
Appendix D

Cultural Resources Technical Report

Cultural Resources Inventory and Evaluation Report

Irvine Gateway Project, City of Irvine, California

AUGUST 2025

Prepared for:

CITY OF IRVINE

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National Archaeological Database (NADB) Information

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Project Proponent:	Brookfield Residential
Report Date:	March 2025
Report Title:	Cultural Resources Inventory and Evaluation Report, Irvine Gateway Project, City of Irvine, California
Type of Study:	Cultural Resources Inventory and Evaluation
Resources:	Map ID 1; Map ID 2; Map ID 3; Map ID 4; P-30-176748
USGS Quads:	Sections 20, 21, and 29 of Township 5 South, Range 8 West, San Bernardino Meridian; Lake Forest, California, 7.5-minute Quadrangle
Acreage:	109.88 acres
Permit Numbers:	N/A
Keywords:	City of Irvine; Irvine Gateway; P-30-176748; Positive; Built Environment

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Executive Summary

The City of Irvine retained Dudek to prepare a Cultural Resources Inventory and Evaluation Report for the proposed Irvine Gateway Project (project) located in the City of Irvine, Orange County, California. The project is within Sections 20, 21, and 29 of Township 5 South and Range 8 West of the Lake Forest, California 7.5-minute USGS Quadrangle map. The project proposes to construct a new residential village with approximately 1,360 residential units with parks, paseos, and an extension of the Jeffrey Open Space Trail (JOST). This report documents Dudek's efforts to identify and evaluate cultural resources consistent with the requirements of the California Environmental Quality Act (CEQA). The project's lead agency under CEQA is the City of Irvine.

Dudek's efforts included a records search of the California Historical Resources Information System (CHRIS) located at the South Central Coastal Information Center (SCCIC), the delineation of an Area of Potential Impacts (API) for cultural resources, correspondence with the Native American Heritage Commission (NAHC), an intensive-level pedestrian survey of the API for cultural resources, background and archival research, development of a cultural context, and the recordation and evaluation of five historic-era resources located in the API using the National Register of Historic Places (NRHP), and California Register of Historical Resources (CRHR) evaluation criteria.

Dudek conducted a CHRIS records search of the API and surrounding 0.5-mile radius at the SCCIC. The records search identified one previously recorded historic-era built environment resource overlapping the API (P-30-176748), and an additional six resources within the 0.5-mile radius. P-30-176748 or the Highline Canal, is characterized as a historic-era built environment resource and is addressed in this report as Map ID 2. An NAHC Sacred Lands File (SLF) was also conducted for the project, and results were negative for Native American cultural resources within the search area. Additionally, a review of historic topographic maps and aerial photographs indicates the API has been subject to past disturbances associated with the development of agricultural fields, the California Labor Camp, and El Modena Nursery throughout the mid and late-twentieth century. A review of the geomorphological context of the API further indicates that alluvial soils are present, which generally have a moderate potential to contain intact archaeological deposits.

Dudek cultural resources specialists conducted an intensive-level pedestrian survey of the 109.88-acre API on January 21, 2025. Though no archaeological resources were identified within the API during the pedestrian survey, five historic-era built environment properties were identified and recorded. Map ID 2, the Highline Canal (P-30-176748), was previously recorded and recommended not eligible as a result of survey evaluation. Dudek concurred with this finding and updated the record for the segment of the canal located in the API. Additional built environment properties included a former barracks building (Map ID 1), a decommissioned well (Map ID 3), a road culvert (Map ID 4), and a transmission line (Map ID 5). This report found Map ID 1, 2, 3, 4, and 5 not eligible for the NRHP or CRHR and assigned these properties status codes of 6Z (found ineligible for the NRHP, CRHR, or local designation through survey evaluation). Therefore, the project would not cause an impact to known historical and significant or unique archaeological resources.

Though the project will not have any impacts on known significant or unique archaeological resources, there is a moderate potential for the inadvertent discovery of subsurface archaeological resources during project implementation. Dudek recommends a series of archaeological resources management strategies (outlined in Section 5) be implemented in order to ensure that the project will not result in impacts to unanticipated archaeological resources and human remains.

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
API	Area of Potential Impacts
APN	assessor parcel number
bgs	below ground surface
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
JOST	Jeffrey Open Space Trail
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
PRC	Public Resources Code
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SOI	Secretary of the Interior
USGS	U.S. Geological Survey

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1 Introduction

This cultural resources inventory and evaluation report documents the identification and evaluation of cultural resources within or adjacent to the proposed Irvine Gateway Project (project) for compliance under the California Environmental Quality Act (CEQA). This report includes the following components: (1) an introduction including project location, description, the Area of Potential Impacts (API), and regulatory context; (2) background research, which includes a focused records search review of previously recorded cultural resources included in the California Historical Resources Information System (CHRIS) located at the South Central Coastal Information Center (SCCIC), archival research; and the field survey methodology; (3) the development of an applicable environmental and historic context for the project site and vicinity; (4) results of identification and evaluation efforts; and (5) findings and management recommendations.

1.1 Project Location

The project is located in the City of Irvine (City), Orange County, California (Figure 1, Project Location). It is sited at the northeast corner of Portola Parkway and Jeffrey Road and is bounded by Portola Parkway to the south, Jeffrey Road/Hicks Haul Road to the west, and Bee Canyon Access Road to the east. Hicks Canyon Wash is the project site's northern boundary. The project site consists primarily of active agricultural fields with equipment storage and laydown areas in the southern portion of the site. Adjacent land uses include agricultural (Irvine Ranch Conservancy Native Seed Farm) and industrial (the All American Asphalt plant) to the north and residential development to the south and west. The northern half of the project site is in a very high fire hazard severity zone (CAL FIRE 2024).

1.2 Project Description

The project proposes the development of a new residential village with approximately 1,360 residential units, called Gateway Village, on approximately 105 acres of land. The project would also include the development of parks, a community garden, paseos, and a 2,750-foot extension of the JOST east from Portola Parkway to the entrance of the new Gateway Preserve. The project would include 25% affordable housing, consistent with the Surplus Lands Act.

Zoning and Land Use Changes

The proposed project would require a General Plan Amendment to change the land use designation on the site to Medium Density and Medium High Density Residential, a zone change to change the zoning classification to Medium Density and Medium High Density Residential, a Parks Master Plan Amendment, and a Master Landscape and Trails Plan Amendment.

Residential Development

The project would consist of approximately 1,360 two- and three-story attached and detached homes over 65.5 acres. Density ranges for different residential development areas would range from 10 to 22 dwelling units per acre at the lowest density to 30 to 40 dwelling units per acre at the highest density.

Parks

The project would include the construction of three parks: Gateway Village Park would be 1.4 acres, the linear park would be 0.4 acres, and South Park would be 4.9 acres. South Park would include parking, restrooms, and trail staging. A 1.2-acre landscape frontage would be included along Portola Parkway.

Jeffrey Space Open Trail

The JOST is a recreational resource for the residents of the City. It is an important element in the City's overall Open Space system, linking the conservation and open space lands within the City. It provides a key linkage extending from the Pacific Ocean to the Santa Ana Mountains and Cleveland National Forest (City of Irvine 2024). The existing JOST runs south to north along Jeffrey Road from Walnut Avenue to Portola Parkway. The JOST is currently being extended westward and over the I-5 from Walnut Avenue to Barranca Parkway. The proposed project would include the extension of the JOST north 2,750 feet from Portola Parkway to South Park at the entrance to the forthcoming Gateway Preserve and would include a pedestrian bridge over Portola Parkway. The total acreage of the JOST extension under the proposed project would be 9.5 acres.

Utilities

The proposed project would include the extension of all utilities to the project site.

Wet Utilities

Domestic Water

A new domestic 12-inch water line under Portola Parkway would need to be extended from Wonderview Street at Portola Parkway to serve the proposed project, a new 8-inch water line would be extended from Jeffrey Road into the site along "C" Street, and a new 12-inch water line from Jeffrey Road would be extended along "C" Street and then into a 10-inch water line down "D" Street.

Sewer

A new 8-inch, 3,200-linear-foot sewer line would be constructed along "C" Street and down "D" Street and "E" Street to Portola Parkway and then to an existing 8-inch sewer line in the Stonegate development. In addition, a new 12-inch sewer line would be constructed on Woodhill, Boxberry, Encore, Ovation, Slate and Crested Bird in Stonegate to accommodate the increased flows from the proposed project.

Reclaimed Water

A new 6-inch reclaimed water line would need to be added to the project site to connect to the existing recycled water line in Jeffrey Road that starts at 12 inches at Portola Parkway and reduces to 6 inches after "A" Street. The new line would connect under "A" Street, "C" Street, and "D" Street, where it transitions to 4 inches.

Stormwater Lines and Stormwater Detention Basin

Three existing storm drain laterals 48-inch, 18-inch, and 24-inch, are located in Portola Parkway and a 102-inch storm drain is located in Jeffrey Road. The project site generally drains from the northeast to the southwest. A storm

drain would be constructed in “C” Street to intercept off-site flows and convey them to point of connection (POC)-1 and POC-2 just south of South Park and to the Jeffrey Road storm drain. These pipes would be sized to convey 25-year peak flows. In addition, an underground storage tank to hold 17,500 cubic feet of storage would be constructed on site near POC-2. POC-3 would collect flows from the storm drain under “D” Street, which would flow down the center of the project site to the stormwater detention basin in the southeast of the site and ultimately out to Portola Parkway. POC-4 would also convey flows to the storm drain in Portola Parkway. A stormwater detention basin would be constructed in the southeastern corner of the project site to accommodate a 25-year storm event and 190,575 cubic feet of storage.

Dry Utilities

Electricity

Southern California Edison (SCE) has existing systems or the ability to upgrade their system to serve the project site. There are existing underground distribution systems in Bee Canyon Access Road, Portola Parkway, and partially up Jeffrey Road north of Portola Parkway. The existing overhead system in Jeffrey Road is part of planned underground conversion with the realignment and widening of Jeffrey Road. The project would be served by SCE from Jeffrey Road.

Telecommunications

AT&T has facilities in place and planned that would be available to serve the project (Moran 2023). There is an existing underground system in Portola Parkway and in Jeffrey Road for a certain extent north of Portola Parkway. AT&T has an overhead system that runs from the corner of Portola Parkway and Bee Canyon Access Road and goes north through the Gateway Preserve parcel and connects to the existing overhead system that SCE has on Jeffrey Road. They are on the existing poles that SCE will convert to an underground system with the Jeffrey Road construction.

Cox Communications has facilities underground in Portola Parkway and a portion of Jeffrey Road north of Portola Parkway that could serve the project site (Moran 2023). A Cox Communications underground system is also planned in a joint trench with SCE and AT&T in Jeffrey Road (Moran 2023).

Natural Gas

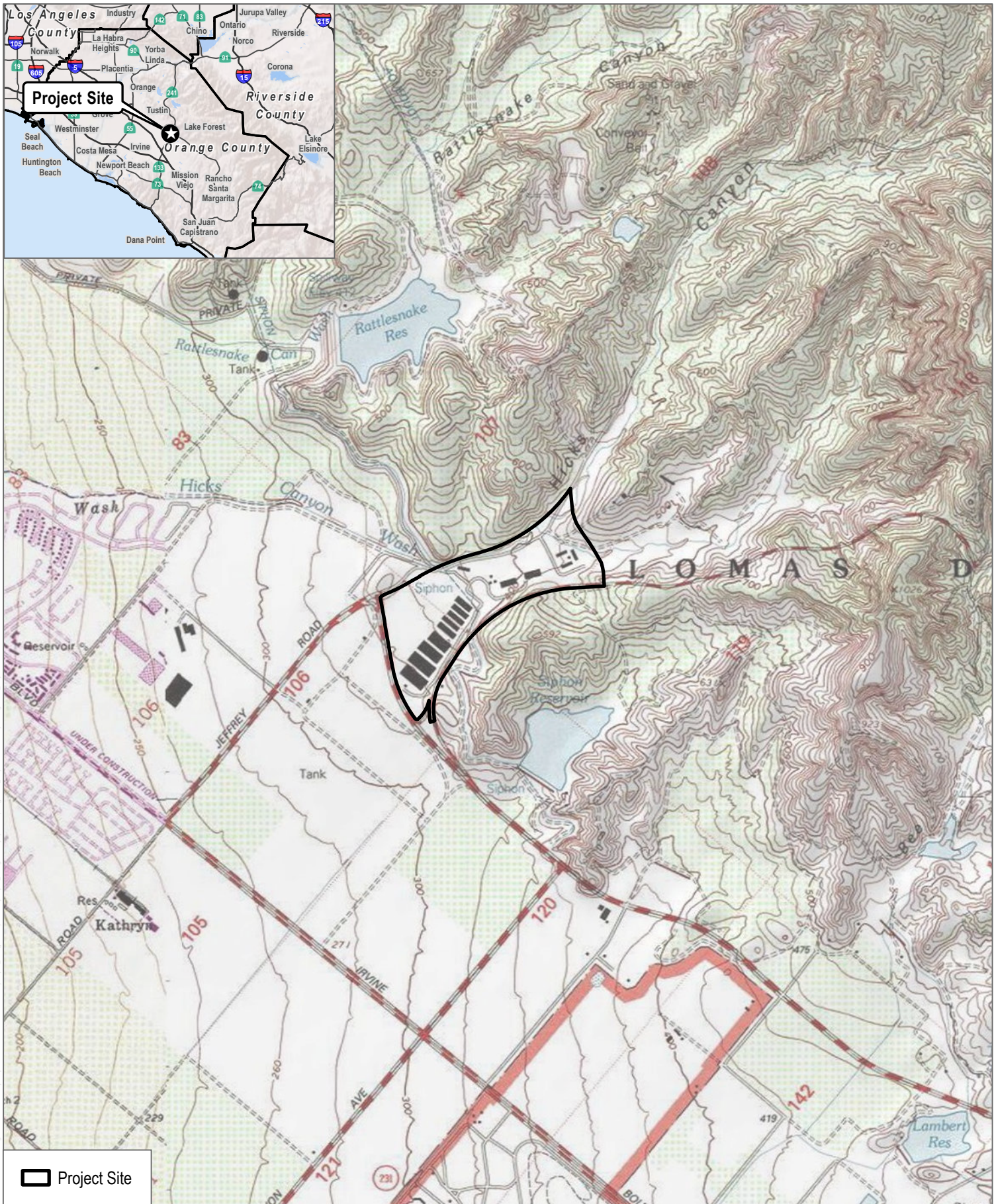
Southern California Gas Company (SoCalGas) has existing gas mains in Portola Parkway and Jeffrey Road. As part of the widening and realignment of Jeffrey Road, the existing 8-inch high-pressure main will be relocated into the new Jeffrey Road alignment. SoCalGas would need to run a new distribution main from Portola Parkway and up Jeffrey Road if natural gas service will be provided to this project (Moran 2023).

Jeffrey Road Improvements

Jeffrey Road improvements along the western project frontage have been completed in 2024 by The Irvine Company. These improvements were included as part of the Orchard Hills development. The roadway segment of Jeffrey Road north of “A” Street is a two-lane facility, and the intersection of Jeffrey Road/“A” Street would be striped to provide one northbound through lane and one dedicated northbound right-turn lane onto “A” Street. A traffic signal would be included on Jeffrey Road at “A” Street.

1.3 Project Personnel

This report and its associated fieldwork and property significance evaluation was prepared by Dudek archaeologists Jennfier De Alba, BA and Roshanne Bakhtiary, MA, and architectural historian Claire Cancilla, MSHP. Ms. Bakhtiary meets the Secretary of the Interior's (SOI) Professional Qualification Standards in archaeology and Ms. Cancilla meets the SOI Professional Qualification Standards in architectural history. The report was reviewed by senior cultural resource specialists Monte Kim, PhD, and Adam Giacinto, MA, RPA who meet the SOI Professional Qualifications standards in their respective fields.



SOURCE: USGS 7.5 Minute Series

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FIGURE 1

Project Location

Irvine Gateway Village Project EIR

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1.4 Regulatory Context

While the project as currently planned is subject only to state and local regulatory conditions, federal regulations are also provided here for reference should they be relevant in the future.

1.4.1 Federal

National Historic Preservation Act and the National Register of Historic Places

The National Historic Preservation Act (NHPA) established the National Register of Historic Places (NRHP) and the Advisory Council on Historic Preservation (ACHP). Under the NHPA, significant cultural resources are referred to as historic properties, which include any prehistoric or historic district, site, building, structure, or object included in, or determined eligible for inclusion in, the NRHP. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization. Historic properties that are designated by the SOI to be National Historic Landmarks are nationally significant historic places that possess exceptional value or quality in illustrating or interpreting the heritage of the United States. A property is considered historically significant if it meets one of the National Register of Historic Places (NRHP) criteria and retains sufficient historic integrity to convey its significance.

The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service (NPS), under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by NPS.

The NRHP criteria for evaluation (36 CFR Section 60.4) considers the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures., For a property to be listed in or determined eligible for listing, it must meet at least one of the following criteria:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity. Integrity is the ability of a property to convey its significance. Because the concept of integrity is based on significance, the assessment of a property's integrity can only proceed after its significance has been fully established. The assessment of integrity requires consideration under the following seven aspects or qualities: location, design, materials, workmanship, setting, feeling, and association. To retain integrity, a property will always possess several, and generally most, of these aspects (NPS 1997: 44).

Implementing Regulations for Section 106 of the National Historic Preservation Act (36 CFR Part 800)

Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. The Section 106 process consists of four principal steps: 1) initiation of the Section 106 process, which includes identifying and initiating consultation with Native American tribes, local governments, and other interested parties; 2) identification of historic properties; 3) assessment of adverse effects; and 4) delineation of stipulations to resolve adverse effects in an agreement document.

Section 106 affords the ACHP and the State Historic Preservation Officer (SHPO), as well as other consulting parties, a reasonable opportunity to comment on any project that would adversely affect historic properties. The ACHP is an independent administering agency that develops procedures at the federal level to protect cultural resources included in, or eligible for inclusion in, the NRHP. The SHPOs administer the national historic preservation program at the state level, in addition to reviewing NRHP nominations, maintaining data on historic properties, and consulting with federal agencies during the Section 106 review.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. The act clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the institution or agency and to provide a summary to any Native American tribe claiming affiliation.

1.4.2 State

California Register of Historical Resources

California Public Resources Code (PRC) Section 5024.1 establishes the California Register of Historical Resources (CRHR), which lists all significant resources in California that are considered to be historical resources. In California, the term historical resource includes, but is not limited to, “any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California” (PRC Section 5020.1[j]). The CRHR is “to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP. As such, a resource is considered historically significant if it meets at least one of the following criteria outlined under PRC Section 5024.1(c):

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one of the significance criteria described in PRC Section 5024.1(c), a resource must also possess sufficient integrity to qualify for listing in the CRHR. Integrity as defined in 14 California Code of Regulations (CCR) Section 4852(c) as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance” as evaluated with regard to the resource’s retention of location, design, setting, materials, workmanship, feeling, and association. Historical resources that lack sufficient integrity to meet the criteria for listing in the NRHP may still be eligible for listing in the CRHR if they have the potential to yield significant scientific, historical information, specific data.

The CRHR includes not only listed prehistoric and historic cultural resources but also California Historical Landmarks (numbered 770 and above), California Points of Historical Interest designated by the State Historical Resources Commission, and resources that are identified through local historical resource surveys or designated under local ordinances provided the survey and ordinance meet the criteria in 14 CCR Section 4852(e) and (f).

California Environmental Quality Act

CEQA requires that the lead agency consider the impacts of a project on historical resources. PRC Section 21084.1 defines historical resources as those listed, or eligible for listing, in the CRHR, or those officially designated or recognized as historically significant by a local government pursuant to a local county or city ordinance or jurisdiction, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. Historical resources also include “historic properties” in California that are listed, or determined eligible for listing, in the NRHP and CRHR. The CEQA Guidelines provide specific guidance for determining the significance of impacts on historical resources. As described in in Section 15064.5(b) of the CEQA Guidelines, a “project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.”

- A “substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (Section 15064.5[b][1]).
- The significance of an historical resource is materially impaired when a project:
 - Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources (Section 15064.5[b][2][A]); or
 - Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1[k] of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1[g] of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of the evidence that the resource is not historically or culturally significant (Section 15064.5[b][2][B]); or

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historic significance and that justify its inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA (Section 15064.5[b][2][B]); or

The CEQA Guidelines also provide guidance on minimizing or avoiding significant adverse impacts on historical resources as outlined in the following provisions of Section 15064.5(b)(3)-(5).

- Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource (Section 15064.5[b][3]).
- A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures (Section 15064.5[b][4]).
- When a project will affect state-owned historical resources, as described in Public Resources Code Section 5024, and the lead agency is a state agency, the lead agency shall consult with the State Historic Preservation Officer as provided in Public Resources Code Section 5024.5. Consultation should be coordinated in a timely fashion with the preparation of the environmental documents (Section 15064.5[b][5]).

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (Section 21083.2[a], [b], and [c]).

Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts to non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2(a); CEQA Guidelines Section 15064.5(c)(4).) However, if a non-unique archaeological resource qualifies as tribal cultural resource (PRC 21074(c); 21083.2(h)), further consideration of significant impacts is required.

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in PRC section 5097.98.

California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, the procedures are detailed in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (California Health and Safety Code Section 7050.5[b]). PRC Section 5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the California Native American Heritage Commission (NAHC) within 24 hours (California Health and Safety Code Section 7050.5[c]). In accordance with California Public Resources Code Section 5097.98(a), the NAHC will notify the Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. Within 48 hours of being granted access to the site, the MLD may recommend means of treatment or disposition, with appropriate dignity, of the human remains and associated grave goods.

Native American Historical Cultural Sites (California Public Resources Code Section 5097 et. Seq.)

State law addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resource Protection Act makes it a misdemeanor punishable by up to 1 year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, required all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

California State Assembly Bill 52

California Assembly Bill (AB) 52, which took effect July 1, 2015, establishes a consultation process between California Native American Tribes and lead agencies in order to address tribal concerns regarding project impacts and mitigation to “tribal cultural resources” (TCR). Public Resources Code section 21074(a) defines TCRs and states

that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A TCR is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either:

1. Listed or eligible for listing in the CRHR or a local register of historical resources, or
2. Determined by a lead agency to be a TCR.

California State Senate Bil 18

California Senate Bill (SB) 18, which took effect on March 1, 2005, requires local (city and county) governments to consult with California Native American tribes identified by the NAHC for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans (Government Code Section 65352.3).

1.4.3 Local

City of Irvine General Plan

The Cultural Resources Element of the City of Irvine's General Plan, adopted in 1973, contains the following goal, objectives and policies relating to protection of cultural resources (City of Irvine 1973):

Goal. Ensure the proper disposition of historical, archaeological, and paleontological resources to minimize adverse impacts, and to develop an increased understanding and appreciation for the community's historic and prehistoric heritage, and that of the region.

Objective E.1. Historical, Archaeological, and Paleontological Surveys. Identify and obtain information on the existence and significance of historical, archaeological, and paleontological sites and encourage land use planning which incorporates this information.

Policy (a). Require appropriate surveys and necessary site investigations in conjunction with the earliest environmental document prepared for a project, in accordance with California Environmental Quality Act (CEQA) and the City's CEQA procedures.

Policy (b). Require surveys, prior to discretionary approval, for areas where the possibility of encountering sites exists. Additional specific site investigations may also be required in order to obtain sufficient information to determine the site's significance. The project sponsor shall fund this level of investigation.

Policy (c). Require a written report be submitted to the City following a survey or investigation describing the findings and making recommendations as to the site's significance, future disposition, and the amount of further investigation which should be undertaken. Copies of site survey records and reports shall be filed with the appropriate clearinghouse

Policy (d). Encourage, if appropriate, removal of all materials collected during the survey/investigation to local museums, universities, or other depositories providing access for public review or scientific research.

Policy (e). Funding of Archaeological Excavations: Use the following in the case of archaeological salvage excavations: 75% project sponsor; 25% City or other public or quasipublic agency or organization.

The costs of other mitigation measures may also be shared by the landowner or developer, the City, and other agencies or organizations.

Policy (f). Maintain information on areas surveyed, numbers of sites located, their status and the names and addresses of individuals or organizations knowledgeable of the sites.

Policy (g). Maintain specific locations of unprotected sites as confidential information to avoid vandalism and the resultant irretrievable loss of the historic and prehistoric record of the community.

Policy (h). Determine the proper disposition of each historical site prior to approval of zoning or discretionary development applications. Disposition determinations shall be based upon a detailed historical report, including an inventory form, a written evaluation, and slides documenting the building and its location. This information shall be reviewed by staff and the approval authority for discretionary development cases. Each historical report shall be filed at the Irvine Historical Museum and the City of Irvine Community Development Department.

Policy (i). Buffer and protect the integrity of an historic site and/or resources contained therein, if the Planning Commission, during review of a discretionary development case, determines preservation is required.

Objective E.2. Hazard Occurrence. Evaluate surveyed sites for their present and potential cultural, educational, recreational, and scientific value to the community and the region, and determine their proper disposition prior to the approval of any project which could adversely affect them.

Policy (a). Ensure that sites determined to be significant are protected through the City's planning policies, ordinances, approval conditions, and mitigation measures.

Policy (b). Encourage the nomination of significant historical sites to the National Registry of Historic Places.

Policy (c). Include sites which are appropriate for educational or recreational purposes as an integral part of either public or community facilities or as part of the Citywide bikeway, pedestrian, and equestrian trail systems. Encourage agencies, organizations, and individuals to develop interpretive and educational programs in order to properly utilize the site for the benefit of the entire community.

Policy (d). Ensure that appropriate staff is available to act in matters relating to the implementation of this element to include identification of costs, and to coordinate the investigation and disposition of sites between City departments and Commissions, The Irvine Company, and other agencies, institutions, organizations, and individuals.

Policy (e). Determine the methods and means of preservation on a case-by-case basis according to a site's importance and disposition methods available. These may include public or private acquisition or one of the following, provided extreme care is exercised not to adversely affect the site:

- Including the site within greenbelts, parks, open space spines, preservation areas or other open space.
- Covering surface or sub-surface sites by adequate fill, pavement, or buildings.
- Using the site for nondestructive public interest or educational purposes, such as museums, interpretive centers, or outdoor classrooms.
- Moving buildings for preservation as part of a consolidated historic site.
- Using significant historic buildings in a preserved state as a part of their functional capacity (e.g., a building preserved and used as an office, restaurant, or home).

Policy (f). Encourage site preservation through economic incentives such as increased building densities, reduced taxes, credit toward park dedication, or reduction of other amenity requirements. Where incentives are not sufficient, the land owner shall be directly compensated by the City or other public or quasi-public agencies or organizations for land preserved as an archaeological, paleontological, or historical site. The costs of site preservation may be the principal responsibility of the City, other public, or quasi-public agencies, or other organizations. Policy (b). Encourage the nomination of significant historical sites to the National Registry of Historic Places.

Policy (h). Assign the Community Services Commission the responsibility to oversee implementation programs for sites or buildings which have been acquired by the City.

Policy (i). Identify and implement revenue sources which can be expended in support of this objective.

Policy (j). Undertake a comprehensive survey to inventory the remaining historical resources within the City of Irvine incorporated territory and adopted Sphere of Influence, including the location and significance of all remaining tenant farm homes over 50 years of age. This survey shall be used to determine the appropriate disposition of the resources located within any area not designated for preservation as a historical resource.

1.5 Area of Potential Impacts

The area of potential impacts (API) is the study area delineated to assess potential impacts from the construction and operation of the project on both archaeological and historic built environment resources. The API encompasses the geographic area or areas within which the project may directly or indirectly cause a substantial adverse change in the significance of a known or unknown historical resource. A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource is materially impaired (14 CCR Section 15064.5[b][1]). Under CEQA, material impairment of a historical resource is considered a significant impact (or effect), which can be direct, indirect, or cumulative.¹

A direct or primary effect on a historical resource is one that is caused by the project and occurs at the same time and place (14 CCR Section 15358[a][1]). Examples of direct effects that are caused by, and immediately related to, the project include, but are not limited to, demolition, destruction, relocation, and alteration of a historical resource as a result of ground disturbance and other construction activities. Direct effects, however, are not limited to physical effects and, in certain circumstances, can be visual, vibratory, auditory, or atmospheric in nature if the effect is immediate and it results in the material impairment of the significance of a historical resource. Visual intrusions within the viewshed of a historical resource, for example, could result in the material impairment of the resource's integrity of setting if an unencumbered view of the surrounding area or a specific area is a characteristic that contributes to the significance of the resource. Similarly, operational noise that exceeds the ambient level of a sensitive noise receptor can cause material impairment to a historical resource that derives part or all its significance from an inherently quiet auditory setting.² Finally, atmospheric intrusions, such as those caused by the introduction of high levels of fugitive dust emissions or chemical pollutants, can result in adverse effects that

¹ As used in the CEQA Guidelines and 14 CCR Section 15358, the terms "effects" and "impacts" are synonymous in this report.

² Construction noise that exceeds the ambient level of a sensitive noise receptor is not analyzed because it is considered a temporary impact that would not have an adverse effect on historical resources because it would not cause physical damage and would not permanently alter or diminish the integrity of such resources. Temporary construction noise would not result in a substantial adverse change in the significance of a historical resource and, therefore, would not cause a significant impact under CEQA.

directly and physically affect biological landscape features that have been identified as historical resources for the purposes of CEQA. Overall, while direct effects clearly include physical effects, they may also include other types of effects that are visual, vibratory, auditory, or atmospheric in nature if the effect is caused by and occurs at the same time and place as the project and there is no other intervening cause between the activities or components of the project and the historical resource.

By contrast, an indirect or secondary effect is a reasonably foreseeable effect caused by the project that occurs later in time or is farther removed in distance. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems (14 CCR Section 15358[a][2]). Because these types of effects are not immediately related to the project, they are considered secondary effects.

Cumulative impacts refer to two or more individual effects that, when considered together, are considerable or compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (14 CCR Section 15355[a]-[b]). The API for cumulative impacts, if any exist, would include the API for direct effects, indirect effects, or both because in order for a cumulative impact to exist, a historical resource must first be directly or indirectly affected by the project.

Explanation of the API considerations for archaeological and built environment resources is noted below.

1.5.1 API for Cultural Resources

Delineation of the API for cultural resources considered the proposed project activities in conjunction with both archaeological and historic-era built resources (45 years of age or older [those built-in or prior to 1980]) that may sustain impacts or effects due to the construction or operation of the project.³ Additional considerations used to justify the delineation of the API include the following:

The horizontal limits of the API considered the extent of the project footprint, which is coincident with the project site, and any adjacent historic-era properties that may have the potential to be directly or indirectly impacted by the proposed project. Because there are no historic-era built environment resources, historic districts, or cultural landscapes adjacent to the project site that could be directly or indirectly affected by physical, visual, vibratory, auditory, or atmospheric effects cause by the project, the API is limited to the project footprint consisting of a total area of 109.88 acres⁴ as delineated in Figure 2, Area of Potential Impacts.

³ While the 50-year threshold is generally used for listing resources in the NRHP and CRHR, the OHP *Instructions for Recording Historical Resources* recommends recording “any physical evidence of human activities over 45 years . . . for the purposes of inclusion in the OHP’s filing system.” It also allows for the “documentation of resources less than 45 years . . . if those resources have been formally evaluated, regardless of the outcome of the evaluation.” Further, the guidance notes that the 45-year threshold recognizes that there is commonly a five-year lag between resource identification and the date that planning decisions are made, and thus it explicitly encourages the collection of data about resources that may become eligible for the NRHP or CRHR within that planning period (OHP 1995: 2).

⁴ The API, as delineated in the current study, was established prior to project redesign. As a result, it encompasses a larger area than the current project footprint of approximately 105 acres.

Resources excluded from the API include the modern housing tracts to the west⁵ of the project site (Stonegate) containing residences built between 2013 and 2017, as well as buildings constructed between c. 1987 and c. 2012 along the eastern periphery of the API. The SCE Las Lomas Substation, which was built in c. 2011 on the north side of Jeffrey Road adjacent to the project site, was also excluded from the API. The substation was built in c. 2011 and does not meet the special considerations clause under 14 CCR § 4852(d)(2) for resources that have achieved significance within the past 50 years because sufficient time has not passed to understand any potential historical significance it may possess.

The API excludes the Hicks Canyon Wash along Jeffrey Road and the ephemeral drainage tributary to the Hicks Canyon Wash that runs along Jeffrey Road. Because they are considered natural waterways and not engineered structures or built environment resources, any potential project-related effects on them are not analyzed in this report. Adjacent buildings to the project site were constructed between c. 1987 and c. 2012.

The vertical underground extent of the API is currently unknown, but it is anticipated that ground disturbance would involve tree removals, trenching for utilities, foundation work, and grading. The vertical above ground extent of the API is anticipated to be approximately 30 feet (two to three stories), which is the height of the residential buildings proposed for construction on the project site. At this height, the proposed project would not cause any adverse visual effects because there are no historic-era built resources within the API. Consequently, the API has been limited to the properties presented in Table 1, as depicted on Figure 2.

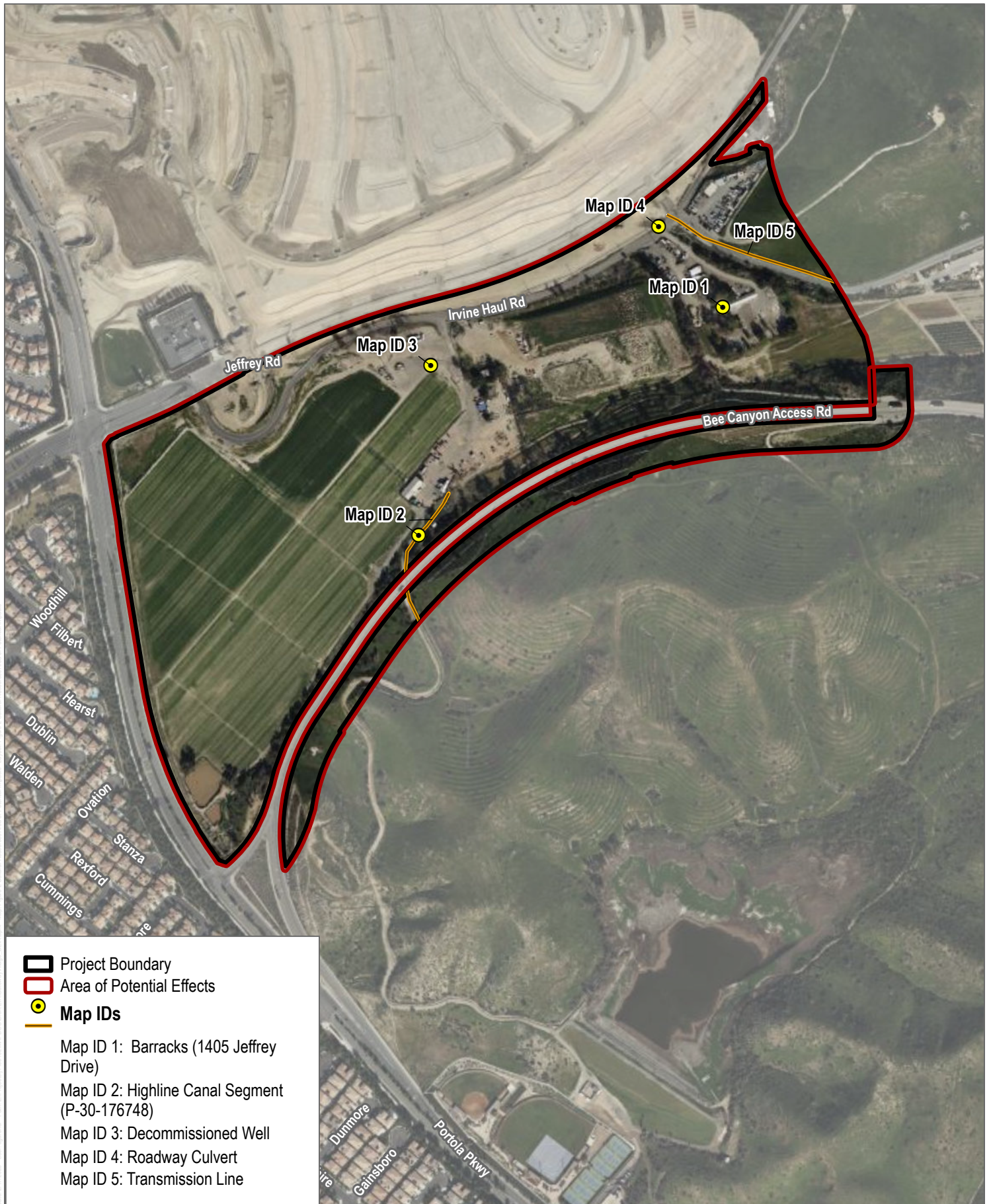
Finally, since there are no reasonably foreseeable project activities that would occur later in time or that would be farther removed in distance that could indirectly affect historical resources, the API contains no geographic areas under consideration for indirect effects.

Table 1. Built Environment Properties Within the API

Map ID	Property Type	Address/Name	Year Built	Prior Evaluation Status
1	Barracks	11405 Jeffrey Road	c. 1967	Not evaluated
2	Canal	Highline Canal	c. 1933	6Z
3	Well	Decommissioned well	c. 1972	Not evaluated
4	Roadway culvert	Roadway culvert	c. 1967	Not evaluated
5	Transmission line	Transmission line	c. 1980	Not evaluated

Note: 6Z: Found ineligible for NR, CR or local designation through survey evaluation

⁵ All cultural resources sections and appendices in this report use cardinal direction due to the submission requirements put forth by the CHRIS.



SOURCE: Bing Maps (Accessed: 2025)



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2 Methods

This section provides an overview on the methods of the CHRIS records search performed at the SCCIC, archival research, additional records reviews, as well as the intensive-level pedestrian survey. Consultation with interested parties will be initiated once the CEQA process is initiated by the lead agency.

2.1 SCCIC Records Search

A records search of the CHRIS was completed for the current project site and a 0.5-mile radius by Dudek at the SCCIC on December 9, 2024. This search included a review of their collection of mapped prehistoric, historical, and built-environment resources, California Department of Parks and Recreation (DPR) 523 Series Forms (DPR site records), technical reports, historical maps, and local inventories. Additional consulted sources included the NRHP, California Inventory of Historical Resources/CRHR and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, and California Historical Landmarks. The results of the records search are presented in Section 4.

2.2 NAHC Sacred Lands File Search

Dudek requested a NAHC Sacred Lands File (SLF) search for the project site on August 9, 2024. The SLF consists of a database of known Native American cultural resources. These resources may not be included in the SCCIC database. The results of this search are summarized in Section 4, Results of Identification and Evaluation Efforts.

2.3 Interested Party Correspondence

On January 29, 2025, Dudek Architectural Historian Claire Cancilla, MSHP sent an outreach letter and figure depicting the project site to the Irvine Historical Society, the Orange County Historical Society, and Preserve Orange County. The letter provided a brief description of the proposed project and requested information about historic and cultural components in or near the project site. To date, no responses have been received. Copies of the interested party correspondence have been submitted in conjunction with this project and all responses are in Appendix C.

2.4 Archival Research

The following sources provide additional information regarding the potential for archaeological and built environment cultural resources to be located within the API. This information was used to understand the history of the area and how the landscape has changed and developed over time.

2.4.1 Built Environment Resource Directory

The California Office of Historic Preservation (OHP) maintains the Built Environment Resource Directory (BERD), an inventory of built environment cultural resources that are processed through OHP's office. A January 29, 2025, search of the BERD was completed for Orange County.

2.4.2 Calisphere

Calisphere provides access to 2,000 collections contributed by more than 300 cultural heritage organizations in California, including universities, libraries, archives, museums, and historical societies. Dudek searched for subject properties' addresses and other keywords on Calisphere on January 29, 2025. This search did not identify and materials pertaining to Map IDs 1–5; however, it did identify historical photographs and documents relating to the development of the Irvine Ranch, the city of Irvine, and the University of California, Irvine, which were incorporated into Section 3.3.1.

2.4.3 Online Archive of California

The Online Archive of California (OAC) provides free public access to detailed descriptions of primary resource collections maintained by more than 300 contributing institutions including libraries, special collections, archives, historical societies, and museums throughout California and collections maintained by the 10 University of California campuses. Dudek searched for addresses and keywords associated with the subject properties on OAC on January 29, 2025, and did not identify any relevant materials. However, the search identified digital collections relating to the development of Irvine that were viewed through Calisphere and incorporated into Section 3.3.1.

2.4.4 City of Irvine Building Permits

Dudek used Irvine Quick Record, the City of Irvine's online database, to search for building permits associated with Map ID 1: 11405 Jeffrey Road on January 29, 2025. The search yielded no results.

2.4.5 Historical Newspapers

Dudek reviewed historical newspapers from the California Digital Newspaper Collection and Newspapers.com covering Irvine and the surrounding area to understand the development of the area and the subject properties. These documents were used in the preparation of Section 3, Historic Context, Section 4 Property Histories, and Section 5, Results of Identification and Evaluation Efforts.

2.4.6 Historic Topographic Maps

Dudek examined historic topographic maps from 1935, 1944, 1950, 1958, 1960, 1963, 1970, 1978, 1982, 1984, 2000, 2012, 2015, 2018, and 2022 to determine the growth in the area and how the properties developed over time (Table 2) (NETR 2025b). The results of this review are summarized in Section 4, Results of Identification and Evaluation Efforts.

2.4.7 Historic Aerial Photographs

A review of historic aerial photographs for the years 1938, 1946, 1952, 1963, 1967, 1972, 1980, 1981, 1985, 1987, 1988, 1992-2000, 2002-2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022 was conducted as part of the archival research effort for the proposed project. The aerial photographs provided a general idea of the growth of the project site and its environ and changes to project site and subject properties over time (NETR 2025a; UCSB 2025). The results of this review are summarized in Section 4, Results of Identification and Evaluation Efforts.

2.4.8 Geomorphological Context Review

Online records of the U.S. Department of Agriculture Web Soil Survey, the U.S. Geological Survey Mineral Resources Online Spatial Dataset, and the geotechnical report prepared for the project were consulted to better understand the belowground soil composition of the API and the project site's potential to contain subsurface archaeological resources. The results of this review are summarized in Section 4, Results of Identification and Evaluation Efforts.

2.5 Field Survey

Dudek cultural resources specialists Roshanne Bakhtiary and David Alexander conducted an intensive-level pedestrian survey of the API on January 21, 2025. All survey work was conducted using standard procedures and techniques consistent with SOI Standards and Guidelines for archaeology and historic preservation. When possible, 15-meter interval survey transects were conducted and oriented in cardinal direction. Where visible, the ground surface was examined for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of the current or former presence of structures or buildings (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as rodent/reptile burrows, cut banks, and drainages were also visually inspected for exposed subsurface materials.

The pedestrian survey also entailed the recordation and photo documentation of historic-era properties 45 years of age or older within the API delineated for the project. All historic-era properties were documented with notes and photographs. Special attention was given to noting any character-defining features, spatial relationships, observed alterations, and historic landscape features.

All fieldwork was documented using field notes and an Apple iPad equipped with ESRI Field Maps. Location-specific photographs were taken using an eighth-generation Apple iPad equipped with an eight (8) mega-pixel (MP) 1080p resolution camera and georeferenced PDF maps of the API. All field notes, photographs, and records related to the current study are on file at Dudek's Mission Viejo, California office.

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3 Project Context

3.1 Environmental Context

The project site consists primarily of active agricultural fields with equipment storage and laydown areas in the northern portion of the site. According to the California Department of Conservation, the site is designated prime farmland, with a small area of unique farmland (DOC 2024). The current General Plan designation for the project site is Recreation. Hicks Canyon Wash forms the northern boundary of the project site. Just north of Hicks Canyon Wash is a road that stretches east to the Irvine Ranch Conservancy Native Seed Farm and various other special use sites leased to third parties, including a landscape designer, a pump supplier, and an excavating contractor. Following Hicks Haul Road to the north are avocado groves, undeveloped open space, and the AAA plant. The final phase of the Orchard Hills development, a single-family residential development, is under construction directly to the west of the project site.

3.2 Prehistoric Context

Please note that the present cultural context is compiled from the results of previous archaeological studies, research papers, ethnographic documentation and other archival research. It is intended to provide a baseline context for major archaeological and ethnographic themes discussed in this report. This context is not intended to be inclusive of all available information nor be representative of contemporary Native American values. Considerations of Native American heritage and cultural values should be informed by traditionally culturally affiliated Native American tribes, through the process of Tribal engagement and consultation.

The following sections have had a strong contribution from previous cultural contexts prepared by Micah Hale, PhD, RPA. Evidence for continuous human occupation in the region spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. This research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 BC), Archaic (8000 BC–AD 500), Late Prehistoric (AD 500–1750), and Ethnohistoric (post-AD 1750).

3.2.1 Paleoindian (pre-5500 BC)

Evidence for Paleoindian occupation in the region is tenuous; the knowledge of associated cultural pattern(s) is informed by a relatively sparse body of data that has been collected from within an area extending from coastal San Diego through the Mojave Desert and beyond. One of the earliest dated archaeological assemblages in this area (excluding the Channel Islands) derives from SDI-4669/W-12, in La Jolla, San Diego County. A human burial from SDI-4669 was radiocarbon dated to 9,590–9,920 years before present (95.4% probability) (Hector 2006). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of groundstone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools. Prime examples of this pattern are sites that were studied by Emma Lou Davis (1978) on China Lake Naval Air Weapons

Station near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679), a multicomponent fluted point site, and MNO-680, a single component Great Basined stemmed point site (Basgall et al. 2002). At MNO-679 and MNO-680, groundstone tools were rare, while finely made projectile points were common.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the Southern California region that possibly dates between 10,365 and 8200 BC (Warren et al. 2004, p. 26). Termed San Dieguito (Rogers 1945), assemblages at the Harris site, located in the area now occupied by City of Escondido, are qualitatively distinct from most others in the region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (Warren 1964, 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos' interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent for tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with the general trends in Southern California deserts, wherein hunting-related tools are replaced by processing tools during the early Holocene (Basgall and Hall 1990).

3.2.2 Archaic (8000 BC-AD 500)

The more than 1500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the region. If San Dieguito is the only recognized Paleoindian component in the region, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the region (Hale 2001, 2009).

The Archaic pattern is relatively easy to define with assemblages that consist primarily of processing tools: millings, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the region, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural

conservatism (Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurs until the bow and arrow is adopted at around AD 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remains low. After the bow is adopted, small arrow points appear in large quantities, and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millstones and handstones decrease in proportion relative to expedient, unshaped groundstone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complimented only by the addition of the bow and ceramics.

3.2.3 Late Prehistoric (AD 500–1750)

The period of time following the Archaic and prior to Ethnohistoric times (AD 1750) is commonly referred to as the Late Prehistoric (Rogers 1945; Wallace 1955; Warren et al. 2004). However, several other subdivisions continue to be used to describe various shifts in assemblage composition, including the addition of ceramics and cremation practices. The post-AD 1450 period is called the San Luis Rey Complex (Meighan and True 1977). Rogers (1929) also subdivided the last 1,000 years into the Yuman II and III cultures, based on the distribution of ceramics. Despite these regional complexes, each is defined by the addition of arrow points and ceramics and the widespread use of bedrock mortars. Vagaries in the appearance of the bow and arrow and ceramics make the temporal resolution of the San Luis Rey complex difficult. For this reason, the term Late Prehistoric is well-suited to describe the last 1,500 years of prehistory in the region.

Temporal trends in socioeconomic adaptations during the Late Prehistoric period are poorly understood. This is partly due to the fact that the fundamental Late Prehistoric assemblage is very similar to the Archaic pattern but includes arrow points and large quantities of fine debitage from producing arrow points, ceramics, and cremations. While steatite was commonly the material of choice for vessel production, it was generally replaced near the time of missionization by locally procured clay to produce ceramic vessels. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock. Some argue that the Ethnohistoric intensive acorn economy extends as far back as AD 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred prior to AD 1400. True (1980) argued that acorn processing and ceramic use in the region did not occur until the San Luis Rey pattern emerged after approximately AD 1450.

3.3 Ethnohistoric Context

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Bean and Shipek 1978; Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Laylander 2000; White 1963). The principal intent of these researchers was to record the precontact, culturally specific practices, ideologies, and

languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as “salvage ethnography,” was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his “memory culture” approach (Lightfoot 2005, p. 32) by recording languages and oral histories within the region. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities.

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about Native American life before European immigration, a significantly large proportion of these informants were born after 1850; therefore, the documentation of pre-contact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. This is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006, p. 34). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007, p. 71). Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative “time depth” of the speaking populations (Golla 2007, p. 80). A large amount of variation within the language of a group represents a greater time depth than a group’s language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla has observed that the “absolute chronology of the internal diversification within a language family” can be correlated with archaeological dates (2007, p. 71). This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

The Native American inhabitants of the region would have generally spoken Luiseño-Juaneño (Acjachemen) and Gabrielino (or Tongva) varieties of Takic, which may be assigned to the larger Uto-Aztecan family (Golla 2007, p. 74). Golla has interpreted the amount of internal diversity within these language-speaking communities to reflect a time depth of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto-Aztecan ca. 2600 BC–AD 1, which was later followed by the diversification within the Takic speaking tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2010). The Luiseño-Juaneño (Acjachemen) and Gabrielino (or Tongva) represent the descendants of local Late Prehistoric populations. They are generally considered to have migrated into the area from the Mojave Desert, possibly displacing the prehistoric ancestors of the Yuman-speaking Kumeyaay (Ipai Tipai) that lived to the south during Ethnohistoric times. The Luiseño-Juaneño shared boundaries with the Gabrielino and Serrano to the west and northwest, the Cahuilla to the east, the Cupeño to the southeast, and the Kumeyaay to the south (Bean and Shipek 1978; Kroeber 1925). Southern Native American tribal groups of the San Diego and southern Imperial region have traditionally spoken Yuman languages, a subgroup of the Hokan Phylum.

The Uto-Aztecan inhabitants of the region were called Juaneño and Gabrielino by Franciscan friars who established the Missions San Juan Capistrano and San Gabriel Arcángel the traditional territory of these two respective tribes. The project area is east of Aliso Creek, which is considered by Kroeber (1925) to be the ethnographic boundary marker between the Gabrielino (or Tongva) (west of the Aliso Creek) and Juaneño (east of the Aliso Creek). A brief description of both ethnographic groups is provided in the following text.

The Gabrielino may have numbered as many as 5,000 people during their peak in the pre-contact period; however, population estimates are difficult due to the gradual process of missionization (Kroeber 1925). The Gabrielino territory included the Los Angeles Basin, the coast of Aliso Creek in Orange County to the south, and Topanga Canyon in the north, the four southern Channel Islands, and watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers. At the time of European contact, the Gabrielino were actively involved in trade using shell and beads as currency. The Gabrielino produced pipes, ornaments, cooking implements, inlay work, and basketry. Dwellings were constructed of tule mats on a framework of poles, but size and shape have not been recorded (Kroeber 1925). Basketry and steatite vessels were used rather than ceramics until near the end of the mission period in the nineteenth century (Garcia et Al. 2011).

The Juaneño, or Acjachemen, territory was bounded to the north by Aliso Creek, the east by the crest of the Santa Ana Mountains, the south by San Onofre Creek, and west by the Pacific Ocean (Kroeber 1925:636). Ethnographic, linguistic, and archaeological evidence indicate that Juaneño and Luiseño are one cultural/tribal group. There is no existing record of the Juaneño population during the pre-contact period. Records indicated that approximately 1,300 individuals culturally affiliated with the Juaneño resided at Mission San Juan Capistrano in the year 1800 (Engelhardt 1922). The mission death register shows as many as 4,000 native burials in the mission cemetery (White 1963). It is clear from that arrival of the Spanish decimated Native peoples through disease and changed living conditions (Bean and Shipek 1978).

The tribes of the region were organized into patrilineal clans or bands centered on a chief, composed of 25–30 people (Kroeber 1925), each of which had their own territorial land or range where food and other resources were collected at different locations throughout the year (Sparkman 1908). The title of chief was heritable along family lines. Inter-band conflict was most common over trespassing. Sparkman observed that “when questioned as to when or how the land was divided and subdivided, the Indians say they cannot tell, that their fathers told them that it had always been thus” (1908). Place names were assigned to each territory, often reflecting common animals, plants, physical landmarks, or cosmological elements that were understood as being related to that location. Marriages were generally arranged by parents or guardians. Free and widowed women had the option to choose their partner. Polygamy occurred though was not common, often with a single man marrying a number of sisters and wives. Shamanism was a major component in tribal life. The physical body and its components was thought to be related to the power of an individual, and wastes such as fluids, hair, and nails were discarded with intent. Hair, once cut, was often carefully collected and buried to avoid being affected negatively or controlled by someone who wishes them harm. Some locations and natural resources were of cultural significance. Springs and other water-related features were thought to be related with spirits. These resources, often a component of origin stories, had power that came with a variety of risks and properties to those who became affected. Puberty ceremonies for both boys and girls were complex and rigorous. Mourning ceremonies were similar throughout the region, generally involving cutting of the hair, burning the deceased’s clothes a year after death, and redistributing personal items to individuals outside of the immediate tribal group (Sparkman 1908; Kroeber 1925). The center of the Juaneño and Gabrielino religion was *Chinigchinich*, the last of a series of heroic mythological figures. The heroes were originally from the stars and the sagas told of them formed the Juaneño religious beliefs. The most obvious expression of the religion was the *Wankech*, a brush enclosed area where religious observances were performed. The *Wankech* contained an inner enclosure housing a representation of *Chinigchinich*, a coyote skin stuffed with feathers, claws, beaks, and arrows.

The staple food of the Native American inhabitants of this region during the ethnohistoric period was acorns (Sparkman 1908). Of the six or more oak species within this traditional territory, the most desirable of these was

the black oak (*Quercus kelloggii*) due to its ease of processing, protein content, and digestibility. Acorns were stored in granaries to be removed and used as needed. The acorns were generally processed into flour using a mortar and pestle. The meal was most commonly leached with hot water and the use of a rush basket; however, there are also accounts of placing meal into excavated sand and gravel pits to allow the water to drain naturally. The acorn was then prepared in a variety of ways, though often with the use of an earthen vessel (Sparkman 1908). Other edible and medicinal plants of common use included wild plums, choke cherries, Christmas berry, gooseberry, elderberry, willow, *Juncus*, buckwheat, lemonade berry, sugar bush, sage scrub, currants, wild grapes, prickly pear, watercress, wild oats and other plants. More arid plants such as *Yucca*, *Agave*, mesquite, chia, bird-claw fern, *Datura*, yerba santa, *Ephedra*, and cholla were also of common use by some Juaneño and Gabrielino populations. A number of mammals were commonly eaten. Game animals included black-tailed deer, antelope, rabbits, hares, birds, ground squirrels, woodrats, bears, mountain lions, bobcats, coyotes, and others. In lesser numbers, reptiles and amphibians may have been consumed. Fish and marine resources provided some portion of many tribal communities, though most notably those nearest the coast. Shellfish would have been procured and transported inland from three primary environments, including the sandy open coast, bay and lagoon, and rocky open coast. The availability of these marine resources changed with the rising sea levels, siltation of lagoon and bay environments, changing climatic conditions, and intensity of use by humans and animals.

Areas or regions, identified by known physical landmarks, could be recognized as band-specific territories that might be violently defended. Other areas or resources, such as water sources and other locations that were rich in natural resources, were generally understood as communal land to be shared. The coastal Juaneño and Gabrielino exchanged a number of local goods, such as seafood, coastal plants, and various types of shell, for items including acorns, agave, mesquite beans, gourds, and other more interior plants of use (Luomala 1978). Shellfish would have been procured from three primary environments, including the sandy open coast, bay and lagoon, and rocky open coast. The availability of these marine resources changed with the rising sea levels, siltation of lagoon and bay environments, changing climatic conditions, and intensity of use by humans and animals (Gallegos and Kyle 1988; Pignoli 2005; Warren 1964). Shellfish from sandy environments included *Donax*, *Saxidomas*, *Tivela*, and others. Rocky coast shellfish dietary contributions consisted of *Pseudochama*, *Megastrea*, *Saxidomus*, *Protothaca*, *Megathura*, *Mytilus*, and others. Lastly, the bay environment would have provided *Argopecten*, *Chione*, *Ostrea*, *Neverita*, *Macoma*, *Tagelus*, and others. While marine resources were obviously consumed, terrestrial animals and other resources likely provided a large portion of sustenance. Game animals consisted of rabbits, hares (*Leporidae*), birds, ground squirrels, woodrats (*Neotoma*), deer, bears, mountain lions (*Puma concolor*), bobcats (*Lynx rufus*), coyotes (*Canis latrans*), and others. In lesser numbers, reptiles and amphibians may have been consumed.

A number of local plants were used for food and medicine. These were exploited seasonally, and were both traded between regional groups and gathered as a single triblet moved between habitation areas. Some of the more common of these that might have been procured locally, or as higher elevation varieties, would have included buckwheat (*Eriogonum fasciculatum*), *Agave*, *Yucca*, lemonade berry (*Rhus integrifolia*), sugar brush (*Rhus ovata*), sage scrub (*Artemisia californica*), yerba santa (*Eriodictyon*), sage (*Salvia*), *Ephedra*, prickly pear (*Opuntia*), mulefat (*Baccharis salicifolia*), chamise (*Adenostoma fasciculatum*), elderberry (*Sambucus nigra*), oak (*Quercus*), willow (*Salix*), and *Juncus* grass, among many others (Wilken 2012).

3.4 Historic Context

This section provides an overview of the relevant historic and architectural contexts that informed the evaluation of built environment resources within the API and their potential for significance.

3.4.1 Irvine Ranch and the Development of Irvine

The present-day city of Irvine was built entirely on the former Irvine Ranch, a massive 93,000-acre piece of agricultural land in Orange County. Portions of the Irvine Ranch also became parts of neighboring cities such as Newport Beach, Costa Mesa, Laguna Beach, Santa Ana, Tustin, and Orange. The Irvine Ranch stemmed from three large Spanish/Mexican grants: Rancho Santiago de Santa Ana, Rancho San Joaquin and Rancho Lomas de Santiago. In 1864, Jose Sepulveda, owner of Rancho San Joaquin, sold the rancho to sheep ranchers Benjamin and Thomas Flint, Llewellyn Bixby and James Irvine. Two years later, Irvine, Flint, and Bixby acquired Rancho Lomas de Santiago, followed by Rancho Santiago de Santa Ana in 1868. With these acquisitions, the three men's land holdings stretched 23 miles from the Pacific Ocean inland, one-fifth of the total land comprising Orange County. The men rented out the land to tenant farmers, but the land was predominately utilized for sheep and cattle grazing. In 1878, James Irvine acquired his partners' interests, becoming sole owner. He continued to use the land for ranching and grazing until his death in 1886 (City of Irvine 2025).

James Irvine Jr. came into possession of the land following his father's death and began to transform it from grazing land to productive agricultural fields of citrus groves, sugar beets, corn, celery, chili peppers, barley, alfalfa, avocados, walnuts olives, berries, and lima beans, among other crops. Development in present-day Irvine was centered around a stop for the Santa Fe Railroad with buildings including a school, post office, a barley warehouse, blacksmith's shop, and tenant houses. Serving as the center of the Ranch's activities, this community was called Myford, after one of James Irvine Jr's sons. In 1894, Irvine Jr. incorporated the Irvine Ranch into The Irvine Company, which became the Ranch's operating entity. The Irvine Company, which continues to operate to this day as a real estate management company, began to lease land on the Ranch to individuals and entities for farming and ranching (IHS 2020a: 4; IHS 2020b: 21, 32; IHS 2020c: 11; City of Irvine 2025).

As the Ranch's agricultural endeavors expanded, Irvine sought ways to provide more consistent water. In 1910, The Irvine Company constructed and laid about 50,000 feet of concrete pipelines and had a total of about 30 miles of pipeline and ditch for irrigation and drainage purposes. Three years later, Irvine formed the Frances Mutual Water Company (named for his wife) to construct water infrastructure projects to provide irrigation to Irvine Ranch land. By 1918, approximately 60,000 acres of lima beans were grown on the Ranch (Exhibit 1), which had also become the largest cattle ranch in Orange County (IHS 2020a: 4; IHS 2020b: 21, 32; IHS 2020c: 11; City of Irvine 2025)

Exhibit 1. Lima bean fields at Irvine Ranch, circa 1920



Source: UC Irvine, Libraries, Orange County Regional History Collection/Cochems (Edward W.) Photographs

In the 1920s, various agricultural cooperatives were formed on the Irvine Ranch, including the Irvine Valenica Growers Association (1926). Beginning in 1929, the Frances Mutual Water District implemented an extensive reservoir and dam system on the ranch to support farming. This system included the Lambert Reservoir (1929); Santiago Canyon Dam (1931-1932) and Canyon Reservoir (1942); Peters Canyon Dam Number 1, Laguna Dam and Bonita Dam (all between 1937 and 1938); Peters Canyon Dam Number 2 (1940); Sand Canyon Dam (1942); Syphon Canyon Dam (1948-49); and, after Irvine's death, Rattlesnake Canyon Dam (1960). Irvine also built canals to deliver water to the reservoirs and more than 2,500 miles of gravity fed irrigation pipeline to move it to the fields. While Irvine Ranch land continued to be productive through the 1920s, the nation-wide effects of the Great Depression (1929-1939) impacted tenant farmers' ability to sell their crops and pay their leases. Still, Irvine Ranch remained a central agricultural producer for the state during the 1930s and development remained sparse and scattered (IHS 2020a: 17; IHS 2020b: 32; NETR 2025a; NETR2025b).

When the United States entered World War II in 1941, the United States military acquisitioned 2,318 acres of land from the Irvine Ranch for the construction of the Marine Corps Air Station El Toro (completed 1942). The acquisitioned land was located in the middle of a large lima bean field under cultivation at the Irvine Ranch. The military acquired another 1,600 acres for the Santa Ana Naval Air Station. The Navy purchase prompted the Orange County Assessor to reassess the Irvine Ranch land. At this time, the Assessor taxed open land as though it were being utilized for its "highest and best use" (usually considered residential or commercial), which resulted in a higher property tax burden for the owners of the Irvine Ranch. Eventually, high property taxes and post-war development pressures became a disincentive to retain the agricultural usage of the land. (IHS 2021a: 25; City of Irvine 2025; Jepsen 2021).

During World War II, many tenant farmers and ranchers enlisted in the military and left their properties at the Irvine Ranch, making cultivation difficult during the war. Still, though, the food grown on Irvine Ranch fed the nearby military facilities and contributed to the county's overall war effort. After the conclusion of World War II in 1945, many former tenant and rancher farmers did not, or could not, return. In 1947, James Irvine Jr., who adamantly opposed selling Irvine Ranch land for development, died and his brother Myford took over operations (Jepsen 2021; City of Irvine 2025).

The Irvine Ranch faced development pressure in the years following World War II, commensurate with the rising population and corresponding urban and suburban sprawl developing on formerly agricultural land throughout Southern California. Residential sprawl, much of which consisted of individual housing tracts developed around freeways with no unifying plan, pushed at the borders of the Irvine Ranch. As suburbs grew in the surrounding areas, The Irvine Company was inundated with requests to purchase land for development. This pressure became more acute every year; by the late 1950s, Orange County was the fastest growing region in the United States. The Irvine Company, understanding that development of the ranch was inevitable, looked for solutions that would allow development while avoiding the perceived pitfalls of suburban sprawl (Jepsen 2021; City of Irvine 2025).

This opportunity arose in 1957, when the University of California recognized the need to establish a new public university to serve the ever-growing population of the greater Los Angeles area. Architect and planner William Pereira proposed Irvine Ranch as a location for the new university, noting that because the massive Ranch was largely undeveloped and owned by a single entity, there was a unique possibility to design a master planned city surrounding the university. Pereira prepared "A University Campus and Community Study," which advocated for the development of a planned "new town" associated with the intellectual and cultural implant of the university (Watson 2002: 108, 110, 113; Jepsen 2021; City of Irvine 2025).

Pereira envisioned mixed-use residential, business, and commercial "villages" emanating like spokes out of the university center and connected by regional roads, bike trails, and open space corridors. In 1959, the Irvine Company donated 1,000 acres to the state for a new university campus and it opened its doors in October 1965 (Exhibit 2). Planning and construction of elements of Pereira's master plan occurred concurrently with university development. By 1970, the villages of Turtle Rock, University Park, Culverdale, the Ranch and Walnut were completed and the present-day Irvine Business Complex opened. Although originally tasked with planning the university campus and 10,000 acres, Pereira's master plan became the guiding goals for the entire 93,000-acre ranch. Pereira's plans included the preservation of 30,000 acres of farmland and 30,000 acres of mountainous wilderness (Watson 2002: 108, 110, 113; Ellison 2021; Jepsen 2021; City of Irvine 2025).

Exhibit 2. Aerial view of the University of California, Irvine, circa 1965



Source: UC Irvine, Libraries, Orange County Regional History Collection/Watson (Raymond L.) Papers

From 1970 to 1980, Irvine was California's fastest growing city, although much of present-day Irvine remained agricultural land. In 1971, Irvine residents voted to incorporate as a larger city than what was envisioned in the original Pereira master plan. The city of Irvine continued to develop rapidly, with new civic, residential, and commercial structures constructed throughout the decade. The scale of this growth is indicated through permits issued in the decade; in June 1973, for example, the City issued 113 building permits valued at more than \$4 million, and 128 permits valued at more than \$5 million in November 1975 (Skrove 1977: 41; City of Irvine 2025; Tustin News 1976: 3; Tustin News 1973: 17).

Despite the rapidly evolving city, much of Irvine Ranch remained heavily agricultural. In 1977, for example, the Irvine Ranch was the single biggest consumer of water in Orange County and still maintained more than 14,000 acres of oranges, berries, and vegetable crops. The city of Irvine continued to densify in the 1980s and 1990s, although aerial photographs through the 1980s continue to show large swaths of undeveloped farmland around the city's central developed core. In 1991, Old Town Irvine was designated a California Historic Landmark (No. 1004) and includes a collection of original, moved, and re-built buildings from Irvine Ranch's early days, including the post office and several warehouses. Today, Irvine has a population of nearly 315,000 and comprises 66 square miles (Skrove 1977: 41; City of Irvine 2025; NETR 2025a).

North Irvine

North Irvine is an area of recent development within the city, including the development of the residential communities of Portola Springs and Orchard Hills. The residential community of Orchard Hills, located north of the

API, is currently in its final phase of development. State Route (SR) 261 and SR-241 provide highway access to the area. The developed areas of North Irvine sit adjacent to a large swath of open space called the Northern Open Space Preserve, which includes Limestone Canyon and Blackstar Canyon and extends to the Cleveland National Forest.

3.4.2 Project Site Development

An aerial photograph from 1938 shows the project site as farmland with one agricultural property located adjacent to the Highline Canal segment (Map ID 2) in the API. This orientation remained consistent until 1967, when the California Labor Camp and the El Modena Nursery were constructed (Exhibit 3). The El Modena Nursery originated in 1958 when Jan Groot began a specialty fern growing business in the present-day City of Orange, which evolved to become El Modena Nursery. In 1967, Groot moved the nursery to the project site at 11911 Jeffrey Road to expand its operations. El Modena was not the only nursery drawn to the area's favorable climate; by 1974, five different nurseries were located around Irvine Boulevard and Jeffrey Road. El Modena prospered and the business expanded to Hollister, Valley Center, Watsonville, Lake Mathews and Imperial County. The California Labor Camp was constructed at the same time as a complex of four buildings including barracks and a mess hall to house 200 predominately Latino agricultural laborers, most of whom worked at El Modena Nursery or Hines Nursery, another nursery located approximately 1.5 miles west of the project site at 12621 Jeffrey Road (presently a residential development) (Register 1966: 3; Berkov 1961: 12; Schwartz 1987: 63; Kieffer 1986: 1; LAT 1974: 22; Greenhouse Grower 2009).

Exhibit 3. Aerial photograph of the project site from 1972 showing the California Labor Camp and greenhouses and infrastructure for the El Modena Nursery



Source: NETR 2025a

By 1986, El Modena was the 12th largest nursery wholesaler in the country with reported total sales of \$12 million; three years later, the operations expanded on the project site with the addition of several green houses at the west end of the project site. The business continued to operate for the next two decades until it closed permanently in 2009 and its equipment and inventory were sold to Color Spot. Similarly, the Hines Nursery filed for bankruptcy in 2010. The project site remained largely unchanged until 2012, when the remaining structures associated with the El Modena Nursery were demolished. The California Labor Camp remained extant until circa 2020, when its buildings (except Map ID 1) were demolished (Exhibit 4) (NETR 2025a; Kieffer 1986: 1; Milbourn 2010).

Exhibit 4. The original configuration of the California Labor Camp in 1967 (left) and the configuration of the camp in 2022 (right), by which time the other buildings associated with the Labor Camp had been demolished; concrete foundations are visible at the former locations of these buildings



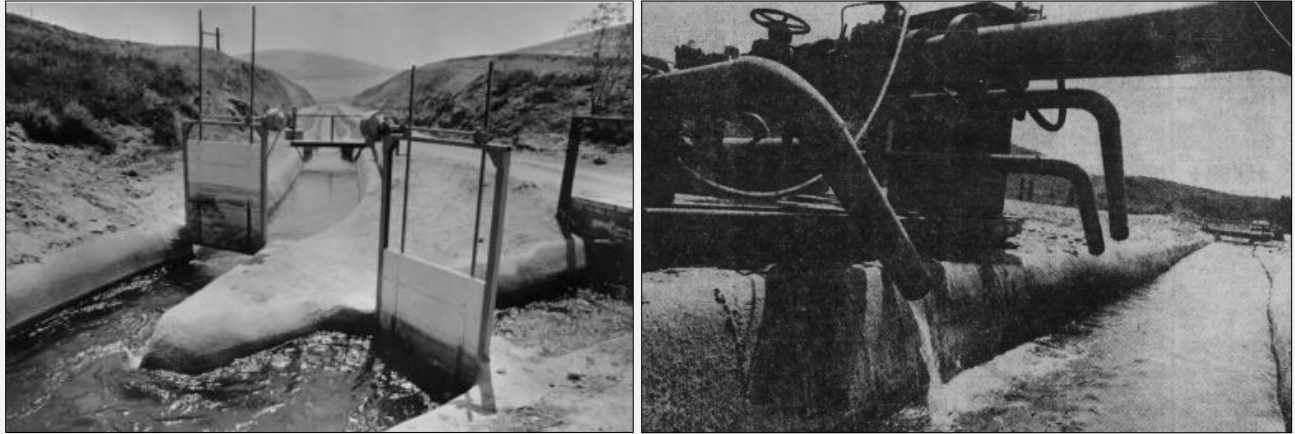
Source: NETR 2025a

3.4.3 Highline Canal (P-30-176748)

An approximately 0.10-mile-long segment of the Highline Canal is located in the API. The Highline Canal (Exhibit 5) is a gravity-fed water conveyance system constructed circa 1933 through the Frances Mutual Water Company that carried water to the agricultural fields of the Irvine Ranch. The segment of the Highline Canal that transects the project site was originally an open channel canal that became part of a system that included over 2,500 miles of gravity fed pipelines constructed for the Irvine Ranch by the Frances Mutual Water Company. The Highline Canal is fed by the Santiago Dam (1931-1932) and Irvine Lake (completed and filled in 1933), which were constructed as a joint venture by The Irvine Company and Serrano Irrigation District with the purpose of flood control, irrigation, and municipal water use. The canal begins at the Santiago Reservoir and winds southeast to the Syphon Reservoir. During the 1940s, a large portion of the canal was demolished, and other segments were undergrounded for the construction of the El Toro Marine Base on Irvine Ranch land. The remaining segments of the canal remained

operational through the late 1970s, when it was replaced by an underground pipeline constructed by the Irvine Ranch Water District (Sawyer 2003: 1, 3; Skrove 1977: 41).

Exhibit 5. Photograph of the Highline Canal, circa 1940 (left) and in 1977 (right)



Source: Irvine Historical Society 2020b: 21 (left); Skrove 1977: 41 (right)

3.4.4 Work Camps

Between 1848 and 1941, the diversification of California's economy resulted in the establishment of work camps throughout the state to provide housing for laborers. Work camps were linked to specific industries, most commonly agriculture, mining, logging, reclamation projects (levee construction), fishing, and railroad construction. Often intended to be temporary, labor camps have typically been designed with utilitarian forms and materials. Early work camps in California became common following the Gold Rush in 1848 as functional living spaces for the influx of miners seeking their fortunes. The number and size of camps expanded in subsequent decades as industrialization prompted the construction of new infrastructure and created the need to extract raw materials for development. Work camps ranged in size, with some housing only a handful of workers while others could house hundreds of workers. Some camps were private or corporately-owned while others were created by the state and federal governments. Most work camps were not intended to be complete, full-service communities and the amount of infrastructure built was often "contingent on their anticipated duration, size, and demographic composition" (Caltrans 2013: 17). Characteristics of work camps typically include a narrow economic focus; relative geographic isolation; impermanence; and connections with and dependence on regional, national, and, in some cases, global economies (Caltrans 2013: 10, 12, 19).

The Great Depression (1929-1939) resulted in widespread unemployment and led to a proliferation of work camps throughout the state. The election of Franklin Delano Roosevelt in 1933 marked the beginning of the New Deal, large-scale federal public-relief efforts that resulted in the construction of state and federal relief camps and the establishment of the Civilian Conservation Corps which provided housing and employment opportunities. Between 1936 and 1941, Roosevelt's Farm Security Administration also operated 13 work camps throughout California's rural agricultural valleys. Work camps began to decline in prevalence following the United States' entry to World War II in 1941 and due to their intentionally ephemeral nature, many have been subsequently demolished. In the

decades years following the conclusion of World War II, labor camps in California became primarily established to house seasonal agricultural laborers (Caltrans 2013: 8, 12, 28, 57, 58, 90).

3.4.5 Transmission Lines

Aerial transmission lines are supported by a series of vertical poles or towers. The transmission lines provide power to plants and substations, which serve individual customers in cities, towns, industrial plants, and utility districts. Transmission line structures include three main design components: the tower structure, the conductors, and the insulators. The tower is the structure that holds the insulators, and the insulators hold the conductors, which come in the form of a transmission line. The electricity transmission includes anything above the electrical voltages of 60 kV or more. Transmission lines with a voltage of 500 kV are the highest voltage connected to energy grids throughout the western United States. Lines with higher voltages (230 kV and above) are primarily carried on metal towers, while lines below 230 kV are usually on wooden pole structures. Extra-high voltage lines (500kV and above) usually have steel lattice towers, which are larger than the those constructed for lower voltage lines, that feature a cinched waist, massing with a wide base, narrow mid-point, and extended horizontal cross arms. With technological advances in insulator and conductor design, components are replaced and repaired regularly. Transmission lines and systems are generally categorized by their conductor positioning, construction materials, and voltage (Tinsley-Becker 2017: 51).

Character-defining features are the specific physical characteristics of data requirements that an individual property must possess to retain integrity. Key character-defining features of transmission lines often include the following:

- Alignment of transmission line from the date of original construction
- Intact primary tower structures
- Connectivity and association to power-generating plants and substations and transmission lines

In addition to possessing the character-defining features outlined above, the *Southern California Edison Historic-Era Electrical Infrastructure Management Program* identified periods of historic significance for SCE transmission line systems according to their voltage. For systems transmitting electrical power at 66 kV or below, the period of significance is limited to 1907 to 1930. For systems transmitting electrical power between 67 kV to 230 kV, the period of significance is limited to 1912 to 1941. For systems transmitting electrical power at 500 kV, the period of significance is limited to 1965 to 1970 (Tinsley-Becker 2017: 64).

4 Results of Identification and Evaluation Efforts

4.1 SCCIC Records Search Results

4.1.1 Previously Cultural Resources Studies

The SCCIC records search indicates that 28 previous cultural resources technical studies have been conducted within a 0.5-mile radius of the API, 11 of which address portions of the API (Table 4-1). See Confidential Appendix A for the complete SCCIC records search results and associated documentation, and below Table 4-1 for a summary on the reports relevant to the currently proposed project.

Table 4-1. Previous Cultural Resource Studies Within 0.5 Miles of API

Report ID	Year	Title	Author
Studies Within the API			
OR-00252	1978	Cultural Resources Report- Preliminary Assessment on the Proposed San Diego Creek Watershed Erosion and Sedimentary Control System in Hicks Canyon, Hicks Canyon Wash, Rattlesnake Creek Wash, San Diego Creek, and the San Joaquin Marsh Located in Orange County	Desautels, Roger J.
OR-00305	1979	The History of Archaeological Research on Irvine Ranch Property: The Evolution of a Company Tradition	Schroth, Adella
OR-00648	1982	Cultural Resource Survey: Archaeological Resources: Foothill Transportation Corridor, Phase II	Breece, Bill, and Beth Padon
OR-00847	1985	Archaeological Resource Inventory City of Irvine and its Sphere of Influence	Padon, Beth
OR-01428	1994	First Supplemental Archaeological Survey Report for the Eastern Transportation Corridor (SR 231): Siphon Ridge Revegetation Area Orange County, California	Daey, Douglas, and Judy McKeegan
OR-02106	1994	Supplemental Historic Property Survey Report for Siphon Ridge Revegetation Area, Orange County, California, 12-Ora-231, 12830-111000	Huey, Gene
OR-02225	1978	The Irvine Company Planning Process and California Archaeology- A Review and Critique	Strozier, Hardy
OR-02342	2001	Peer Review of "A Phase I Cultural Resources Inventory for Planning Area 9, Irvine, California," dated 12 April 2001. Author, Christopher Drover, Ph.D. Prepared by The Keith Companies, Incorporated (TKCIJ for the Irvine Community Development Company (ICDC)	Bissell, Ronald M.
OR-02845	2001	A Phase I Cultural Resources Inventory for Planning Area 9 Irvine, California	Drover, Christopher E.

Table 4-1. Previous Cultural Resource Studies Within 0.5 Miles of API

Report ID	Year	Title	Author
OR-03600	2007	Results of Archaeological Survey and Monitoring for Southern California Edison's Pole Replacements After Santiago Fire Along Santiago Canyon Road, Modjeska Canyon Road, and Hicks Canyon Road; Orange County, California; Jo:6259-0468	Garcia, Kyle H., and Marcy Rockman
OR-03824	2000	A Cultural Resources Inventory of Planning Areas 1 & 2, Irvine, California	Drover, Christopher
Studies within 0.5-Miles of the API			
OR-00234	1978	Addendum to Previous Report on Reach 4, Santiago Canyon Parallel Aqueduct	Cottrell, Marie G.
OR-01099	1979	Archaeological Resources Assessment Conducted for Proposed Irvine Ranch Water District Pipeline Right of Ways	Cooley, Theodore G.
OR-01214	1986	Report of a Cultural\Scientific Resources Survey Conducted for the Supplemental Study Area (Alignments 72a, 73, 73a, and 83a), Eastern Transportation Corridor	Del Chario, Kathleen C., and Marie G. Cottrell
OR-01394	1994	A Cultural Resources Survey for the Northwood Point Planned Community (Northwood 5), County of Orange Tentative Tract Map No.14540	Chace, Paul G.
OR-01426	1994	Cultural Resources Assessment Hicks Canyon and East Hicks Canyon Retarding Basins Orange County Ema File No. IP94-124	McLean, Deborah K.
OR-01486	1996	Archaeological Test Investigations at CA-ORA-1371-h and CA-ORA -1440 Supplemental Report for the Eastern Transportation Corridor Orange County, California	Davy, Douglas M., Judy McKeethan, and Gino Calvano
OR-01557	1995	Test Level Investigations at CA-ORA-1371/h, East Hicks Canyon, Orange County, California	Strudwick, Ivan H., Deborah McLean, William McCawley, Steve Conkling, and Brad Sturm
OR-01844	1991	Request for Finding of Effect for the Proposed Eastern Transportation Corridor	Webb, Lois M.
OR-02108	1991	Historic Property Survey Report for the Proposed Eastern Transportation Corridor, Orange County	Unknown
OR-02518	2001	Peer Review of "A Phase I Cultural Resources Inventory for Planning Area 5b, Irvine, California", Dated 20 March 2001. Author, Christopher Drover, Ph.D. Prepared by The Keith Companies, Incorporated for the Irvine Community Development Company	Bissell, Ronald M.
OR-02534	1976	Annual Report to The Irvine Company from Archaeological Research, Inc.	Archaeological Research, Inc.
OR-03347	1992	Supplemental Environmental Impact Statement for the Eastern Transportation Corridor Tca ESI 2-1	Benner, Michael A.

Table 4-1. Previous Cultural Resource Studies Within 0.5 Miles of API

Report ID	Year	Title	Author
OR-03816	2001	A Phase I Cultural Resources Inventory for Planning Area 5B, Irvine, California	Drover, Christopher, David M. Smith, and Catherine Bell
OR-04084	2005	Cultural Resource Assessment of 22 Natural Treatment System Facility Sites Within the San Diego Creek Watershed - Natural Treatment System Project, Irvine Ranch Water District, Orange County, California	Fulton, Terri, and Deborah McLean
OR-04453	2014	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate CLV1261 (TIC PA 5B), Center Median of Future Encore Road NW of Jeffery Road, Irvine, Orange County, California EBI Project No. 61146573	Bonner, Diane, and Carrie Wills
OR-04454	2014	Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate PA5B, Center Median of Future Encore Road and northwest of Jeffery Road, Irvine, Orange County, California	Bonner, Diane, and Carrie Wills
OR-04522	2015	Controlled Demolition of Archaeological Sites CA-ORA-361, CA-ORA-811, CA-ORA-1610, and CA-ORA-1615, Planning Area I, Irvine, California	Fulton, Phil

Note: API = Area of Potential Impacts.

OR-00252

Cultural Resources Report – Preliminary Assessment on the Proposed San Diego Creek Watershed Erosion and Sedimentary Control System in Hicks Canyon, Hicks Canyon Wash, Rattlesnake Creek Wash, San Diego Creek, and the San Joaquin Marsh Located in Orange County (Desautels 1978), documents the results of an archaeological assessment to determine if the construction of two dams within Hicks Canyon would impact archaeological resources. The area of study overlaps approximately 70% of the API. The assessment included a literature search and a pedestrian survey. No archaeological resources were discovered within the API. At the time the study was performed, the final project plans, including the location of staging and borrow areas, were not available; however, it was determined no archaeological resources would be impacted at the location of the two dams.

OR-00648

Cultural Resource Survey: Archaeological Resources: Foothill Transportation Corridor, Phase II (Breece and Padon 1982), documents the results of an archaeological investigation for proposed freeway alignments. The study area covers 23 miles and overlaps approximately 50% of the API. The investigation included archival research and a pedestrian survey; however, the API was not surveyed due to the presence of a nursery and the disturbed nature of the ground surface. No archaeological resources were discovered within the API as a result of the literature review.

OR-00847

Archaeological Resource Inventory City of Irvine and its Sphere of Influence (Padon 1985), documents the results of an archaeological study performed to provide the City of Irvine a comprehensive database of existing

archaeological resources. The area of study overlaps the entire API. The study included a literature review and a pedestrian survey; however, the API was not able to be surveyed due to the presence of an active agricultural operation. No archaeological resources were discovered within the API as a result of the literature review. It was recommended the unsurveyed portions be surveyed as soon as field conditions permit.

OR-01428

First Supplemental Archaeological Survey Report for the Eastern Transportation Corridor (SR 231): Siphon Ridge Revegetation Area Orange County, California (Daey and McKeehan 1994), documents the results of a supplemental archaeological investigation for the revegetation of an area associated with the Eastern Transportation Corridor project. The area of study overlaps approximately 10% of the API along the project site's southern boundary. The investigation included a literature review, a pedestrian survey, Native American outreach, and the excavation of a 1-meter by 1-meter test unit. The investigation identified one prehistoric site, currently identified as P-30-001400, that is located approximately 80 meters (262 feet) south of the API. P-30-001400 was determined to be entirely disturbed by terracing, planting, and road construction, had no subsurface deposit, and contained no diagnostic dateable carbon or obsidian. Further scientific study of P-30-001400 was not recommended.

OR-02845

A Phase I Cultural Resources Inventory for Planning Area 9 Irvine, California (Drover 2001), documents the results of an archeological investigation conducted in order to determine if development would impact cultural resources. The area of study overlaps approximately 25% of the API. The investigation included a records search, an archival review, and a pedestrian survey; however, the API was not surveyed. No archaeological resources were discovered within the API as a result of the records search and archival review. It was suggested that due to the proximity to intermittent drainages, such as Hicks Canyon Wash, prehistoric sites could exist within the study area and could have been either destroyed or buried by alluvial soils. It was recommended a qualified monitor be present during all grading activities in order to inspect soils for previously unknown archaeological resources.

OR-03600

Results of Archaeological Survey and Monitoring for Southern California Edison's Pole Replacements After Santiago Fire Along Santiago Canyon Road, Modjeska Canyon Road, and Hicks Canyon Road; Orange County, California; Jo:6259-0468 (Garcia and Rockman 2007), documents the results of pedestrian surveys and cultural monitoring for the replacement of SCE distribution poles that were destroyed as a result of the Santiago Fire. A pedestrian survey of a 15-meter radius was performed around each pole that is located along Hicks Canyon Road after the power pole replacements had already taken place. No cultural monitoring was performed within the API and no archaeological resources were identified within or directly adjacent to the API as a result of the survey. Furthermore, there was no evidence to suggest that subsurface cultural deposits were impacted by the distribution pole replacements.

OR-03824

A Cultural Resources Inventory of Planning Areas 1 & 2, Irvine, California (Drover 2000), documents the results of an archaeological investigation conducted in order to determine if commercial and residential development would impact cultural resources. The area of study overlaps approximately 10% of the API along the project site's northeast

boundary. The investigation included a records search and a pedestrian survey. No cultural resources were identified within the API as a result of the investigation.

4.1.2 Previously Identified Cultural Resources

The SCCIC records search indicates that seven previously recorded cultural resources are located within a 0.5-mile radius of the API, one of which intersects the API. The overlapping resource, P-30-176748 or the Highline Canal, is characterized as a historic-era built environment resource and is addressed in this report as Map ID 2. Of the seven resources within the 0.5-mile radius, four are prehistoric sites, two are historic-era built environment resources, and one is a multicomponent site containing both prehistoric and historic-era components. All previously recorded cultural resources identified within 0.5 miles of the API are listed in Table 4.2. See Confidential Appendix A for the complete SCCIC records search results, documentation, and DPR site records.

Table 4-2. Previous Identified Cultural Resources Within 0.5 Miles of API

Primary Number	Trinomial	Age	Description	Eligibility for NRHP	Recording Event
Resources Within the API					
P-30-176748	—	Historic-era	Highline Canal	6Z	2003 (William A. Sawyer)
Resources Within 0.5 Miles of the API					
P-30-000601	CA-ORA-000601	Prehistoric	Flake scatter	Not evaluated	1974 (N. Farrell); 1982 (William H. Breece)
P-30-001237	CA-ORA-001237	Prehistoric	Lithic scatter consisting of flakes, flaked stone tools, and hammerstones	Not evaluated	1990 (J. Sorensen, G. Brown, P. Fulton, and B. Texier)
P-30-001246	CA-ORA-001246	Prehistoric	Lithic scatter consisting of manos and a possible core	Not evaluated	1990 (John M. Foster)
P-30-001371	CA-ORA-001371/H	Prehistoric, Historic-era	Prehistoric component: a lithic scatter consisting of flakes, a flaked stone tool, and groundstone; Historic-era component: a dilapidated wooden building, household debris, building materials, and fragments of farm equipment	Found ineligible through subsurface testing	1994 (Deborah McLean and Diann Taylor); 1995 (Gino Calvano)
P-30-001400	CA-ORA-001400	Prehistoric	Lithic scatter consisting of groundstone, flakes, cores, and a core tool	Not evaluated	1994 (Doug Davy and Judy McKeethan)
P-30-161867	—	Historic-era	Building, South Coast Gun Club; OHP Property Number - 070071	Appears ineligible	1990 (Roger Hatheway)

Notes: API = Area of Potential Impacts; NRHP = National Register of Historic Places; 6Z = found ineligible for NRHP, California Register of Historical Resources, or local designation through survey evaluation.

4.2 NAHC SLF Search Results

Dudek requested a NAHC SLF search for the project site on August 9, 2024. The NAHC replied via email on August 21, 2024, stating that the SLF search was completed with negative results. Additionally, the NAHC provided a list of Native American tribes and individuals/organizations with traditional geographic associations to the project site that might have knowledge of cultural resources in the area. To date, Dudek has not sent outreach letters to the entities identified by the NAHC. See Appendix B for complete documentation of SLF search results.

In compliance with AB 52 and SB 18, the City, as Lead Agency, is responsible for conducting government-to-government consultation with Tribal entities.

4.3 Archival Research Results

4.3.1 Historic Topographic Maps

Dudek examined historic topographic maps from 1935, 1944, 1950, 1958, 1960, 1963, 1970, 1978, 1982, 1984, 2000, 2012, 2015, 2018, and 2022 to determine the growth in the area and how the properties developed over time (Table 2) (NETR 2025b).

While topographic maps are informative, they do not illustrate the minute changes that can occur to a landscape overtime and at times, are inconsistent with what is depicted on the maps year to year. Most often, structures depicted in topographic maps are limited to those with community or social significance (e.g. Firehouses or Hospitals), including additions or changes to roads and/or waterways. Nonetheless, the information gathered contributes to the overall understanding of the chronological development of a study area but must be considered with these limitations in mind.

Table 4-3. Review of Historical Topographic Maps

Year	Description
1935	Only the western half of the API is illustrated on the 1935 topographic map. There is an informal road along the southern boundary of the API, where Bee Canyon Access Road is currently located. The road turns north, towards the Hicks Canyon Wash, turns west along the API's northern boundary, and then continues north. There is a structure within the center of the API, south of the informal road. Hicks Canyon Wash is depicted stopping at the northern boundary of the API, at the edge of the illustrated area. MAP ID 4 (The Highline Canal) is not depicted.
1944	Depicts the same information as the 1935 topographic map.
1950	<p>The entire API is illustrated on the 1950 topographic map. Hicks Canyon Wash borders the northern boundary of the API, intersecting at various points, including the approximate location of MAP ID 4 (road culvert). The Highline Canal is present, connecting to the Hicks Canyon Wash, and intersecting the center of the API. The area where the Highline Canal intersects the API is labeled "Siphon"</p> <p>The informal road depicted in the 1935 topographic map is still present, however it follows a slightly different layout. The informal road intersects the center of the API, but the northern and southern ends of the road fork into different directions. The southern end forks with one portion of the road following the Highline Canal south, and the other portion intersects the</p>

Table 4-3. Review of Historical Topographic Maps

Year	Description
	<p>southwest portion of the API. The northern end of the informal road forks with one portion following Hicks Canyon Wash to the northwest, and the other portion continues north.</p> <p>There are two additional structures within the API, one small square structure and one long rectangular structure. Both are located directly north of the northern fork in the informal road.</p>
1958	Depicts the same information as the 1950 topographic map.
1960	<p>The informal road is depicted extending along the northern section of the API, following Hicks Canyon Wash. There is an additional square structure within the center of the API, directly west of where the informal road intersects the center of the API.</p> <p>Hicks Canyon Wash intersects the API at three locations, the northern border, the eastern portion, and the center of the API; however it no longer intersects the center of the API from north to south, it now runs east to southwest. This is not consistent with the layout of the Highline Canal.</p>
1963	Depicts the same information as the 1960 topographic map.
1970	<p>Hicks Canyon Wash and the Highline Canal follow the same paths depicted on the 1950 topographic map. The southern portion of the informal road follows the same layout as it did in the 1950 topographic map. The northern portion of the informal road connects to a formal road that borders approximately two-thirds of the API's northern boundary and appears to follow the same path as Jeffery Road. This formal road intersects the Hicks Canyon Wash in the same approximate location of the road culvert.</p> <p>Two roads break off to the south from the formal road, intersecting the northeast portion of the API. One of the roads that breaks off to the south, stops at four structures that represent the California Labor Camp (11405 Jeffrey Road containing Map ID 1). There is only one other structure depicted on the map, the square structure within the center of the API.</p>
1978	There are three additional structures within the center of the API, one large rectangular and two small square shaped.
1982	There is an additional rectangular shaped structure along the northern boundary of the API.
1984	There are eight additional large rectangular structures within the western portion of the API, lined up along the informal road.
2000	<p>The informal road is now depicted as a formal road and forks within the center of the API. There is now a formal road along the western boundary of the API, where Portola Parkway is located. Bee Canyon Access Road is now present.</p> <p>There is an additional large rectangular structure within the western portion of the API, as well as two small square structures within the southwest portion of the API, and two small square structures in the center of the API. The small square structure depicted south of the informal road, within the center of the API, on the 1970 topographic map is no longer present.</p>
2012	No structures are depicted on the topographic map. Portola Parkway, Jeffery Road, and Bee Canyon Access Road appear as they do present day.
2015-2022	There is an increase in development in the area west of Portola Parkway. There are no changes to the API to suggest ground disturbance has occurred.

4.3.2 Historic Aerial Photographs

A review of historic aerial photographs for the years 1938, 1946, 1952, 1963, 1967, 1972, 1980, 1981, 1985, 1987, 1988, 1992-2000, 2002-2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022 was conducted as part of the archival research effort for the proposed project. The aerial photographs provided a general idea of the growth of the project site and its environment and changes over time (Table 3) (NETR 2025a; UCSB 2025).

Table 4-4. Review of Historical Aerial Photographs

Year	Description
1938	The API is intersected by an informal road and the Highline Canal. There is a structure and a small number of trees within the center of the API, adjacent to the informal road and the Highline Canal. Consistent with what is depicted on the 1950 topographic map, there are two roads leading away from the structure. The roads are parallel to one another at first, trending southwest, and then one road curves to the south, following the Highline Canal, and the other continues southwest.
1946	The western half of the API appears to have been disked. The eastern border of the disked area appears consistent with the informal road depicted on the 1935 topographic map. Hicks Canyon Wash appears unchanneled, bordering the northern boundary of the API and intersecting the northeast portion of the API. There is a group of small structures south of the road that is trending to the southwest, five of which appear to overlap the API. The area surrounding the API is undeveloped, with the area to the west being used for agricultural purposes.
1952	The majority of the API appears to have been disked, with the exception of the hill that is currently located south of Bee Canyon Access Road and the hills in the eastern portion of the API. The trees located at the center of the API have been removed. Only two of the small structures within the southwest portion of the API remain. The northern end of the road intersecting the API, now forks to the north and northwest. This is consistent with the informal road depicted on the 1950 topographic map. Directly north of the fork in the road, within the northern boundary of the API, there are three rectangular shaped structures. Syphon Reservoir is present south of the API.
1963	The western portion of the API is being used for agricultural purposes. The portion of Hicks Canyon Wash, located north and outside of the API, appears to have been channelized. There is a road along the northern boundary of the API. The road curves to the south, stopping at the center of the eastern portion of the API, where the California Labor Camp is to be constructed. There are various roads along the hill located in the northeast corner of the API. There appears to be a small object where Map ID 3 (decommission well) is located; however, it is not discernable due to the quality of the image.
1967	The California Labor Camp (11405 Jeffrey Road containing Map ID 1) is now present within the eastern portion of the API. The decommissioned well is now visible in its present location.
1972	As it does in present day, the road along the northern boundary of the API now follows the hillside within the northeast portion of the API. Hicks Canyon Wash now appears channelized directly north of the API and turns south, overlapping the northeast portion of the API. The road crosses Hicks Canyon Wash in the same location as road culvert. Approximately 90% of the API is being used for agricultural operations that includes fields, greenhouses, and parking.
1980	The hillside currently located south of Bree Canyon Access appears to have been disked. There are various small structures along the southwest boundary of the API. The Map ID 5 (transmission line) is visible in its present location.

Table 4-4. Review of Historical Aerial Photographs

Year	Description
1985	The hillside currently located south of Bee Canyon Access Road appears in use as an orchard.
1987	Bee Canyon Access Road is under development. The various small structures along the southwest boundary of the API are no longer present.
1988	Bee Canyon Access Road is present.
1992	There are no significant changes to the API.
1993	Portola Parkway is under development directly west of the API.
1994	Portola Parkway now connects to Jeffery Road. Most of the trees within the orchard south of Bee Canyon Access Road have been removed.
1995	The remaining trees south of Bee Canyon Access Road have been removed.
1996-1999	There is an increase in development west of the API, though there are no significant changes to the API.
2000	The parking lot within the northeast corner of the API is present.
2002	There are no significant changes to the API.
2003	There are no significant changes to the API.
2004 and 2005	There are no significant changes to the API.
2009	The rectangular shaped structure along the northern border of the API has been removed.
2010 and 2012	Greenhouses within the API (associated with El Modena Nursery) have been removed but the API is still being used for agriculture.
2014	There are no significant changes to the API.
2018	The agriculture fields within the center of the API have been graded.
2020	All the structures associated with the California Labor Camp except Map ID 1 have been demolished.
2022	There are no significant changes to the API and the API appears as it does in present day.

4.3.3 Geomorphological Context

According to the U.S. Department of Agriculture Natural Resources Conservation Services (USDA 2025a), the API consists primarily of Anaheim clay loam with slopes ranging from 15 to 50%, Metz loamy sand, San Emigdio fine sandy loam with slopes ranging from 0 to 2%, and Sorrento loam with slopes ranging from 0 to 2%. The official United States Department of Agriculture soil descriptions for these soil series are provided below.

Anaheim Series (USDA 2025b). The Anaheim Series soils are characterized as well-drained, moderately deep soils over weathered fine-grained sandstone and shale that formed in material weathered from fine grained sandstone or shell. Anaheim soils are on foothills, at elevations of 100 to 2,500 feet, and have a series profile typically consisting of 0 to 26 inches of grayish-brown clay loam and 26 to 54 inches of weathered fractured fine-grained sandstone and shale.

Metz Series (USDA 2025c). The Metz Series soils are characterized as very deep, somewhat excessively drained soils that formed in alluvial material from mixed, but dominantly sedimentary rocks. Metz soils are on floodplains and alluvial fans, at elevations of 25 to 2,500 feet, and have a series profile typically consisting of 0 to 12 inches of light brownish gray fine sandy loam; 12 to 29 inches of light brownish gray fine sand; 29 to 38 inches of light brownish gray sand; 38 to 52 inches of light brownish gray very fine sandy loam and; 52 to 118 inches of light brownish gray fine sand.

San Emigdio Series (USDA 2025d). The San Emigdio Series soils are characterized as very deep, well drained soils that formed in dominantly sedimentary alluvium. San Emigido soils are on fans, floodplains, and in narrow valleys, at elevations of 100 to 2,000 feet, and have a series profile typically consisting of 0 to 22 inches of light brownish gray fine sandy loam and 22 to 60 inches of light gray fine sandy loam.

Sorrento Series (USDA 2025e). The Sorrento Series soils are characterized as very deep, well drained soils that formed in alluvium mostly from sedimentary rocks. Sorrento soils are on alluvial fans and stabilized floodplains, at elevations of 25 to 2,100 feet, and have a series profile typically consisting of 0 to 26 inches of grayish brown heavy loam; 26 to 37 inches of grayish brown mixed with light brownish gray heavy loam; 37 to 58 inches of pale brown heavy loam; and 58 to 74 inches of light yellowish brown loamy fine sand.

A review of the USGS mineral resources (USGS 2025) online spatial data for geology indicates that approximately 75% of the API is underlain by Quaternary alluvium and marine deposits from the Pleistocene to Holocene epochs and the remaining approximate 25% of the API is underlain by Oligocene nonmarine rocks from the middle Eocene to early Miocene. Late Pleistocene-era alluvial formations do have the potential to support the presence of buried archaeological resources. These soils are associated with the period of prehistoric human use, as well as represent ongoing processes of development that have potential to preserve cultural material in context, depending on area-specific topographical setting.

The geotechnical report, *Preliminary Geotechnical Subsurface Evaluation, Proposed Residential Development, Gateway Village, Irvine, California* (LGC Geotechnical Inc. 2024), was prepared for the project in November 2024 to determine the subsurface geological conditions of the API. The report details the results of 15 hollow-stem borings (HS-1 through HS-5 and I-1 through I-10) and 17 exploratory geotechnical test pits (TP-1 through TP-17). The 15 hollow-stem borings were excavated using a truck-mounted drill rig using 8-inch diameter hollow-stem augers and extended to a maximum depth ranging from 5 to 30 feet below ground surface (bgs). The 17 exploratory geotechnical test pits were excavated with a backhoe and extended to a maximum depth ranging from 5 to 15 feet bgs. According to the geotechnical report, the soils encountered include: (1) Undocumented Artificial Fill: characterized as older artificial fill and/or agricultural till generally consisting of brown, clayey to silty sand and sandy silt; (2) Quaternary Alluvium (Native Soils): characterized as Holocene to Late Pleistocene Epoch deposits predominantly consisting of brown, reddish brown, and light yellowish brown, sandy silt to silty sand, clayey sand, and silty to sandy clay; and (3) Tertiary Vaqueros and Sespe Formations (Bedrock). The Tertiary Vaqueros and Sespe Formations (Bedrock) was observed along the southern boundary of the project area, north of Bee Canyon Access Road. Undocumented Artificial Fill soils were observed throughout the project area to varying depths. A summary of the subsurface exploratory results for the project is provided in Table 4-5.

Table 4-5. Summary of Subsurface Investigative Results - LGC Geotechnical Inc. 2024

Boring/ Test Pit	Dry Vegetation/ Topsoil or Gravel Over Topsoil	Undocumented Artificial Fill Soils	Quaternary Alluvium (Native Soils)	Tertiary Vaqueros and Sespe Formation (Bedrock)	Terminated Depth
HS-1	—	—	0–26.5 ft bgs	—	26.5 ft bgs
HS-2	—	—	0–26.5 ft bgs	—	26.5 ft bgs
HS-3	—	—	0–26.5 ft bgs	—	26.5 ft bgs
HS-4	—	—	0–26.5 ft bgs	—	26.5 ft bgs

Table 4-5. Summary of Subsurface Investigative Results - LGC Geotechnical Inc. 2024

Boring/ Test Pit	Dry Vegetation/ Topsoil or Gravel Over Topsoil	Undocumented Artificial Fill Soils	Quaternary Alluvium (Native Soils)	Tertiary Vaqueros and Sespe Formation (Bedrock)	Terminated Depth
HS-5	—	—	0–26.5 ft bgs	—	26.5 ft bgs
I-1	0–2.5 ft bgs	—	2.5–30 ft bgs	—	30 ft bgs
I-2	0–3.5 ft bgs	—	3.5–5 ft bgs	—	5 ft bgs
I-3	0–5 ft bgs	—	5–30 ft bgs	—	30 ft bgs
I-4	—	—	0–5 ft bgs	—	5 ft bgs
I-5	0–5 ft bgs	—	5–30 ft bgs	—	30 ft bgs
I-6	0–3.5 ft bgs	—	3.5–5 ft bgs	—	5 ft bgs
I-7	0–5 ft bgs	—	5–30 ft bgs	—	30 ft bgs
I-8	0–3.5 ft bgs	—	3.5–5 ft bgs	—	5 ft bgs
I-9	—	—	0–30 ft bgs	—	30 ft bgs
I-10	—	—	0–5 ft bgs	—	5 ft bgs
TP-1	—	0–2.5 ft bgs	2.5–12 ft bgs	—	12 ft bgs
TP-2	—	0–2 ft bgs	2–12 ft bgs	—	12 ft bgs
TP-3	—	0–2.5 ft bgs	2.5–12 ft bgs	—	12 ft bgs
TP-4	—	0–3 ft bgs	3–14 ft bgs	—	14 ft bgs
TP-5	—	0–6 ft bgs	6–15 ft bgs	—	15 ft bgs
TP-6	—	0–4 ft bgs	4–15 ft bgs	—	15 ft bgs
TP-7	—	0–2.5 ft bgs	2.5–10 ft bgs	—	10 ft bgs
TP-8	—	0–1 ft bgs	1–14 ft bgs	—	14 ft bgs
TP-9	0–2 ft bgs	—	—	2–5 ft bgs	5 ft bgs
TP-10	—	0–2 ft bgs	2–14 ft bgs	—	14 ft bgs
TP-11	—	—	0–2 ft bgs	4–5 ft bgs	5 ft bgs
TP-12	—	—	0–2 ft bgs	4–5 ft bgs	5 ft bgs
TP-13	0–2 ft bgs	—	—	2–6 ft bgs	6 ft bgs
TP-14	—	0–2.5 ft bgs	2.5–13 ft bgs	—	13 ft bgs
TP-15	—	0–9 ft bgs	—	—	9 ft bgs
TP-16	—	0–8 ft bgs	—	—	8 ft bgs
TP-17	—	0–2 ft bgs	2–11 ft bgs	—	11 ft bgs

Note: ft bgs = feet below ground surface.

4.4 Field Survey Results

Dudek cultural resources specialists Roshanne Bakhtiary and David Alexander conducted an intensive-level pedestrian survey of the API on January 21, 2025. The API consists of two pieces of land bisected by Bee Canyon Access Road totaling an area of 109.88 acres. The topography is a mixture of flat landscape along the western portion of the API, a flat terrace within the central portion of the API, and hilly terrain throughout the eastern and southern portions of the API. Nearly the entire western half of the API is currently used for agricultural operations, while the northwest and central portions of the API are in use as construction laydown and haul out yards. While

the majority (65%) of the API appears have been disturbed by development and grading, the eastern, southeastern, and southern portions of the API remain heavily vegetation and undeveloped.

4.4.1 Archaeology

Ground surface visibility within the API ranged from poor to excellent (0-90%). Poor ground surface visibility (0-25%) was observed in areas covered in dense vegetation, hardscape, and fill (Photograph 1). This accounted for approximately 40% of the total and encompassed the majority of the eastern, southeastern and southern portions of the API. Fair to good ground surface visibility (25-75%) was observed within the central portion of the API (accounting for 10% of the total API), and excellent (75-90%) ground surface visibility was observed within the fallow agricultural fields in the western half of the API (Photograph 2). Excellent ground surface visibility accounted for the remaining 50% of the API. Vegetation included various species of invasive grasses, black mustard (*Brassica sp.*), eucalyptus (*eucalyptus sp.*), Italian thistle (*Carduus pycnocephalus*), wild tobacco (*Nicotiana sp.*), coyote brush (*Baccharis pilularis*), and various agricultural grasses (alfalfa etc.). Disturbances included modern debris, various informal roadways, laydown yards, borrow piles, ongoing construction activity, and agricultural fields. Additionally, there evidence of vegetation clearing and vehicle overland travel (tire ruts etc.) throughout the entire API. Overall, no prehistoric or historic-era archaeological resources were identified within the API during the intensive-level pedestrian survey.

Photograph 1. Example of poor ground surface visibility, view to the northeast



Source: Dudek 2025

Photograph 2. Example of excellent ground surface visibility, view to the southeast



Source: Dudek 2025

4.4.2 Built Environment

Five built environment properties were recorded in the API during the intensive-level pedestrian survey. These properties are summarized in Table 4.3. Each resource is described and evaluated below. DPR 523 forms are available in Appendix D.

Table 4-6. Built Environment Properties Recorded and Evaluated in the API

Map ID	Property Type	Name or Address	Year Built	Primary Numbers
Previously Recorded within the API				
2	Canal	Highline Canal	c. 1933	P-30-176748
Newly Recorded within the API				
1	Labor Camp Barracks	11405 Jeffrey Road	c. 1967	N/A
3	Well	Decommissioned well	c. 1972	N/A
4	Culvert	Roadway culvert	c. 1967	N/A
5	Transmission Line	Transmission line	c. 1980	N/A

Map ID 1: 11405 Jeffrey Road

Description

Map ID 1 is a one-story, rectangular plan former labor camp barracks. The eastern half of the building has been renovated and is clad with replacement vertical plank siding (Photograph 3). The western half of the building has not been renovated and is clad in corrugated metal siding (Photograph 4). The building has a medium-pitch side gable roof clad in corrugated metal. Fenestration includes single and multi-light, original wood and replacement vinyl-frame slider windows arranged into long rows. Some windows on the north and south elevations are missing window frames and glass and were covered at the time of the survey. Entrances include a half-lite metal door with metal security bars west end of both the north and south elevations, two single wood doors on the east elevation, a single metal door on the west elevation, and two single wood doors on the east elevation. The building is in overall fair physical condition. At the time of this property's recordation, the property did not have a legal APN because it is in the process of being consolidated with adjacent parcels; however, the property is bound by Irvine Haul Access Road to the north, an unnamed access road to the east, Bee Canyon Access Road to the south and a line of trees located approximately 15 feet west of the subject property.

Photograph 3. East and north and east elevations with replacement siding and windows, view to the southwest



Source: Dudek 2025

Photograph 4. West and south elevations with original siding, view to the northeast



Source: Dudek 2025

Statement of Significance

Under NRHP and CRHR Criterion A/1, the California Labor Camp building (Map ID 1) lacks a direct and important association with any event significant in local, state, or national history. Map ID 1 is associated with the California Labor Camp, which was originally comprised of four buildings constructed in 1967 to provide housing for agricultural laborers until 2005. Many workers who inhabited the camp worked at the El Modena Nursery, located adjacent to the camp, or the Hines Nursery, headquartered approximately 1.5 miles to the west. While successful during their years in operation, neither nursery is known to have made a particularly significant contribution to the development of local agriculture. As a barracks building purposely constructed for agricultural laborers who worked on land owned by the Irvine Ranch, Map ID 1 is associated with the general pattern of agricultural development in Orange County. Map ID 1 did not, however, play a significant role in this trend. It is also not known to be directly associated with any event(s) significant in the history of Irvine, Orange County, California, or the nation. Therefore, the property does not meet NRHP Criterion A or CRHR Criterion 1 and is recommended not eligible.

Under NRHP and CRHR Criterion B/2, the California Labor Camp building lacks a significant association with the productive life of any person important in local, state, or national history. Research identified one former owner of the California Labor Camp, Arturo Espinoza, who owned the camp in the 1980s; however, research did not identify Espinoza as an individual important to our past. While the workers who inhabited the labor camp barracks contributed to the development of the agricultural industry in Irvine, Orange County, and California, research did not uncover information to indicate that any of the workers who occupied the labor camp building made a singular and specific significant contribution to this development. Due to a lack of identified significant associations with any persons important in our past, the property is recommended not eligible under NRHP Criterion B or CRHR Criterion 2.

Under NRHP and CRHR Criterion C/3, the California Labor Camp building does not fully embody the distinctive characteristics of a particular architectural style, nor is it known to represent the work of a master, possess high

artistic value, or be a component of a potential or existing historic district. With its one-story height, horizontal massing, rambling footprint, and low-pitched roof, the subject building displays some of the characteristics of the Ranch-style aesthetic, but it does not represent a fully developed articulation of the style. Additionally, alterations such as the replacement of original windows and wall cladding have diminished architectural features that would otherwise be considered a distinctive characteristic of the style. Overall, the property lacks sufficient design and construction value to meet NRHP Criterion C or CRHR Criterion 3.

Under NRHP and CRHR Criterion D/4, Map ID 1 is not significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. As such, the property lacks significance under NRHP Criterion D and CRHR Criterion 4.

Because the California Labor Camp building lacks the necessary significance to meet any of the NRHP or CRHR listing criteria, an analysis of the property's physical integrity was considered unwarranted and immaterial to the overall finding that Map ID 1 is ineligible for listing in either register. As such, this evaluation concludes that the California Labor Camp building is not a historical resource for the purposes of CEQA as defined under 14 CCR § 15064.5(a), nor is it considered a historic property under Section 106 of the NHPA because it does not meet any of the NRHP evaluation criteria as described under 36 CFR § 60.4. Map ID 2: Highline Canal (P-30-176748).

Map ID 2: Highline Canal

Description

The approximately 0.10-mile segment of the Highline Canal located in the API is concrete lined with an earthen base. It is approximately three feet deep and four feet wide and undergounds at a concrete culvert. There is one concrete pipe positioned vertically on the west bank of the canal and one corrugated metal pipe, also positioned vertically, on the east bank at approximately 33.716057, -117.734778 (Photograph 5). It is unclear if these features are original to the canal segment. The Highline Canal winds southeasterly from the API for approximately 0.40 miles to the Syphon Reservoir. The canal is in poor condition as it has been decommissioned since the late 1970s.

Photograph 5. Highline Canal segment, view to the north



Source: Dudek 2025

Statement of Significance

Under NRHP and CRHR Criterion A/1, the Highline Canal lacks a direct and important association with any event significant in local, state, or national history. The Highline Canal, constructed in 1933, is associated with the agricultural development of the Irvine Ranch and the local economy. As a private water supply system, it provided irrigation water to farming operations on the ranch. While the Highline Canal is representative of the agricultural development of the Orange County area, it was not the first such local irrigation system and did not contribute in any significant way to this development pattern. The Highline Canal was one of many water infrastructure features constructed on the Irvine Ranch by The Irvine Company and Frances Mutual Water Company in the 1920s and 1930s. By the mid-1930s, for example, the Highline Canal was part of a water conveyance system that included over 2,500 miles of gravity fed irrigation pipeline designed to deliver water from the various reservoirs on Irvine Ranch to agricultural fields. Because the Highline Canal represents a later expansion of the water conveyance systems in the Orange County area and is not known to be directly associated with any event(s) important in history, it therefore does not meet NRHP Criterion A or CRHR Criterion 1 and is recommended not eligible.

Under NRHP and CRHR Criterion B/2, the Highline Canal lacks a significant association with the productive life of any person important in local, state, or national history. The Highline Canal was commissioned as a joint venture by The Irvine Company and the Serrano Water Irrigation District and was constructed by the Frances Mutual Water Company. The Canal was therefore constructed through the combined efforts of both public and private entities and is not attributable to any single individual. Due to a lack of identified significant associations with any persons important in our past, the property is recommended not eligible under NRHP Criterion B or CRHR Criterion 2.

Under NRHP and CRHR Criterion C/3, the Highline Canal is not a particularly distinctive example of an irrigation canal, nor is it known to represent the work of a master engineer, possess high artistic value, or be a component of a potential or existing historic district. The Highline Canal is a standard gravity-fed water conveyance system that supplied water to the agricultural and ranching enterprises on the Irvine Ranch. It was constructed in 1933 and remained in use through the 1970s, although its alignment was altered and substantial portions piped underground in 1940 for the construction of the El Toro Marine Base. Gravity fed water conveyance systems have been utilized for hundreds of years and research did not indicate that the Highline Canal was constructed using methods that were technologically or materially innovative. The Highline Canal was constructed by the Frances Mutual Water Company, a local construction company established by James Irvine Jr. to construct reservoirs and water conveyance systems throughout the Irvine Ranch. Research, however, did not indicate that the design or the construction of the canal by the Frances Mutual Water Company was the work of a master engineer or builder. Overall, the property lacks sufficient design and construction value to meet NRHP Criterion C or CRHR Criterion 3.

Under NRHP and CRHR Criterion D/4, Map ID 2 is not significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. As such, the property lacks significance under NRHP Criterion D and CRHR Criterion 4.

Because the Highline Canal lacks the necessary significance to meet any of the NRHP or CRHR listing criteria, an analysis of the property's physical integrity was considered unwarranted and immaterial to the overall finding that Map ID 2 is ineligible for listing in either register. As such, this evaluation concludes that the Highline Canal is not a historical resource for the purposes of CEQA as defined under 14 CCR § 15064.5(a), nor is it considered a historic property under Section 106 of the NHPA because it does not meet any of the NRHP evaluation criteria as described under 36 CFR § 60.4.

Map ID 3: Decommissioned Well

Description

Map ID 3 consists of a decommissioned well that was associated with the former agricultural functions of the El Moderna Nursery. It has a square footprint measuring approximately 4 feet by 5 feet with uneven concrete walls clad in stucco extending approximately 1 to 2 feet above ground (Photograph 6). Its opening was covered with a wooden chipping pallet and debris during the field survey. The well is in fair condition.

Photograph 6. Decommissioned well located at 33.718039, -117.734809, view to the west



Source: Dudek 2025

Statement of Significance

Under NRHP and CRHR Criterion A/1, the subject irrigation well (Map ID 3) lacks a direct and important association with any event significant in local, state, or national history. Map ID 3 is a decommissioned well constructed circa 1972. The well supported the El Modena Nursery that opened on the project site in 1967. The El Modena Nursery was one of five large nurseries that operated along Jeffrey Road and Irvine Boulevard when it opened. El Modena Nursery remained in operation until 2009, at which point it permanently closed, and its greenhouses were demolished. Although associated with the general pattern of agricultural development in Orange County, El Modena Nursery and the related well did not play a singularly important role in that overall trend. Map ID 3 is a standard piece of commonly installed agricultural infrastructure and is one of many irrigation wells established throughout the region. Because it is not known to have made a significant contribution to the history of Orange County, California, or the nation, the property does not meet NRHP Criterion A or CRHR Criterion 1 and is recommended not eligible.

Under NRHP and CRHR Criterion B/2, the subject well lacks a significant association with the productive life of any person important in local, state, or national history. Research did not identify any information relating to individuals associated with the development of or use of Map ID 3. Due to a lack of identified significant associations with any persons important in our past, the property is recommended not eligible under NRHP Criterion B or CRHR Criterion 2.

Under NRHP and CRHR Criterion C/3, the subject well is not a particularly distinctive example of a late 1960s agricultural well, nor is it known to represent the work of a master engineer, possess high artistic value, or be a component of a potential or existing historic district. Map ID 3 is a common water infrastructure feature constructed to support agricultural endeavors. Similar wells are used for agricultural uses throughout Orange County, California,

and the nation. Map ID 3 does not represent a new or innovative technology in the field of agriculture water infrastructure. As such, the property is recommended not eligible under NRHP Criterion C or CRHR Criterion 3.

Under NRHP and CRHR Criterion D/4, Map ID 3 is not significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. As such, the property lacks significance under NRHP Criterion D and CRHR Criterion 4.

Because the subject well lacks the necessary significance to meet any of the NRHP or CRHR listing criteria, an analysis of the property's physical integrity was considered unwarranted and immaterial to the overall finding that Map ID 3 is ineligible for listing in either register. As such, this evaluation concludes that the subject well is not a historical resource for the purposes of CEQA as defined under 14 CCR § 15064.5(a), nor is it considered a historic property under Section 106 of the NHPA because it does not meet any of the NRHP evaluation criteria as described under 36 CFR § 60.4.

Map ID 4: Road Culvert

Description

The road culvert located at 33.719809, -117.731310 runs north-south underneath Irvine Haul Road, an asphaltic concrete road that runs parallel to Jeffrey Road to the north. The road culvert has an inlet made of stacked flat concrete fragments atop a corrugated steel pipe (Photograph 7) that outlets on the north side of the road (Photograph 8). The culvert is in fair condition.

Photograph 7. Concrete inlet of Map ID 4, view to the west



Source: Dudek 2025

Photograph 8. Projecting corrugated metal outlet pipe of Map ID 4, view to the northeast



Source: Dudek 2025

Statement of Significance

Under NRHP and CRHR Criterion A/1, the subject culvert (Map ID 4) lacks a direct and important association with any event significant in local, state, or national history. Map ID 4 is a road culvert constructed circa 1967 to provide drainage to the surrounding area, likely to support the El Modena Nursery that opened on the project site in 1967. The El Modena Nursery was one of five large nurseries around Jeffrey Road and Irvine Boulevard when it opened. Although associated with the general pattern of agricultural and roadway development of the Orange County area, neither the El Modena Nursery nor the roadway played a particularly important role in that overall trend. Map ID 4 is a standard piece of commonly installed water conveyance and roadway infrastructure, and it is not known to be directly associated with any event(s) significant in the history of the Orange County area, California, or the nation. Therefore, the property does not meet NRHP Criterion A or CRHR Criterion 1 and is recommended not eligible.

Under NRHP and CRHR Criterion B/2, the subject culvert lacks a significant association with the productive life of any person important in local, state, or national history. Research did not identify any information relating to individuals associated with the development of or use of Map ID 4. Due to a lack of identified significant associations with any persons important in our past, the property is recommended not eligible under NRHP Criterion B or CRHR Criterion 2.

Under NRHP and CRHR Criterion C/3, the subject culvert is not a particularly distinctive example of a late 1960s roadway culvert, nor is it known to represent the work of a master engineer, possess high artistic value, or be a component of a potential or existing historic district. Map ID 4 is a common concrete and metal road culvert constructed to provide drainage to the El Modena Nursery. Similar culverts are used throughout Irvine, Orange County, California, and the nation. Map ID 4 does not represent any new design approaches, innovative

technologies, or construction methods in roadway infrastructure. As such, the property is recommended not eligible under NRHP Criterion C or CRHR Criterion 3.

Under NRHP and CRHR Criterion D/4, Map ID 4 is not significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. This technology is well understood through contemporary trade journals and scientific monographs. As such, the property lacks significance under NRHP Criterion D and CRHR Criterion 4.

Because the subject culvert lacks the necessary significance to meet any of the NRHP or CRHR listing criteria, an analysis of the property's physical integrity was considered unwarranted and immaterial to the overall finding that Map ID 4 is ineligible for listing in either register. As such, this evaluation concludes that the subject well is not a historical resource for the purposes of CEQA as defined under 14 CCR § 15064.5(a), nor is it considered a historic property under Section 106 of the NHPA because it does not meet any of the NRHP evaluation criteria as described under 36 CFR § 60.4.

Map ID 5: Transmission Line

Description

Map ID 5 consists of an approximately 0.20-mile-long segment of a SCE 120kV transmission line with five wood utility poles that are approximately 35 feet tall and spaced approximately 125 feet apart constructed circa 1980 (Photograph 9). The power transmission lines and associated equipment are mounted at the top of each utility pole. Wires supported by insulators are located on each pole's cross arm. The transmission line's terminus is located within the northeastern portion of the project site at Irvine Haul Road and extends outside the project site to the southeast. Many of the poles appear to be recently replaced and the overall line is in good condition.

Photograph 9. Transmission line poles, view to the northeast.



Source: Dudek 2025

Statement of Significance

Under NRHP and CRHR Criteria A/1, the segment of the SCE transmission line along Jeffrey Road evaluated for this study lacks a direct and important association with any event significant in local, state, or national history. The 120kV transmission line was built in c. 1980 substantially after the 1912-1941 period that the SCE *Historic-Era Electrical Infrastructure Management Program* identified as a significant period in the development of transmission line systems designed to transmit electrical power within the 67kV to 230 kV range. Although the Jeffrey Road transmission line is representative of power infrastructure in Irvine, it is not associated with any event(s) or period(s) important in SCE or electrical engineering history. As such, the SCE transmission line along Jeffrey Road is recommended not eligible under NRHP Criterion A and CRHR Criterion 1.

Under NRHP and CRHR Criteria B/2, the SCE transmission line along Jeffrey Road lacks a significant association with the productive life of any person important in local, state, or national history. Archival research indicates that the transmission line system is associated with the SCE Company. Although the power company played an important role in the development of electrical infrastructure in Orange County, Irvine, and Southern California, the transmission line segment represents the collective work of many individuals rather than the single work of any single individual. Because research did not identify any individuals who made a singular and specific significant contribution to the development of electrical transmission line systems in Orange County, the transmission line along Jeffrey Road lacks the necessary associative significance to meet NRHP Criterion B and CRHR Criterion 2.

Under NRHP and CRHR Criteria C/3, the SCE transmission line along Jeffrey Road is not distinctive in terms of a particular type of transmission line system, a period, or a method of transmission line construction, nor does it

represent the work of a master engineer, possess high artistic value, or contribute to the significance of a potential or existing historic district. The subject system is representative of a standardized transmission system consisting of wooden T-frame transmission poles, transmission lines, and hardware, and it lacks innovation regarding its overall design, form, and function. Additionally, research did not indicate the subject system is associated with the work of a master engineer or builder, nor did it reveal that the subject line segment represents an important variation, evolution, or transition of transmission line development. Lacking sufficient design and construction value, the SCE transmission line along Jeffrey Road is recommended not eligible under NRHP Criterion C and CRHR 3.

Under NRHP and CRHR Criteria D/4, the SCE transmission line along Jeffrey Road is not significant as a source, or likely source, of important historical information, nor does it appear likely to yield important information about historic construction methods, materials, or technologies. Therefore, the SCE transmission line along Jeffrey Road is recommended not eligible under NRHP Criterion D and CRHR Criterion 4.

Because the SCE transmission line system along Jeffrey Road lacks the necessary significance to meet any of the NRHP or CRHR listing criteria, an analysis of its physical integrity was considered unwarranted and immaterial to the overall finding that the system is ineligible for listing in either register. As such, this evaluation concludes that the subject transmission line system is not a historical resource for the purposes of CEQA as defined under 14 CCR § 15064.5(a), nor is it considered a historic property under Section 106 of the NHPA because it does not meet any of the NRHP evaluation criteria as described under 36 CFR § 60.4.

5 Summary of Findings and Management Considerations

As a result of Dudek's research, field survey, and property significance evaluations, the following section presents a summary of archaeological sensitivity, eligibility for the subject properties in the API, and management recommendations for cultural resources. The current cultural resources inventory was completed to satisfy the requirements of CEQA.

5.1 Archeological Resources Findings

Dudek's cultural resources inventory and evaluation of the API indicates that there is a moderate potential for the inadvertent discovery of archaeological resources during project implementation. Although the SCCIC records search did not identify any archaeological resources within the API, several are located within the 0.5-mile radius. A NAHC SLF search was also conducted for the project, and results were negative for Native American cultural resources within the search area. Although Dudek's archival review indicates the API has been subject to past disturbances associated with the development of agricultural fields, the California Labor Camp, and El Modena Nursery throughout the mid and late-twentieth century, alluvial soils are present throughout the API, which generally have a moderate potential to contain intact archaeological deposits. Dudek archaeologists conducted an intensive-level pedestrian survey of the project API on January 21, 2025. Though no archaeological resources were identified within the API during the survey, approximately 40% of the ground surface was heavily obscured by dense vegetation, hardscape, and fill.

Though the project will not have any impacts on known significant or unique archaeological resources, there is a moderate potential for the inadvertent discovery of subsurface archaeological resources during project implementation. Although the records search, NAHC SLF search, and pedestrian survey did not identify any archaeological resources within the API, the API would have likely been used by indigenous Native American inhabitants prior to Euromerican contact, and there is ample evidence to indicate the API's historic use as an agricultural operation and labor camp. Dudek recommends the following archaeological resources management strategies be implemented in order to ensure that the project will not result in impacts to unanticipated archaeological resources and human remains.

5.2 Archaeological Resources Management Recommendations

5.2.1 Cultural Resources Sensitivity Training

Prior to the initiation of ground-disturbing activities, construction crews shall be made aware of the potential to encounter cultural resources and the requirement for cultural monitors to be present during these activities. Topics addressed should include definitions and characteristics of cultural resources and Tribal Cultural Resources, regulatory requirements and penalties for intentionally disturbing cultural resources, and protocols to be taken in the event of an inadvertent discovery.

5.2.2 Cultural Resources Monitoring and Inadvertent Discovery Protocols

A Cultural Resources Monitoring and Inadvertent Discovery Plan (CRMIDP) should be prepared by an archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards in archaeology, and subject to City review prior to initiation of construction. The CRMIDP shall detail, at a minimum, requirements for archaeological and Native American monitoring (as applicable); roles and responsibilities; inadvertent discovery, management, and communication protocols; and daily and post-construction reporting.

An archaeological monitor shall be present during all initial ground-disturbing activities for the project in areas with the highest perceived archaeological sensitivity. This includes in areas along Hicks Canyon Wash, and throughout the eastern portion of the project area that has not be subject to past mass-grading efforts. Areas of lower sensitivity, including in areas previously graded for agricultural use (i.e. western portion of the project area) shall be subject to weekly spot checks. Archaeological monitoring may be adjusted (increased, decreased, or discontinued) at the recommendation of the archaeological principal investigator based on inspection of exposed cultural material and the observed potential for soils to contain intact cultural deposits or otherwise significant archaeological material. The archaeological monitor shall have the authority to temporarily halt work to inspect areas for potential cultural material or deposits.

In the event that unanticipated archaeological deposits or features are exposed during construction activities, all construction work occurring within 50 feet of the find shall immediately stop until the archaeological principal investigator is provided access to the project site and can assess the significance of the find and determine whether additional study is warranted. The work exclusion buffer may be adjusted as appropriate to allow work to feasibly continue at the recommendation of the archaeological principal investigator. Should it be required, temporary flagging shall be installed around the resource to avoid any disturbance from construction equipment. The potential for avoidance and preservation in place should be the primary consideration of this initial process. The significance of the find shall be assessed as outlined by the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; California Public Resources Code Section 21082). If the archaeological principal investigator observes the discovery to be potentially significant under CEQA, additional efforts, such as the preparation of an archaeological treatment plan, testing, and/or data recovery, are warranted prior to allowing construction to proceed in this area.

Daily monitoring logs shall be completed by the on-site archaeological monitor. Within 60 days following completion of construction, the archaeological principal investigator shall provide an archaeological monitoring report to City. This report shall include the results of the cultural monitoring program (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates that all mitigation measures defined in the environmental document were appropriately met. Appendices shall include archaeological monitoring logs and documentation relating to any newly identified or updated cultural resources. This report shall be submitted to the SCCIC once considered final.

The requirement for Native American monitoring, while recommended, is left to the discretion of the City, and based on the results of government-to-government Assembly Bill 52 and Senate Bill 18 consultation.

5.2.3 Unanticipated Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code and the requirements of the California Code of Regulations (CCR) Section 15064.5(e), if human remains are found, the Orange County Coroner (County Coroner) shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, The County Coroner shall notify the NAHC within 24 hours. In accordance with California Public Resources Code Section 5097.98, the NAHC must immediately notify the person or persons it believes to be the Most Likely Descendent (MLD) of the deceased Native American. The MLD shall complete inspection after being granted access to the site and make recommendations for the treatment and disposition, in consultation with the landowner, of the human remains and associated grave goods.

5.3 Built Environment Findings

No historical resources or historic properties were identified within the API as a result of archival research, a records search, field survey, and significance evaluations. The subject properties are not currently listed in any national, state, or local registers, nor have they been previously identified in any local historic resources surveys.

Dudek evaluated the resources in the API in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the PRC and found that none of the resources within the API are considered historical resources for the purposes of CEQA. The recommended Status Code for Map IDs 1, 2, 3, 4 and 5 is 6Z. A summary of the findings is provided below in Table 5-1.

Table 5-1. Summary of Significance Evaluations and Findings

Map ID	Name or Address	Year Built	Primary Number*	NRHP/ CRHR Eligibility	Assigned California Historical Resource Status code
Previously Recorded within the API					
2	Highline Canal	c. 1933	P-30-176748	Not eligible	6Z
Newly Recorded within the API					
1	11405 Jeffrey Road	c. 1967	N/A	Not eligible	6Z
3	Decommissioned well	c. 1972	N/A	Not eligible	6Z
4	Roadway culvert	c. 1967	N/A	Not eligible	6Z
5	Transmission line	c. 1980	N/A	Not eligible	6Z

Notes: API = Area of Potential Impacts; c. = circa; CEQA = California Environmental Quality Act; NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.

* If previously evaluated

6Z=Found ineligible for NR, CR, or local designation through survey evaluation

5.4 Built Environment Management Recommendations

Since no historical resources were identified, no additional built environment studies are necessary prior to the implementation of the proposed project.

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6 References

- 14 CCR 4852. Types of Historical Resources and Criteria for Listing in the California Register of Historical Resources.
- AEI Consultants. 2023. "Phase I Environmental Site Assessment for Gateway & Foothills, Irvine, Orange County, CA." May 23, 2023. Prepared for the City of Irvine. On file at Dudek's Pasadena, CA office.
- Basgall, M. E., L. Johnson, and M. Hale. 2002. "An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Corps Air Ground Combat Center, Twentynine Palms, California." Submitted to U.S. Army Corps of Engineers, Fort Worth, Texas.
- Basgall, M.E., and M. Hall. 1990. "Adaptive Variation in the North-Central Mojave Desert." Paper presented at the 55th Annual Meeting of the Society for American Archaeology, Las Vegas, Nevada.
- Bean, L.J., and F.C. Shippek. 1978. "Luiseño." In *Handbook of North American Indians*, Vol. 8, California, edited by Robert F. Heizer 550–563. Washington, D.C.: Smithsonian Institution.
- Berkov, Joyce. 1961. "Friends Fete Peales on 25th Anniversary." *Newspapers.com: Pasadena Independent* (Pasadena, CA). November 9, 1961. Page 12.
- Boscana, G. 1846. "Chinigchinich; A Historical Account of the Origin, Customs, and Traditions of the Indians at the Missionary Establishment of St. Juan Capistrano, Alta California." In *Life in California*, by Alfred Robinson, 227–341. New York, New York: Wiley & Putnam.
- Breece, Bill and Beth Padon. 1982. *Cultural Resource Survey: Archaeological Resources: Foothill Transportation Corridor, Phase II*. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.
- Byrd, B.F., and S.N. Reddy. 2002. "Late Holocene Adaptations along the Northern San Diego Coastline: New Perspectives on Old Paradigms." In *Cultural Complexity on the California Coast: Late Holocene Archaeological and Environmental Records*, edited by J.M. Erlandson and T.L. Jones, 41–62. Los Angeles, California: University of California–Los Angeles Press.
- California Health and Safety Code, Sections 7050.5–7055. Division 7: Dead Bodies; Part 1: General Provisions; Chapter 2: General Provisions.
- California Public Resources Code, Sections 21000–21177. California Environmental Quality Act (CEQA), as amended. California Public Resources Code, Sections 5020–5029.6. Division 5: Parks and Monuments; Chapter 1: State Parks and Monuments; Article 2: Historical Resources.
- California Public Resources Code, Sections 5097.9–5097.991. Chapter 1.75: Native American Historical, Cultural, and Sacred Sites.
- Caltrans (California Department of Transportation). 2013. "A Historical Context and Archaeological Research Design for Work Camp Properties in California." Accessed January 2025. <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/work-camps-a11y.pdf>.

- City of Irvine. 1973. City of Irvine General Plan, Cultural Resources Element. Accessed February 2025. <https://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=20693#:~:text=Description%20of%20Cultural%20Resources,%2C%20and%20where%20appropriate%2C%20preservation.>
- City of Irvine. 2024. "Hiking and Biking." City of Irvine Open Space & Trails [webpage]. Accessed November 5, 2024. <https://www.cityofirvine.org/open-space-trails/hiking-biking>.
- City of Irvine. 2025. "History of the City." Accessed January 2025. <https://www.cityofirvine.org/about-irvine/history-city>.
- Daey, Douglas and Judy McKeethan. 1994. First Supplemental Archaeological Survey Report for the Eastern Transportation Corridor (SR 231): Siphon Ridge Revegetation Area Orange County, California. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.
- Davis, E.L. 1978. The Ancient Californians: Rancholabrean Hunters of the Mojave Lakes Country. Los Angeles, California: Natural History Museum of Los Angeles County.
- Desautels, Roger J. 1978. Cultural Resources Report- Preliminary Assessment on the Proposed San Diego Creek Watershed Erosion and Sedimentary Control System in Hicks Canyon, Hicks Canyon Wash, Rattlesnake Creek Wash, San Diego Creek, and the San Joaquin Marsh Located in Orange County. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.
- Drover, Christopher. 2000. A Cultural Resources Inventory of Planning Areas 1 & 2, Irvine, California. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.
- DOC (California Department of Conservation). 2024. California Important Farmland Mapping. Accessed July 16, 2024. www.maps.conservation.ca.gov/dlrp/ciftimeseries.
- Drover, Christopher E. 2001. A Phase I Cultural Resources Inventory for Planning Area 9 Irvine, California. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.
- EDR (Environmental Data Resources). 2023. "EDR Aerial Photo Decade Package for the Irvine Gateway Project." Prepared for AEI Consultants. April 6, 2023. On file at Dudek's Pasadena, California office.
- Ellison, Katherine. 2021. "The Story of William Pereira, Irvine's Original Planner." *Irvine Standard*. Accessed February 2025. <https://www.irvinestandard.com/2021/the-story-of-william-pereira-irvines-original-planner/>.
- Engelhardt, Zephyrin. 1922. The San Juan Capistrano Mission. Zephyrin Englehardt, Los Angeles.
- Fages, P. 1937. A Historical, Political, and Natural Description of California (1775). Translated by Herbert Ingram Priestly. Berkeley, California: University of California Press.

- Filkins, Dexter. 1997a. "Building a Bridge to Better Health." February 4, 1997. Newspapers.com: *Los Angeles Times* (Los Angeles, CA). Page 183.
- Filkins, Dexter. 1997b. "Easing the Toll of Toil." February 4, 1997. Newspapers.com: *Los Angeles Times* (Los Angeles, CA). Page 103.
- Gallegos, D., and C. Kyle. 1988. Five Thousand Years of Maritime Subsistence at Ballast Point Prehistoric Site SDI-48 (W-164), San Diego, California. San Diego, California: WESTEC Services.
- Gallegos, D.R. 1987. "San Dieguito-La Jolla: Chronology and Controversy." San Diego County Archaeological Society, Research Paper No. 1.
- Garcia, Kyle H. and Marcy Rockman. 2007. Results of Archaeological Survey and Monitoring for Southern California Edison's Pole Replacements After Santiago Fire Along Santiago Canyon Road, Modjeska Canyon Road, and Hicks Canyon Road; Orange County, California; Jo:6259-0468. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.
- Garcia, Kyle H., Mathew Gonzalez and Jon Wilson. 2011. Phase I Cultural and Paleontological Resources Assessment for the Proposed Sky Ridge Project, Orange County, California. Prepared for Vandermost Consulting Services Inc. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton.
- Geiger, M. and C.W. Meighan. 1976. As the Padres Saw Them: California Indian Life and Customs as Reported by the Franciscan Missionaries, 1813–1815. Santa Barbara Mission Archive Library, Santa Barbara, California.
- Golla, V. 2007. "Linguistic Prehistory." In *California Prehistory: Colonization, Culture, and Complexity*, edited by T.L. Jones and K.A. Klar, 71–82. New York, New York: Altamira Press.
- Greenhouse Grower. 2009. "Color Spot Buys El Modeno Assets." October 21, 2009. Accessed February 2025. <https://www.greenhousegrower.com/management/finance-operations/color-spot-buys-el-modeno-assets/>.
- Griset, S. 1996. "Southern California Brown Ware." Unpublished PhD dissertation; University of California, Riverside.
- Hale, M. 2001. "Technological Organization of the Millingstone Pattern in Southern California." Master's thesis; California State University, Sacramento.
- Hale, M. 2009. "San Diego and Santa Barbara: Socioeconomic Divergence in Southern California." PhD dissertation; University of California, Davis.
- Harrington, J.P. 1934. "A New Original Version of Boscana's Historical Account of the San Juan Capistrano Indians of Southern California." *Smithsonian Miscellaneous Collections* 92(4).
- Hector, S.M. 2006. Cultural Resources Study for the Maintenance of Old Mission Dam, Mission Trails Regional Park, San Diego, California. Prepared for the City of San Diego.

- Johnson, J.R., and J.G. Lorenz. 2006. "Genetics, Linguistics, and Prehistoric Migrations: An Analysis of California Indian Mitochondrial DNA Lineages." *Journal of California and Great Basin Anthropology* 26:33–64.
- Kroeber, A. 1925. *Handbook of the Indians of California*. Washington DC: Smithsonian Institution.
- Laylander, D. 2000. *Early Ethnography of the Californias, 1533–1825*. Salinas, California: Coyote Press Archives of California Prehistory.
- Laylander, D. 2010. "Linguistic Prehistory." *Research Issues in San Diego Prehistory*. Accessed August 31, 2012. <http://www.sandiegoarchaeology.org/Laylander/Issues/index.htm>.
- LGC Geotechnical Inc. 2024. *Preliminary Geotechnical Subsurface Evaluation, Proposed Residential Development, Gateway Village, Irvine, California*. Prepared for Brookfield Properties.
- Lightfoot, Kent J. 2005. *Indians, Missionaries, and Merchants*. Berkeley: University of California Press.
- Luomala, K. 1978. "Tipai and Ipai." In *California*, edited by Robert F. Heizer, 592–609. *Handbook of the North American Indians*, Vol. 8, William C. Sturtevant, general editor. Washington, DC: Smithsonian Institution.
- Meighan, C.W. and D.L. True. 1977. Additional Comments on Molpa Archaeological Site. *The Journal of California Anthropology*, 4(2).
- Milbourn, Mary Ann. 2010. "Hines Nurseries to shutter Irvine production facility." *Orange County Register*. Accessed February 2025. <https://www.ocregister.com/2010/10/13/hines-nurseries-files-chapter-11-bk/>.
- Moran (Moran Utility Service Inc.). 2023. *Dry Utility Due Diligence Report Gateway Preserve – Irvine, CA*. Prepared for Cherry Tree Capital Partners.
- NETR (Nationwide Environmental Title Research, LLC). 2025a. *Historic Aerial Photographs of the of the Irvine Gateway Project API, Irvine, CA, dating from 1946, 1952, 1963, 1967, 1972, 1980, 1981, 1985, 1987, 1988, 1992-2000, 2002-2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022*. Accessed January 2025. <https://www.historicaerials.com/viewer>.
- NETR (Nationwide Environmental Title Research, LLC). 2025b. *Historic Topographic Maps of the Irvine Gateway Project API, Irvine, CA, dating from 1935, 1944, 1950, 1958, 1960, 1963, 1970, 1975, 1978, 192, 1984, 2000, 2012, 2015, 2018, and 2022*. Accessed January 2025. <https://www.historicaerials.com/viewer>.
- NPS (National Park Service). 1997. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*. Department of the Interior. Washington, D.C.: Government Printing Office.
- Padon, Beth. 1985. *Archaeological Resource Inventory City of Irvine and its Sphere of Influence*. On File at CHRIS Information Center, South Central Coastal Information Center, located on the campus of California State University Fullerton. Accessed December 9, 2024.

- Pignoli, A.R. 2005. "Subsistence, Settlement, and Environmental Change at San Diego Bay." *Proceedings of the Society for California Archaeology* 18:255–259.
- Rogers, M.J. 1929. "The Stone Art of the San Dieguito Plateau." *American Anthropologist* 31:454–467.
- Rogers, M.J. 1945. "An Outline of Yuman Prehistory." *Southwestern Journal of Anthropology* 1:167–198.
- Sawyer, William. 2003. "DPR 523 Form for the Highline Canal (P30-176748)." From the Archaeological Reconnaissance and Test Level Investigations in Planning Area 1, Irvine, California, January 2004. On file at Dudek's Pasadena, CA office.
- Schwartz, Bob. 1987. "Ezell Discounts Labor Shortage Reports, but County Growers Dispute His Claims." June 24, 1987. *Newspapers.com: Los Angeles Times* (Los Angeles, CA). Page 63.
- Skrove, Tim. 1977. "Drought Pinches OC's Biggest Water User." *Newspapers.com: The Register* (Santa Ana, CA). April 25, 1977. Page 41.
- Sparkman, P.S. 1908. "The Culture of the Luiseno Indians." *University of California Publications in American Archaeology and Ethnology* 8: 187-234.
- The Register. 1966. "Teamster Executive Raps Irvine Tactics." *Newspapers.com: The Register* (Santa Ana, CA). August 23, 1966. Page 3.
- Tinsley Becker et. al. 2017. "Historic-Era Electrical Infrastructure Management Program: A Program for the Identification, Review, Exemption, and Treatment of Generating Facilities, Transmission Lines, Sub transmission Lines, Distribution Lines, and Substations within the Southern California Edison Company's Service Territory." Prepared by Urbana Preservation for the Southern California Edison Company. Revised 2017.
- True, D.L. 1980. "The Pauma Complex in Northern San Diego County: 1978." *Journal of New World Archaeology* 3(4):1–39.
- Tustin News. 1973. "Irvine June Building Permits Total \$4,017,681." *Newspapers.com: Tustin News* (Tustin, CA). July 19, 1973. Page 17.
- Tustin News. 1976. "Irvine Building Permits Valued at \$5,645,407." *Newspapers.com: Tustin News* (Tustin, CA). January 1, 1976. Page 3.
- UCSB (University of California, Santa Barbara). 2025. Historic Aerial Photographs dating from 1938, 1946, 1952, 1963, 1967, 1972, 1980, 1981, 1985, 1987, 1988, 1992-2000, 2002-2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource. Accessed January 2025. <https://www.library.ucsb.edu/geospatial/finding-airphotos>.
- USDA (United States Department of Agriculture). 2025a. Natural Resources Conservation Service Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed January 9, 2025.

- USDA. 2025b. Natural Resources Conservation Service Official Soil Series Description of Anaheim. Accessed January 9, 2025. https://soilseries.sc.egov.usda.gov/OSD_Docs/A/ANAHEIM.html.
- USDA. 2025c. Natural Resources Conservation Service Official Soil Series Description of Metz. Accessed January 9, 2025. https://soilseries.sc.egov.usda.gov/OSD_Docs/M/METZ.html.
- USDA. 2025d. Natural Resources Conservation Service Official Soil Series Description of San Emidio. Accessed January 9, 2025. https://soilseries.sc.egov.usda.gov/OSD_Docs/S/SAN_EMIGDIO.html.
- USDA. 2025e. Natural Resources Conservation Service Official Soil Series Description of Sorrento. Accessed January 9, 2025. https://soilseries.sc.egov.usda.gov/OSD_Docs/S/SORRENTO.html.
- USGS (United States Geological Society). 2025. Mineral Resources Online Spatial Data. Interactive maps and downloadable data for regional and global analysis. Accessed January 9, 2025. <https://mrdata.usgs.gov/>
- IHS (Irvine Historical Society). 2020a. "Irvine Development to the 1950s." October 2020. Accessed January 2025. <https://irvinehistory.org/wp-content/uploads/2020/10/Irvine-Development-into-1950s.pdf>.
- IHS. 2020c. October 2020. "James Irvine II Turns Ranch into Agricultural Treasure." Accessed January 2025. <https://irvinehistory.org/wp-content/uploads/2020/10/James-Irvine-II-turns-Irvine-into-Agriculture-Treasure.pdf>.
- IHS. 2020b. "Legacy of James Irvine Sr." October 2020. Accessed January 2025. <https://irvinehistory.org/wp-content/uploads/2020/10/Legacy-of-James-Irvine-Sr.pdf>.
- Jepsen, Chris. 2021. "O.C. History: The Irvine Ranch, 1930s-1950s." County of Orange Monthly Employee Newsletter. April 22, 2021. Accessed January 2025. <https://issuu.com/ocgov/docs/marapr21-final/28>.
- Kieffer, Brad. 1986. "Holiday Cheer Sprouts Locally." Newspapers.com: *Free Lance* (Hollister, CA). December 24, 1986. Page 1.
- LAT (Los Angeles Times). 1974. "The Greening of Orange County." Newspapers.com: *Los Angeles Times* (Los Angeles, CA). May 12, 1974. Page 22. Wallace, W.J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." *Southwestern Journal of Anthropology* 11:214–230.
- Warren, C.N. 1964. "Cultural Change and Continuity on the San Diego Coast." Unpublished PhD dissertation; University of California, Los Angeles.
- Warren, C.N. 1968. "Cultural Tradition and Ecological Adaptation on the Southern California Coast." In *Archaic Prehistory in the Western United States*, edited by C. Irwin-Williams, 1–14. Portales, New Mexico: Eastern New Mexico University Contributions in Anthropology.
- Warren, C.N., G. Siegler, and F. Dittmer. 2004. "Paleoindian and Early Archaic Periods." In *Prehistoric and Historic Archaeology of Metropolitan San Diego: A Historic Properties Background Study*. Prepared for the Metropolitan Wastewater Department, City of San Diego. Encinitas, California: ASM Affiliates.

Watson, Ray. 2002. "Irvine Ranch Master Plan: Irvine, California, 1961." in *William Pereira*, edited by James Steel, 108-139. Los Angeles: University of Southern California, 2002.

White, Raymond C. 1963. Luiseno Social Organization. University of California Publications in American Archaeology and Ethnology 48(2): 91–194. Berkeley, California: University of California.

Wilken, M. 2012. "An Ethnobotany of Baja California's Kumeyaay Indians." Master's thesis; San Diego State University.

Appendix A (Confidential)

SCCIC Records Search Results

Appendix B

NAHC SLF Search Results



NATIVE AMERICAN HERITAGE COMMISSION

August 21, 2024

Jennifer De Alba
Dudek

Via Email to: jdealba@dudek.com

CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Bennae Calac
Pauma-Yuima Band of
Luiseño Indians

EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok, Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

Re: Native American Consultation, Pursuant to Senate Bill 18 (SB18), Government Codes §65352.3 and §65352.4, as well as Assembly Bill 52 (AB52), Public Resources Codes §21080.1, §21080.3.1 and §21080.3.2, 14554.02 Gateway Village Project, Orange County

To Whom It May Concern:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties or projects.

Government Codes §65352.3 and §65352.4 require local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to cultural places when creating or amending General Plans, Specific Plans and Community Plans.

Public Resources Codes §21080.3.1 and §21080.3.2 requires public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of avoiding, protecting, and/or mitigating impacts to tribal cultural resources as defined, for California Environmental Quality Act (CEQA) projects.

The law does not preclude local governments and agencies from initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction. The NAHC believes that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

Best practice for the AB52 process and in accordance with Public Resources Code §21080.3.1(d), is to do the following:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The NAHC also recommends, but does not require that lead agencies include in their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential affect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE, such as known archaeological sites;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.
3. The result of the Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event, that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Orange County
8/21/2024

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Cahuilla Band of Indians	F	Erica Schenk, Chairperson	52701 CA Highway 371 Anza, CA, 92539	(951) 590-0942	(951) 763-2808	chair@cahuilla-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	2/1/2024
Cahuilla Band of Indians	F	Anthony Madrigal, Tribal Historic Preservation Officer	52701 CA Highway 371 Anza, CA, 92539	(951) 763-5549		anthonymad2002@gmail.com	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	6/28/2023
Cahuilla Band of Indians	F	BobbyRay Esparza, Cultural Director	52701 CA Highway 371 Anza, CA, 92539	(951) 763-5549		besparza@cahuilla-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	6/28/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	8/18/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	8/18/2023
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	12/4/2023
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/16/2023
Gabrielino Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/16/2023
Gabrielino/Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Aiso St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/28/2023
Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	5/30/2023
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	5/30/2023
Juaneno Band of Mission Indians Acjachemen Nation - Belardes	N	Joyce Perry, Cultural Resource Director	4955 Paseo Segovia Irvine, CA, 92603	(949) 293-8522		kaamalam@gmail.com	Juaneno	Los Angeles, Orange, Riverside, San Bernardino, San Diego	3/17/2023
Juaneno Band of Mission Indians Acjachemen Nation 84A	N	Heidi Lucero, Chairperson, THPO	31411-A La Matanza Street San Juan Capistrano, CA, 92675	(562) 879-2884		jbman.chairwoman@gmail.com	Juaneno	Los Angeles, Orange, Riverside, San Bernardino, San Diego	3/28/2023
Pala Band of Mission Indians	F	Christopher Nejo, Legal Analyst/Researcher	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3564		cnejo@palatribe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	11/27/2023
Pala Band of Mission Indians	F	Alexis Wallick, Assistant THPO	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3537		awallick@palatribe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	11/27/2023
Pala Band of Mission Indians	F	Shasta Gaughen, Tribal Historic Preservation Officer	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3515		sgaughen@palatribe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	11/27/2023
Santa Rosa Band of Cahuilla Indians	F	Steven Estrada, Tribal Chairman	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	sestrada@santarosa-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	4/8/2024
Santa Rosa Band of Cahuilla Indians	F	Vanessa Minott, Tribal Administrator	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	vmnott@santarosa-nsn.gov	Cahuilla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	4/8/2024
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	7/14/2023
Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahuilla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	7/14/2023

**Native American Heritage Commission
Native American Contact List
Orange County
8/21/2024**

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced. 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 applicable only for consultation with Native American tribes under Government Code Sections 65352.3, 65352.4 et seq. and Public Resources Code Sections 21080.3.1 for the proposed 14554.02 Gateway Village Project, Orange County.

Record: PROJ-2024-004307
Report Type: AB52 SB18 Combo
Counties: Orange
NAHC Group: All

Appendix C

Interested Parties Correspondence

From: [Claire Cancilla](#)
To: info@orangecountyhistory.org
Subject: Irvine Gateway Project
Date: Wednesday, January 29, 2025 11:47:00 AM
Attachments: [IPC OC Historical Society.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

To Whom it May Concern,

I am reaching out today on behalf of Dudek and the City of Irvine to provide you with some information about the Irvine Gateway Project. As part of the cultural resources study for the proposed project, Dudek is consulting regional historical organizations to determine if there are any known historic or cultural resources that may be within the proposed project area. Please see the attached letter and map for more information about the nature and location of the project, and please feel free to contact me should you have questions or information regarding cultural or historical resources in this area.

Thank you,
Claire Cancilla

Claire Cancilla, MSHP (she/her)
Architectural Historian

DUDEK

O: 626 204 9822 **C:** 213 200 1378

dudek.com



Orange County Historical Society
P.O. Box 10984
Santa Ana, CA 92711

January 29, 2025

Subject: Irvine Gateway Project

To Whom it May Concern,

Dudek has been retained by the City of Irvine (City) to complete a cultural resources inventory and evaluation report for the Irvine Gateway Project (Proposed Project). The Proposed Project site is located in north Irvine, at the northeast corner of Portola Parkway and Jeffrey Road. The site is bounded by Portola Parkway to the south, Jeffrey Road/Hicks Haul Road to the west, and Bee Canyon Access Road to the east (see Figure 1 enclosed).

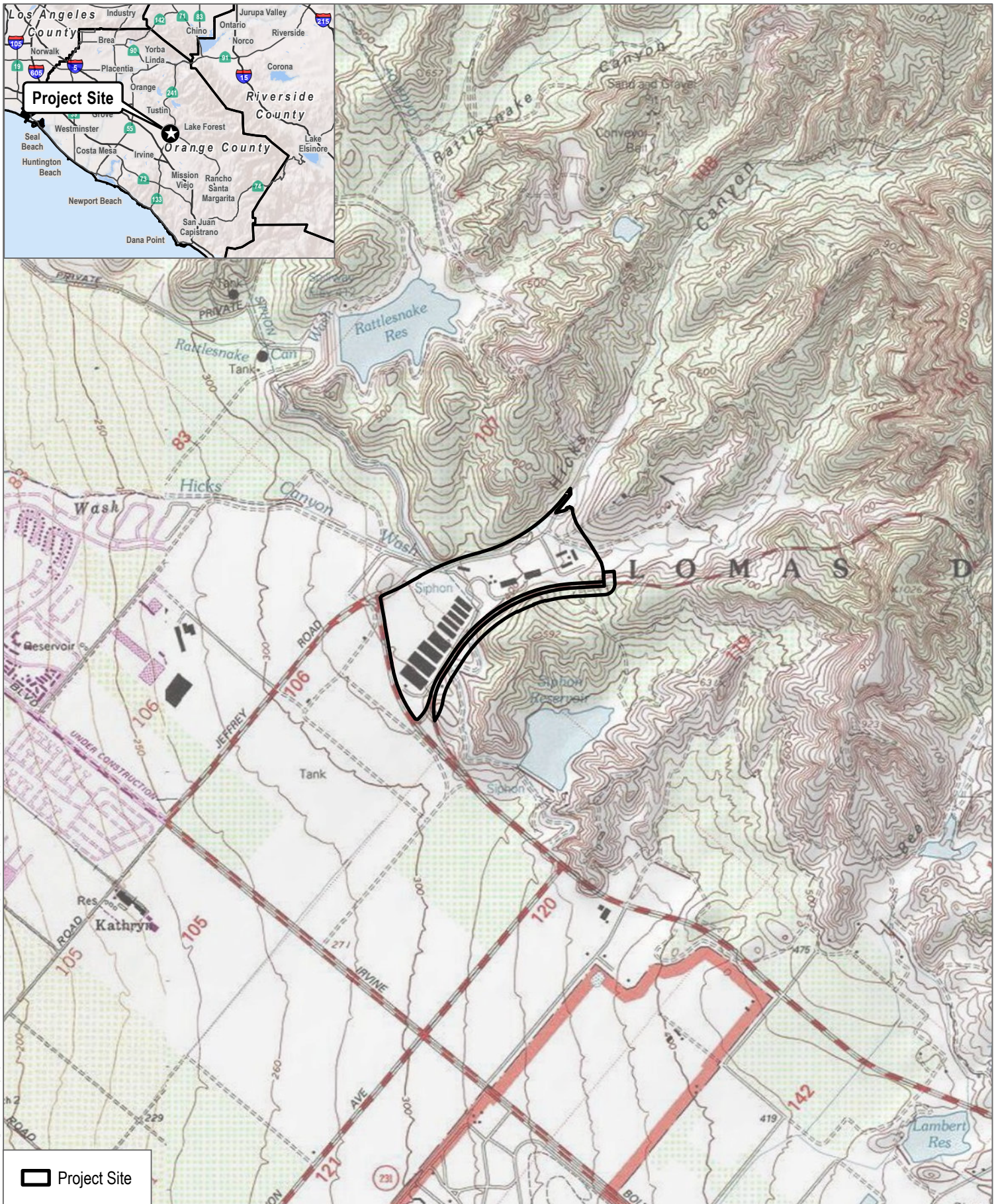
The project proposes the development of a new 120-acre residential village with 1,360 residential units. The project would also include development of parks, a community garden, paseos, and a 2,750-foot extension of the JOST east from Portola Parkway to the entrance of the development

As part of our study, we are consulting regional historical organizations to determine if there are any known historic or cultural resources that may be affected by the Proposed Project. Your efforts in this process will provide invaluable information for the proper identification and treatment of such resources. If you have any information regarding known cultural resources in the Proposed Project area, please feel free to contact me via phone or email (listed below). All comments, emails, or letters received will be included in the reports generated by this study. Thank you for your time regarding our request.

Sincerely,



Claire Cancilla, MSHP
Architectural Historian
831.359.7228 // ccancilla@dudek.com
Att.: Figure 1, Project Site



SOURCE: USGS 7.5 Minute Series 1:24,000

FIGURE 1
Project Location
Gateway Village Project

From: [Claire Cancilla](#)
To: info@preserveoc.org
Subject: Irvine Gateway Project
Date: Wednesday, January 29, 2025 11:48:00 AM
Attachments: [IPC_Preserve Orange County.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

To Whom it May Concern,

I am reaching out today on behalf of Dudek and the City of Irvine to provide you with some information about the Irvine Gateway Project. As part of the cultural resources study for the proposed project, Dudek is consulting regional historical organizations to determine if there are any known historic or cultural resources that may be within the proposed project area. Please see the attached letter and map for more information about the nature and location of the project, and please feel free to contact me should you have questions or information regarding cultural or historical resources in this area.

Thank you,
Claire Cancilla

Claire Cancilla, MSHP (she/her)
Architectural Historian

DUDEK

O: 626 204 9822 **C:** 213 200 1378

dudek.com



Preserve Orange County
615 N Bush St #145
Santa Ana, CA 92702

January 29, 2025

Subject: Irvine Gateway Project

To Whom it May Concern,

Dudek has been retained by the City of Irvine (City) to complete a cultural resources inventory and evaluation report for the Irvine Gateway Project (Proposed Project). The Proposed Project site is located in north Irvine, at the northeast corner of Portola Parkway and Jeffrey Road. The site is bounded by Portola Parkway to the south, Jeffrey Road/Hicks Haul Road to the west, and Bee Canyon Access Road to the east (see Figure 1 enclosed).

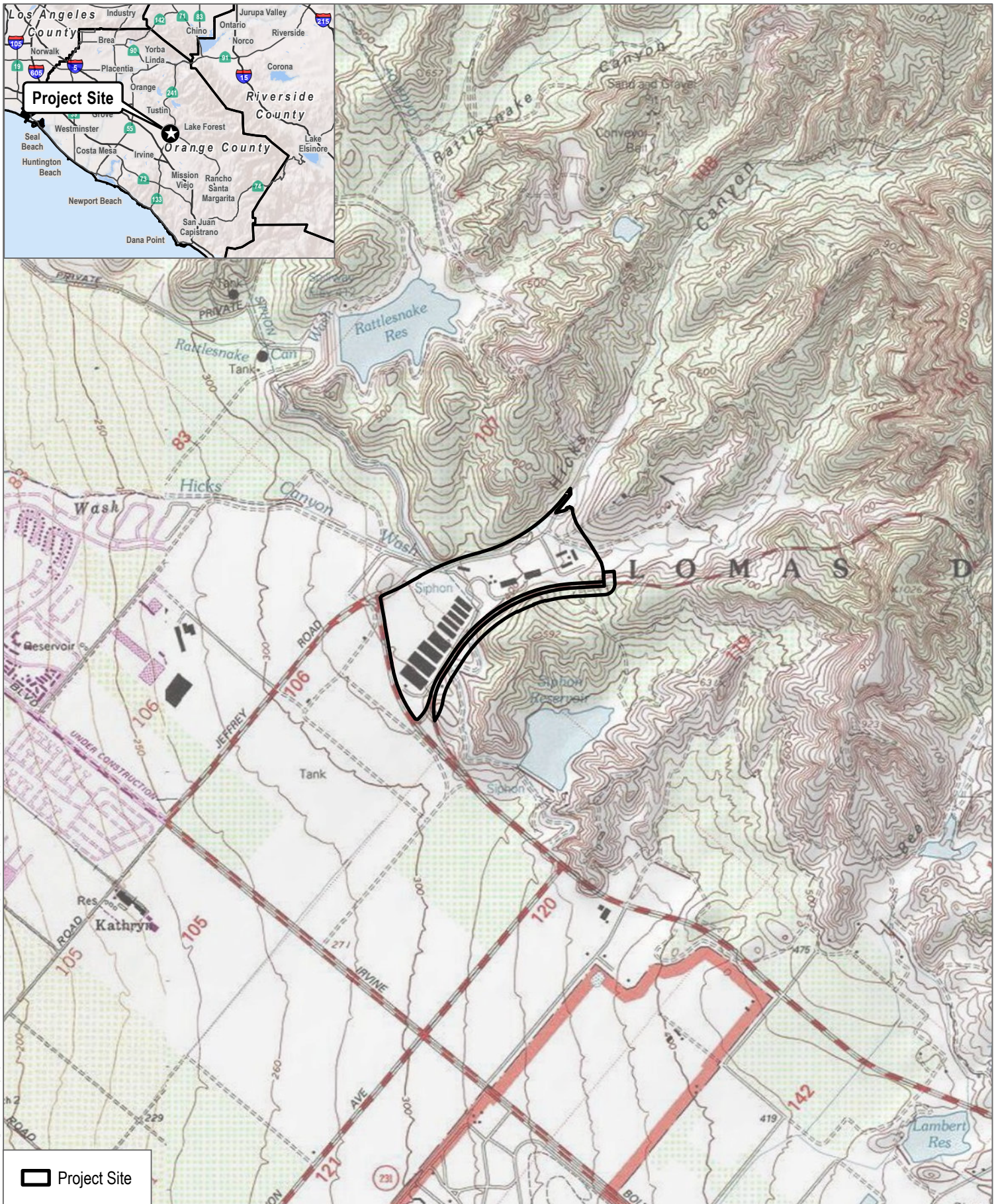
The project proposes the development of a new 120-acre residential village with 1,360 residential units. The project would also include development of parks, a community garden, paseos, and a 2,750-foot extension of the JOST east from Portola Parkway to the entrance of the development

As part of our study, we are consulting regional historical organizations to determine if there are any known historic or cultural resources that may be affected by the Proposed Project. Your efforts in this process will provide invaluable information for the proper identification and treatment of such resources. If you have any information regarding known cultural resources in the Proposed Project area, please feel free to contact me via phone or email (listed below). All comments, emails, or letters received will be included in the reports generated by this study. Thank you for your time regarding our request.

Sincerely,



Claire Cancilla, MSHP
Architectural Historian
831.359.7228 // ccancilla@dudek.com
Att.: Figure 1, Project Site



SOURCE: USGS 7.5 Minute Series 1:24,000

FIGURE 1
Project Location
 Gateway Village Project

From: [Claire Cancilla](#)
To: info@orangecountyhistory.org
Subject: Irvine Gateway Project
Date: Wednesday, January 29, 2025 11:47:00 AM
Attachments: [IPC OC Historical Society.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

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Irvine Historical Society

January 29, 2025

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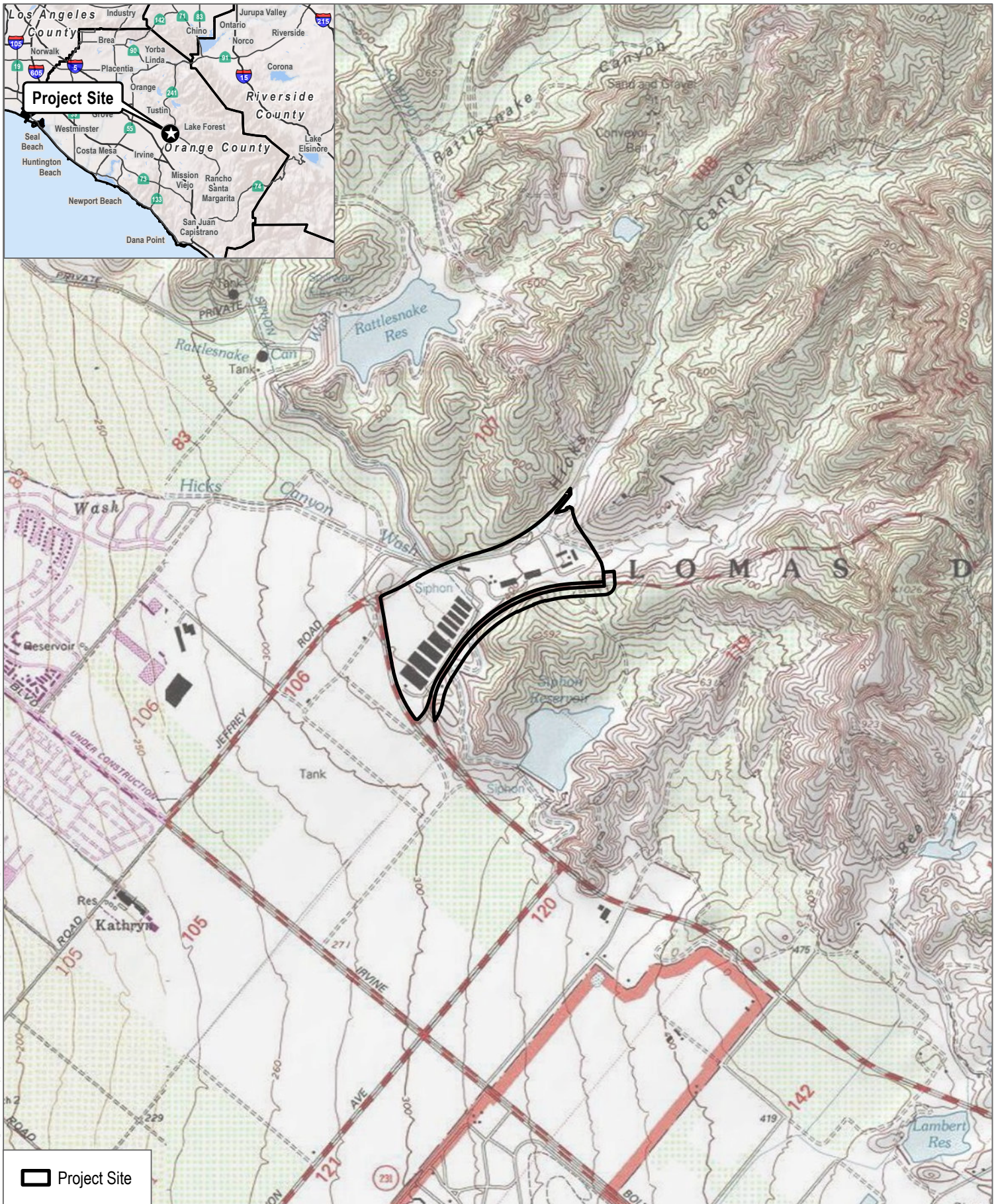
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Project Location
Gateway Village Project

Appendix D (Confidential)

DPR 523 Forms

