurrences nearest the Study Area are all east of The City of Thousand Oaks.
California Orcutt grass *Orcuttia californica*	FE/SE G1/S1 1B.1	Annual herb. Vernal pools. Elevations: 50-2165ft. (15-660m.) Blooms Apr-Aug.	**None**	No vernal pool habitat on-site.
Sonoran maiden fern *Pelazoneuron puberulum* var. *sonorense*	None/None G5T4/S2 2B.2	Meadows and seeps (seeps, streams). Along streams, seepage areas. 50-610m. Blooms Jan-Sep.	**Moderate**	Seeps and stream sides present within the Study Area. Multiple occurrences within 9 quad search area.
Lyon's pentachaeta *Pentachaeta lyonii*	FE/SE G1/S1 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. Elevations: 100-2265ft. (30-690m.) Blooms (Feb)Mar-Aug.	**High**	There are several overlapping 1996 and 1997 occurrence overlapping with the Study Area located in Northern portion of the Project. Suitable habitat including openings in grassland and understory of scrub within are located in this portion of the Study Area. Additionally Critical habitat for Lyon's pentachaeta overlaps with the Study Area.

Common Name Scientific Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/Observations
white rabbit-tobacco *Pseudognaphalium leucocephalum*	None/None G4/S2 2B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy, gravelly sites. Elevations: 0-6890ft. (0-2100m.) Blooms (Jul)Aug-Nov(Dec).	**Low**	Records in Ventura Co. are north of the Santa Susana Mountains or older (<1959).
Nuttall's scrub oak *Quercus dumosa*	None/None G3/S3 1B.1	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. Elevations: 50-1310ft. (15-400m.) Blooms Feb-Apr(May-Aug).	**Low**	Species tends to occur at lower elevations. Nearest occurrence is from 1938 with low location quality (~1.5mi west of Study Area).
Santa Catalina Island currant *Ribes viburnifolium*	1B.2	Perennial evergreen shrub found in chaparral, cismontane woodland. 100- 1150 ft. Blooming Period: Feb-Apr	**Low**	SWCA recorded a possible individual of this species within the Study Area; however, the Study Area is outside of this species documented range (Jepson 2025), no records have been recorded within the 9-quad search area, and the identification has not been confirmed.
chaparral ragwort *Senecio aphanactis*	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr(May).	**High**	A 2016 CNDDB population occurrence overlaps with the Study Area located in Northern portion of the Project. Suitable habitat was observed in this portion of the Study Area.
broadleaf pondweed *Stuckenia striata*	None/None G3G4Q/S2S3 2B.3	Marshes and swamps. Lakes, ponds, rivers, and stream canals. - -70-2135m. Blooms (Jun)Jul-Aug.	**Low**	Some marginal riverine and stream habitat is present within the Study Area and one record is located within the Santa Clara River; however, preferred pond/lake habitat is absent within the Study Area and this species documented geographic range is located outside of the Study Area (Jepson2025).
estuary seablite *Suaeda esteroa*	None/None G3/S2 1B.2	Perennial herb. Marshes and swamps. Coastal salt marshes in clay, silt, and sand substrates. Elevations: 0-15ft. (0-5m.) Blooms (Jan-May)Jul-Oct.	**None**	Study Area is above the known elevational range of the species.
California screw moss *Tortula californica*	None/None G2G3/S2? 1B.2	Moss. Chenopod scrub, valley and foothill grassland. Moss growing on sandy soil. Elevations: 35-4790ft. (10-1460m.)	**Low**	No Calflora or CNDDB records in Ventura Co
Invertebrates				
Crotch bumble bee *Bombus crotchii*	None/SCE G2/S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	**Moderate**	Upland areas in the Study Area provide suitable habitat for the species and several of the required food plant genera were detected during the field survey. CNDDB shows a 2020 occurrence approximately 4 miles southwest of the project.
monarch - California overwintering population *Danaus plexippus plexippus pop. 1*	FPT/None G4T1T2Q/S2	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Moderate (migrating)**	Overwintering groves are absent from the Study Area. However, migrating individuals from nearby overwintering groves could stop within the Study Area to oviposit and feed on the milkweed documented within the Study Area.
quino checkerspot butterfly *Euphydryas editha quino*	FE/None G4G5T1T2/S1S2	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	**None**	There is suitable habitat within the project area, however there are no known records in Ventura County and the nearest CNDDB records in Los Angeles County are considered extirpated.
Riverside fairy shrimp *Streptocephalus woottoni*	FE/None G1G2/S2	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	**None**	The project area lacks the habitat to support the species
Fish				
Santa Ana sucker *Catostomus santaanae*	FT/None G1/S1 SSC	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	**None**	The watershed the project area is located in is out of the known range of the species.
tidewater goby *Eucyclogobius newberryi*	FE/None G3/S3 SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**None**	The project area lacks the habitat to support the species.
unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	FE/SE G5T1/S1 FP	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.	**None**	The watershed the project area is located in is out of the known range of the species.

Common Name Scientific Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/Observations
arroyo chub *Gila orcuttii*	None/None G1/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**High**	Arroyo Conejo is known to support the species. CNDDB show a 2000 occurrence overlapping with the project and indicates the population is a transplant outside of its native range. Arroyo chub are considered somewhat common within this watershed.
steelhead - southern California DPS *Oncorhynchus mykiss irideus* pop. 10	FE/SCE G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	**Low**	The project area could potentially support the species. CNDDB shows a 2013 occurrence approximately 3.8 miles west in Conejo Creek which Arroyo Conejo becomes after merging with Arroyo Santa Rosa. While the watershed has historically not supported the species, it is possible for the species to travel upstream into Arroyo Conejo to locate spawning sites.
Amphibians				
western spadefoot *Spea hammondii*	FPT/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	**Low**	Upland areas in the project area could potentially support the species however no suitable breeding habitat such as vernal pools were observed. CNDDB shows several 2008 – 2013 occurrences approximately 8 miles northeast of the Study Area
Reptiles				
southwestern pond turtle *Actinemys pallida*	FPT/None G2G3/SNR SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. Occurs in southern California from Monterey County south to Los Angeles, Riverside, and San Diego Counties into northern Baja California, Mexico.	**High**	The species was observed basking in the Arroyo Conejo during surveys conducted by Bowland & Associates on July 17 and 18, 2012. The species was not observed during the 2022 surveys.
Southern California legless lizard *Anniella stebbinsi*	None/None G3/S3 SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	**High**	Suitable sandy and loamy soils were found in the Study Area**.** As of 2013, There is taxonomic uncertainty regarding which species of California legless lizard. Occurs within the project vicinity. CNDDB shows several occurrences of California legless lizard and Southern California legless lizard within the vicinity of the Project
California glossy snake *Arizona elegans occidentalis*	None/None G5T2/S2 SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	**Low**	There is suitable habitat in the Study Area to support the species, however the species is rarely seen and there are few records in Ventura County. CNDDB shows a 1995 occurrence located approximately 7.5 miles north of the Study Area.
coastal whiptail *Aspidoscelis tigris stejnegeri*	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	**Present**	Several individuals were observed in the Study Area.
coast horned lizard *Phrynosoma blainvillii*	None/None G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**High**	There is suitable habitat in the upland areas of Study Area. CNDDB shows a 2007 occurrence located approximately 2.5 miles north of the Study Area.
two-striped gartersnake *Thamnophis hammondii*	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	**High**	There is suitable habitat in the Study Area near Arroyo Conejo and its intermittent and perennial tributaries. CNDDB shows a 1995 occurrence located approximately 3.5miles west of the Study Area.
south coast gartersnake *Thamnophis sirtalis* pop. 1	None/None G5T1T2/S1S2 SSC	Southern California coastal plain from Ventura County to San Diego County, and from sea level to about 850 m. Marsh and upland habitats near permanent water with good strips of riparian vegetation.	**Low**	There is suitable habitat in the Study Area near Arroyo Conejo and its intermittent and perennial tributaries, however occurrences in Ventura County are uncommon. CNDDB shows a 2008 occurrence located approximately 12 miles northwest of the Study Area.
Birds				
tricolored blackbird *Agelaius tricolor*	None/ST G1G2/S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**None**	The project area lacks the appropriate nesting habitat to support the species. May occur on-site for foraging. CNDDB shows an occurrences from 1995 located approximately 3.5 miles southeast near Lake Sherwood
golden eagle *Aquila chrysaetos*	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Low**	The project area lacks the appropriate nesting habitat to support the species. Species may be observed as a flyover and has a low potential to forage on-site. CNDDB shows several 1989 occurrences approximately 4.5 – 6 miles south and southwest all generally considered inactive nest sites
burrowing owl *Athene cunicularia*	None/SCE G4/S2 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	**High**	Suitable grassland habitat is located within the upland portions of the Y Study Area. There is an eBird observation located within this area (eBird 2025).

Common Name Scientific Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/Observations
Western snowy plover *Charadrius nivosus nivosus*	FT/None G3T3/S3 SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	**None**	The Study Area lacks the appropriate nesting habitat to support the species
western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Low**	The riparian forest habitat along Arroyo Conejo provides marginally suitable habitat for nesting. CNDDB shows the nearest confirmed nesting occurrence, from 2018, is located along the Santa Clara River approximately 11 miles northwest of the Study Area.
white-tailed kite *Elanus leucurus*	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**Moderate**	Suitable habitat is present within the Study Area and multiple eBird observations have been made within Wildwood Park (eBird 2025).
southwestern willow flycatcher *Empidonax traillii extimus*	FE/SE G5T2/S3	Riparian woodlands in Southern California. .	**Low**	The riparian forest habitat along Arroyo Conejo provides suitable habitat for nesting, however the species has never been observed nesting in the vicinity. CNDDB shows the nearest confirmed nesting occurrence, from 2009, is located along the Santa Clara River approximately 11 miles northwest of the Study Area.
Belding's Savannah Sparrow *Passerculus sandwichensis beldingi*	None/SE G5T3/S3	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	**None**	The Study Area lacks the appropriate nesting habitat to support the species
coastal California gnatcatcher *Polioptila californica californica*	FT/None G4G5T3Q/S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	**High**	The upland portions of the Study Area provide suitable coastal scrub habitat to support the species. CNDDB shows a 2016 occurrence approximately 280 feet west from the western limits of the Study Area. An additional 2019 occurrence is located approximately 0.5 miles south of the Study Area
light-footed Ridgway's rail *Rallus obsoletus levipes*	FE/SE G3T1T2/S1 FP	Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover; feeds on molluscs and crustaceans.	**None**	The Study Area lacks the appropriate nesting habitat to support the species
Bank swallow *Riparia riparia*	None/ST G5/S3	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**None**	The Study Area lacks the appropriate nesting habitat to support the species. Generally considered extirpated in this area (CDFW 2025).
yellow warbler *Setophaga petechia*	None/None G5/S3 SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**High**	The riparian habitat associated with Arroyo Conejo provides suitable nesting and foraging habitat.
California Least tern *Sternula antillarum browni*	FE/SE G4T2T3Q/S2 FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	**None**	The Study Area lacks the appropriate nesting habitat to support the species
least Bell's vireo *Vireo bellii pusillus*	FE/SE G5T2/S3	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	**Present**	The riparian habitat found associated with Arroyo Conejo provides suitable nesting and foraging habitat. CNDDB shows a 2008 occurrence approximately 1.3 miles north of the Study Area along Arroyo Santa Rosa. An additional occurrence, from 2017 is located approximately 2.7 miles from the Study Area along Conejo Creek. Focused surveys were conducted by Werner in 2022 and identified one individual male (Werner 2022).
Mammals				
pallid bat *Antrozous pallidus*	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Low**	Cliff side faces observed along Arroyo Conejo may provide suitable roosting sites The species would also utilize the Study Area for foraging. CNDDB shows a 2004 occurrence approximately 7.6 miles east of the Study Area.
western mastiff bat *Eumops perotis californicus*	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	**Low**	Cliff side faces observed along Arroyo Conejo may provide suitable roosting sites The species would also utilize the site for foraging. CNDDB shows a 2004 occurrence approximately 7.6 miles east of the Study Area
western red bat *Lasiurus blossevillii*	None/None G4/S3 SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	**Moderate**	Several oaks may provide suitable roosting sites. The species would also utilize the Study Area for foraging. CNDDB shows a 2004 occurrence approximately 8.5 miles southeast of the Study Area

Common Name Scientific Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/Observations
Southern coast marsh vole *Microtus californicus*	None/None G5T2T3/S2 SSC	Occurs in tidal marshes of Orange, Los Angeles, and Ventura Counties.	**None**	The Study Area lacks the habitat to support the species.
San Diego desert woodrat *Neotoma lepida intermedia*	None/None G5T3T4/S3S4 SSC	Occurs in scrub habitats of southern California from San Luis Obispo County to San Diego County.	**Moderate**	Rocky areas and hillslopes within the Study Area would provide suitable habitat for the species. Additionally, several middens were found during the survey, however species identification cannot be established without small mammal trapping CNDDB shows a 2016 occurrence located approximately 3 miles southwest of the Study Area.
Southern California saltmarsh shrew *Sorex ornatus salicornicus*	None/None G5T1?/S1 SSC	Coastal marshes in Los Angeles, Orange and Ventura counties. Requires dense vegetation and woody debris for cover.	**None**	The Study Area lacks the habitat to support the species.
American badger *Taxidea taxus*	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Moderate**	Upland areas in the Study Area provide suitable habitat for the species. The species is infrequently observed but has a wide distribution. CNDDB shows a 2013 occurrence located 4.8 miles west of the Study Area

ft. = feet; meter = m.
Regional Vicinity refers to within a 9-quad search radius of site.

Status (Federal/State)
FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)
1A = Presumed extirpated in California, and rare or extinct elsewhere
1B = Rare, Threatened, or Endangered in California and elsewhere
2A = Presumed extirpated in California, but common elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension
.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses
G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant
GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery
LR Locally Rare (Santa Barbara Botanical Gardens 2018)

Additional notations may be provided as follows
T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact numeric rank

Appendix H

Jurisdictional Delineation Map Book

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Additional data provided by NHD, 2025.

Project Components
Study Area
Access Road
Utility Facility
Creek Crossing
Pedestrian Path
NHD Flowline
Stream/River
Jurisdictional Features
CDFW Streambed
Non-Wetland Waters of the U.S.
Non-Wetland Waters of the State
Cleanout #4
F17
Cleanout_Add_1
North Fork Arroyo Conejo
Unit Y Access Road
Unit Y Access Road
Cleanout #3
Cleanout_Add_2
Y Structure
CC-Y2
F17
Cleanout #1
CC-Y1
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet
Created on Thursday, August 21, 2025
Map Created by: Rincon Consultants, Inc.
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101
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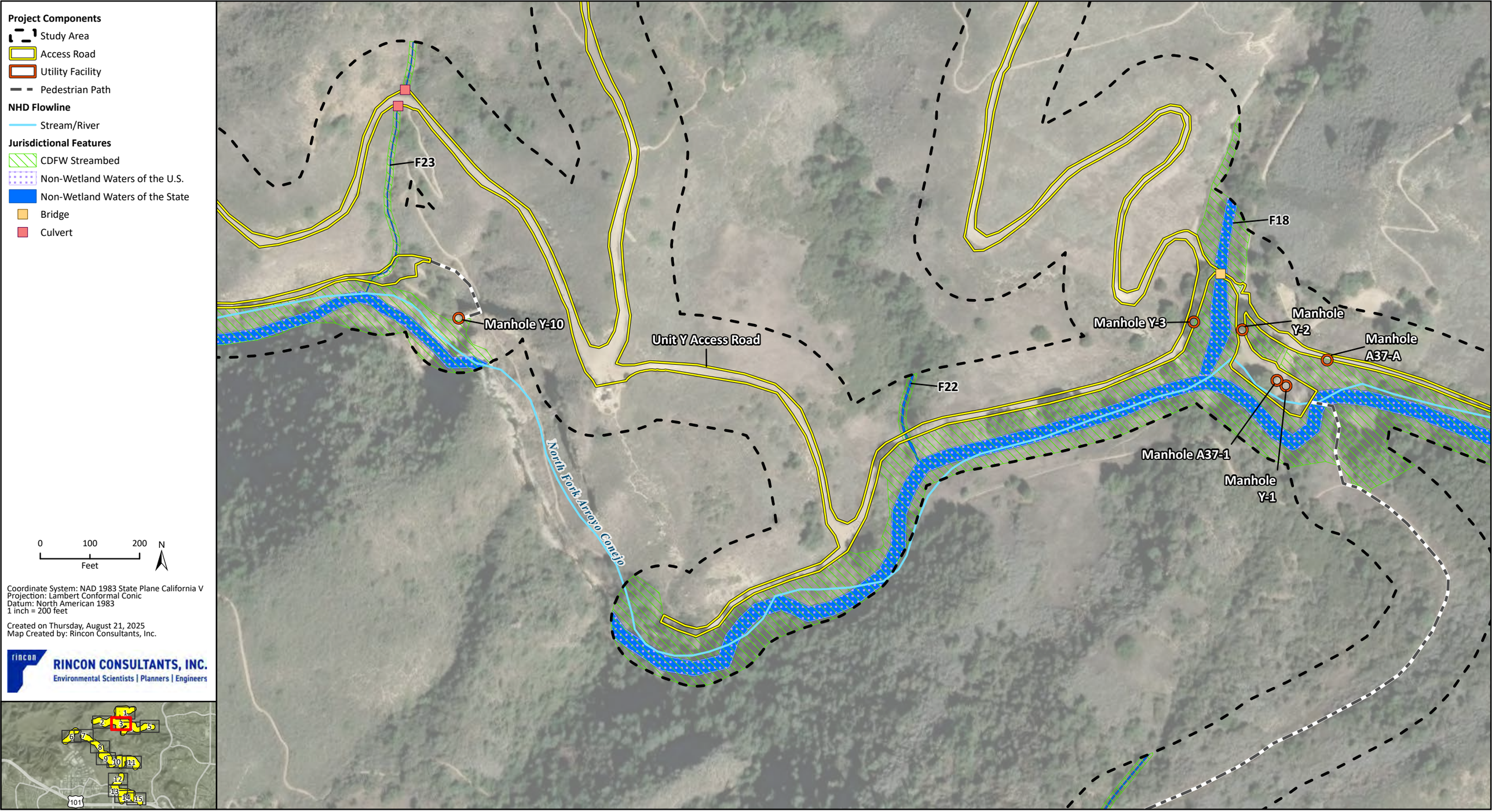
Project Components
Study Area
Access Road
Utility Facility
Pedestrian Path
NHD Flowline
Stream/River
Jurisdictional Features
CDFW Streambed
Non-Wetland Waters of the U.S.
Non-Wetland Waters of the State
Bridge
Culvert
F23
F18
F22
Manhole Y-10
Manhole Y-3
Manhole Y-2
Manhole A37-A
Manhole A37-1
Manhole Y-1
Unit Y Access Road
North Fork Arroyo Conejo
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
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24-16512 BIO
Fig 5 Jurisdiction Delineation

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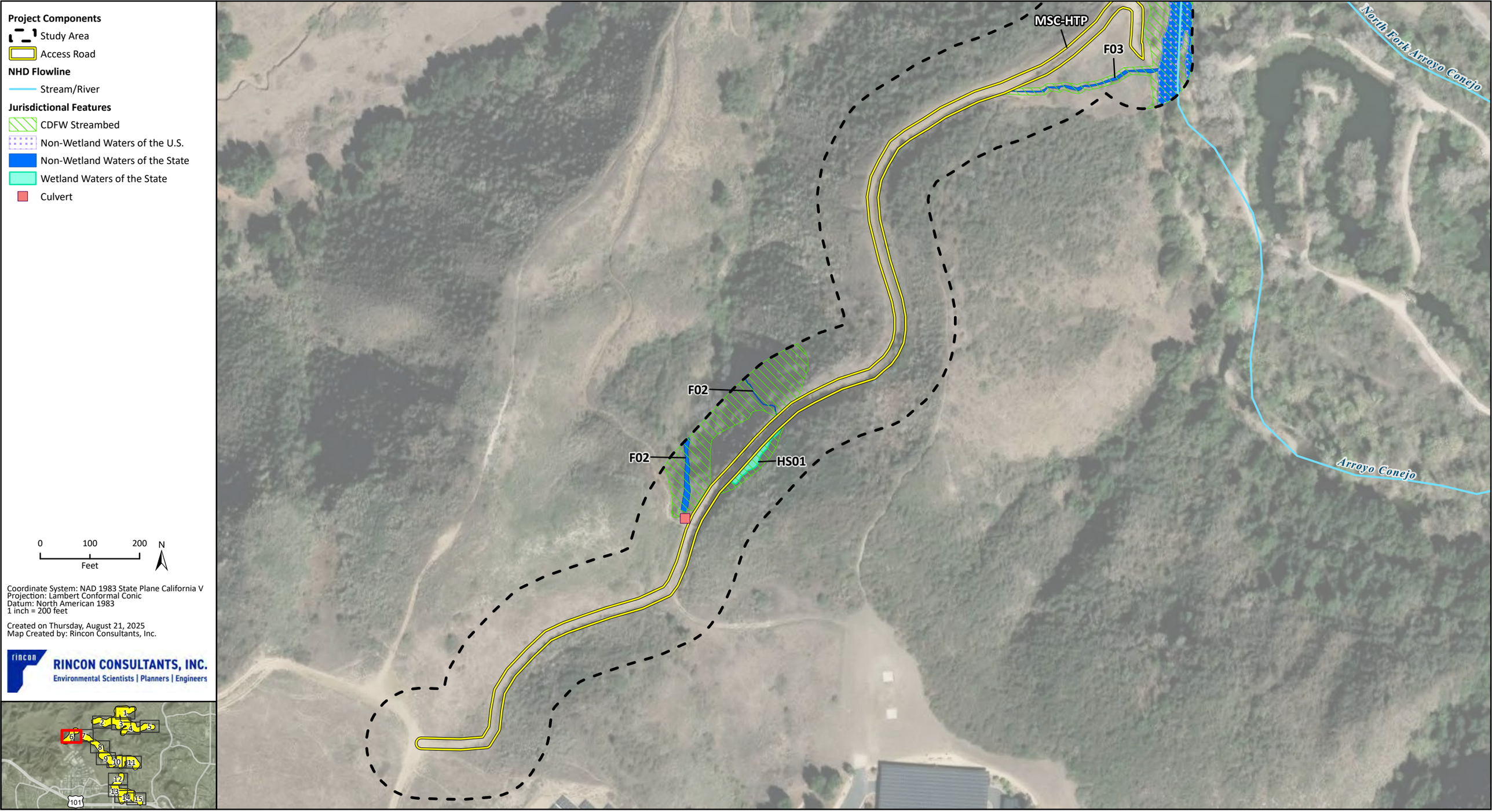

Project Components

- Study Area
- Access Road

NHD Flowline

- Stream/River

Jurisdictional Features

- CDFW Streambed
- Non-Wetland Waters of the U.S.
- Non-Wetland Waters of the State
- Wetland Waters of the State
- Culvert

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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Fig 5 Jurisdiction Delineation

Project Components
Study Area
Access Road
Utility Facility
Creek Crossing
Pedestrian Path
NHD Flowline
Stream/River
Jurisdictional Features
CDFW Streambed
Non-Wetland Waters of the U.S.
Non-Wetland Waters of the State
Temporary Jurisdictional Impacts
Temporary Fill Creek Crossing 2
Non-Wetland Waters of the U.S./State Temporary Impacts - 0.019 ac, 15 lin. ft.
CDFW Streambed Temporary Impacts - 0.027 ac, 15 lin. ft.
HCTP to D Structure
Temporary Fill Creek Crossing 3
Non-Wetland Waters of the U.S./State Temporary Impacts - 0.022 ac, 15 lin. ft.
CDFW Streambed Temporary Impacts - 0.029 ac, 15 lin. ft.
F01
Arroyo Conejo
Shapell Lateral Valves
Temporary Fill Creek Crossing 4
Non-Wetland Waters of the U.S./State Temporary Impacts - 0.017 ac, 15 lin. ft.
CDFW Streambed Temporary Impacts - 0.027 ac, 15 lin. ft.
Shapell Manhole
Roadrunner Ave
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet
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Fig 5 Jurisdiction Delineation

Project Components
Study Area
Access Road
Utility Facility
Creek Crossing
Access Road Washout Rebuild
Pedestrian Path
NHD Flowline
Stream/River
Jurisdictional Features
CDFW Streambed
Non-Wetland Waters of the U.S.
Non-Wetland Waters of the State
Temporary Jurisdictional Impacts
Culvert
Access Road Washout Rebuild at D Structure
Non-Wetland Waters of the U.S./State Temporary Impacts - 0.089 ac, 128 lin. ft.
CDFW Streambed Temporary Impacts - 0.071 ac, 128 lin. ft.
HCTP to D Structure
F04
CC-RC
Arroyo Conejo
D-Structure
F01
CALLE Salto
F05
Calle Salto Lateral
F01
F05
F06
Rancho Conejo Lateral
Seabreeze St
Seabreeze Ct
Sapparwood Ave
Lawrence Dr
Arroyo View St
Rancho Conejo
Pine Creek Ct
Amarelle St
Warmsprings St
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
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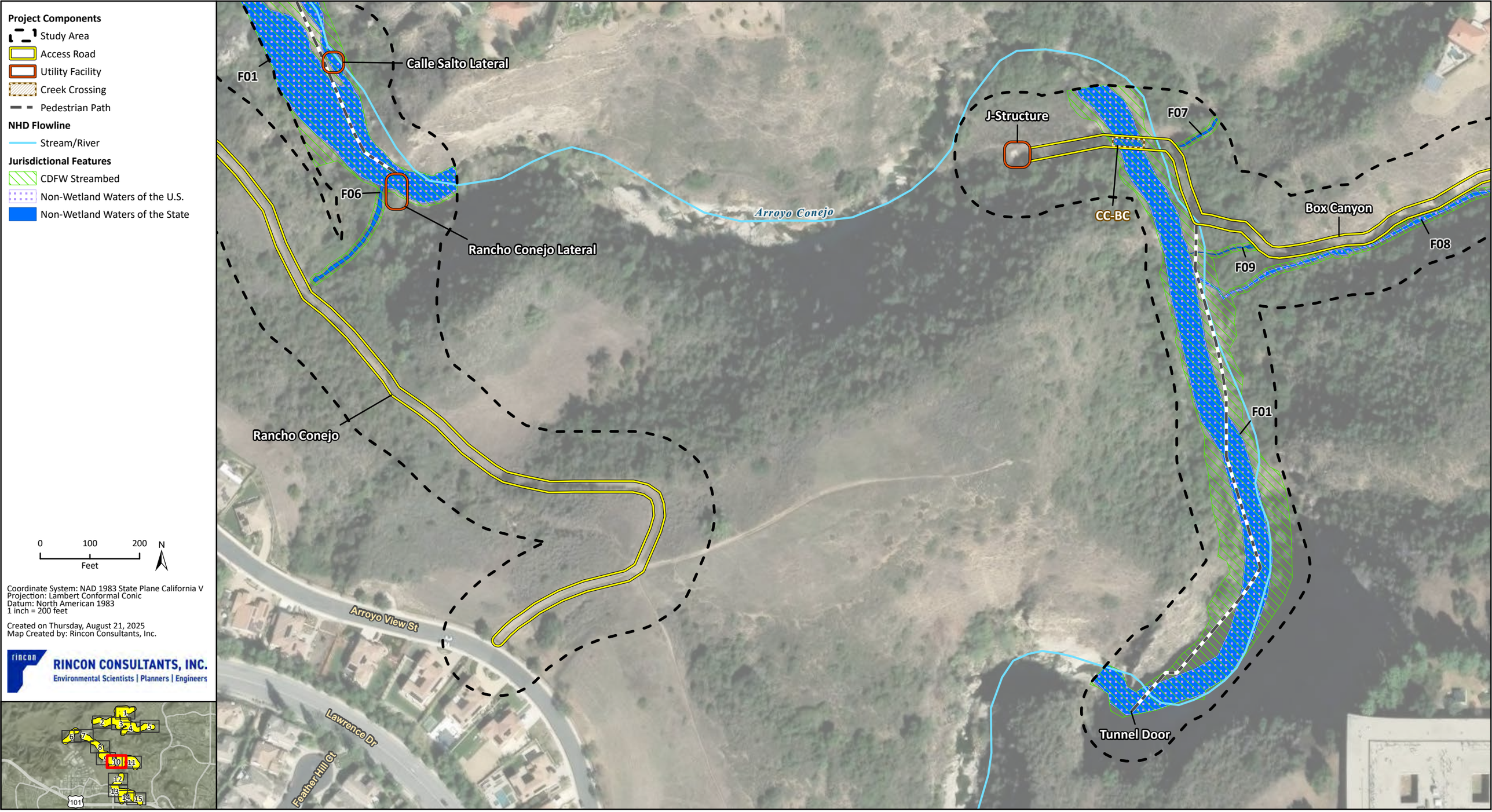
Fig 5 Jurisdiction Delineation



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Project Components
Study Area
Access Road
Pedestrian Path
NHD Flowline
Stream/River
Jurisdictional Features
CDFW Streambed
Non-Wetland Waters of the U.S.
Non-Wetland Waters of the State
Culvert
F09
F09
F09
F09
Box Canyon
F08
F09
Arroyo Conejo
F01
F10
F08
F11
CALLE Yucca
CALLE Compo
CALLE Las Trancas
CALLE Pecos
CAMINO Flores
0
100
200
Feet
N
Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
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Additional data provided by NHD, 2025.

Project Components

- Study Area
- Access Road
- Creek Crossing

NHD Flowline

- Stream/River

Jurisdictional Features

- CDFW Streambed
- Non-Wetland Waters of the U.S.
- Non-Wetland Waters of the State
- Culvert

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
1 inch = 200 feet

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Project Components

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NHD Flowline

- Stream/River

Jurisdictional Features

- CDFW Streambed
- Non-Wetland Waters of the U.S.
- Non-Wetland Waters of the State
- Wetland Waters of the State
- Culvert

0 100 200 Feet

N

Coordinate System: NAD 1983 State Plane California V
Projection: Lambert Conformal Conic
Datum: North American 1983
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Appendix I

Jurisdictional Delineation Datasheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 1/25/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP01

Investigator(s): Luis Aguilar & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.21119 Long: -118.92783 Datum: WGS 84

Soil Map Unit Name: Riverwash 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: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Platanus racemosa	5	Y	FAC
2. Melaleuca cf. viminalis	3	Y	NI*
3.			
4.			
	8 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Salix lasiolepis	25	Y	FACW
2. Baccharis salicifolia	5	N	FAC
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Stipa miliacea var. miliacea	20	Y	NI*
2. Foeniculum vulgare	1	N	NI*
3. Malacothrix cf. saxatilis	1	N	NI*
4. Marah macrocarpa	1	N	NI*
5. Hirschfeldia incana	<1	N	NI*
6.			
7.			
8.			
	23 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 77 % 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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:

NI* - No indicator in 2020 NWPL; assumed upland
Upland veg is invasive

SOIL

Sampling Point: SP01

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3.5	10 YR 3/3	100					SL	fine roots prevalent
3.5 - 9	10 YR 3/2	100					SL	15% cobble
9 - 20	2.5 Y 3/3	100					SC	

[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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 1/25/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP02

Investigator(s): Luis Aguilar & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

Landform (hillslope, terrace, etc.): low-flow channel Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.211261 Long: -118.927644 Datum: WGS 84

Soil Map Unit Name: Riverwash 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:

sampling pit examined within secondary channel

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	5	Y	FACW
2.			
3.			
4.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 100 % 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: SP02

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	5Y 3/2	100					SiC	
2 - 10	5Y 3/2	99	10YR 3/6	1	C	M	SiC	
10 - 16	5Y 3/2	97	5YR 5/8	1	C	M	SiC	
			5Y 5/1	2	D	M		

[1]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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 1/25/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP03

Investigator(s): Luis Aguilar & Maisie Borg Section, Township, Range: Section 31 Township 02N Range 19W

Landform (hillslope, terrace, etc.): low-flow channel Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.205721 Long: -118.917283 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes 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: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	50	Y	FACW
2. Washingtonia robusta	7	N	FACW
3.			
4.			
	57	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Heteromeles arbutifolia	5	Y	NI*
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Stipa miliacea var. miliacea	15	Y	NI*
2. Conium maculatum	3	N	FAW
3. Stellaria media	1	N	FACU
4.			
5.			
6.			
7.			
8.			
	19	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. Rubus ursinus	10	Y	FAC
2.			
	10	= Total Cover	

% Bare Ground in Herb Stratum 81 % 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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:

NI* - No indicator in 2020 NWPL; assumed upland

SOIL

Sampling Point: SP03

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	2.5 Y 5/3	30					SiL	
	2.5 Y 3/2	70					SiL	
6 - 8	2.5 Y 3/3	100					L	
8 - 11	10 YR 3/2	100					SiCL	
11 - 15	2.5 Y 4/4	100					SIC	

[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: rock/boulder

Depth (inches): 16

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 1/26/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP04

Investigator(s): Luis Aguilar & Maisie Borg Section, Township, Range: Section 6 Township 01N Range 19W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.20209 Long: -118.913283 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes 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:

sandbar/terrace between primary & secondary channel

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus fremontii	10	Y	NI**
2. Platanus racemosa	15	Y	FAC
3. Salix laevigata	10	Y	FACW
4. Washingtonia robusta	2	N	FACW
	37	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Malosma laurina	35	Y	NI*
2. Baccharis salicifolia	3	N	FAC
3. Quercus agrifolia	<1	N	NI*
4.			
5.			
	38	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Stipa miliacea var. miliacea	25	Y	NI*
2. Arundo donax	5	N	FACW
3. Foeniculum vulgare	1	N	NI*
4.			
5.			
6.			
7.			
8.			
	31	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 69 % 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (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:

NI* - No indicator in 2020 NWPL; assumed upland
NI** - FAC + in 1996 NWPL; No indicator in 2020 NWPL

SOIL

Sampling Point: SP04

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10 YR 3/2	100					SL	Fine roots throughout substrate
6 - 8.5	10 YR 2/2	100					SL	charcoal within layer
8.5 - 12	10 YR 3/2	100					SL	2% cobble

[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: boulder

Depth (inches): 12

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 1/26/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP05

Investigator(s): Luis Aguilar & Maisie Borg Section, Township, Range: Section 6 Township 01N Range 19W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.2028237 Long: -118.9157479 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: Riverine

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:

terrace just above OHWM

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix laevigata	20	Y	FACW
2.			
3.			
4.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Stipa miliacea var. miliacea	5	N	NI*
2. Arundo donax	60	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	65 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 35 % 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 _____	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:

NI* - No indicator in 2020 NWPL; assumed upland

SOIL

Sampling Point: SP05

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6.5	10 YR 3/2	75					L	
	10 YR 2/2	25						
6.5 - 16	10 YR 2/1	100					SiCL	

[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: boulder

Depth (inches): 16

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/1/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP06

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 26.8

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.207305 Long: -118.919985 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: R4SBC

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:

examined adjacent to creek

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	30	Y	FACW
2. Salix lasiolepis	30	Y	FACW
3. Eucalyptus camadulensis	3	N	FAC
4. Platanus racemosa	2	N	FAC
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Baccharis salicifolia	30	Y	FAC
2.			
3.			
4.			
5.			
	30	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Galium aparine	10	N	FACU
2. Artmesia douglasiana	40	Y	FAC
3. Oxalis pes-caprae	3	N	NI*
4. Foeniculum vulgare	2	N	NI*
5.			
6.			
7.			
8.			
	55	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (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:

NI* - No indicator in 2020 NWPL

SOIL

Sampling Point: SP06

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	2.5Y3/1	100					SiC	
5-15	2.5Y3/2	100					SiC	

[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: roots

Depth (inches): 15

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/1/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP07

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 31 Township 02N Range 19W

Landform (hillslope, terrace, etc.): raised sandbar in stream Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.206374 Long: -118.918261 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: R4SBC

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: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	20	Y	FACW
2. Salix laevigata	10	N	FACW
3. Platanus racemosa	50	Y	FAC
4.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Baccharis salicifolia	20	Y	FAC
2. Salix lasiolepis	20	Y	FACW
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Stipa miliacea	3	N	NI*
2. Oenothera elata	10	Y	FACW
3. Typha sp.	5	Y	OBL
4. Melilotus sp.	1	N	NI*
5.			
6.			
7.			
8.			
	19	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 81 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (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:

NI* - No indicator in 2020 NWPL

SOIL

Sampling Point: SP07

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	2.5Y3/2	100					SC	40% cobble, very rooted

[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: roots/boulders

Depth (inches): 6

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:

algal mats

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/1/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP08

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 6 Township 01N Range 19W

Landform (hillslope, terrace, etc.): stream shoreline Local relief (concave, convex, none): none Slope (%): 34

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.205567 Long: -118.917060 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: R4SBC

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: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix laevigata	50	Y	FACW
2. Washingtonia robusta	5	N	FACW
3.			
4.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Baccharis salicifolia	20	Y	FACW
2. Salix lasiolepis	10	Y	FAC
3.			
4.			
5.			
	30	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Persicaria sp.	7	Y	OBL
2. Apiaceae sp.	1	N	NI*
3. Typha sp.	20	Y	OBL
4.			
5.			
6.			
7.			
8.			
	28	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 72 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (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:

NI* - No indicator in 2020 NWPL

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/2/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP09

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.209116 Long: -118.923462 Datum: WGS 84

Soil Map Unit Name: Riverwash NWI classification: PSSA / R4SBC

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:

Potential veg management of Arundo donax in vicinity

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. none			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Typha sp.	5	Y	OBL
2. Ambrosia psilostachya	1	N	NI*
3. Nasturtium officinale	5	Y	OBL
4. Stachys sp.	2	N	OBL
5.			
6.			
7.			
8.			
	13 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 87 % 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	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:

NI* - No indicator in 2020 NWPL

SOIL

Sampling Point: SP09

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 3/2	100					S	
3-6.5	5Y 2.5/1	100					CL	

[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: boulders/water table

Depth (inches): 6.5

Hydric Soil Present? Yes _____ No ✓

Remarks:

boulders/high water table restricting examination of pedon. No indicators in top 6.5 inches.

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): 6.5

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 4.5

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/2/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP10

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 31 Township 02N Range 19W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): convex Slope (%): 0

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.206347 Long: -118.918142 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: R4SBC

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:

terrace/island located above OHWM of creek.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. none			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. none			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Typha sp.	100	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = 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: SP10

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	2.5Y 3/2	100					LS	30% cobble
3-10	10YR 3/2	100					SCL	

[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: boulders

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

boulders/high water table restricting examination of pedon. No indicators

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): 10

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 7

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/3/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP11

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

Landform (hillslope, terrace, etc.): seep Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.209167 Long: -118.930455 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes 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:

hillside seep along access road

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. none			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Salix cf. Salix laevigata	40	Y	FACW
2. Juglans californica	1	N	FACU
3.			
4.			
5.			
	41 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Cyperus eragrostis	6	N	FACW
2. Epilobium ciliatum	55	Y	FACW
3. Apium graveolens	10	N	NI*
4. Artemisia douglasiana	2	N	FAC
5. Arundo donax	5	N	FACW
6. Helminthotheca echioides	2	N	FAC
7.			
8.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
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: 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	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:

NI* - No Indicator in 2020 NWPL

SOIL

Sampling Point: SP11

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	100					SC	mucky top 1.5 inches
2-8.5	GLEY 1 2.5/5GY	80					SC	5% bedrock fragments
	GLEY 1 4/5G /2	16	White 2.5Y/2/8.5	1	D	M		
			2.5Y5/6	3	C	M		

[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: bedrock

Depth (inches): 8.5 inches

Hydric Soil Present? Yes ✓ No ___

Remarks:

bedrock

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

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/3/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP12

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

Landform (hillslope, terrace, etc.): seep Local relief (concave, convex, none): concave Slope (%): 5

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.208968 Long: -118.930685 Datum: WGS 84

Soil Map Unit Name: San Benito clay loam, 50 to 75 percent slopes, MLRA 20 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:

Hillsdside seep adjacent to road. Pit considered upland - no primary hydrological indicators present. Only one secondary indicator present.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Baccharis salicifolia	60	Y	FAC
2. Toxicodendron diversilobum	5	N	FACU
3.			
4.			
5.			
	65 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Artemisia douglasiana	30	Y	FAC
2. Helminthotheca echioides	2	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	32 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 68 % 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 _____	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: SP12

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	2.5Y 4/2	100					SiC	
2 - 9	10 YR 4/2	98	7.5YR 5/6	2	C	M	CL	

[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: bedrock

Depth (inches): 9

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/3/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP13

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 36 Township 02N Range 20W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 3

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.208902° Long: -118.930732° Datum: WGS 84

Soil Map Unit Name: San Benito clay loam, 50 to 75 percent slopes, MLRA 20 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:

hillslope adjacent to roadside seep with riparian veg in herb strata

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. none			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. Baccharis pilularis	2	N	NI*
2. Artemisia californica	7	Y	NI*
3. Malacothamnus fasciculatus	1	N	NI*
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Artemisia douglasiana	60	Y	FAC
2. Medicago polymorpha	2	N	FACU
3. Solanum xanti	1	N	NI*
4.			
5.			
6.			
7.			
8.			
	63 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 37 % 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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:

NI* - No indicator in 2020 NWPL

SOIL

Sampling Point: SP13

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 1	10YR 4/2	100					SiC	
1 - 6	10YR 3/2	100					CL	

[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: bedrock

Depth (inches): 6

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 2/4/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP14

Investigator(s): Ryan Myers & Maisie Borg Section, Township, Range: Section 6 Township 01N Range 19W

Landform (hillslope, terrace, etc.): streambed shoreline Local relief (concave, convex, none): concave Slope (%): 2

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.201674 Long: -118.907894 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: R4SBC

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:

Prevalence of nonnative veg species along drainage
Concrete 8 inches below surface

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix laevigata	20	Y	FACW
2. Platanus racemosa	10	Y	FAC
3. Washingtonia robusta	10	Y	FACW
4.			
	40 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5)			
1. Arundo donax	30	Y	FACW
2. Typha sp.^	10	Y	OBL
3. Melilotus albus	2	N	NI*
4.			
5.			
6.			
7.			
8.			
	42 = Total Cover		
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 58 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (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:

^ - All Typha species OBL in 2020 NWL
NI* - No indicator in 2020 NWPL

SOIL

Sampling Point: SP14

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 -2	10YR 3/2	100					SL	20% cobble
2 - 8	10YR 2/2	98	10YR 4/6	2	C	M	SC	80% cobble

[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: concrete

Depth (inches): 8

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 5/31/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP15

Investigator(s): Luis Aguilar & Parker Richardson Section, Township, Range: Section 6 Township 01N Range 19W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.194641° Long: -118.907626° Datum: WGS 84

Soil Map Unit Name: Igneous rock land NWI classification: R4SBC

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:

Terrace below OHWM; adjacent to concrete access road

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Washingtonia robusta	10	Y	FACW
2. Platanus racemosa	4	N	FAC
3. Salix lasiolepis	25	Y	FACW
4. Melaleuca cf. viminalis	1	N	NI*
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Typha sp.^	30	Y	OBL
2. Melilotus indicus	<1	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	31	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. none			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 69 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (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:

^ - All Typha species OBL in 2020 NWL
NI* - No indicator in 2020 NWPL

SOIL

Sampling Point: SP15

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 4/1	100					SL	
3 - 6.5	2.5 Y 3/2	100					LS	charcoal, 5% cobble
6.5 - 11	GLEY 1 2.5/10Y	100					SL	muck
11 - 15	GLEY 1 2.5/10Y	100					SL	

[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:

dense roots throughout profile

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): 10

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 6.5

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 6/01/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP16

Investigator(s): Luis Aguilar & Lee Benvau Section, Township, Range: Section 8 Township 01N Range 19W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.18617 Long: -118.901558 Datum: WGS 84

Soil Map Unit Name: Riverwash NWI classification: Freshwater Forested/Sh

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:

Hillside seep directly below private residence; Anthropogenic channelization towards culvert and away from road

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	35	Y	FACU
2. Salix lasiolepis	35	Y	FACW
3.			
4.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Apium graveolens	1	N	NI**
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	1	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. Rubus ursinus	<1	N	FAC
2. Clematis lasiantha	<1	N	NI*
	1	= Total Cover	

% Bare Ground in Herb Stratum 98 % 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 35	x 2 = 70
FAC species 2	x 3 = 6
FACU species 35	x 4 = 140
UPL species 1	x 5 = 5
Column Totals: 73 (A)	221 (B)

Prevalence Index = B/A = 3.0

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:

NI* - No indicator in 2020 NWPL; moss prevalent

NI** - Plants not listed in 2020 NWPL. Species is a hydrophyte and associated with mesic environments. Treating as FAC or wetter.

SOIL

Sampling Point: SP16

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	GLEY 1 2.5/N	20					S	muck; 80% cobble
	GLEY 1 2.5/10Y	80					SiL	80% cobble
3 - 9	GLEY 1 3/10Y	70					S	20% cobble
	GLEY 1 2/.5/N	30					S	muck; 20% cobble

[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:

muck only present within 30% of pedon

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 6/02/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP17

Investigator(s): Luis Aguilar & Lee Benvau Section, Township, Range: Section 8 Township 01N Range 19W

Landform (hillslope, terrace, etc.): low-flow channel Local relief (concave, convex, none): convex Slope (%): 1

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.1887922 Long: -118.902838 Datum: WGS 84

Soil Map Unit Name: Rincon silty clay loam, 15 to 30 percent slopes, eroded NWI classification: Riverine

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:

Sampling point adjacent to ponding in secondary channel along access road

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Platanus racemosa	20	Y	FAC
2. Salix lasiolepis	40	Y	FACW
3.			
4.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Nasturtium officinale	1	N	OBL
2. Polypogon viridis	10	Y	FACW
3. Cyperus eragrostis	2	N	FACW
4. Juncus xiphioides	2	N	OBL
5. Helminthotheca echioides	2	N	FAC
6. Eleocharis macrostachya	1	N	NI*
7. Apium graveloens	1	N	NI*
8.			
	19	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 81 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (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:

NI* - Plants not listed in 2020 NWPL. Species is a hydrophyte and associated with mesic environments. Treating as FAC or wetter.

SOIL

Sampling Point: SP17

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3.5	10YR 3/2	100					S	
3.5 - 7	GLEY 1 2.5/N	100					LS	
7 - 10	10 YR 3/2	87	5 YR 4/6	3	C	M	SiL	
	5 Y 3/2	10						

[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: boulder

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

Not enough redox (5%) to get to Redox dark surface (F6)

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): 9

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 6/02/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP18

Investigator(s): Luis Aguilar & Lee Benvau Section, Township, Range: Section 7 Township 01N Range 19W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.189086 Long: -118.907229 Datum: WGS 84

Soil Map Unit Name: Gilroy loam, 15 to 50 percent slopes, very rocky NWI classification: Freshwater Forested/Sh

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: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix laevigata	45	Y	FACW
2. Salix lasiolepis	25	Y	FACW
3. Alnus rhombifolia	2	N	FACW
4. Platanus racemosa	5	N	FAC
	77	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Baccharis salicifolia	2	N	FAC
2.			
3.			
4.			
5.			
	2	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Schoenoplectus americanus	10	Y	OBL
2. Polypogon monspeliensis	5	N	FACW
3. Veronica anagallis-aquatica	3	N	OBL
4. Erythranthe guttata	3	N	OBL
5. Persicaria lapathifolia	3	N	FACW
6. Eleocharis macrostachya	<1	N	NI*
7. Apium graveloens	2	N	NI*
8. Rumex conglomeratus	2	N	FACW
	29	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 71 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (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:

NI* - Plants not listed in 2020 NWPL. Species is a hydrophyte and associated with mesic environments. Treating as FAC or wetter.

SOIL

Sampling Point: SP18

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6.5	10YR 2/1	100					L	30% root muck
6.5 - 12.5	GLEY 1 2.5/N	100					L	

[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): 5

Saturation Present? (includes capillary fringe) Yes ✓ No _____ Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 6/02/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP19

Investigator(s): Luis Aguilar & Lee Benvau Section, Township, Range: Section 7 Township 01N Range 19W

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

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.189011 Long: -118.9071201 Datum: WGS 84

Soil Map Unit Name: Gilroy loam, 15 to 50 percent slopes, very rocky NWI classification: Freshwater Forested/Sh

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:

Terrace just below OHWM. Paired pit to SP18 examined on adjacent side of channel as it was the next terrace available outside of bedrock. Paired pit on same side not feasible.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix laevigata	30	Y	FACW
2. Salix lasiolepis	40	Y	FACW
3. Platanus racemosa	15	Y	FAC
4.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Juglans californica	<1	N	FACU
2.			
3.			
4.			
5.			
	<1	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Xanthium strumarium	4	Y	FAC
2. Carduus pycnocephalus	2	N	NI*
3. Bromus diandrus	2	N	NI*
4. Stipa miliacea var. miliacea	3	Y	NI*
5. Euphorbia peplus	1	N	NI*
6. Hirschfeldia incana	2	N	NI*
7.			
8.			
	14	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 86 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (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:

NI* - Plants not listed in 2020 NWPL; assumed upland
Large component of non-native annuals

SOIL

Sampling Point: SP19

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6	10 YR 3/2	100					S	
6 - 12	10 YR 3/2	100					L	

[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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 6/03/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP20

Investigator(s): Ryan Myers & Lee Benvau Section, Township, Range: Section 6 Township 01N Range 19W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 6

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.2014502 Long: -118.907744 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: Riverine

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:

Hillslope of floodplain of Arroyo Conejo

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus agrifolia	20	Y	NI*
2. Umbellularia californica	20	Y	FAC
3. Platanus racemosa	5	N	FAC
4. Alnus rhombifolia	15	Y	FACW
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. Toxicodendron diversilobum	15	Y	FACU
2. Baccharis pilularis	5	Y	NI*
3.			
4.			
5.			
	20	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Juncus cf. balticus	20	Y	FACW
2. Stipa miliacea var. miliacea	5	N	NI*
3. Artemisia douglasiana	2	N	FAC
4.			
5.			
6.			
7.			
8.			
	27	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 73 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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:

NI* - Plants not listed in 2020 NWPL; assumed upland

SOIL

Sampling Point: SP20

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 11	10 YR 3/2	100					SiL	

[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: roots

Depth (inches): 11

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo Creek Maintenence Agreement City/County: Thousand Oaks, Ventura Co. Sampling Date: 6/03/2022

Applicant/Owner: City of Thousand Oaks State: CA Sampling Point: SP21

Investigator(s): Ryan Myers Section, Township, Range: Section 6 Township 01N Range 19W

Landform (hillslope, terrace, etc.): low-flow Local relief (concave, convex, none): concave Slope (%): 3

Subregion (LRR): C - Southern California Coastal Plain Lat: 34.2010748 Long: -118.9065454 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: Riverine

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:

examined in tributary to Arroyo Conejo that parallels Box Canyon access road

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus agrifolia	15	Y	NI*
2. Salix laevigata	10	Y	FACW
3. Platanus racemosa	15	Y	FAC
4.			
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. None			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5)			
1. Hirschfeldia incana	5	Y	NI*
2. Stipa miliacea var. miliacea	5	Y	NI*
3. Phacelia cicutaria	1	N	NI*
4. Euphorbia peplus	3	N	NI*
5. Phacelia viscida	1	N	NI*
6. Sonchus oleraceus	2	N	UPL
7. Carduus pycnocephalus	4	N	NI*
8. Malacothrix saxatilis	3	N	NI*
	24	= Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 76 % 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (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:

NI* - Plants not listed in 2020 NWPL; assumed upland

SOIL

Sampling Point: SP21

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10 YR 4/2	100					SL	40% cobble
2 - 8	10YR 4/2	100					CL	5% cobble
8 - 20	10 YR 4/2	100					SCL	50% granule

[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:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Arroyo Conejo Creek Maint
Project Number: 58940.001
Stream: S09 (OHWM-01)
Investigator(s): Ryan Myers, Maisie Borg

Date: 06/09/22 **Time:** 12:00
Town: Thousand Oal **State:** CA
Photo begin file#: **Photo end file#:**

Y ☐ / N ■ Do normal circumstances exist on the site?

Y ■ / N ☐ Is the site significantly disturbed?

Location Details:
Box Canyon access road northeast of Calle Las Trancas

Projection: **Datum:** WGS-84
Coordinates: 34.201528, -118.904861

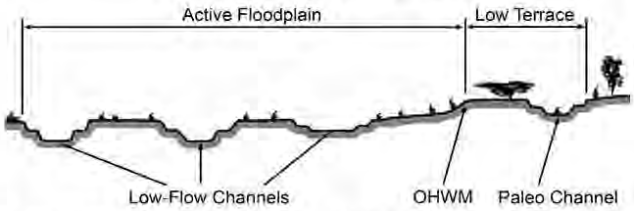
Potential anthropogenic influences on the channel system:
Source of S09 may originate from urban run-off during storm events from surrounding areas. S09 conveys flow along access road and may be subject to periodic maintenance/grading.

Brief site description:
S09 is an ephemeral/intermittent drainage that originates potentially from urban run-off at two upslope locations abutting private residences. S09 is heavily incised along segment of the drainage and eventually drains into Arroyo Conejo (S01). A separate intermittent/perennial drainage (S08) generally parallels Box Canyon Road and drains into S01

Checklist of resources (if available):

- ■ Aerial photography
  Dates:
- ■ Topographic maps
- ☐ Geologic maps
- ■ Vegetation maps
- ■ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ■ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

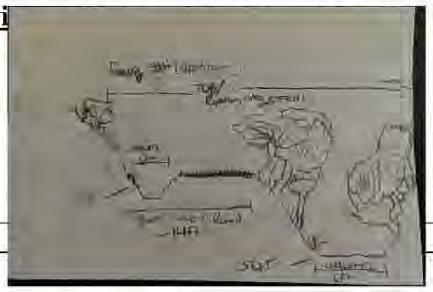


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ■ GPS
   - ☐ Other:

Project ID: 58940.001 **Cross section ID:** OHWM-1 **Date:** 06/09/22 **Time:** 12:00

Cross section drawi



OHWM

GPS point: 34.201535, -118.904884

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [x] Other: drift deposits
- [ ] Other: _____

Comments:

OHW of S09 heavily incised in this sample x-section. Drift deposits. No veg within OHWM of S09.

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [ ] Low Terrace

GPS point: 34.2015353, -118.904884

Characteristics of the floodplain unit:

Average sediment texture: cobble

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: 0 %

Community successional stage:

- [x] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [x] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

No veg in low-flow of S09. Drift deposits, some sediment sorting.

Project ID: 58940.001 **Cross section ID:** OHWM-1 **Date:** 06/09/22 **Time:** 12:00

Floodplain unit: ☐ Low-Flow Channel ■ Active Floodplain ☐ Low Terrace

GPS point: 34.201467, -118.904889

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 50 % Tree: 30 % Shrub: 15 % Herb: 5 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ■ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ■ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Floodplain extent include a S08, a main tributary to S01. Quercus agrifolia, Salix sp. in tree strata. Mostly upland species in shrub/herb layer. Malosma laurina, Hirschfeldia incana

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo/Unit Y City/County: Thousand Oaks/Ventura Sampling Date: 10/27/22

Applicant/Owner: Thousand Oaks State: CA Sampling Point: SP22

Investigator(s): Luis Aguilar (SWCA) Section, Township, Range: 36, 2N, 20W

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

Subregion (LRR): LRR C Lat: 34.214440 Long: -118.9142780 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: PFOA

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:

SP01 within terrace adjacent to OHWM

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	30	Y	FACW
2. Platanus racemosa	20	Y	FAC
3. Salix laevigata	20	Y	FACW
4.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. None			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. Anemopsis californica	85	Y	OBL
2. Artemisia douglasiana	15	N	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 15 ft)			
1. None			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (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: SP22

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	10YR 2/2	100					SiCL	
2 - 7	10 YR 3/2	60					SiCL	
	2.5 Y 4/4	40						
7 - 12	2.5Y 4/2	95	7.5YR 3/4	3	C	PL	SiC	
			2.5Y 5/6	1	C	M		
			2.5 Y 5/4	1	C	PL/M		
12 - 20	Gley 1 4/5G-/1	85	10 YR 4/6	10	C	PL	SiC	
			10 YR 4/6	5	C	M		

[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: None

Depth (inches): ___

Hydric Soil Present? Yes ✓ No ___

Remarks:

Lacking 1 in. to qualify for a depleted matrix (F3)
Moist but not saturated from depths 7 - 20 in

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo/Unit Y City/County: Thousand Oaks/Ventura Sampling Date: 10/27/22

Applicant/Owner: Thousand Oaks State: CA Sampling Point: SP23

Investigator(s): Luis Aguilar (SWCA) Section, Township, Range: 36, 2N, 20W

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

Subregion (LRR): LRR C Lat: 34.2143012 Long: -118.9143045 Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes NWI classification: PFOA

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:

Examined on terrace above OHWM at a higher elevation than SPO1.
Facing upstream, SP01 on right hand side (north) of stream. SP02 on right (south)

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus agrifolia	40	Y	NI*
2. Salix laevigata	10	Y	FACW
3.			
4.			
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. Toxicondendron diversilobum	5	Y	FACU
2. Rosa californica	15	Y	FAC
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. Solidago velutina	2	N	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	2 = Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 98 % 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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:

NI* No indicator in 2020 NWPL; assumed upland

SOIL

Sampling Point: SP23

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 1	2.5Y 4/2	100					L	
1 - 4	2.5Y 3/3	100					L	
4 - 13	10YR 2/2	100					C	
13 - 18	10YR 2/2	65					C	
	10YR 4/2	35						

[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: None

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo/Unit Y | City/County: Thousand Oaks/Ventura | Sampling Date: 10/27/22

Applicant/Owner: Thousand Oaks | State: CA | Sampling Point: SP24

Investigator(s): Luis Aguilar (SWCA) | Section, Township, Range: 36, 2N, 20W

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): LRR C | Lat: 34.213880 | Long: -118.915183 | Datum: WGS 84

Soil Map Unit Name: Hambright very rocky loam, 15 to 75 percent slopes | NWI classification: PFOA

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:

On terrace below OHWM

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus fremontii	10	Y	FAC+*
2.			
3.			
4.			
	10 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. None			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. Stipa miliacea	55	Y	NI^
2. Artemisia douglasiana	5	N	FAC
3. Erigeron canadensis	3	N	FACU
4.			
5.			
6.			
7.			
8.			
	63 = Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 37 % 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (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:

*FAC+ in 1996 NWPL and no indicator in 2020 NWPL; species is phreatophyte with hydrophytic understory.
^ NI* - No indicator is 2020 NWPL; assumed upland

SOIL

Sampling Point: SP24

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 2	2.5Y 4/3	97	10YR 4/6	3	C	PL	SiCL	
2 - 6	10YR 2.2	100					SiCL	
6 - 11	10YR 2/2	100					CL	
11 - 13	10YR 2/2	100					SiC	
13 - 20	10YR 2.2	100					SiC	moist but not saturated

[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: None

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:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo/Unit Y | City/County: Thousand Oaks/Ventura | Sampling Date: 10/28/22

Applicant/Owner: Thousand Oaks | State: CA | Sampling Point: SP25

Investigator(s): Luis Aguilar (SWCA) | Section, Township, Range: 36, 2N, 20W

Landform (hillslope, terrace, etc.): terrace | Local relief (concave, convex, none): none | Slope (%): 0

Subregion (LRR): LRR C | Lat: 34.214601 | Long: -118.905439 | Datum: WGS 84

Soil Map Unit Name: San Benito clay loam, 30 to 50 percent slopes, eroded | NWI classification: PFOA

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: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rhombifolia	40	Y	FACW
2. Salix laevigata	40	Y	FACW
3.			
4.			
	80 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. None			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. Stipa miliacea	10	Y	NI*
2. Apium graveolens	5	Y	NI^
3.			
4.			
5.			
6.			
7.			
8.			
	15 = Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 85 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (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:

*NI - No indicator is 2020 NWPL; assumed upland

^NI - No indicator is 2020 NWPL; Invasive aquatic species with no indicator; treated as FAC or wetter.

SOIL

Sampling Point: SP25

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 5	10YR 3/2	100					SiCL	
5 - 9	10YR 3/1	97	5YR 3/4	3	C	PL	SiCL	
9 - 11	10YR 2/2	96	10YR 4/6	4	C	PL	C	
11 - 13	10YR 3/1	100					SL	20% pebble
13 - 16	10YR 3/1	100					SL	50% pebble

[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: boulder (?)

Depth (inches): 16

Hydric Soil Present? Yes ✓ No ___

Remarks:

restrictive layer sounded hollow with shovel; may not be boulder.

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): 11

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Arroyo Conejo/Unit Y City/County: Thousand Oaks/Ventura Sampling Date: 10/28/22

Applicant/Owner: Thousand Oaks State: CA Sampling Point: SP26

Investigator(s): Luis Aguilar (SWCA) Section, Township, Range: 36, 2N, 20W

Landform (hillslope, terrace, etc.): hillslope terrace Local relief (concave, convex, none): none Slope (%): 2

Subregion (LRR): LRR C Lat: 34.214667 Long: -118.905529 Datum: WGS 84

Soil Map Unit Name: San Benito clay loam, 30 to 50 percent slopes, eroded NWI classification: PFOA

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:

Hydric soils not examined; assumed absent due to lack of hydrophytic vegetation and surface hydrology.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus fremontii	35	Y	NI^
2. Quercus agrifolia	20	y	NI*
3.			
4.			
	55 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. Toxicodendron diversilobum	5	Y	FACU
2.			
3.			
4.			
5.			
	5 = Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	15 = Total Cover		
Woody Vine Stratum (Plot size: 15 ft)			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (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:

^NI - No indicator in 2020 NWPL; FAC+ in 1996 NWPL - considered a phreatophyte

*NI - No indicator in 2020 NWPL; assumed upland

SOIL

Sampling Point: SP26

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[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:

Hydric soils not examined

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 surface hydrological indicators observed.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Arroyo Conejo Maintenance
Project Number: 58940
Stream: Unnamed Drainage
Investigator(s): Luis Aguilar

Date: 10/25 **Time:** 1100
Town: Thousand Oal **State:** CA
Photo begin file#: **Photo end file#:**

Y ☐ / N ■ Do normal circumstances exist on the site?

Y ☐ / N ■ Is the site significantly disturbed?

Location Details:
Wildwood Regional Park

Projection: **Datum:** WGS-84
Coordinates: 34.214120°, -118.907578°

Potential anthropogenic influences on the channel system:
Maintained access road intersects drainage immediately downstream of location represented in datasheet.

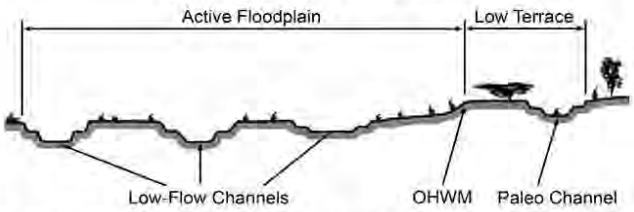
Brief site description:
Ephemeral/intermittent tributary to North Fork Arroyo Conejo. Drainage within Wildwood Regional Park.

Checklist of resources (if available):

- ■ Aerial photography
  Dates:
- ■ Topographic maps
- ☐ Geologic maps
- ■ Vegetation maps
- ■ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ■ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

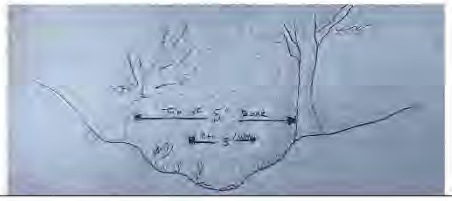


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ■ GPS
   - ☐ Other:

Project ID: 58940 **Cross section ID:** OHWM-02 **Date:** 10/25/2022 **Time:** 11:00

Cross section drawing:



OHWM

GPS point: 34.214110°, -118.907579°

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Soil eroded to bedrock within OHWM. Largely unvegetated OHWM.

Floodplain unit:

- [ ] Low-Flow Channel
- [x] Active Floodplain
- [ ] Low Terrace

GPS point: 34.214107°, -118.907584°

Characteristics of the floodplain unit:

Average sediment texture: Medium silt

Total veg cover: 60 % Tree: 15 % Shrub: 15 % Herb: 30 %

Community successional stage:

- [ ] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [x] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [x] Benches
- [x] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

Drainage may be supporting adjacent oak woodland and scrub oak shrubland.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Arroyo Conejo Maintenance
Project Number: 58940
Stream: Unnamed Drainage
Investigator(s): Luis Aguilar

Date: 10/27 **Time:** 1200
Town: Thousand Oal **State:** CA
Photo begin file#: **Photo end file#:**

Y ☐ / N ■ Do normal circumstances exist on the site?

Y ■ / N ☐ Is the site significantly disturbed?

Location Details:
Wildwood Regional Park

Projection: **Datum:** WGS-84
Coordinates: 34.215073°, -118.910966°

Potential anthropogenic influences on the channel system:
Maintained access road intersects drainage immediately downstream of location represented in datasheet. A culvert facilitates flow across a second slope approximately 300 feet upslope of datasheet coordinates.

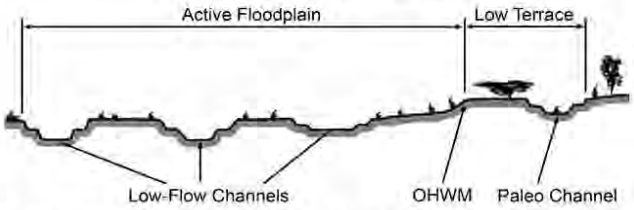
Brief site description:
Ephemeral tributary to North Fork Arroyo Conejo. Drainage within Wildwood Regional Park.

Checklist of resources (if available):

- ■ Aerial photography
  Dates:
- ■ Topographic maps
- ☐ Geologic maps
- ■ Vegetation maps
- ■ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ■ Global positioning system (GPS)
- ☐ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units



Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ■ GPS
   - ☐ Other:

Project ID: 58940 **Cross section ID:** OHWM-03 **Date:** 10/27/2022 **Time:** 12:00

Cross section drawing:

OHWM

GPS point: 34.215073°, -118.910966°

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:

Drainage heavily insided with a shared OHWM/top of bank.

Floodplain unit:

- [ ] Low-Flow Channel
- [x] Active Floodplain
- [ ] Low Terrace

GPS point: 34.215073°, -118.910966°

Characteristics of the floodplain unit:

Average sediment texture: Medium silt

Total veg cover: 30 % Tree: 0 % Shrub: 0 % Herb: 30 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [ ] Benches
- [x] Soil development
- [x] Surface relief
- [ ] Other: _____
- [ ] Other: _____
- [ ] Other: _____

Comments:

Shared OHWM/TOB. Vegetated with non-native upland grasses and mustards.

APPENDIX C.2

Jurisdictional Delineation of the Box Canyon Manhole and Road Improvements Project

November 14, 2025

City of Thousand Oaks
Public Works Department
2100 Thousand Oaks Boulevard
Thousand Oaks, California 91362

Attn: Mr. Patrick McCulloch, Utilities Maintenance Supervisor
Mr. Jon Turner, PE, Principal Civil Engineer

Subj: Jurisdictional Delineation and Habitat Assessment Peer Review
(*Envicom Corporation Project #2025-112-01*)

Dear Mr. McCulloch and Mr. Turner:

Envicom Corporation (Envicom) was recently contracted by the City of Thousand Oaks (City) to assist with the Box Canyon Manhole and Road Improvements Project (Box Canyon Project), which proposes minor improvements within the Box Canyon area of the Arroyo Conejo Corridor within the City. Rincon Consultants (Rincon) previously prepared a Jurisdictional Delineation and Habitat Assessment (JDHA) report, dated August 2025, in support of a separate project (Arroyo Conejo Utility and Road Maintenance Project) for the City, which proposes maintenance activities within a larger area of the Arroyo Conejo corridor. A portion of the area delineated by Rincon encompasses the area where the Box Canyon Project activities will be conducted. As the JDHA was prepared recently and should therefore reflect the current conditions, the City requested that Envicom use Rincon's JDHA to support preparation of the Mitigated Negative Declaration and resource agency permit notifications for the Box Canyon Project.

The JD data for Non-Wetland Waters of the State and California Department of Fish and Wildlife (CDFW) Streambed, as shown in Rincon's JDHA, were peer reviewed by Envicom for the purposes of confirming that jurisdictional features have been properly delineated within the footprint of the Box Canyon Project. This letter summarizes the methods and results of the peer review. Rincon's jurisdictional delineation mapping for the Box Canyon area, as well as photo locations taken by Envicom during a site visit, are provided in **Attachment 1**. Data reviewed is limited to the area for the Box Canyon Project and does not include any areas outside of this. The following includes a description of the methodology used to review the delineation data, followed by a discussion of results.

Methods

Literature Review

Rincon's JDHA, as well as standard biological references, lists, and databases pertaining to known biological resources in the area and region were reviewed prior to or during preparation of this letter. The following includes a list of resources reviewed:

- *Arroyo Conejo Utility and Road Maintenance Project Jurisdictional Delineation and Habitat Assessment* (Rincon Consultants, August 2025).

- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008a).
- *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b).
- *National Wetland Plant List: 2020 Wetland Ratings* (USACE, 2020).
- *State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State* (RWQCB, adopted April 2, 2019, revised April 6, 2021).
- *Revised Definition of Waters of the United States* (EPA and USACE, published in the Federal Register on January 18, 2023).
- *Definition of Waters of the United States; Conforming* (EPA and USACE, published in the Federal Register on September 8, 2023).
- *Streamflow Duration Assessment Methods for the Arid West and Western Mountains of the United States of America* (USACE, EPA, ERDC, Version 2.0, October 2024).

Site Visit

A site visit was conducted by Envicom Staff Biologist, Cameron Cesa, on October 30, 2025, between the hours of 8:30 a.m. and 11:15 a.m., in clear/sunny conditions and winds of approximately 0-3 miles per hour. Geographic Information System (GIS) shapefiles of the area delineated by Rincon within Box Canyon were provided to Envicom, which were then uploaded onto a tablet with submeter Global Positioning System (GPS) accuracy. The jurisdictional boundaries mapped by Rincon within Box Canyon were compared in the field relative to the GPS location of the biologist using the tablet. Photos were taken to document the condition of the site at the time of the site visit and are provided in **Attachment 2**.

Desktop Analysis

In addition to the site visit, Envicom performed a desktop analysis comparing the Box Canyon Project's site plan with the shapefile data for Non-Wetland Waters of the State, CDFW Streambed, and the existing access road, where applicable.

Results

For the purposes of this letter, the nomenclature and labels attributed to Rincon's jurisdictional delineation mapping in the JDHA report have been retained. Within Box Canyon, Rincon mapped several drainage features including F08, F09, F10, and F11. The extent of jurisdiction for the Regional Water Quality Control Board (RWQCB) is identified by Rincon as "Non-Wetland Waters of the State" and the extent of CDFW jurisdiction is identified by Rincon as "CDFW Streambed." The jurisdictional boundaries mapped by Rincon which are the subject of this review are provided in Attachment 1. The results of the review of jurisdictional boundaries associated with each of the jurisdictional areas mapped by Rincon are discussed below.

F08

The extent of the Non-Wetland Waters of the State (ordinary high-water mark) mapped by Rincon appeared consistent with observations made during the Envicom field survey. The incised channel begins near the southern extent of the access road and meanders through the canyon in a roughly northwestern direction, eventually tributing to the main stretch of Arroyo Conejo outside of the area reviewed. Habitat south of the drainage is located on a very steep north-facing slope and supports primarily upland vegetation. The area north of the drainage slopes steeply upward over approximately 15-20 feet toward the access road. Several existing culverts discharge into the drainage as mapped by Rincon.

CDFW defines their jurisdiction as bank-to-bank and the outward extent of the riparian canopy, whichever is greater. In comparing the extent of CDFW jurisdiction mapped by Rincon, portions of the outward extent of coast live oak (*Quercus agrifolia*) and red willow (*Salix laevigata*) canopies from trees located on the slope between the bottom of the channel and the southern edge of the access road with canopies were not included within the mapped limits of CDFW jurisdiction (**Photo 7** of Attachment 2). Nonetheless, these trees are considered part of the riparian canopy is subject to interpretation, and CDFW will ultimately determine the extent of their jurisdiction. While we recognize this condition, we do not believe revisions to the mapping need to be made prior to consultation with CDFW.

F09

As shown in Attachment 1, Rincon mapped several ephemeral tributary channels (referred to collectively as F09). For the purposes of this review, they are labeled as the following in Attachment 1: F09 (Western Channel), F09 (Small Central Channel), F09 (Large Central Channel), and F09 (Eastern Channel).

In the location of the F09 (Western Channel), we did not observe a defined bed bank or channel or riparian vegetation that would warrant mapping this as a jurisdictional feature. Rather than a channel, the area was observed to be a barren/sparsely vegetated portion of the access road that showed some evidence of shallow erosion which is presumably a result of overland runoff from the access road. **Attachment 3** shows F09 (Western Channel) and the access road, as mapped by Rincon, overlaid on the Box Canyon Project's site plan. The site plan indicates that rather than the access road veering north and then west around F09 (Western Channel), it continues west directly over where F09 (Western Channel) was mapped. Given that this jurisdictional feature was not observed, it is recommended that the jurisdictional delineation be revised to remove both Non-Wetland Waters of the State and CDFW Streambed within the red hatched area. Photos of the area where the F09 was mapped are provided as **Photos 3** and **4** of Attachment 2.

The alignment of Waters of the State and CDFW streambed for both the small central channel and large central channel mapped by Rincon appeared consistent with the condition observed by Envicom in the field. However, a proportion of the CDFW Streambed for the large central channel was observed to be an upland area dominated by upland vegetation, including laurel sumac (*Malosma laurina*), tree tobacco (*Nicotiana glauca*), and California sagebrush (*Artemisia californica*). A representative photo of the central drainage is provided as **Photo 5** in Attachment 2. While the mapped extent of CDFW streambed could be reduced, the Box Canyon Project does

not propose improvements in this area. Therefore, the extent of CDFW streambed does not need to be revised prior to consultation with CDFW.

Finally, the alignment of Waters of the State for the eastern drainage also appeared consistent with the condition observed in the field. However, the extent of willow riparian habitat appears to have grown or expanded beyond the extent of CDFW streambed mapped by Rincon. A representative photo of this area is provided as **Photo 6** on Attachment 2. CDFW streambed may ask that the extent of CDFW streambed in this area be increased. However, the impacts associated with the Box Canyon Project would likely occur within the extent of CDFW streambed mapped by Rincon. Therefore, the extent of CDFW streambed does not need to be revised prior to consultation with CDFW.

F10 & F11

F10 and F11 channels are ephemeral channels located on the south-facing slope north of the access road. The extent of both Non-Wetland Waters of the State and CDFW streambed for these two drainages were consistent with what was observed in the field. Neither drainage supported any riparian canopy that extended beyond the top of the bank.

Summary and Recommendations

In summary, the extent of Non-Wetland Waters of the State for the drainages delineated by Rincon within Box Canyon were generally consistent with the condition observed by Envicom in the field, except for F09 (Western Channel). While ultimately up to the CDFW and the RWQCB, we do not believe the conditions at the F09 (Western Channel) feature warrant mapping it as Waters of the State or CDFW streambed. We recommend that the JDHA be revised to remove this feature.

Envicom has noted that portions of the CDFW streambed limits mapped by Rincon within F08, F09 (large central channel) and F09 (eastern channel) could potentially be interpreted differently. However, the limits of CDFW streambed will ultimately be confirmed through consultation with CDFW. Therefore, we do not believe the limits of CDFW streambed within these features needs to be revised prior to consultation with CDFW.

Please do not hesitate to reach out at (818) 879-4700 or ccesa@envicomcorporation.com with any questions you may have regarding this review.

Sincerely,

Cameron Cesa
Staff Biologist

ATTACHMENTS:
Attachment 1, Jurisdictional Delineation Map
Attachment 2, Representative Photographs
Attachment 3, F09 (Western Channel)

Attachment 1
Jurisdictional Delineation Map

Image Source: Arroyo Conejo Maintenance Project Jurisdictional Delineation and Habitat Assessment (Rincon Consultants, August 2025)

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS

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Jurisdictional Delineation Map

0 100 200 ft

Attachment 2
Representative Photographs

Photo 1: Representative photo of eastern portion of drainage F08.

Photo 2: Representative photo of western portion of drainage F08.

Photo 3: Erosional feature observed where F09 (Western Channel) drainage was mapped by Rincon.

Photo 4: Another view of erosional feature where F09 (Western Channel) drainage was mapped by Rincon.

Photo 5: F09 (Large Central Channel) drainage showing mostly upland vegetation.

Photo 6: Additional riparian vegetation (red willow) associated with eastern F09 (Eastern Channel)

Photo 7: Riparian vegetation (red willow and coast live oak) in drainage F08 overhanging access road.

Attachment 3
F09 (Western Channel)

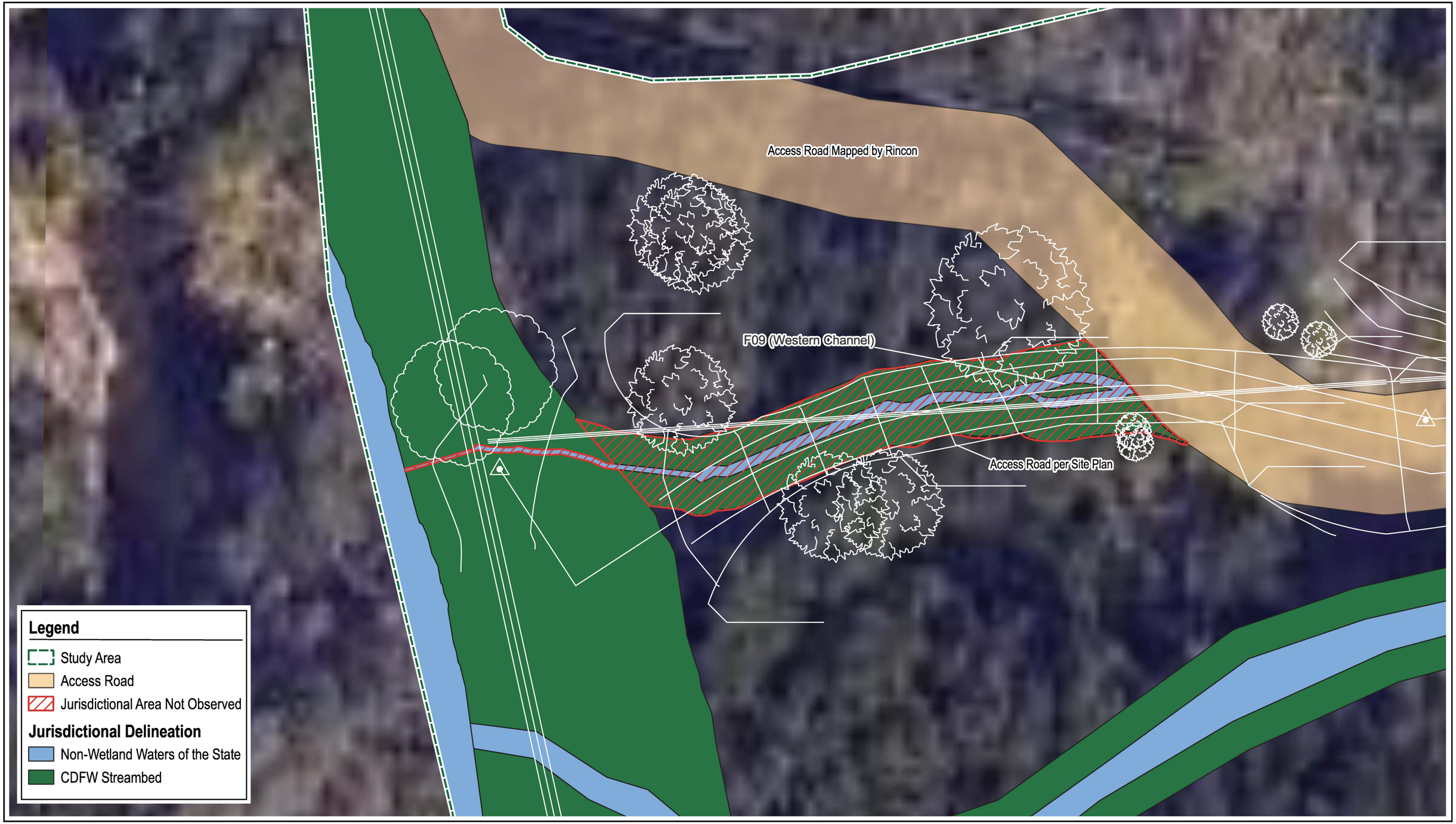

Image Source: Jurisdictional Delineation and Habitat Assessment (Rincon Consultants, August 2025)

BOX CANYON MANHOLE

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F09 (Western Channel)

0 8 16 ft

APPENDIX D

Cultural Resources Phase I Assessment

Cultural Resources Phase I Assessment
Negative Findings Letter Report

Box Canyon Manhole & Road Improvements Project

City of Thousand Oaks, California

PREPARED FOR:

City of Thousand Oaks

Public Works Department
2100 Thousand Oaks Boulevard
Thousand Oaks, CA 91362

Attn: Patrick McCulloch, Utilities Maintenance Supervisor
Jon Turner, PE, Principal Civil Engineer

PREPARED BY:

envicom

4165 E Thousand Oaks Blvd,
Suite #290
Westlake Village, CA 91362

Authors:
Wayne Bishoff, Ph.D.
Rowan Barton,M.S.

(818) 879-4700

NOVEMBER 2025

November 12, 2025

City of Thousand Oaks
Public Works Department
2100 Thousand Oaks Boulevard
Thousand Oaks, CA 91362

Attn: Patrick McCulloch, Utilities Maintenance Supervisor
Jon Turner, PE, Principal Civil Engineer

Subj: Cultural Resources Phase I Assessment/Survey of the Box Canyon Manhole and Road Improvements Project (*Envicom Project #2025-112-01*)

Dear Mr. McCullock and Mr. Turner:

Envicom Corporation (Envicom) has completed a Phase I Cultural Resource Assessment/Survey for the Box Canyon Manhole and Road Improvements Project (project), located in the City of Thousand Oaks, Ventura County, California (City) (**Figure 1** and **Figure 2**). The project is proposed for the Box Canyon access road, which is reached via Calle Las Trancas, approximately 200 feet northwest of its intersection with Calle Pecos. The project intends to install a manhole and replace approximately 10 feet of existing asbestos cement 8-inch diameter wastewater piping at the proposed manhole structure, which is located on the western end of the access road; to install five new 18-inch storm drain pipelines across the unpaved access road, each with upstream and downstream headwalls; to construct three additional upstream headwalls for three existing storm drain culverts; and to add approximately 260 linear feet of concrete paving to the eastern end of the existing, steep unpaved access road to provide stable, year-round access (**Figure 3**). Additional locational information is as follows:

United States Geological Survey 7.5' Quadrangle: Newbury Park, CA
Township/Range: Section 00, Township 2 North, Range 20 West
Latitude/Longitude: 34.201494 N, -118.903822 E

The Phase I Cultural Resource Assessment included a cultural resource record search conducted at the South Central Coastal Information Center (SCCIC) and a Native American sacred lands record search conducted by the California Native American Heritage Commission (NAHC). Both record searches examined the project property plus a 0.25-mile buffer area around the project site, which is an additional "study area" examined, along with the project site findings, to determine the project region's cultural resource sensitivity. The purpose of the cultural resource record searches is to identify any known cultural or tribal resources previously recorded within or immediately adjacent to the proposed project property, to provide cultural and tribal resource context for the project through the examination of the project study area, and to assess the overall cultural resource sensitivity of the project region. SCCIC findings are separated into resources and reports directly involving the project site, and resources and reports found within the designated surrounding study area. NAHC findings do not differentiate between the project site and the project study area, but instead identify whether a tribal resource is located within the combined region.

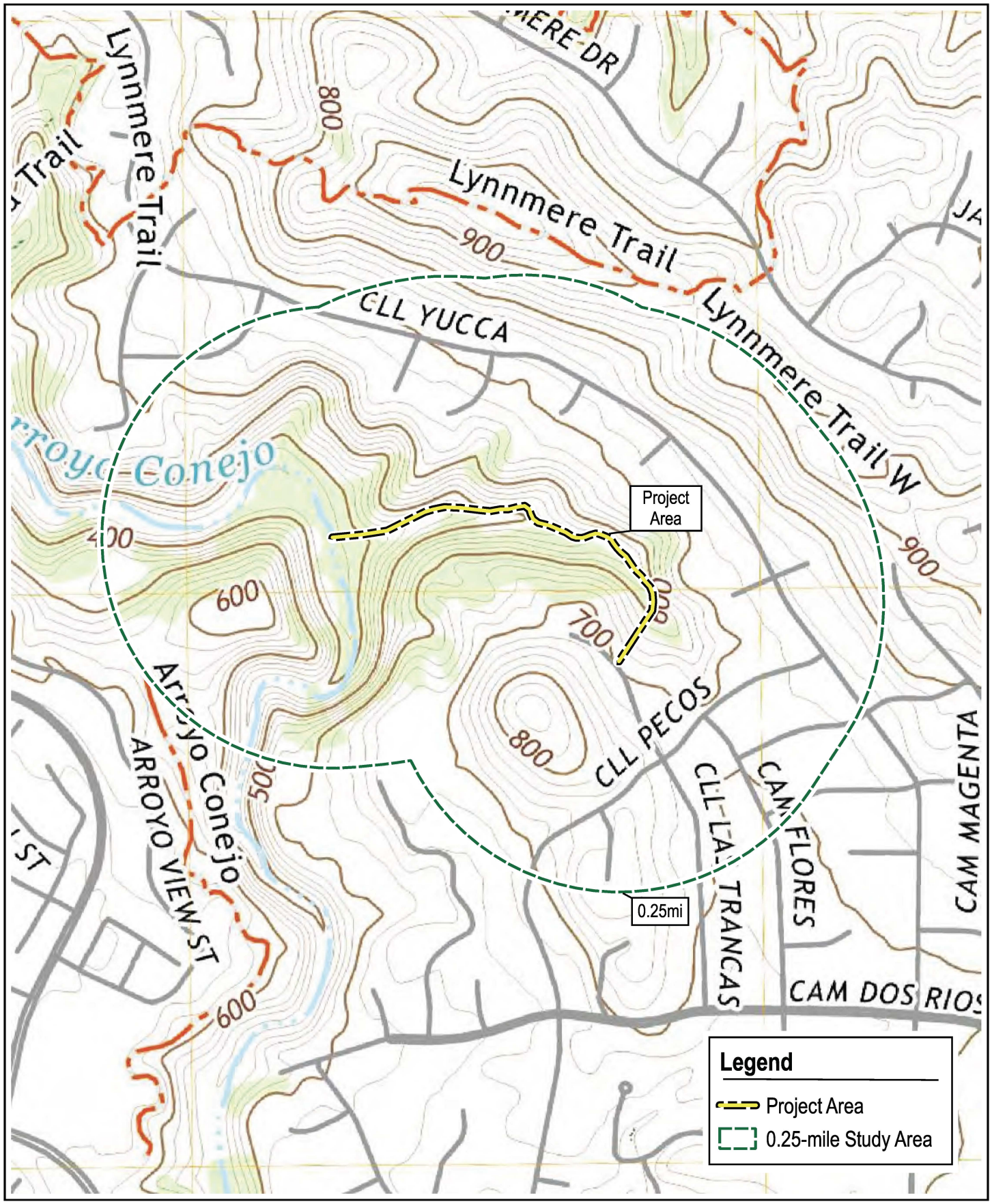

Image Source: USGS 1:24,000 Topographic Map: Newbury Park, 2022.

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USGS Map with Project Area and 0.25-mile Study Area

0 300 600 ft

FIGURE 1

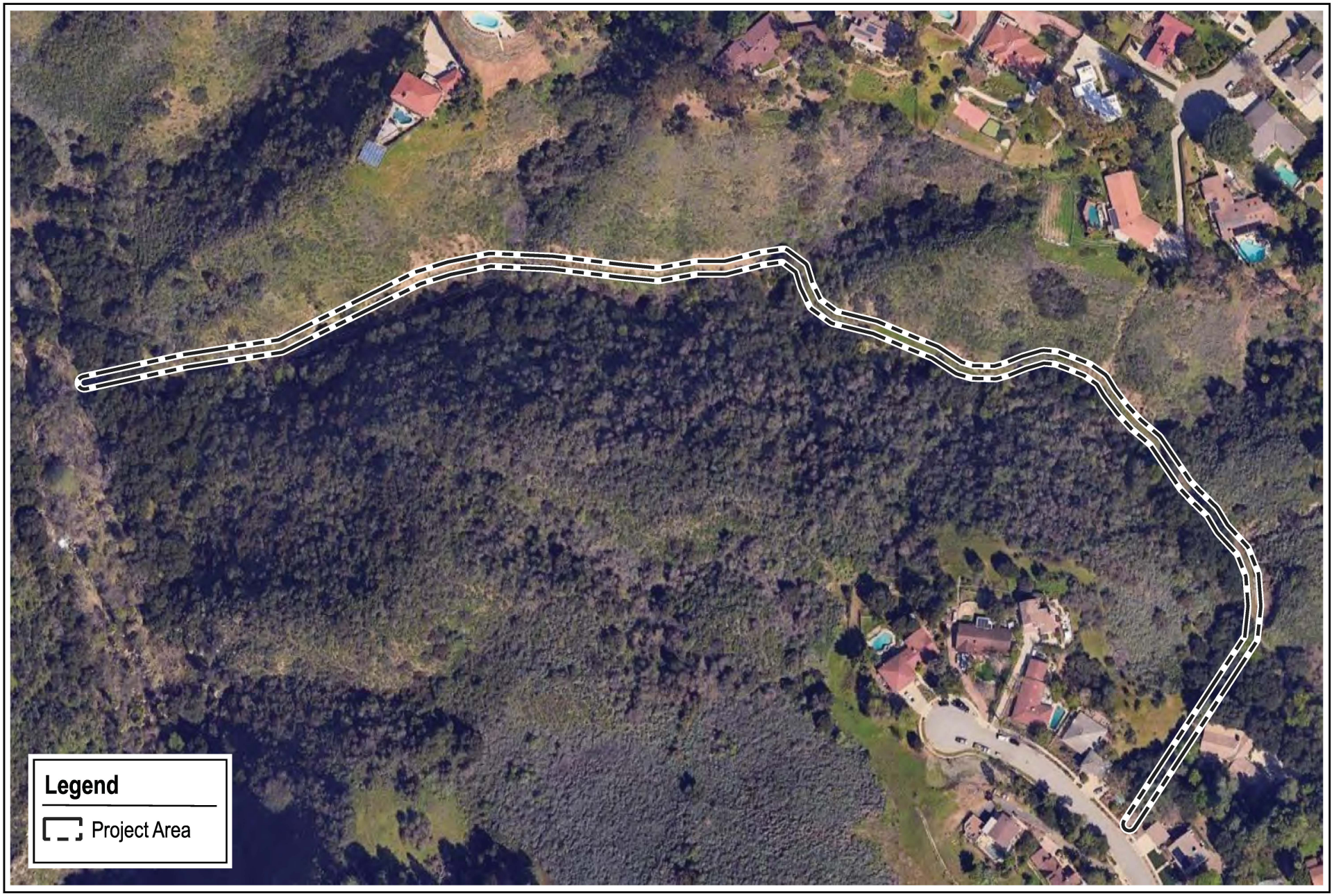

Image Source: Google Earth, 2023.

BOX CANYON MANHOLE AND ROAD IMPROVEMENTS PROJECT - CULTURAL PHASE I

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Aerial Map Showing Current Site Conditions

0 100 200 ft

FIGURE 2

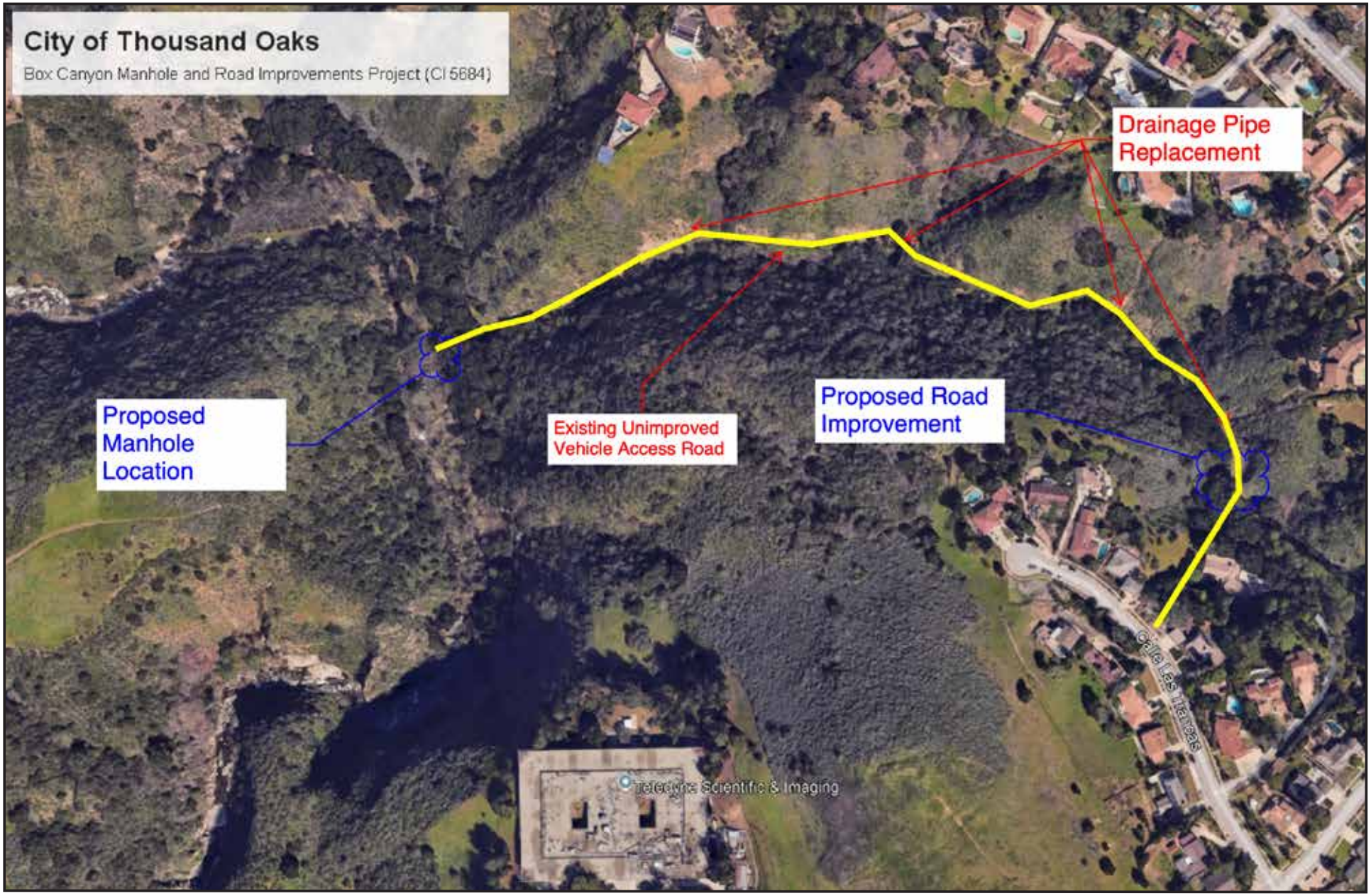

Image Source: Project Planning Set.

Additional databases examined during the Phase I cultural resource assessment included historical regional maps, historical United States Geological Survey (USGS) maps, historical Google Earth images, and the University of California Santa Barbara (UCSB) Library Historical Aerial Photograph Database. Because the cultural resource assessment was negative for cultural resources within or adjacent to the project property, a letter report format will be used for the cultural resource report (this document). Because paleontological resources were a concern, geological maps were examined to assess the project site's paleontological sensitivity. Envicom also contacted the Natural History Museum of Los Angeles County (NHMLAC) and requested that they search their database for fossil resources previously identified on or near the project site.

The Phase I cultural resource assessment also included a systematic pedestrian survey of the project area. The purpose of the pedestrian survey is to identify whether cultural resources are located on the surface of the project area that have not previously been identified or recorded in the California Historical Resource Information System (CHRIS). Any previously recorded cultural resources are also revisited and assessed during the pedestrian survey. The survey is conducted in accordance with Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation (*48 FR 44716, Sept. 29, 1983*). Archaeological staff employed also all meet the educational and/or experience requirements outlined in *48 FR 44716, Sept. 29, 1983*.

Generally, a potential cultural resource is defined as any building, structure, object, or archaeological site older than 50-years in age, and can include historical or prehistoric locations of human habitation or occupation. A detailed definition and clarifications on the criteria are provided by the California Office of Historic Preservation guidelines, United States Department of the Interior guidelines, and *36 Code of Federal Regulations 60.4* of the National Register criteria.

Standard Field Survey Methodology

A systematic field survey follows five-meter transects where possible, but transitions to opportunistic examination of the landscape when brush or terrain does not allow for the systematic walking of the project site. Opportunistic examination also takes place in more open areas, or locations where evidence of rodent disturbance, deflation, and/or erosion may provide an understanding of the site's subsurface conditions. During the site survey, site conditions, including human disturbances or features, ground visibility, site soils, bedrock outcrops, vegetation, and other significant human impacts or natural features, are recorded. Any other conditions that may have influenced the accuracy of the site survey, such as time of year and weather, are also noted.

If the systematic pedestrian survey is determined to be adequate to assess the site surface for evidence of cultural resources, then the findings are summarized in the Phase I report (this document). Any newly identified cultural resources or cultural resources that require updating will then be mapped using georeferenced maps or with a GPS unit with sub-meter accuracy. All of the cultural resource information is then recorded on State of California Department of Parks and Recreation (DPR) forms. If the cultural resource Principal determines that subsurface testing (shovel test pits or test units) is needed to complete the Phase I report, then the subsurface testing information is also added to both the final Phase I survey report and the DPR form.

RECORD SEARCH RESULTS

SCCIC and NAHC Record Searches

Envicom set up an in-person site visit to the SCCIC on October 14, 2025, to have Envicom staff search the CHRIS database for cultural resources located within the project development footprint and within the surrounding 0.25-mile project study area (see Figure 1). The record search included a request for copies of reports for all the previously recorded cultural resources located within or adjacent to the project area, as well as copies of all cultural resource technical reports that intersected with all or part of the project area and surrounding study area. A similar request was made to the NAHC on October 8, 2025.

The findings from the SCCIC record search indicated that no previously recorded cultural resources were located on the project property. One cultural resource, P-56-100077, is located within the surrounding 0.25-mile study area. P-56-100077 is an isolate cultural resource recorded by Mary Maki of Conejo Archaeological Consultants in 1997. The isolate comprises two Pismo clam (*Tivela stultorum*) fragments. A DPR was completed for this isolate because Pismo clams were commonly used by local tribes, and fragments have been discovered at other prehistoric sites in the region (Pattison 2001; Maki 1997). Interestingly, Maki notes that a fossilized oyster shell was observed in the vicinity of the isolate (1997). In comparing the isolate location with geologic maps, Envicom found that P-56-100077 was discovered in Pleistocene geology, which can contain Pismo clams (Dibblee and Ehrenspeck 1990; Pattison 2001). Moreover, no other prehistorical cultural resources have been recorded in Box Canyon. Thus, P-56-100077 is likely a paleontological resource, rather than a cultural resource.

Three cultural resource reports located in the CHRIS database involved the project property: VN-101, VN-1573, and VN-2233. VN-101 is a study of the Conejo Canyons completed by the Thousand Oaks Planning Department in 1976; the report did not record any new cultural resources (Thousand Oaks Planning Department 1976). VN-1573 is the 1997 Archaeological Phase I and Impact Assessment that recorded P-56-100077, discussed above. The 1997 survey described in VN-1573 included the entirety of the Project area, as well as a larger study area. The report's summary of Box Canyon findings is provided below (Maki 1997):

> "Located on the east side of Arroyo Conejo, the Box Canyon feeder runs down Box Canyon within and/or adjacent to an existing graded dirt road. Ground visibility on the dirt road was excellent. Along much of the route, a cut slope bordered the road to the north and drainage bordered it to the south. No cultural resources were seen in or adjacent to the road. The steepness of the slopes in the vicinity of this dirt road combined with the extensive cutting and grading required to construct/grade the dirt road, and the previous trenching within this area for the installation of Box Canyon feeder, make it unlikely that any intact archaeological resources occur within this portion of the project area."

Finally, VN-2233 is a report describing an archaeological reconnaissance (Phase I) conducted by Robert Lopez in 2002. The northern edge of VN-2233 abuts the Project area. Lopez did not record any new cultural resources as part of this study (Lopez 2002).

An additional five reports intersected with the surrounding 0.25-mile study area: VN-59, VN-84, VN-231, VN-1130, and VN-1527. VN-59 is an assessment of the impact of a proposed project on archaeological resources found along the Arroyo Conejo, with the report assessing seven prehistoric sites found along the seasonal creek (Rosen 1977). VN-231 is a re-evaluation of the same area assessed in VN-59, and does not record any additional resources (Lopez 1980). VN-84 is an archaeological assessment of the former MGM Ranch property that reported 26 prehistoric sites (Clemlow 1977). VN-1527 is a historic study of the MGM Ranch property, completed at the same time as VN-59 (Allen 1978). Finally, VN-1130 re-assessed the MGM ranch property and recommended new mitigation measures (Drover 1988). Although none of the cultural resources mentioned in these five reports are located within this project's study area, they all indicate that the Arroyo Conejo region is sensitive for prehistoric cultural resources. However, the sites discussed in these reports are in the hills, and not in the lower floodplain area where the current proposed project is located.

The results from the NAHC record search were received on October 10, 2025, with negative findings. If the Lead/Permitting Agency for the project is required to perform an Assembly Bill (AB)-52 process, the NAHC letter should be made a part of the Native American consultation record. Further, Envicom did not contact Native American groups provided on the NAHC list, as communications with Tribal Group representatives is the responsibility of the Lead/Permitting Agency, if required for this project. A copy of the request letter to the NAHC and the response letter from the NAHC is included in **Appendix A** of this report. The inclusion of the NAHC provided list of tribal contacts is in this report for the benefit of any project Lead/Permitting Agenc(ies). All information on cultural resource physical location supplied by the SCCIC, except for historical public-knowledge built environment resources, is considered confidential by state law and is, therefore, not included in this report, if applicable. The Principal Author's resume is provided in **Appendix B**.

Historical Map Database Search

Envicom examined the USGS database of historical maps for the project site. The database contains thirty-three (33) historical maps that include the project site. These maps date to between 1900 and 2021. The Newbury Park quadrangle USGS maps do not show individual structures after 1951, so Envicom supplemented the USGS map findings with aerial imagery from the UCSB Library historical aerial photograph database and historical satellite imagery from Google Earth Pro.

The earliest map that includes the project site is the 1900 Triunfo Pass USGS Map (**Figure 4**). This map does not show any development in the project region. A 1938 aerial image shows the topography of the project site and confirms that no development occurred in the project region in the early 1900s (**Figure 5**). The 1950 Newbury Park USGS map shows the development of Calle Yucca, the road north of the project site (**Figure 6**). The first change to the project site is the addition of an access road, which is clearly visible in a 1965 aerial image (**Figure 7**). This road was likely graded for the initial installation of the Unit W and Unit Y pipelines in 1960 and 1962, respectively (Rincon 2025). The 1965 aerial image also shows the first residences constructed near the property, along Calle Yucca, and the development of Calle Las Trancas, the road south of the project site.

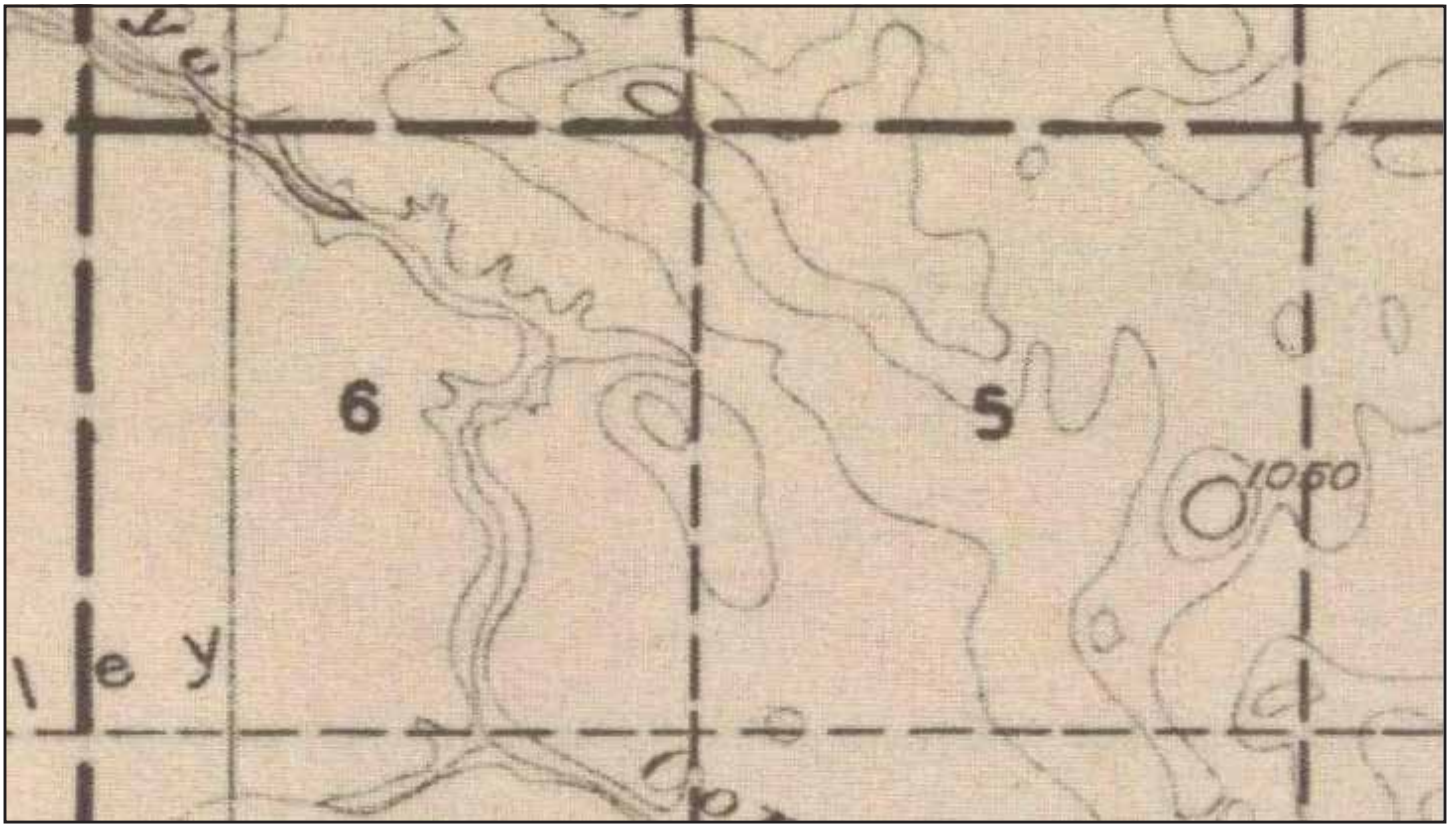

Figure 4: 1900 Triunfo Pass 1:62,500 USGS Map, showing no development on the project site and surrounding region.

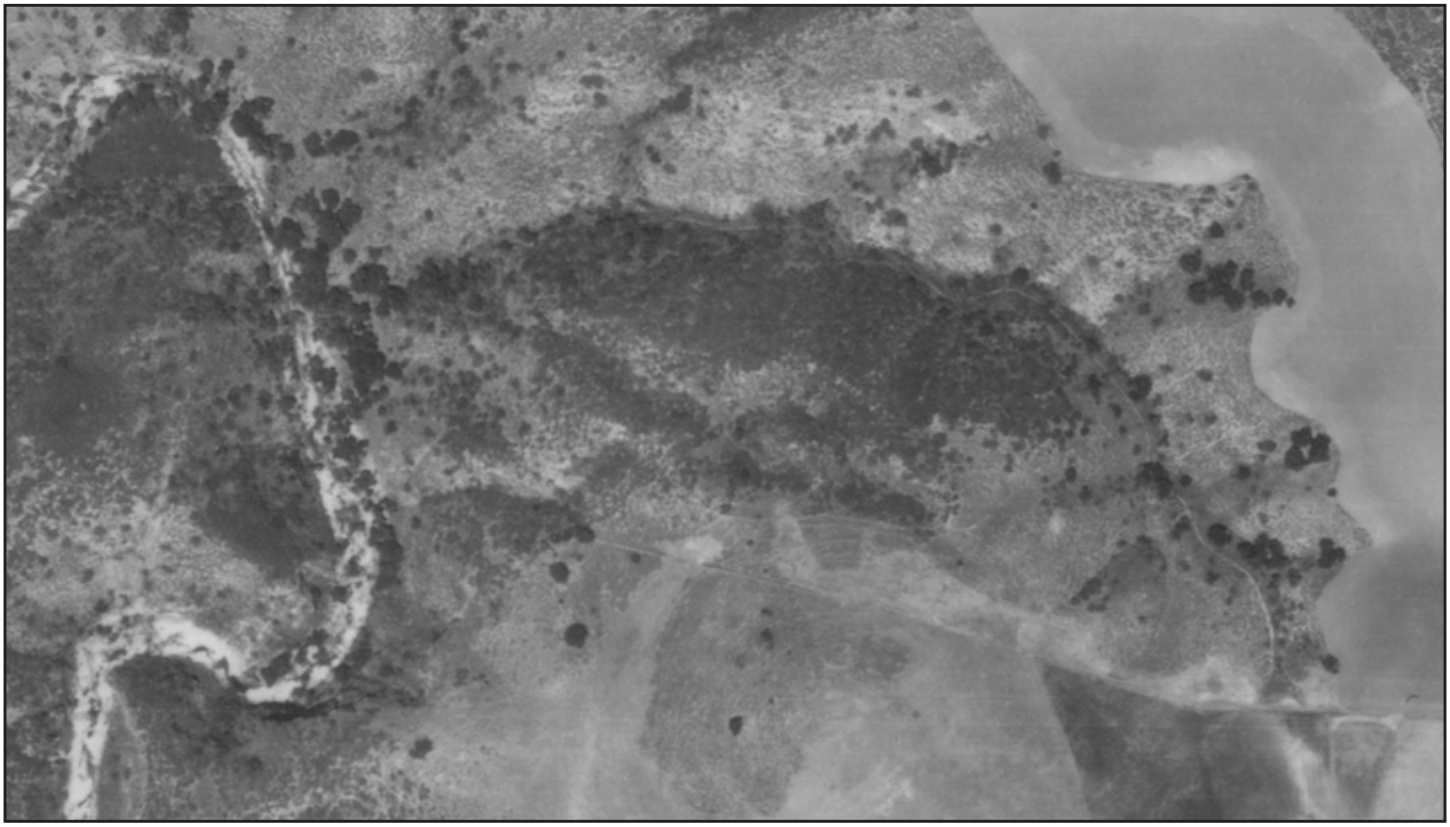

Figure 5: 1938 Aerial Image, showing no development on the project site and surrounding region (UCSB Aerial Photograph Database).

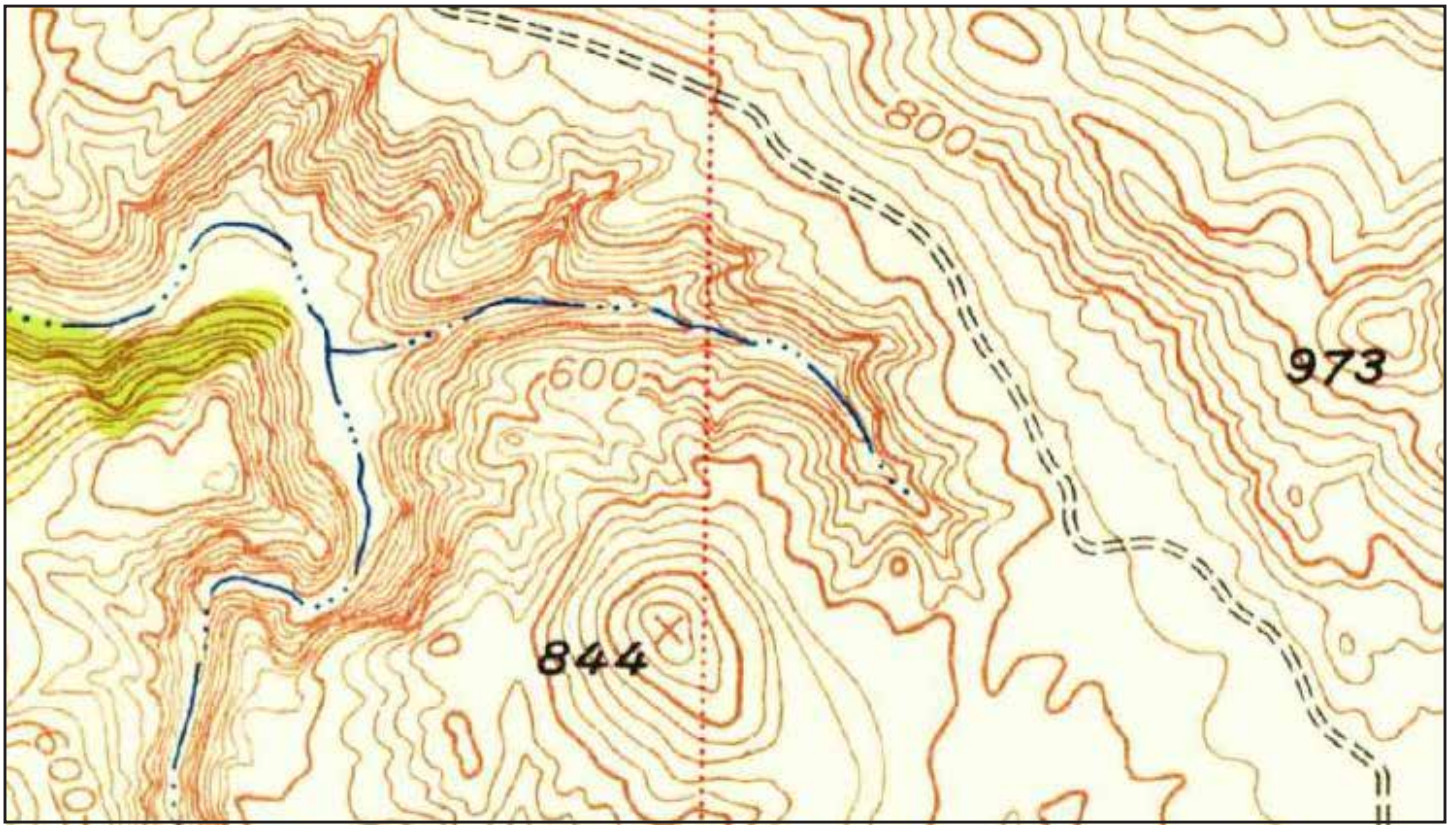

Figure 6: 1950 Newbury Park 1:24,000 USGS Map, again showing no development.

Figure 7: 1965 Aerial Image, showing an access road on the project site and residential construction for the first time in the surrounding area (UCSB Aerial Photograph Database).

By 1977, both Calle Yucca and Calle Las Trancas were lined with residences, but the project area remained largely undeveloped (**Figure 8**). However, report VN-101 from Envicom's SCCIC record search indicates that utility lines were likely located within in the project area (Thousand Oaks Planning Department 1976). There is very little visible change in the project property between the 1977 aerial image and a 2025 satellite image (**Figure 9**). Report VN-1573 indicates that pipelines were replaced in Box Canyon during the 1990s (Maki 1997). The historical map and aerial image database study, therefore, was negative for older historical cultural resources located on or near the project site.

Field Survey Results

Envicom staff archaeologist Rowan Barton (MS) visited the project property on October 24, 2025, and completed a systematic/opportunistic survey of the project site. The project site consisted of an access road and a stream channel parallel to the road (**Figure 10**). The project site was flanked by hills to the north and south. The stream channel varied in elevation in relation to the access road along the length of the project area; in some spots, it was at the same elevation as the access road, and in others, the stream ran approximately 20ft below the access road, in a deep V-shaped valley (**Figure 11**). There was little to no vegetation on the access road, so the ground visibility was excellent. Vegetation was more abundant on either side of the creek, so ground visibility there was moderate (**Figure 12**).

Bedrock was visible in the steep hillside on the north side of the access road (**Figure 13**). There was also evidence of bedrock eroding from the hillside, in the form of abundant colluvium on the access road (**Figure 14**). In addition, there were small water cut channels within the access road (**Figure 15**). Both of these geological processes result in the burial and/or movement of material, which can impact preservation of cultural material. Moreover, extreme slopes, such as those to the north and south of the project property, are not conducive for archaeological site development. Finally, the project site has been heavily altered by historical and modern construction, including access road grading, the installation of powerlines, and the installation of sewer lines; evidence of all these alterations was observed during the survey (**Figure 16** and **Figure 17**).

Because the Arroyo Conejo region is known to contain many recorded prehistoric sites, the project site was closely examined for evidence of prehistoric quarrying, trails, or rock shelters. None were noted. This finding echoes the findings of previously completed surveys that involved the project area, all of which did not find cultural resources in the local region (see above). Envicom's field survey, therefore, did not find prehistoric or older historical resources within the project development footprint and noted modern damage to the landscape that suggested that any resources that are present have been disturbed and impacted to a great extent.

Paleontological Assessment

Envicom requested on October 8, 2025, that the NHMLAC examine their fossil records database for any paleontological discoveries previously recorded within the development footprint or within the surrounding project study area. In addition, Envicom examined the T.W. Dibblee and H.E. Ehrenspeck 1990 Geologic map of the Camarillo and Newbury Park quadrangles, Ventura County, California.

Figure 8: 1977 Aerial Image, showing the project site aera and surrounding residential development (UCSB Aerial Photograph Database).

Figure 9: 2025 Satellite Image, showing current conditions (Google Earth Pro).

Figure 10: Project site overview, showing the graded access road (facing east).

Figure 11: Project site overview, showing the stream downhill from the road (facing west).

Figure 12: Image showing the excellent visibility along the graded road and moderate visibility along the stream (facing west).

Figure 13: Exposed bedrock and sparce vegetation; no evidence of prehistoric quarrying of toolstone was observed (facing north).

Figure 14: Erosion of bedrock on the project site (facing north).

Figure 15: Water cut channels in the graded road (facing west).

Figure 16: Powerline installed on the project site (facing east).

Figure 17: Wastewater main and manhole installed on the project site (facing south).

The 1990 Dibblee and Ehrenspeck map shows that the project area is underlain by four types of geology: modern alluvium (Qa), older alluvium (Qoa), Lower Topanga Formation Clay Shale (Ttlc), and Lower Topanga Formation Sandstone (Ttls) (**Figure 18**). Modern alluvium underlies the far western end of the project area, where the project intends to place a manhole. This geology dates to the Holocene and is not paleontologically sensitive.

The geology at the base of the hill on the far eastern end of the access road, near Calle Las Trancas, is older alluvium that dates to the Pleistocene, and can be sensitive for Pleistocene terrestrial fossils. This older alluvium geological context extends around the western edge of the hills and along Calle Yucca, to the location where Maki (1997) recorded the Pismo clam fragments. Since the Thousand Oaks region during the Pleistocene had a highly variable shoreline located much farther inland from where the Pacific coast is located today, it is not surprising that deposits of near shore or beach invertebrates are present in the region.

The majority of the project area is underlain by the Lower Topanga formation, which dates to the Early to Middle Miocene (23 mya to 11.6 mya) and is sensitive for marine fossils. Two types of geological rock units comprise the Lower Topanga formation in the project area. Dibblee and Ehrenspeck (2000) describe the first rock unit (Ttlc) as, “gray to gray-black micaceous clay-shale; contains few thin layers of hard yellowish dolomitic shale and others of tan fine-grained sandstone.” This Lower Topanga formation context is the most prevalent geology type on the project site. The second Lower Topanga formation rock unit (Ttls) is described as, “tan arkostic sandstone and some interbedded gray micaceous shale,” and occurs on the western end of the project site.

Both Topanga Formation bedrock rock unit types were observed during the site survey, indicating that any excavation in the project site is likely to encounter sensitive Topanga Formation deposits (**Figure 19** and **Figure 20**). No paleontological resources were observed during the survey, but due to the paleontological sensitivity of the Topanga Formation, it is possible that fossil resources will be encountered during project ground disturbing activities.

Envicom received the NHMLAC record search response on October 20, 2025, with negative findings for the project site. The NHMLAC record search always provides the closest fossil discovery localities, no matter whether they are located within the project study area or from farther out from the project site. The four closest fossil localities were all in the Topanga Formation at an unknown depth. The first locality is Point Mugu, where herring (Xyne), a sardine relative (Ganolytes), drumfish (Lompoquia), herring/shad family taxon (Clupeidae), and invertebrates (including Macrochlamis magnolia and Vertipecten sp.) were recovered from a hard black shale Lower Topanga Formation context. The second locality is North of Madera Road, Simi Valley, where toothed whale (Odontoceti), requiem shark (Carcharhinus, Galeocerdo), weasel shark (Hemipristis), eagle ray (Myliobatidae), and barracuda (Sphyraenidae) fossils were recovered from a gray orange fine grained well-sorted sandstone Topanga Formation context.

The third locality is on the Northbound side of Hwy 23, near the Tierra Rejada Road offramp, where shark (*Isurus planus*) and invertebrate (bivalves, echinoids, bryozoans, barnacles) fossil were recovered from a Topanga Formation context characterized by coarse-grained sandstone with

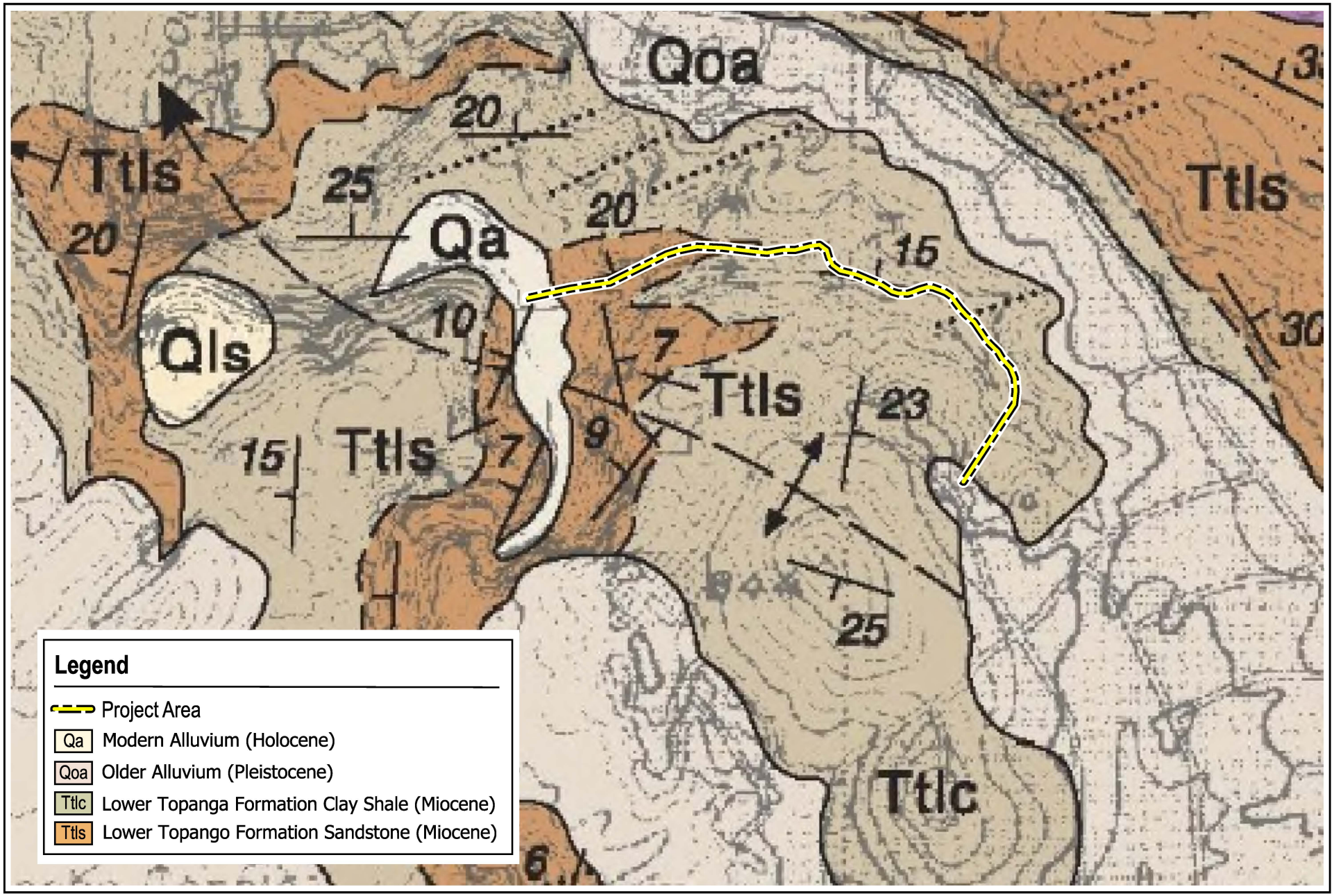

Image Source: Dibblee, T.W., and Ehrenspeck, H.E. 1990. Geologic map of the Camarillo and Newbury Park Quadrangles, Ventura County, California. Scale: 1:24,000. Dibblee Geological Foundation.

Figure 19: Lower Topanga Formation clay shale (Ttlc) observed in the project area.

Figure 20: Lower Topanga Formation sandstone (Ttls) observed in the project area.

fragments of underlying Conejo volcanics. The final fossil locality was in Thousand Oaks, where invertebrate (including *Turritella*) specimens were recovered from the Topanga Formation.

The NHMLAC also recommended a full paleontological assessment be conducted, which is their standard response on all record search findings reports. Given that most of the project is underlain by sensitive Lower Topanga Formation contexts, Envicom recommends that further paleontological study is not needed, and instead recommends that full-time paleontological monitoring during excavation of native soils take place during the project construction phase. However, the manhole that will be installed on the western end of the access road will be in modern alluvial soil, so Envicom does not recommend paleontological monitoring for this activity. Envicom also recommends that contingency measures be followed in case unexpected fossil discoveries occur during project excavation.

Recommendations

The results of the SCCIC and NAHC database record searches were negative for cultural resources within the project development site. The 0.25-mile study area around the project site only contained one resource, P-56-100077, which is most likely a paleontological discovery and not from a prehistoric context. However, numerous past archaeological studies indicated that the project region is sensitive for prehistoric cultural resources. Finally, the historical database search determined that the project area is not likely to be sensitive for older historical cultural resources.

Normally, Envicom recommends archaeological monitoring of sites located within regions known to have prehistoric archaeological sites; however, due to the lack of prehistoric cultural resources directly within the Box Canyon project area and due to the observed extensive impacts to the project site, Envicom does not recommend archaeological or Native American monitoring for the proposed project. Envicom does, however, recommend paleontological monitoring of the project site, which is almost entirely located within sensitive rock units, including two rock units of the Topanga Formation and within older Pleistocene alluvial material. Additionally, Envicom recommends contingency measures for the project construction-phase to be followed in the case that unexpected archaeological, tribal, or fossil resources or human remains are encountered during project subsurface excavation activities.

Recommendation 1: Paleontological Monitoring

Prior to construction, a company qualified to provide paleontological monitoring will be engaged by the City to provide monitoring services when the project is located within the Topanga Formation or within Pleistocene alluvium. Full-time paleontological monitoring will take place unless the paleontological monitor determines that construction activities are located within fill or disturbed soils, at which point spot-check monitoring can take place. Envicom also recommends that the paleontological monitor be cross-trained in prehistoric archaeological resources in the unlikely case that such material is encountered during monitoring, at which point the project discovery procedures should be followed.

The paleontological monitor will collect any fossil material that is uncovered through grading or excavating that is found within disturbed or intact soils. If necessary, the paleontological monitor

can halt construction within 30-feet of a potentially significant fossil resource that cannot readily be removed or that the monitor believes needs further immediate examination. Fossils from a disturbed context or that can be recovered without halting construction can be collected; fossils that cannot be removed during construction, or that the monitor believes will need further *in situ* assessment, will trigger the project "discovery" protocol. Discovery situations that do not lead to further assessment, survey, evaluation, or data recovery can be described in the monitor's daily logs or in a final project monitoring report.

All fossils recovered that may be of importance to California paleontology will be cleaned, analyzed, and described within a final project monitoring report. All collected materials will be offered to the NHMLAC to be curated at the end of the project. If the NHMLAC decides that recovered fossils are worthy of curation, then a curation agreement will be needed that is reviewed by the City prior to the completion of the project. The costs of any paleontological monitoring report and the processing, analysis, and curation of fossil material will be the responsibility of the City.

Recommendation 2: Archaeological, Tribal, and Fossil Resource Discovery Protocol

If potentially significant intact archaeological, Tribal, or fossil resources are encountered within an undisturbed context, or in contexts that do not readily allow for expedient site removal, then this "discovery" protocol will be followed. If older historical or prehistoric features, artifact concentrations, prehistoric materials, or sensitive fossil materials are encountered during project grading and subsurface excavation within native soils or original context, then all work in that area shall be halted or diverted away from the discovery to a distance of 30-feet until a qualified senior archaeologist, Tribal Representative(s), or senior paleontologist can evaluate the nature and/or significance of the find(s). If the senior archaeologist, Tribal Representative(s), or the senior paleontologist confirms that the discovery is potentially significant, then the City will be contacted and informed of the discovery immediately.

Construction will not resume in the locality of the discovery until consultation between the resource assessment team, the City's representative, and any other concerned parties (such as other Native American Tribal Groups), takes place and reaches a conclusion approved by the City. If a significant archaeological resource, Tribal resource, or fossil resource is discovered during earth-moving construction activities, complete avoidance of the find is preferred. However, if the discovered resource cannot be avoided, further survey work, evaluation tasks, or data recovery of the resource may be required by the City. All individual reports will be submitted to the SCCIC, the Native American monitoring organization, and/or to the NHMLAC at the conclusion of the Project. Curation agreements may also need to be made with appropriate resource depositories.

Recommendation 3: Inadvertent Discovery of Human Remains

The inadvertent discovery of human remains is always a possibility during ground disturbances; State of California Health and Safety Code Section 7050.5 addresses these findings. This code section states that in the event human remains are uncovered, no further disturbance shall occur until the County Coroner has made a determination as to the origin and disposition of the remains pursuant to PRC Section 5097.98. The coroner must be notified of the find immediately, together

with the City and the property owner. If the human remains are determined to be prehistoric, in accordance with the Health and Safety Code, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials and an appropriate re-internment site.

The City and a qualified archaeologist, with possible Native American involvement, shall also establish additional appropriate mitigation measures for further site development, which may include additional archaeological and/or Native American monitoring, or subsurface testing that will be paid for by the City. All responses to the discovery of human remains will be outlined in a Recovery and/or Management Plan that will be submitted to the City for final review.

References

Allen, Patricia, A.
1978 An Historic Study of the Property Known as the M.G.M. Ranch: A Planned Community by Shapell Industries, Inc. Report prepared by Conejo Balley Historical Society, prepared for Shapell Industries, Inc.

Clemlow, C. William, Jr.
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Drover, Christopher E.
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1980 A Re-evaluation of the Archaeological Resources Contained within and Directly or Indirectly Impacted by the 633 Acres Proposed for Tract 3465 Thousand Oaks, Ventura County, California. Report prepared by Robert Lopez, prepared for Hale, Haaland and Associates, Inc.

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1997 Phase I Archaeological Survey and Impact Assessment of Approximately 4 Linear Miles for the Unit W & F Interceptor Replacement Project, Arroyo Conejo, Thousand Oaks, Ventura County California. Report prepared by Conejo Archaeological Consultants, prepared for Padre Associates, Inc.

Pattison, Christine A.
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Rincon Consultants
2025 Arroyo Conejo Utility and Road Maintenance Project: Jurisdictional Delineation and Habitat Assessment. Report prepared by Rincon Consultants, prepared for City of Thousand Oaks.

Rosen, Martin D.
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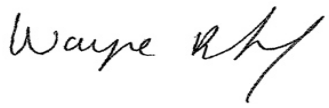
Thousand Oaks Planning Department
1976 Conejo Canyons Study. Thousand Oaks Planning Department.

Sincerely,



Dr. Wayne Bischoff, Principal
(co-author, Rowan Barton, M.S.)

ATTACHMENTS:

Appendix A: NAHC and NHMLAC Record Search Request Letters, and the NAHC and NHMLAC Response Letters.
Appendix B: Resume of Principal Investigator (Dr. Wayne Bischoff)

APPENDIX A
NAHC and NHMLAC Record Search Request Letters, and the NAHC and NHMLAC Response Letters

October 9, 2025

Native American Heritage Commission
1550 Harbor Boulevard, Room 100
West Sacramento, CA 95691

Subj: Project to Provide a Cultural Resource Phase I for Box Canyon, Thousand Oaks, Ventura County, California *(Envicom Project #2025-112-01)*

To Whom It May Concern,

Envicom Corporation (Envicom) is requesting a record review of the Native American Heritage Commission (NAHC) records of cultural resources for the Project site, plus a **0.25-mile study area**. We also request a list of Tribal Group representatives for the area in the event we need to contact their offices. The Project site is located at:

United States Geological Survey 7.5' Quadrangle: Newbury Park, 2021
County: Ventura County

Envicom appreciates the NAHC's help with this request. For correspondence or questions regarding this Project, please contact Dr. Wayne Bischoff at 818-879-4700 ext. 229 (wbischoff@envicomcorporation.com).

Sincerely,

Rowan Barton
Staff Archaeologist

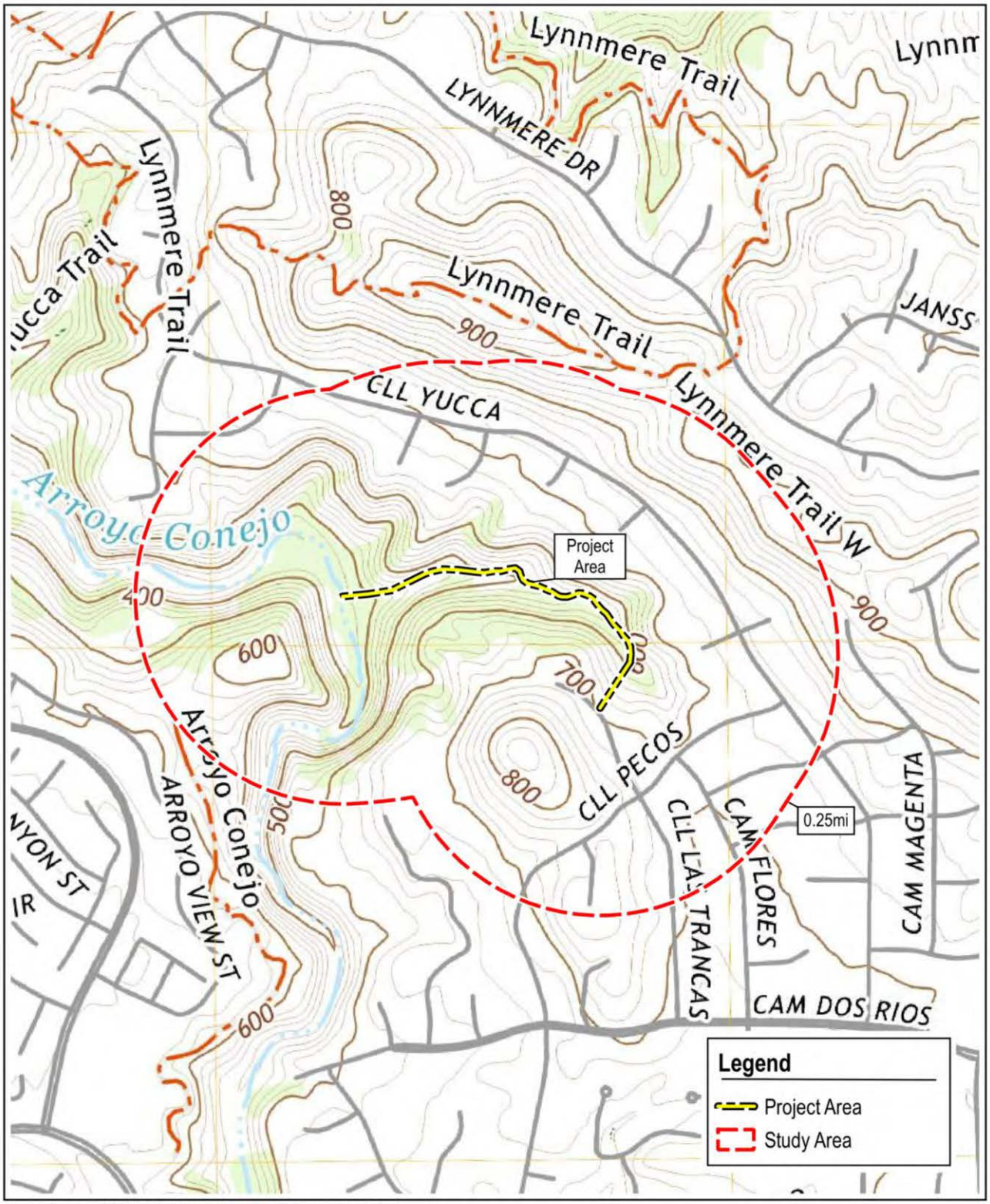


Image Source: USGS 1:24,000 Topographic Map: Thousand Oaks, 2022.

BOX CANYON CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

0 400 800 ft

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Box Canyon Project, Thousand Oaks, Ventura County (Envicom Project #2025-112-01)

County: Ventura

USGS Quadrangle Name: Newbury Park

Township: 2N **Range:** 20W **Section(s):** 00

Company/Firm/Agency: Envicom Corporation

Street Address: 4165 E Thousand Oaks Blvd #290, Thousand Oaks, CA

City: Thousand Oaks, CA **Zip:** 91362

Phone: (818) 879-4700

Fax:

Email: wbischoff@envicomcorporation.com

Project Description:

Project to provide a cultural resource Phase I for the Box Canyon Project
in Thousand Oaks, Ventura County, CA
(Envicom Project # 2025-112-010)

October 9, 2025

Natural History Museum of Los Angeles
900 Exposition Blvd.
Los Angeles, CA 90007

Subj: Project to Provide a Cultural Resource Phase I for Box Canyon, Thousand Oaks, Ventura County, California *(Envicom Project #2025-112-01)*

To Whom It May Concern,

Envicom Corporation (Envicom) is requesting a record search of the Natural History Museum of Los Angeles County (NHMLAC) database for paleontological resources/sensitivity for the Project site and surrounding area (within 0.25 mile of the Project site), as well as a map/listing of all paleontological resources previously identified within the attached Project site, plus the 0.25-mile study area. The Project site is located at:

United States Geological Survey 7.5' Quadrangle: Newbury Park, 2021
County: Ventura County

Envicom appreciates the NHMLAC's help with this request. For correspondence or questions regarding this Project, please contact Dr. Wayne Bischoff at 818-879-4700 ext. 229 (wbischoff@envicomcorporation.com).

Sincerely,

Rowan Barton
Staff Archaeologist

Attachment:
Project vicinity map on 1:24,000 topographic map

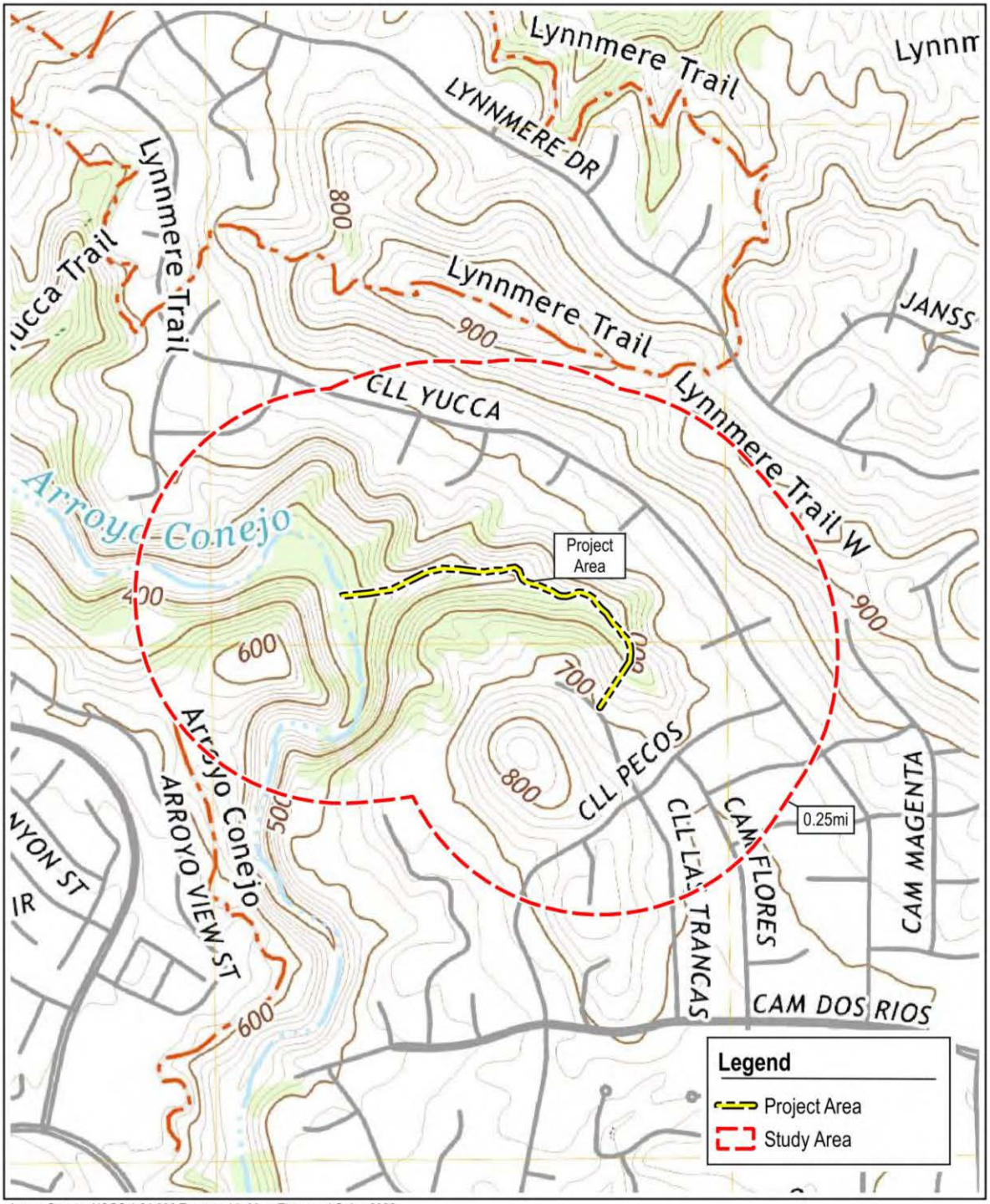


Image Source: USGS 1:24,000 Topographic Map: Thousand Oaks, 2022.

BOX CANYON CULTURAL PHASE I

envicom

USGS Map with Project Area and 0.25-mile Study Area

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

SECRETARY
Isaac Bojorquez
Ohlone-Costanoan

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Sara Dutschke
Miwok

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of Luiseño Indians

COMMISSIONER
Vacant

COMMISSIONER
Vacant

ACTING EXECUTIVE SECRETARY
Michelle Carr

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

October 10, 2025

Wayne Bischoff
Envicom Corporation

Via Email to: wbischoff@envicomcorporation.com

Re: Box Canyon, Thousand Oaks, Ventura County (Envicom #2025-112-01) Project, Ventura County

To Whom It May Concern:

As requested, a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed based on information submitted for the above referenced project. The results were negative. Be aware that tribes do not always record their sacred sites in the SLF, nor are they required to do so. As such, an SLF search is not a substitute for consultation with all tribes that are traditionally and culturally affiliated with a project's geographic area.

Attached is a list of Native American tribes that are traditionally and culturally affiliated with the project's geographic area. Please contact all of the listed tribes as they may have information about sacred sites within the project area that is not listed with the NAHC.

If within two weeks of notification, a response has not been received, the Commission requests that you follow up with a telephone call or email to ensure that the project information was received.

If you receive notification of a change of address or phone number from a tribe, please inform the NAHC so that we can assure that our lists contain current information.

In addition to engaging in tribal consultation, you should consult the appropriate regional California Historical Research Information System (CHRIS) information center to determine whether it has information regarding the presence of recorded archaeological sites within the project area.

If you have any questions or need additional information, please contact me at Mathew.lin@nahc.ca.gov.

Sincerely,

Mathew Lin

Mathew Lin, MPP
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Ventura County
10/10/2025

County	Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Ventura	Barbareño/Ventureño Band of Mission Indians	N	Cultural Resource Committee	P.O. Box 364 Ojai, CA, 93024	(805) 746-6685		CR@bvbmi.com	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	6/19/2023
	Coastal Band of the Chumash Nation	N	Michael Khuz-Zarate, CBCN Vice Chairman	5151 W Vartikian Ave. Fresno, CA, 93722	(559) 761-9827		mkhus70@gmail.com	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	5/14/2025
	Coastal Band of the Chumash Nation	N	Janet Hall, CBCN Cultural Resources Manager	1529 West Lemon Ave. Lompoc, CA, 93436	(805) 451-8757		tasinhall@yahoo.com	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	5/14/2025
	Coastal Band of the Chumash Nation	N	Mati Waiya, Tribal Chair	16500 S Mountain Drive Santa Paula, CA, 93060	(805) 794-1248		tribalchair@coastalband.org	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	5/14/2025
	Northern Chumash Tribal Council	N	Violet Walker, Chairperson	P.O. Box 6533 Los Osos, CA, 93412	(760) 549-3532		violetsagewalker@gmail.com	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	6/5/2023
	Santa Ynez Band of Chumash Indians	F	General CRM Consultation Account	100 Via Juana Road Santa Ynez, CA, 93460			CRMConsultation@chumash.gov	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	4/28/2025
	Santa Ynez Band of Chumash Indians	F	Nakia Zavalla, Tribal Historic Preservation Officer	100 Via Juana Road Santa Ynez, CA, 93460			nzavalla@chumash.gov	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	7/6/2023
	Santa Ynez Band of Chumash Indians	F	Wendy Teeter, Cultural Resources Archaeologist	100 Via Juana Road Santa Ynez, CA, 93460	(805) 325-8630		wteeter@chumash.gov	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	7/6/2023
	Santa Ynez Band of Chumash Indians	F	Sam Cohen, Government & Legal Affairs Director	100 Via Juana Road Santa Ynez, CA, 93460			scohen@chumash.gov	Chumash	Kern, Los Angeles, San Luis Obispo, Santa Barbara, Ventura	7/6/2023

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Box Canyon, Thousand Oaks, Ventura County (Envicom #2025-112-01) Project, Ventura County.

Record: PROJ-2025-005659
Report Type: List of Tribes
Counties: Ventura
NAHC Group: All

APPENDIX B
Resume of Principal Investigator (Dr. Wayne Bischoff)

DR. WAYNE BISCHOFF
Director of Cultural Resources

Years of Experience
Over 30 years

Education
Ph.D. Anthropology, Michigan State University

B.A. Anthropology, Purdue University

Certifications
Registry of Professional Archaeologists (RPA #32450562)

Hazwoper 24-hour

Professional Affiliations
Society for California Archaeology

Southern California Paleontological Society

Society of Vertebrate Paleontoloty

Ventura County Archaeolgical Society

Specialized Training
Built Environment Assessments

Paleontological Assessments

Ethnographic Reports

AB-52/Tribal Consultation

Dr. Bischoff has over 30 years of experience in managing cultural resource projects and ensuring compliance with the California Environmental Quality Act (CEQA), Section 106 of the National Historic Preservation Act (NHPA), the National Environmental Protection Act (NEPA), and state, county, city, and local government cultural laws, guidelines, and procedures. He is experienced with the City of Los Angeles, having completed dozens of cultural resource projects within the City and surrounding municipalities. He has also completed numerous cultural, paleontological, and built environment projects throughout Los Angeles County. Dr. Bischoff has worked with all Tribal Groups of the Greater Los Angeles area and has provided expert consultation, including Assembly Bill (AB) 52 consultation, writing support, and coordination. He has also written, planned, and enforced cultural resource components of many forms of CEQA and NEPA documents and been a part of Memorandum of Agreement (MOA), Memorandum of Understanding (MOU), and Programmatic Agreement (PA) development teams.

Dr. Bischoff's experience includes residential and commercial development, public works, storm and sewer projects, environmental restoration, water resources, energy and transmission line, highway and bridge, telecommunication, educational facility, and park and trail project. Dr. Bischoff has been the principal or project manager for hundreds of cultural projects in California, including Phase I literature searches and surveys, Phase I(b) subsurface surveys, Phase II evaluations, and Phase III data recoveries.

Dr. Bischoff also has extensive experience consulting with state and federal agencies, including the State Historic Preservation Office (SHPO), California Department of Transportation (Caltrans), the Department of Defense, the General Services Agency (GSA), California Department of Parks and Recreation, the U.S. Department of Agriculture (USDA), many U.S. Army Corps of Engineers (ACOE) districts, Fish and Wildlife, the California Public Utilities Commission (CPUC), and the National Park Service, among others.

REPRESENTATIVE PROJECT EXPERIENCE

Phase I Survey of 28730 Agoura Road, City of Agoura Hills, Los Angeles

Principal and Project Manager for this commercial project, which included SCCIC, NAHC, and NHM record searches and a site survey. A large prehistoric site was discovered and mapped as part of this project. The prehistoric site was evaluated as part of the study, creating a combined Phase I/Phase II report for the City (January 2024 – Current).

Phase I Survey of the Westwood Lane Residential Housing Project, City of Grand Terrace,County of San Bernardino County

Principal and Project Manager for this 60+ acre project, which included SCCIC, NAHC, and NHM record searches and a site survey. (January 2024 – Current).

Cultural Resource Monitoring for the Sanborn II Solar Farm project, County of Kern

Native American, archaeological, and paleontological monitoring principal for this large Terra Gen project. Project includes updating numerous cultural resources and the recordation of new isolates (January 2024 – Current).

Completion of a Positive Findings Combined Phase I Survey and Phase II Evaluation Report for 3555 Chaney Avenue, City of Altadena, County of Los Angeles

Principal and Project Manager for the Phase I/Phase II report, which included SCCIC, NHM, and NAHC record searches. The project also involved the mapping and completion of a DPR for a large Late-19th Century brickmaking industrial site, which was later evaluated and recommended to be eligible to the CRHR (September 2023 – Current).

Orange County Health Care Center Arch/Paleo Monitoring, City of Irvine, County of Orange

Principal and Project Manager for this archaeological and paleontological monitoring project, which included a WEAP, and other post-construction tasks (July 2023 – Current).

Archaeological Monitoring for the Rancho Sierra Affordable Housing Project, City of Los Angeles, City of Camarillo, County of Ventura

Principal and Project Manager for this archaeological monitoring project (May 2023 – Current).

Paleontological Monitoring of 4827 Sepulveda, City of Los Angeles, Area of Sherman Oaks, County of Los Angeles

Principal and Project Manager for this large paleontological monitoring project. (July 2022 – Current).

Archaeological Monitoring for the 623 South La Brea Affordable Housing Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this archaeological monitoring project, which included a detailed project Monitoring Plan, WEAP, and other pre-construction tasks (January 2022 – Current).

Los Angeles Unified Schools Department (LAUSD) Environmental On-Call (including cultural resources), City of Los Angeles, County of Los Angeles

Principal, Project Manager, and cultural resource consultant as needed. Envicom was one of 15 companies to be awarded this large on-call contract. (February 2017 – Current).

Paleontological Monitoring of the Citrus Commons Project, City of Los Angeles, Area of Sherman Oaks, County of Los Angeles

Principal and Project Manager for this paleontological monitoring project. This project led to a large salvage project where over 4000 Late Pleistocene animal bones and bone fragments were collected, cleaned, and stabilized. Over a dozen animal species were represented, with 30% of an extinct bison being plaster jacketed for later processing. The La Brea Tarpits staff completed a partial species identification report for the faunal collection. The Natural History Museum of Los Angeles County identified the collection as the largest ever discovered in the San Fernando Valley. The collection will be curated at CSUCI for future research projects. (October 2021 – March 2024).

Completion of a Historical Built Environment Impact Report for 4403 Thatcher Road, City of Ojai, County of Ventura

Principal and author for this built environment impacts assessment and partial evaluation project for the Twin Peaks Ranch historical site, which included an indirect impacts and viewshed impacts assessment (February 2024 – March 2024).

Phase I Survey of Additional Segments of the Agoura Hills Recreational Center Trail Project, City of Agoura Hills, County of Los Angeles

Principal and Field Director for this public trail survey, which surveyed additional loop segments for the Agoura Hills Recreational Center Trail. (February 2024 – March 2024).

Phase I Survey of the Calabasas Kia Dealership 2nd Parcel, Calabasas, County of Los Angeles

Principal and project manager for this Phase I survey, which included SCCIC and NAHC record searches and a site visit (March 2024).

Phase I Survey of the Sagebrush III Battery Storage Project, Terra Gen Windfarms, County of Kern

Principal and Project Manager for this 300+ acre project, which included a record search and a site survey. (January 2024 – March 2024).

Peer Review of the Cultural Phase I Report for 4875 Spring Housing Project, City of Moorpark, County of Ventura

Peer review was conducted on behalf of the County of Ventura for this project (December 2023 – February 2024).

Phase I Survey of 1118 North Signal Street, City of Ojai, County of Ventura

Principal and Project Manager for this residential project, which included a report of findings, but with the City allowing monitoring instead of the standard record searches. (February 2024).

Native American consultation for the City of Thousand Oaks on the 1651 Lynn Road Project, City of Thousand Oaks, County of Ventura

Native American consultant for this 17-lot residential subdivision project (February 2024).

North Canyon Ranch 170-acre Residential Subdivision, City of Simi Valley, County of Ventura

Cultural resource consultant for entitlement process. (November 2023 – February 2024).

Phase I Survey of 23755 Newhall Avenue, City of Santa Clarita, County of Los Angeles(revised)

Updating the original 2021 report of findings for this commercial project, including with geotechnical information (January 2024 – February 2024).

Phase I Survey of 1449 North Montgomery Street, City of Ojai, County of Ventura

Principal and Project Manager for this residential project, which included a report of findings, but with the City allowing monitoring instead of the standard record searches. (January 2024).

Phase I Survey of 727 Grand Avenue, City of Los Angeles, County of Los Angeles

Principal and Field Director for this survey project, which includes SCCIC, NHM, and NAHC record searches and a site visit. Addressing a 1963 utilitarian parking structure was also an issue for the project. Envicom also produced a Native American Ethnographic Report for the project following the latest City guidelines (November 2021 – January 2024).

Completion of Primary and Building DPR Forms for 4884 North Ventura Avenue, City of Ventura, County of Ventura

Principal for this built environment survey and DPR completion project (January 2024).

Phase I Survey of 4181 Ruffin Road, City of San Diego, County of San Diego

Principal and Project Manager for this commercial development project, which included SCIC, NAHC, and SDNHM record searches. This project involved positive findings from the NAHC. (November 2023 – January 2024).

Native American Consultation for the 9143 DeSoto Project, 4181 Ruffin Road, City of Los Angeles, County of Los Angeles

Envicom conducted a NAHC record search and provided Native American consultation for the project team. (December 2023 – January 2024).

Peer Review of the Cultural Phase I Report for the Xia TTM 68203 Project, City of Palmdale, County of Los Angeles

Peer review was conducted on behalf of the City for this project (December 2023).

Archaeological and Paleontological Monitoring for the Wisteria at Warner Center Project, City of Los Angeles, Area of Woodland Hills, County of Los Angeles

Principal and Project Manager for this archaeological monitoring project, which included a detailed project Monitoring Plan, WEAP, and other pre-construction tasks, including bio sweeps (November 2022 – November 2023).

Newport Crossings, City of Newport Beach, County of Orange

Principal and Project Manager for this archaeological and paleontological monitoring project, which included a WEAP, and other pre-construction tasks (March 2023 – October 2023).

Phase I Survey of the LAUSD Canoga Park High School, City of Los Angeles, Area of Canoga Park, County of Los Angeles

Principal and Project Manager for this survey project, which included SCCIC, NHM, and NAHC record searches. (July 2023 – September 2023).

Phase I Survey of 5825 Philip Avenue, City Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (July 2023 – September 2023).

Phase I Survey of the Western Segment of the Agoura Hills Recreational Center Trail Project, and the Phase II Evaluation of Three Prehistoric Archaeological Sites, City of Agoura Hills, County of Los Angeles

Principal and Field Director for this public trail survey and evaluation project, which surveyed an additional segment of the Agoura Hills Recreational Center Trail. The discovery of three (3) prehistoric sites led to separate evaluation work, which recommended that one of the sites was eligible to the CRHR due to the presence of complex prehistoric features, task areas, and extensive lithic artifacts (April 2023 – September 2023).

Phase I Survey of 210 East Matilija, City of Ojai, County of Ventura

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (July 2023 – August 2023).

Phase I Survey of the Studio City Mixed-Use Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this mixed-use development project, which included SCCIC, NAHC, and NHM record searches (May 2023 – August 2023).

Phase I Survey of the Calabasas Kia Dealership, City of Calabasas, County of Los Angeles

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches and a site visit (December 2022 – August 2023).

Response to Peer Review of the Saugus Gas Station CATEX project, City of Santa Clarita, County of Los Angeles

Peer review was conducted on behalf of the City for this project, with Envicom providing comments and edits to the original cultural report to reflect current conditions (June 2023 – July 2023).

Phase I Survey of the Rancho Potrero Equestrian Center Lighting Project, City of Thousand Oaks, Ventura

Principal and Project Manager for this project, which included SCCIC/NAHC/NHM record searches and a site visit. (April 2023 – July 2023).

Cultural Monitoring of the Riverpark Landing Commercial Development Project, City of Oxnard, County of Ventura

Principal and Project Manager for the archaeological monitoring of this small commercial development project (October 2022 – July 2023).

Phase I Survey for the Soledad Mixed Use Project, City of Santa Clarita, County of Los Angeles

Principal and Project Manager for this project, which included updating a previous report, addressing third-party review questions, and updating project paleontological studies. (March 2023 – June 2023).

Phase I Survey of the Pearblossom Gas Station Project, Unincorporated Area of the County of Los Angeles

Principal and Field Director for this commercial development project, which included SCCIC, NAHC, and NHM record searches. During survey work, an older historical cultural resource was discovered.

Additional tasks involved determining that the identified site was not part of a nearby State of California Landmark; the Llano del Rio socialist commune (1914 to 1918). Shovel tests were placed within the existing older historical cultural resource and an updated DPR for the site were also completed (May 2022 – April 2023).

Phase I Survey of 514 Vista Hermosa, City of Ojai, County of Ventura

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (April 2023 – April 2023).

Phase I Survey of the Princeton Road Mixed-Use Project, City of Moorpark, County of Ventura

Principal and Project Manager for this large 21-acre commercial project, which included SCCIC, NHM, and NAHC record searches and a site survey. This project involved assessing a large destroyed prehistoric site that once was located on the property. (April 2022 – March 2023).

Phase III Data Recovery and Monitoring of CA-VEN-271, City of Thousand Oaks, County of Ventura

Principal and Project Manager for this data recovery project to take place before monitoring of construction of The Oaks multi-family residential project (October 2022 – March 2023).

Consultant for the 40th Street and Avenue L Project, City of Lancaster, County of Los Angeles

Dr. Bischoff addressed Tataviam comments on the Phase I report and drafted a response memo for use by the Client during the entitlement and AB-52 consultation process as needed (March 2023 – March 2023).

1413 Michigan Avenue Archaeological and Native American Monitoring and SHPO Reporting Coordination for a HUD housing project, City of Santa Monica, County of Los Angeles

Envicom completed archaeological and Native American monitoring tasks for this HUD housing project. During monitoring, an older historical cultural resource with a prehistoric element was discovered. Additional tasks related to the discovery included the completion of a DPR and the cleaning, processing, and tabulation of a large number of historical and prehistoric artifacts. The project also involved periodic reporting to SHPO and the creation of a final monitoring report (June 2022 – February 2023).

Archaeological and Paleontological Monitoring for the San Pedro High School Upgrade Project for LAUSD, City of Long Beach, County of Los Angeles (Phase 1) (with Samantha Renta and PaleoWest subconsultants).

Principal and Project Manager for this large archaeological and paleontological monitoring project. PaleoWest was involved with monitoring Miocene bedrock formations, which recovered a dolphin rib and many fish bones and scales. Envicom was involved with the salvage and data recovery of a large amount of Pleistocene (100,000 bp) shells and invertebrates in a layer linked to the second Palos Verdes terrace. Dr. Austin Hendy of the Natural History Museum of Los Angeles County was involved in this data recovery as methodology consultant and speciation expert. The Pleistocene collection will be housed at the NHM when cleaning and tabulation are completed. (June 2021 – February 2023).

Phase I Survey of 32420 Pacific Coast Highway, City of Malibu, County of Los Angeles

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches and a site visit (December 2022 – January 2023).

28116 Pacific Coast Highway Archaeological Monitoring, City of Malibu, County of Los Angeles

Principal and Project Manager for this small archaeological monitoring project. A final monitoring memo was produced for the project. (May 2022 – January 2023).

Phase I Survey of 31335 Lobo Canyon Road, City of Agoura Hills, County of Los Angeles

Principal and project manager for a project SCCIC record search and consultation tasks (December 2022 – January 2023).

Phase I Survey of 21415 Plummer Street Industrial Project, City of Los Angeles, Area of Chatsworth, County of Los Angeles

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches and a site visit. Project later completed as a CATEX (December 2022 – January 2023).

Phase I Survey of 21605 Plummer Street Industrial Project, City of Los Angeles, Area of Chatsworth, County of Los Angeles

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches and a site visit. Project later completed as a CATEX (December 2022 – January 2023).

1100 Rancho Conejo Cultural Resource Monitoring: Demolition Phase, City of Thousand Oaks, County of Ventura

Principal and Project Manager for this large demolition-phase archaeological and paleontological monitoring project. A final monitoring report will be produced for the project. (July 2022 – January 2023).

Phase I Survey of 1046 Cuyama, City of Ojai, County of Ventura

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches and a site visit (November 2022 – January 2023).

Phase I Survey of 1090 Cuyama, City of Ojai, County of Ventura County

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches and a site visit (November 2022 – January 2023).

Development of a Data Recovery Plan for 31800 Broad Beach Road, City of Malibu, County of Los Angeles

Principal and project manager for the authoring of a project data recovery plan for this Malibu Beach project (December 2022 – January 2023).

Phase I Survey of the Canwood Mixed-Use Development Project and the Phase II Evaluation of the Canwood 1 Historical Cultural Resource, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this large mixed-use project, which included SCCIC and NAHC record searches and a site survey as well as the evaluation and recordation of an early 20th Century historical site. (January 2022 – January 2023).

Phase I Survey of 3555 Chaney Avenue, City of Altadena, County of Los Angeles

Principal and Project Manager for this survey of 40-acres of mostly undeveloped land, which included SCCIC, NHM, and NAHC record searches. The survey work led to the discovery of a large Late-19th Century brickmaking industrial site, which was mapped in full (July 2022 – December 2022).

Phase I Survey of 210 Del Norte, City of Ojai, County of Ventura

Principal and project manager for this small Phase I survey, which included SCCIC and NAHC record searches (October 2022 – November 2022).

Phase I Survey of 3802 Avenida Simi, City of Simi Valley, County of Ventura

Principal and Field Director for this survey project for Habitat for Humanity, which included SCCIC and NAHC record searches (July 2022 – November 2022).

2150 Hillcrest Phase I Survey, City of Thousand Oaks, County of Ventura

Principal and Project Manager for this commercial project that involved SCCIC and NAHC record searches (August 2022 – November 2022).

Phase I Survey of 21555 Roscoe, City of Canoga Park, County of Los Angeles

Principal and Project Manager for this survey project, which included SCCIC and NAHC record searches. Addressing several older built environment structures of various integrities was an issue for the project (July 2022 – November 2022).

Pepperdine University: Native American Consultation, City of Malibu, County of Los Angeles

I have provided Pepperdine University professional advice and consultation on a variety of Native American subjects and consultation issues for their current and upcoming development projects (January 2020 – November 2022).

Paleontological consultant for the Riverwalk I Project, City of Santa Clarita, County of Los Angeles

Principal paleontological consultant for this commercial and residential project, which included the drafting of a memo for the City regarding planned site conditions not triggering paleo monitoring of the project. (October 2022 – October 2022).

Archaeological Monitoring at the Sakioka Business Park, City of Oxnard, County of Ventura

Project Manager for this large archaeological monitoring project, which included the recordation of a significant early historic cultural resource (1860s through 1920s) and the processing of hundreds of older historic artifacts. (October 2020 – October 2022).

Phase I Survey of 1651 Lynn Road, City of Thousand Oaks, County of Ventura

Principal and Field Director for this 17-lot residential subdivision project, which included SCCIC and NAHC record searches (June 2022 – September 2022).

Phase I Survey of the Calle Tecate Commercial Project, City of Camarillo, County of Ventura

Principal and Project Manager for this survey project, which included SCCIC and NAHC record searches (August 2022 – September 2022).

Peer Review of the Cultural Phase I Report for the Santa Clarita TTM 68203 Project, City of Santa Clarita, County of Los Angeles

Peer review was conducted on behalf of the City for this project (August 2022 – September 2022).

Phase I Survey of the Oxnard Landing Commercial Development Project, City of Oxnard, County of Ventura

Principal and Project Manager for this small commercial development project, which included a site survey and archaeological monitoring of all site subsurface activities. (March 2022 – August 2022).

Phase I Survey of the Agoura Recreational Center Trail Project, and the Phase II Evaluation of Five Prehistoric Archaeological Sites, City of Agoura Hills, County of Los Angeles

Principal and Field Director for this public trail survey and evaluation project, which included SCCIC, and NAHC record searches, as well as a survey of multiple proposed trail alignments. The discovery of five (5) prehistoric sites led to separate evaluation work, which recommended that three sites were eligible to the CRHR due to the presence of complex prehistoric features, task areas, and extensive lithic artifacts (April 2022 – August 2022).

Phase I Survey of 1502 San Rafael Street, City of Ojai, County of Ventura

Principal and Project Manager for this small survey project, which included SCCIC and NAHC record searches. Due to SCCIC delays involving staffing problems, the City of Ojai granted Envicom a variance to produce the cultural report without state information center data (June 2022 – August 2022).

Agoura Gateway Project, City of Agoura Hills, County of Los Angeles

Consultant for Native American consultation and project scoping. (July 2022 – August 2022).

5506 Pacific Avenue, City of Los Angeles, Area of Venice, County of Los Angeles County

Consultant for the applicant in addressing California Coastal Commission monitoring directives on a site constructed entirely of artificial fill. (July 2022).

Phase I Survey of the Paramount Senior Assisted Living Center, City of Los Angeles, Area of Paramount, County of Los Angeles

Principal and Field Director for this survey project, which includes SCCIC, NHM, and NAHC record searches. This project also required the DPR recordation of a 1950s church, which will be demolished as part of the project. An additional 1920s built environment resource was also assessed as not being eligible for evaluation due to evaluation during a previous project (November 2021 – June 2022).

CA-LAN-320 Phased Evaluation Project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for the phased evaluation (Phase II) of CA-LAN-320 in response to potential impacts from the construction of the Conrad N. Hilton Foundation Phase 2 Campus Building. The site is a prehistoric Chumash residential and ceremonial center of over 80-acres in size and that was used by prehistoric Native Americans from 300 B.C. to the late 1700s. Dozens of test units, hundreds of shovel test pits, surface collection, and surface feature mapping have been completed to date planned. (August 2015 – June 2022).

Phase I Survey of the Rancho Santa Susana Park Phase 4 Development, City of Simi Valley, County of Ventura

Principal and Project Manager for this 4-acre commercial project for the Rancho Simi Parks Department, which included SCCIC and NAHC record searches and a site survey. (March 2022 – May 2022).

Phase I Survey of 6500 Sunset Boulevard, City of Los Angeles, County of Los Angeles

Principal and Field Director for this survey project, which includes SCCIC, NHM, and NAHC record searches. Project was put on hold at the draft report stage (October 2021 – April 2022).

Phase I(b) Survey of APN 673-0-460-190, City of Newbury Park, County of Ventura

Principal and Project Manager for this residential development project, which included subsurface shovel test pits as part of the surface survey as well as construction phase monitoring (April 2022 – April 2022).

Peer Review of the Cultural Phase I Report for the Eternal Valley Cemetery Expansion, City of Santa Clarita, County of Los Angeles

Peer review was conducted on behalf of the City for this project (February 2022 – April 2022).

Phase I Survey of the Rolling Oaks Proposed Open Space, City of Thousand Oaks, County of Ventura

Principal and Project Manager for this proposed park property for the Conejo Recreation and Parks District, which included SCCIC and NAHC record searches. (December 2021 – April 2022).

Phase I Survey of 4303 Ocean View Drive, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 3948 Las Flores Canyon Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 3942 Las Flores Canyon Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 21373 Rambla Vista Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase I Survey of 21425 Rambla Vista Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – April 2022).

Phase II Evaluation of the "Lancaster 3" site, Lancaster Tract 72534, City of Lancaster, County of Los Angeles

Principal and Project manager for this evaluation report, which evaluated an older historical archaeological site as per CRHR Criteria 1, 2, and 4. Two temporal elements were identified; one from the early 20th Century, and another from the 1950s/1960s. Neither was recommended as eligible (December 2021 – April 2022).

1413 Michigan Avenue NEPA Environmental Assessment (EA) for a HUD housing project, City of Santa Monica, County of Los Angeles

Cultural Resource consultant for the project, which involved potential impacts to a City historic landmark – the Nikkei Hall – and authoring a "No Impact" letter to SHPO for the Client. Tasks also included consultation with SHPO and Tribal Groups, and support of an architectural evaluation of the structure as per the NRHP and CRHR. A final DPR for the local landmark was also produced by the project team (October 2021 – April 2022).

Phase I Survey of the Palmdale 70 Affordable Housing Project, City of Palmdale, County of Los Angeles

Principal and Project Manager for this affordable housing residential development project, which included SCCIC, NHM, and NAHC record searches (January 2022 – March 2022).

Phase I Survey of 400 Gorham Road, City of Ojai, County of Ventura

This was a NEPA/Section 106 project. Principal and Project Manager for this affordable housing project, which included an SCCIC and NAHC record searches. (January 2022 – March 2022).

Archaeological and Paleontological Monitoring of the Twin Lakes Water Tank Construction for the Las Virgenes Water District, City of Los Angeles, Area of Porter Ranch, County of Los Angeles

Principal and Project Manager for this archaeological and paleontological monitoring project. (November 2021 – March 2022).

Oakmont Senior Living Historic and Archaeological Display Production, Agoura Hills, Los Angeles County, CA.

Project Manager for this historical interpretation display project (October 2020 – March 2022).

Phase I Survey of 5809 Trancas Canyon Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included SCCIC and NAHC record searches (December 2021 – February 2022).

Phase I Survey of a Parcel at 30th Street and Avenue I, City of Lancaster, County of Los Angeles

Principal and Project Manager for this residential development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. Additional tasks included a paleontological survey of the property and the recordation of a large 1930s/1940s residential archaeological site (September 2021 – February 2022).

Phase I Survey of 325 and 391 Hampshire, City of Thousand Oaks, County of Ventura

Principal and Project Manager for this mixed-use development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. This project also included an architectural assessment and evaluation of the utilitarian commercial building (August 2021 – February 2022).

Phase I Survey of 2301 Santiago Court, City of Oxnard, County of Ventura

Principal and Project Manager for this 4-acre commercial project, which included a record search and a site survey. (October 2021 – January 2022).

Phase I Survey of 5868 Deerhead Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this residential development project, which included a SCCIC and NAHC record search and a site visit (October 2021 – January 2022).

Oakmont Senior Housing Archaeological, Paleontological, and Native American Monitoring Project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this archaeological, paleontological, and Native American monitoring project. (January 2020 – January 2022).

Phase I Survey of a Parcel at 40th Street and Avenue L, City of Lancaster, County of Los Angeles

Principal and Project Manager for this residential development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. Additional tasks included a paleontological survey of the property (September 2021 – December 2021).

Phase I Survey of the Sagebrush II Battery Storage Project, Terra Gen Windfarms, County of Kern

Principal and Project Manager for this project, which included a record search and a site survey. (October 2021 – December 2021).

Phase I Survey of the Rob's Acre Battery Storage Project, Terra Gen Windfarms, County of Kern

Principal and Project Manager for this project, which included a record search and a site survey. (October 2021 – December 2021).

Phase I Survey of the Sagebrush I (extended) Battery Storage Project, Terra Gen Windfarms, County of Kern

Principal and Project Manager for this project, which included a Bakersfield record search and a site survey. (October 2021 – December 2021).

Phase I Survey of the Barrera Hacienda Heights Residential Project, Unincorporated Area, County of Los Angeles

Principal and Project Manager for this 12-acre residential development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (August 2021 – December 2021).

Phase I Survey of 11480 Sulphur Mountain Road, UnincorporatedArea, County of Ventura

Principal and Project Manager for this commercial development project, which included a SCCIC and NAHC record search and a site visit (September 2021 – November 2021).

Phase I Survey of 710 West Harvard, City of Santa Paula, County of Ventura

This is a NEPA/Section 106 project. Principal and Project Manager for this mixed-use development project, which included an SCCIC and NAHC record searches and a site visit. This project also included later consultation with the Client and City on the discovery of a previously unknown historic well (August 2021 – November 2021).

Phase I Survey of the Bixby Villas Development Project, City of Long Beach, County of Los Angeles

Principal and Project Manager for this residential development project, which included an SCCIC and NAHC record searches and a site visit. (July 2021 – November 2021).

Phase I Survey of the Dorothy Drive Residential Development Project, City of Agoura Hills, County of Los Angeles County, CA.

Principal and Project Manager for this 9-acre residential development project, which included an SCCIC, NHM, and NAHC record searches and a site visit. (August 2021 – September 2021).

Archaeological, Paleontological, and Native American Monitoring for the JPA/Las Virgenes Water District Solar Farm Expansion, City of Calabasas, County of Los Angeles

Principal and Project Manager for this monitoring project. This project encountered a prehistoric lithic scatter at depth, which included lithic material, a point fragment, and groundstone artifacts. An older historic hearth was also discovered. The project concluded with a prehistoric site form and a small display at the Las Virgenes Water District headquarters (April 2020 – September 2021).

Phase I Survey of the Agoura Yard Development Project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this mixed-use development project, which included an SCCIC and NAHC record searches and a site visit. (July 2021 – September 2021).

Cultural Resource Monitoring for the Oasis Windmill Farm Phase II, County of Kern

Project manager for the monitoring of impacts to cultural resources as part of the Oasis Windmill Farm Phase II upgrade. Project including updating numerous cultural resources and the recordation of one new prehistoric site with bedrock milling and other surface features (March 2021 – August 2021).

Phase I Survey of the Sagebrush Battery Storage Project, Terra Gen Windfarms, County of Kern

Principal and Project Manager for this project, which included a Bakersfield record search and a site survey. (July 2021 – August 2021).

Ferro Ditch Biological and Archaeological Monitoring, County of Ventura Public Works Osteology, Area of Somis, County of Ventura

Principal Archaeologist and Project Osteologist for this public improvement project. This project also involved the field analysis of excavated bones as being non-human. (January 2021 – July 2021).

Phase I Survey of "The Malibu Club" Project, City of Malibu, County of Los Angeles

Principal and Project Manager for this commercial development project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (June 2021 – July 2021).

Phase I Survey of the Moorpark 67 Residential Development Project, City of Moorpark, County of Ventura

Principal and Project Manager for this 67-acre project, which included an SCCIC, NAHC, and NHM record searches and a site visit, as well as responses to peer review. (May 2021 – July 2021).

Review of Technical Documents, Cultural Resource Consultant for the City of Agoura Hills, and EIR Cultural Section Writing for "The Agoura Village Expansion" project, City of Agoura Hills, County of Los Angeles

Professional review of project cultural resource documents and authoring of cultural resource section of MND for this large mixed-use project. The primary challenge is that the entire development is located on a CRHR-eligible prehistoric Native American cultural resource. (January 2018 – June 2021).

Archaeological Monitoring for 1055 North Signal, City of Ojai, County of Ventura

Principal and Project Manager for this small archaeological monitoring project. (February 2021 – June 2021).

Phase I Survey of the Agoura Kanan Village Project; Additional Project Areas to be Impacted, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this project, which involved the survey of additional project areas and the recordation and updating of two previously known prehistoric cultural resources. (April 2021 – May 2021).

Phase I Survey of 22825 West Roscoe, Area of West Hills, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (April 2021 – May 2021).

Phase I Survey of 23755 Newhall Avenue, City of Santa Clarita, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. The discovery of an older historic cultural resource also resulted in the recordation of a cultural resource on State of California DPR forms. A paleontological survey report was also completed by PaleoWest as per the NHM findings (March 2021 – May 2021).

Phase I Survey of a Property on Giles Road, Area of Lake Sherwood, County of Ventura

Principal and Project Manager for this project, which included an SCCIC and NHAC record search and a site visit. Exploration of all rock shelters and cache openings on the property for historic artifacts was part of this project. A pre-construction survey was also completed for the project. (July 2020 – May 2021).

Phase I Survey of 12772 San Fernando Road, Area of Sylmar, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (March 2021 – May 2021).

Phase I Survey of a large parcel located off of West Avenue I, Area of Antelope Valley, City of Lancaster, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC, NHM, and NAHC record searches and a site visit. The discovery of an older historic cultural resource also resulted in the recordation of a cultural resource on State of California DPR forms. A paleontological survey report was also completed by PaleoWest as per the NHM findings (March 2021 – April 2021).

Phase I Survey of 2140 Stunt Road, Unincorporated Area, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (March 2021 – April 2021).

Arts District Archaeological Monitoring Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this archaeological monitoring project. (October 2020 – April 2021).

Phase I Survey of the Lynch Land and Cattle Property, Area of Somis, County of Ventura

Principal and Project Manager for this project, which included an SCCIC and NAHC record searches and a site visit. (February 2021 – April 2021).

Phase I Survey of 3870 Puerco Canyon Road (Lot 1), City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (February 2021 – April 2021).

Phase I Survey of 3870 Puerco Canyon Road (Lot 2), City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (February 2021 – April 2021).

Phase I Survey of the Ladyface Vista project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this project, which included SCCIC, NAHC, and NHM record searches and a site visit. This large project had complex paleontological issues, which Envicom addressed with the NHM report and an excellent geotechnical report (February 2021 – March 2021).

Phase I Survey of the Central Plaza Shopping Center Project, City of Camarillo, County of Ventura

Principal and Project Manager for this project, which included SCCIC, NAHC, and NHM record searches and a site visit. (February 2021 – March 2021).

Phase I Survey of 3426 Serra Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (January 2021 – March 2021).

Oakmont Senior Living Historic and Archaeological Display Production, City of Simi Valley, County of Ventura

Project Manager for this historical interpretation display project (with the Strathearn Historic Park and Museum) (September 2020 – February 2021).

Cultural Resource Monitoring for the Oasis Windmill Farm, County of Kern

Project manager for the monitoring of impacts in six cultural resources as part of the Oasis Windmill Farm upgrade (August 2020 – February 2021).

Archaeological Monitoring at the Arctic Cold Industrial Project Site, City of Oxnard, County of Ventura

Project Manager for this large archaeological and Native American monitoring project. (November 2020 – February 2021).

Phase Ib (subsurface) Survey 239 Oak Glen Avenue, City of Ojai, County of Ventura

Principal and Project Manager for this City-requested Phase Ib survey, which included the excavation of six shovel test pits and a comprehensive site assessment to supplement work completed in 2020 as the "Rancho Ojai" project. (February 2021 – February 2021).

Entitlement Phase Cultural Resource Tasks, Arrowhead Estate Residential Development, City of Banning, County of Riverside

Project Manager for all cultural tasks, which included HAER documentation of the Gilman House Channel, team meetings, and the development of a construction phase Monitoring Plan that incorporated the history of the St. Boniface Indian School. (January 2021 – February 2021).

Phase I Survey of a Proposed Little Rock Mobile Home Park, Unincorporated Area, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. The recordation of a large early 20th Century residential and farm complex on State of California DPR forms was also completed as part of this project. A paleontological survey report was also completed by PaleoWest as per the NHM findings (November 2020 – February 2021).

Phase I survey of the Chadwick School Development Project, City of Palos Verdes, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (December 2020 – February 2021).

Phase I Survey of 3142 Subida Circle, City of Santa Rosa, County of Sonoma

Principal and Project Manager for this project, which included an SCCIC and NAHC record search and a site survey. (August 2020 – February 2021).

Keyes Porsche Archaeological, Paleontological, and Native American Monitoring Project, Area of Woodland Hills, County of Los Angeles

Principal and Project Manager for this archaeological, paleontological, and Native American monitoring project. (August 2020 – February 2021).

Los Angeles Unified School District (LAUSD) Environmental On-Call for Archaeological and Paleontological tasks, County of Los Angeles

Principal, Project Manager, and cultural resource task completion as needed. Envicom is one of three selected vendors for one year, with four potential renewable years in the contract (eventually rolled in with LAUSD environmental on-call contract) (February 2019 – February 2021).

Conrad N. Hilton Foundation Phase Ib of Proposed Phase II Building Locations, City of Agoura Hills, County of Los Angeles

This project involved the excavation of 48 shovel test pits within the western periphery of cultural resource CA-LAN-320 on Foundation property. (January 2020 – January 2021).

Phase I Survey of the Sandefer Residential Project, Unincorporated Area, County of Ventura

Principal and Project Manager for this project, which included an SCCIC and NAHC record search and a site survey. (August 2020 – January 2021).

Phase I Survey of 122 acres of the Canyon Ostara residential development project, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC and NAHC record search and a site survey. (August 2020 – January 2021).

Summit View Apartments Project Paleontological Monitoring for this Veterans Housing Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this paleontological monitoring project. (February 2020 – January 2021).

Native American Monitoring at the Los Angeles International Airport (LAX), City of Los Angeles, County of Los Angeles

Project Manager for this long term Native American monitoring project, which includes a Discovery Plan and a final Monitoring Report. (October 2020 – December 2020).

18800 Gale Avenue Archaeological, Biological, and Paleontological Monitoring Project, Area of Rowland Heights, Countu of Los Angeles

Principal and Project Manager for this archaeological, biological, and paleontological monitoring project. (November 2019 – December 2020).

Phase I survey of 410 Tico Road, City of Ojai, County of Ventura

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (November 2020 – December 2020).

Phase I Survey of a property within the Rancho Ojai subdivision, City of Ojai, County of Ventura

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (October 2020 – November 2020).

Fillmore Terrace Phase I and Native American Consultation, City of Fillmore, County of Ventura

Principal and Project Manager for this large low-income housing project, which included an SCCIC record search, site visit, and Native American consultation on behalf of the City. (September 2020 – October 2020).

Phase I Survey of 730 South Vermont, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC, NAHC, and NHM record searches and a site visit. (June 2020 – October 2020).

Phase I Survey of the Reconstruction of the Brookview Ranch Riding and Event Venue, School of Management Building, County of Los Angeles

Principal and Project Manager for this riding venue rebuild and expansion. Project included a SCCIC/NAHC record search and a site visit. One of the challenges has been integrating a prehistoric cultural resource immediately north of the project development, but on the project property, into the assessment recommendations (July 2019 – September 2020).

Phase I Survey of 715 Del Oro Drive, City of Ojai, County of Ventura

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (June 2020 – August 2020).

Phase I Survey of 604 Gridley Road, City of Ojai, County of Ventura

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (July 2020 – August 2020).

Phase I Survey of the 5041 Lankershim Hotel Property, Area of North Hollywood, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC, NHM, NAHC record searches and a site visit. (May 2020 – July 2020).

Phase II Evaluation of CA-LAN-41 within the Boundary of the Agoura Village project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for the completion of an Evaluation (Phase II) of a complex prehistoric cultural resource within the boundary of the Agoura Village project. The Phase II involved the excavation of ten test units, dozens of shovel test pits, as well as more detailed mapping of the site. (January 2019 – July 2020).

Phase I Survey of 6544 Wandermere Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (June 2020 – July 2020).

Phase I Survey of 5841 Busch Drive, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (May 2020 – July 2020).

Archaeological and Paleontological Monitoring for the Agoura Landmark Development Project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this monitoring project. A positive findings report was also completed and submitted to the City after the discovery of a small lithic scatter within the development footprint (January 2019 – July 2020).

Phase I Survey 505 Centre Street, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC, NAHC, and NHM record searches and a site visit. This complex project had multiple built environment concerns, including the adjacent San Pedro Commercial Historic District (April 2020 – June 2020).

Paleontological Phase I Survey of an Agricultural Development Parcel in Balcom Canyon, Area of Somis, County of Ventura

Author for this project, which included a detailed geological and paleontological statement for the proposed project. (June 2020).

Cultural Resource Discovery Plan for the Oasis and Point Wind Windmill Farm, County of Kern

Author of the discovery plan for upgrades to two large windmill farms for Terra Gen. (March – April 2020).

Phase II Evaluation of Six Native American Archaeological Sites for the Terra Gen Oasis Windmill Farm, County of Kern

Principal and Project Manager for this archaeological evaluation project, which utilized shovel test pits and test units to evaluate six prehistoric Native American cultural resources that would be impacted by future windfarm development. (March 2020 – April 2020).

Phase I Survey of The Emerald Residential Project, City of Lancaster, County of Los Angeles

Principal and Project Manager for this approximately 5-acre housing project, which included an SCCIC/NAHC/NHM record searches and a site visit. (February 2020 – April 2020).

Phase I Survey of The West Palmdale Residential Complex Project, City of Palmdale, County of Los Angeles

Principal and Project Manager for this approximately 35-acre housing project, which included an SCCIC/NAHC/NHM record searches and a site visit. (February 2020 – April 2020).

Conrad N. Hilton Foundation Geotech Boring Archaeological and Paleontological Monitoring, City of Agoura Hills, County of Los Angeles

This project involved the monitoring of geotech trench and drilling sites within Foundation and Las Virgenes Water District properties within the City of Agoura Hills. (January 2020 – April 2020).

Phase I Survey of 4510 Via Vienta, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (January 2020 – April 2020).

Phase I Survey of the Proposed California Lutheran University, School of Management Building, City of Thousand Oaks, County of Ventura

Principal and Project Manager for this university project. Project included a SCCIC/NAHC record search and a site visit. (December 2019 – April 2020).

Phase I Survey of the Twin Lakes Water Tank Project, Area of Porter Ranch, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for the Los Virgenes Municipal Water District. (October 2019 – April 2020).

Phase I Survey of the Castaic Apartments Project, Town of Castaic, County of Los Angeles

Principal and Project Manager for this large 105-acre mixed use development project, which included an SCCIC/NAHC record search, an NHM record search, and a site visit. The cultural survey discovered two complex older historic sites, which required extensive recordation and evaluation (July 2019 – April 2020).

Sierra West Assisted Living Project, City of Santa Clarita, County of Los Angeles

Principal and Project Manager for this group residential project. Project included NHM/SCCIC/NAHC record searches, and a site visit. A project challenge was addressing historic early 20th Century structures, including an early stagecoach station, which once were located on the property, as well as the proximity of the parcel to a historic (1880s) cemetery. (October 2019 – April 2020).

Phase I Survey of 1175 Camille Drive, City of Ojai, County of Ventura

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (January 2020 – February 2020).

Vineland and Cleon Self Storage Project Phase I Cultural Survey, City of Burbank, County of Los Angeles

Principal and Project Manager for this commercial project. Project included NHM/SCCIC/NAHC record searches, but no site visit due to extensive urbanization. (December 2019 – January 2020).

Phase I Survey of 5617 Busch Drive, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (December 2019 – January 2020).

Cultural Resource Monitoring of the 21110 Oxnard Hotel project, Area of Woodland Hills, County of Los Angeles

Principal and Project Manager for this monitoring project. (August 2019 – January 2020).

Phase I Survey of the Riverwalk II Mixed-Use Project, City of Santa Clarita, County of Los Angeles

Principal and Project Manager for this commercial and Residential Project. Project included a SCCIC/NAHC record search and a site visit. (December 2019 – December 2019).

Phase I Survey of 5814 Philip Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (October 2019 – December 2019).

Phase I Survey of Improvements to the Coronado Golf Course, City of San Diego, County of San Diego

Principal and Project Manager for this project, which included an SCCIC/NAHC record search only. (October 2019 – November 2019).

Phase I Survey of 6208 Tapia Drive, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (October 2019 – November 2019).

Phase I Survey of 6711 Wandermere Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (September 2019 – October 2019).

Phase I Survey of 5820 Foxview Drive, City of Malibu, County of Los Angeles

Principal and Project Manager for residential project, which included an SCCIC/NAHC record search, an NHM record search, and a site visit. (September 2019 – October 2019).

Phase I Survey of the new Keyes Porsche Auto Dealership, Area of Woodland Hills, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC/NAHC/NHM record search, a site visit, and the production of a separate Ethnographic Assessment Report for the project. Envicom also supported the Lead Agency in AB-52 consultation with the Tataviam and Tongva Tribal Groups. (August 2019 – October 2019).

Cultural Resource Monitoring of the 21121 Van Owen development project, Area of Canoga Park, County of Los Angeles

Principal and Project Manager for this monitoring project. (September 2019).

Phase I Survey of the Avenue 34 Mixed-Use Development Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (August 2019 – September 2019).

Phase I Survey of the Faith Lutheran Senior Living Project, City of Inglewood, Los Angeles County, CA.

Principal and Project Manager for this project, which included an SCCIC/NAHC record search and a site visit. (August 2019 – September 2019).

Phase II Evaluation of Cultural Resource CA-LAN-513 within the Boundary of 6282 Sea Star Estates Residential Development within the City of Malibu, County of Los Angeles

Principal and Project Manager for this Phase II evaluation, which involved surface examination only due to plowed field conditions. No evidence of a cultural resource was found. (September 2019).

Phase I Survey of an Agricultural Development Parcel in Balcom Canyon, Area of Somis, County of Ventura

Principal and Project Manager for this project, which included an SCCIC/NAHC record search, a site visit, and the recordation of a prehistoric site at the edge of the project boundary. (July 2019 – August 2019).

Phase I Survey of 31215 Bailard Road, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC record search and a site visit. (July 2019 – August 2019).

Phase II Evaluation of the Proposed Location of the Printz Colony House within the Strathearn Historic Park, City of Simi Valley, County of Ventura

Principal and Project Manager for this Phase II evaluation of part of the 1880s Strathearn Farmstead. Evaluation tasks included the excavation of shovel test pits and a single test unit, construction monitoring, and a combined report for the Rancho Simi Recreation and Parks District (June 2019 – July 2019).

Phase I Survey of the Parks LA project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC/NAHC/NHM record search, a site visit, and a Natural History Museum paleontological assessment. (June 2019 – July 2019).

Phase I Survey of the Rancho Malibu residential development project, City of Malibu, County of Los Angeles

Principal and Project Manager for this project, which included an SCCIC/NAHC/NHM record search, a site visit, and a Natural History Museum paleontological assessment. (June 2019 – July 2019).

Phase I Survey of 380 South Rosemead, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this development project, which included an SCCIC/NAHC/NHM record search, a site visit, and a Natural History Museum paleontological assessment. (May 2019 – June 2019).

Phase II Evaluation of CA-LAN-129 and CA-LAN-129a, two prehistoric sites, and CA-LAN-4363H, an early historic site, City of Calabasas, County of Los Angeles

Principal and Project Manager for the evaluation of these three sites as part of permitting with the Corps of Engineers. The evaluation was written to NRHP/SHPO standards. (May 2019 – June 2019).

Phase I Survey of 1160 Sulphur Mountain Road, City of Ojai, County of Ventura

Principal and Project Manager for this residential development project, which included a SCCIC/NAHC record search and a site visit (May 2019 – May 2019).

Phase I Survey of the Cal Grow Farms Project, City of Perris, County of Riverside

Principal and Project Manager for this agricultural development project, which included a SCCIC/NAHC/NHM record search and a site visit. (March 2019 – May 2019).

Phase I Survey of the Riverwalk Mixed-Use Project, City of Santa Clarita, County of Los Angeles

Principal and Project Manager for this commercial and Residential Project. Project included a SCCIC/NAHC record search and a site visit. (March 2019 – May 2019).

Phase I Survey of the West Village Project, City of Calabasas, County of Los Angeles

Principal and Project Manager for this Army Corps of Engineers (ACOE) permitting project. Project included a SCCIC/NAHC/NHM record search and a site visit, as well as SHPO review of the final report. (March 2019 – May 2019).

Phase I Survey of the Belvedere Middle School Improvements Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search and NAHC record search request for LAUSD. (November 2018 – April 2019).

Phase I Survey "The Angel" Project, City of Los Angeles, County of Los Angeles

Principal and Project Manager for this low-income housing project in the San Fernando Valley. Project included a SCCIC/NAHC record search and a site visit. (January 2019 – March 2019).

Fourth and Hewitt, City of City of Los Angeles, County of Los Angeles

Principal and Project Manager for a cultural resource record search for the development of a new office building within a commercial urban environment. Project also included a paleontological assessment of the property due to an extensively deep planned parking garage and Native American concerns. Also completed with an Ethnographic Report to meet AB-52 criteria. Another key issue was determining whether a historic built environment assessment was needed. (February 2017 – March 2019).

Phase I Survey of the Deer Lake Water Tank Project, Area of Porter Ranch, City of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for the Las Virgenes Municipal Water District. (November 2018 – March 2019).

Phase I Survey of the Sherwood Development Corporation, Tract 4409, Unincorporated Area, County of Ventura

Principal and Project Manager for this Army Corps of Engineers (ACOE) permitting project. Project included a SCCIC/NAHC record search and a site visit, as well as SHPO review. (January 2019 – February 2019).

City of Thousand Oaks Environmental On-Call (Including Cultural Resources), City of Thousand Oaks, County of Ventura

Envicom was selected as one of a limited number of on-call environmental firms for the City. (June 2015 – December 2018).

Phase II Evaluation of Cultural Resource CA-LAN-513 within the Boundary of 6361 Sea Star Estates Residential Development within the City of Malibu, County of Los Angeles

Principal and Project Manager for this Phase II evaluation, which involved limited shovel test pits and surface examination. No evidence of a cultural resource was found. (November 2018 – December 2018).

Phase I Survey for the Massilia Spa Project, Unincorporated Area, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. Project also includes an inventory and initial assessment of over a dozen 1930 through 1990 structures on the property (June 2018 – December 2018).

Phase I Survey of the Conejo Creek Park, City of Thousand Oaks, County of Ventura

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (August 2018 – November 2018).

Phase I Survey of the Butler Ranch, Unincorporated area near West Simi Valley, County of Ventura

Principal and Project Manager for the completion of a Phase I record search, NAHC record search request, and a site survey of this 332-acre low density residential development project. (May 2018 – October 2018).

Valencia Travel Village, City of Valencia, County of Los Angeles

Principal and Project Manager for the completion of a Phase I for trailer park and recreation center. (August 2018 – October 2018).

Phase I Survey of the JPA Solar Farm, City of Calabasas, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for the Las Virgenes Municipal Water District. This 20-acre solar project also addressed a large prehistoric Native American site located next to and partially on the property. Project included Native American consultation with the Lead Agency and the Tatatviam and the recordation of two prehistoric petroglyphs (August 2018 – October 2018).

Simi BMX Course Phase I Survey, City of Simi Valley, County of Ventura

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (July 2018 – August 2018).

Phase I Paleontological Survey of the 3467 Camino de la Cumbre Property, Area of Sherman Oaks, County of Los Angeles

Principal and Project Manager for the completion of a Natural History Museum record search and paleo report. (August 2018).

Phase I Survey of the proposed 113-133 West Plymouth Street multiple unit residential development, City of Inglewood, County of Los Angeles (with Samantha Whittington, Debbie Balam, and Charlie Fazzone).

Principal and Project Manager for the completion of a SCCIC/NAHC record search, paleontological record search, NAHC record search request, and a site survey. Additional tasks included writing for the cultural section of the MND document (April 2018 – August 2018).

Phase I Survey for the 17-acre Olivas Park Extension commercial development project in City of Ventura, County of Ventura

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey, followed by limited monitoring. (January 2018 – June 2018).

Phase I(b) Survey of the proposed Forrest Club 50-acre private club development, County of Los Angeles (with Samantha Whittington and Charlie Fazzone).

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. In addition, 24 shovel test pits were excavated across the locations of two 1920s historic cabins. No further work was required. (April 2018 – June 2018).

Phase I Survey for the Ascension Lutheran Church Master Plan and MND, City of Thousand Oaks, California, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (May 2018 – June 2018).

Cultural, Paleo, and Native American Monitoring for the Agoura Hills Marriott Development Project, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for this monitoring project. During monitoring, a prehistoric Chumash cultural resource was discovered (number not yet assigned), which led to artifact collection, analysis, and a final report of findings that was submitted to the City (January 2018 – June 2018).

Phase I Survey for the Mulholland Senior Living Project, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (May 2018 – May 2018).

Phase I Survey of the proposed Tapo at Alamo EIR for a mixed-use development project, City of Simi Valley, County of Ventura (with Samantha Whittington and Debbie Balam).

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (March 2018 – May 2018).

Phase I Survey of the Upper Bailey Road tract, Area of Sylmar, City of Los Angeles, County of Los Angeles (with Samantha Whittington and Debbie Balam).

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (December 2017 – April 2018).

Phase I Survey of the Lower Bailey Road tract, Area of Sylmar, City of Los Angeles, County of Los Angeles (with Samantha Whittington and Debbie Balam).

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (December 2017 – April 2018).

Historic Structure Evaluation of Blythe Elementary School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of Robert Hill Lane Elementary School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of James Madison Middle School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. School was found eligible for the CRHR. (February 2018 – April 2018).

Historic Structure Evaluation of 54th Street Elementary School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. School was found eligible for the CRHR. (February 2018 – April 2018).

Historic Structure Evaluation of Chapman Elementary School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of Dena Street Elementary School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Historic Structure Evaluation of Patrick Henry Middle School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. School was found eligible for the CRHR. (February 2018 – April 2018).

Historic Structure Evaluation of Richland Avenue Elementary School for LAUSD, City of Los Angeles, County of Los Angeles

Project Manager for this project, with Chattel, Inc., being the historic preservation consultant. (February 2018 – April 2018).

Marinette Road Residential Development, Area of Pacific Palisades, City of Los Angeles, County of Los Angeles

Principal and project manager for this development project, which included a SCCIC/NAHC record search, site survey, Tribal Group scoping letters, and agency consultation. The major challenge was that the project property was within the Will Rogers State Monument and National Register site boundary. An update for this project was conducted in 2018 to include AB-52 compliance. (February 2015 – May 2015; January 2018 – April 2018).

Phase I Survey for 6956 Dume Drive, City of Malibu, County of Los Angeles

Principal and Project Manager for the completion of an SCCIC record search, and a site survey. (February 2018 – March 2018).

Phase I Survey of roughly 50-acres for Improvements on the Saddlerock Ranch/Malibu Wines Property in the Area of the Santa Monica Mountains, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project involves upgrades to the winery existing structures and public buildings, as well as road and parking improvements. Part of this project is located near a National Register Chumash rock art site as well as other prehistoric resources (November 2016 – March 2018).

Phase I Survey for 28730 Grayfox, City of Malibu, County of Los Angeles

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (January 2018 – February 2018).

Phase I Survey for 11681 Foothill Boulevard, a multiple-unit residential project, Area of Sylmar, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. This project also included a Native American Tribal Cultural Resource Assessment. (November 2017 – February 2018).

Phase I Survey for a single-family property development along Yerba Buena Road, County of Ventura

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (December 2017 – January 2018).

Phase I Survey for 34134 Mulholland Highway, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (December 2017 – January 2018).

Faunal, Osteological, Archaeological, and Fossil Consultation for Citadel Environmental and Turner-Hunt for the Hollywood Park Development Project (new Rams NFL Stadium), City of Inglewood, County of Los Angeles

Osteological and paleontological consultant for Kiewit, Turner, and Citadel for the construction of the new Rams NFL stadium in Ingelwood. Project included discovery and recordation of modern and fossil mammal bones. I was the official on-call cultural/paleo professional for the Rams Stadium project, being called in to deal with modern faunal and Pleistocene fossil remains found during excavation. I worked closely with the construction team to get an expert on site within 24-hours of the discovery, with the goal of getting the discovery assessed and the construction team back to work as soon as possible. (December 2016 – January 2018).

Phase I Survey for 24600 Thousand Peaks Road, City of Calabasas, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (November 2017 – January 2018).

Phase I Survey for 28929 Grayfox, City of Malibu, California, County of Los Angeles

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (November 2017 – January 2018).

Manzanita School Phase Ia Survey for a 20.27-acre private school development, Area of Topanga Canyon, County of Los Angeles

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. This project also assessed built environment resources, which included early 1900s buildings, early 1900s water control features, culverts, and bridges, and 1950s landscaping elements (May 2017 – January 2018).

Phase I Survey for the 181 to 187 Monterey Road Condominium Project, a small residential development, City of South Pasadena, County of Los Angeles

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (July 2017 – January 2018).

Phase I Survey for the Agoura Village project, a 7.37-acre Commercial Subdivision, City of Agoura Hills, County of Los Angeles County

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a Phase Ia site survey. The Phase Ia survey was followed by a Phase Ib subsurface survey and an updated site form for a previously known prehistoric cultural resource that includes the entire project area. (October 2016 – December 2017).

Phase I survey for 22866 Beckledge Terrace, City of Malibu, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (September 2017 – November 2017).

Lynn Road Residential Development Project, Construction Monitoring, Area of Newbury Park, County of Ventura

Principal and Project Manager for the surface collection and construction monitoring for this 10-acre residential construction project. (October 2017 – November 2017.)

Phase II Evaluation of two cultural resources located on the Oakmont project property, City of Agoura Hills, County of Los Angeles

Principal and Project Manager for the evaluation of a prehistoric cultural resource and a 1920s-1980s historic homestead cultural resource. Evaluation tasks included shovel test pits, and a test unit for the prehistoric cultural resource, and detailed mapping and documents research for the historic cultural resource. A combined report for both Oakmont projects was produced for the City. (August 2017 – October 2017).

Pomona Environmental On-Call (Including Cultural Resources), City of Pomona, County of Los Angeles

Envicom successful won inclusion as one of six on-call environmental firms for the City. (October 2014 – October 2017).

Phase I Survey for the Oakmont commercial project, a 5.75-acre development in the City of Agoura Hills, County of Los Angeles

Principal and Project Manager for the completion of NAHC record search, and a Phase Ia site survey. The Phase Ia survey identified two (2) cultural resources; a 1920s historic homestead foundation, and a large prehistoric archaeological site. (August 2017 – October 2017).

Phase I Assessment of the West Hills Crest 37-acre Residential Subdivision in West Hills, City of Los Angeles, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search and project area site survey. A key issue for this project was the record search being positive for a prehistoric cultural resource within the development area. This resource, CA-LAN-1223, was further investigated with 22 shovel test pits, and evaluated as not being a significant cultural resource. (February 2017 – October 2017).

San Bernardino Cultural, Historic Architecture, and Paleontology On-Call, County of San Bernardino, CA.

Envicom successful won inclusion in the limited on-call pool. (October 2014 – October 2017).

Phase I Survey for 15498 LaPeyre Court, a residential development, City of Moorpark, County of Ventura

The project was actually in the unincorporated area of Ventura County. Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. Project also included coordination with numerous biology tasks. (August 2017 – September 2017).

Canyon View Estates Paleontological Survey, City of Santa Clarita, County of Los Angeles

Principal and Project Manager for this paleontological record search, site survey, and report. (August – September 2017).

North Canyon Ranch 170-acre Residential Subdivision, City of Simi Valley, County of Ventura

Principal and Project Manager for the completion of a SCCIC/NAHC record search and project area site survey. A key issue for this project was a previously disturbed cultural resource within the project area, the destruction of which needed to be addressed in the final report. (May 2017 – August 2017).

Phase I Survey for the 12300 Valley Boulevard Hotel, a commercial development, City of El Monte, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this small residential development. (June 2017 – August 2017).

Phase Ia Survey for the Holiday Inn Express Hotel, a commercial development, City of El Monte, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this small residential development. (July 2017 – August 2017).

Arcadia Town Homes MND Phase I Cultural Assessment for a multi-unit residential development, City of Arcadia, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this multi-unit residential development. (May 2017 – August 2017).

Phase I Survey for 3800 Figueroa, an apartment complex development, City of Los Angeles, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for apartment complex development. (June 2017 – August 2017).

Phase I Survey for the Copper Canyon Project, a 5-acre residential development, Area of Santa Clarita, county of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. Also part of the project was the resurvey of two previously recorded cultural resources within the project boundary. (May 2017 – July 2017).

Phase Ia Survey for the Oneonta Hillside Drive, a residential development, City of South Pasadena, County of Los Angeles

Principal and Project Manager for the completion of an SCCIC and NAHC record search, and a site survey. (May 2017 – July 2017).

Construction Monitoring for Parcel 2058-003-010, Area of Lobo Canyon, County of Los Angeles

Principal and Project Manager for the surface collection and construction monitoring for this single-family residential construction project. (July 2017)**.**

Phase I Survey for the 6625 Bradley Road, a residential development, Area of Somis, County of Ventura

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey for this small residential development. (June 2017 – July 2017).

11172 Santa Paula Road Phase Ia Survey for a 5.5-acre Agricultural property, Area of Ojai, California, County of Ventura

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (May 2017 – June 2017).

Pepperdine University Campus Life Project: Updated Cultural Resources Record Search, City of Malibu, County of Los Angeles

Principal and Project Manager for an updated record search and letter report for the Pepperdine Campus Life housing, facilities, and trail development project. This update was part of an amended campus-wide EIR (December 2017 – June 2017).

Pepperdine University Campus Life Project: Phase I survey of new Baseball Field development, City of Malibu, County of Los Angeles

Principal and Project Manager for the addition of the campus baseball field as part of the larger Pepperdine Campus Life housing, facilities, and trail development project. (February 2017 – June 2017).

6658 Reseda Boulevard, Area of Reseda, County of Los Angeles

Principal and Project Manager for a Phase 1 record search for this urban mixed-use project. (March 2017 – May 2017).

Paradise Valley Development Project Environmental Impact Report and Impact Statement, County of Riverside

Author of the cultural section for this EIR for a housing and mixed-use development of over 2200-acres east of Indio, California. Also reviewed original technical documents, and incorporated legal and agency comments. Mitigation measures included the management and monitoring of dozens of cultural resources, sensitive soils, and paleontological resources. (October 2014 – March 2017).

Phase I Cultural Resources Survey for Parcel 2058-003-010, Area of Lobo Canyon, county of Los Angeles

Principal and Project Manager for completion of a Phase I and Army Corps of Engineers permit for the project (ACOE, Los Angeles District). Extensive communications and consultation with the ACOE and SHPO. (July 2016 – March 2017).

Phase I Survey for a 1.33-acre Mixed-Use development, Area of Northridge at the corner of Nordoff and Darby Streets, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project included a built-environment assessment of existing historic structures (October 2016 – February 2017).

Phase I Survey for a 0.5-acre Residential Subdivision in the City of Los Angeles at the end of Crisler Way, County of Los Angeles County

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC record search request, and a site survey. (October 2016 – February 2017).

Deer Lake Residential Development Cultural Monitoring, Area of Porter Ranch, County of Los Angeles

Principal and Project Manager for the cultural monitoring of eight cultural resources within the project development boundary. This project includes the writing of a final Monitoring Report. (May 2016 – February 2017).

Phase I Survey for a 0.5-acre Mixed Use Development Project on Camarillo Avenue, Area of North Hollywood, County of Los Angeles

Principal and Cultural Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project also included a historic built environment assessment (November 2016 – January 2017).

Phase I Survey for a 14-acre Residential Subdivision, Area of Woodland Hills, County of Los Angeles

Principal and Project Manager for the completion of a SCCIC/NAHC record search, NAHC scoping, and a site survey. This project involved consultation with the City of Los Angeles on AB-52 (July 2016 – January 2017).

Lynn Road Residential Development Project, Area of Newbury Park, County of Ventura

Principal and Project Manager for the Phase Ia and Phase Ib survey of this 10-acre parcel. A large prehistoric Middle-Period seasonal settlement was discovered, which required subsurface testing and extensive mapping of surface hearths, yucca roasters, and dwelling features. Project included public testimony before the Thousand Oaks Planning Commission. (September 2015 – December 2016).

Pepperdine University Campus Life Project: Debris Basin Excavation Cultural and Paleontological Resource Monitoring, City of Malibu, County of Los Angeles

Principal and Project Manager for cultural resource monitoring of Phase I of the Pepperdine Campus Life housing, facilities, and trail development project. (August – October 2016).

Trail Construction Monitoring, Conrad N. Hilton Foundation, County of Los Angeles

Principal and Project Manager for the development of a pedestrian foot trail loop between the Foundation and the nearby "Ridge" professional building, including the excavation of dozens of shovel test pits and a major surface collection of prehistoric artifacts, including trail construction monitoring. (August – September 2016).

Conrad N. Hilton Foundation Trail Project Cultural Assessment, City of Agoura Hills, County of Los Angeles

Project Manager for the Phase 1b survey of a new pedestrian access trail linking off-site office space with the Foundation campus buildings. Project included the excavation of over 30 shovel test pits and the recording of numerous prehistoric features. (May – August 2016).

32640 Pacific Coast Highway Phase I Cultural Resource Survey, City of Santa Monica, County of Los Angeles

Principal and Project Manager for the Phase I cultural resource assessment of a ravine rehabilitation project between the Pacific Coast Highway and the Pacific Ocean. Included a SCCIC/NAHC record search, site survey, and technical report. (May 2015 – June 2016).

CA-LAN-320 Project Compliance Plans, and Native American and Lead Agency Consultation, City of Agoura Hills, County of Los Angeles

Tasks included the authoring of a cultural resource Treatment and Data Recovery Plan, a cultural resource Management Plan, and a Curation Plan for all artifacts, as well as the organization of meetings with the Chumash Tribal Groups and the Lead Agency. (April 2015 – June 2016).

Canyon Park Homes, Area of Sylmar, County of Los Angeles

Native American Tribal Group consultation and pre-construction monitoring for this 80-acre residential property development, as well as EIR section writing. (February 2015 – March 2016).

Oakwood Schools Built Environment and Archaeological Assessment, Area of North Hollywood, County of Los Angeles

Principal and Project Manager for the Phase I cultural resource assessment of the project property prior to the construction of a new middle and high school campus within the North Hollywood area. Challenging tasks included Native American ghost writing for the lead agency (City of Los Angeles) and addressing a modern human cremation garden in the report (November 2015 – February 2016).

Floral Canyon Residential Development Cultural Resource Survey, Area of North Hollywood, County of Los Angeles

Principal and Project Manager for this Phase Ia cultural resource survey of an 8-acrea property. The cultural resource parts of the CEQA checklist were also completed. (September – December 2015).

Hilton Property Phase 3 Construction Site Phase Ib Cultural Resources Survey, City of Agoura Hills, County of Los Angeles County

Principal and Project manager for this extensive preliminary survey project, including excavation of over 200 shovel test pits and 4 test units to define the boundaries of a prehistoric ceremonial site of over 80-acres in size, used by Chumash Native Americans from 400 A.D. to the late 1700s. Recordation of over 190-features and 11,500 artifacts. Second phase will include data recovery tasks and an amended Environmental Impact Report. (February 2014 – March 20 15).

Blessed Theresa Church Construction, City of Winchester, County of Riverside

Cultural consultation including cultural/paleo monitoring issues. (April 2014 – July 2014).

Village at Los Carneros, City of Goleta, County of Santa Barbara

Reviewed all previous technical studies and wrote part of the cultural sections of the Environmental Impact Report for this residential house development project. (March 2014 – April 2014).

3121 Old Topanga Canyon Road Phase I Survey and Literature Search, City of Calabasas, County of Los Angeles

Principal and Project manager for this residential development project, including NAHC letters, literature review, site survey, paleontological survey and literature search, final technical report, and the writing of the cultural resources section of the Environmental Impact Report. (March 2014 – April 2014).