

Appendix B

Archaeological Resource Assessment

ARCHAEOLOGICAL RESOURCES ASSESSMENT FOR THE EL CAMINO COLLEGE FIRE ACADEMY PROJECT

CITY OF TORRANCE, LOS ANGELES
COUNTY, CALIFORNIA

PREPARED FOR:

EL CAMINO COMMUNITY COLLEGE DISTRICT

16007 Crenshaw Boulevard

Torrance, California 90506

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MARCH 2022

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PROJECT INFORMATION PAGE

Report Type: Phase I Archaeological Resources Assessment

Project Name: El Camino College Fire Academy Project


APN: APN 137-200-087 and APN 137-200-094

Lead Agency: El Camino Community College District

Contact: Jorge Gutierrez, Executive Director, Facilities Planning and Services
16007 Crenshaw Boulevard
Torrance, California 90506

Report Date: March 2022

Authors: Linda Kry, BA, RA, Heather McDaniel McDevitt, MA, RPA, Kira Archipov BS, and Jennifer De Able BA with contributions to the prehistoric and ethnographic sections made by Micah J. Hale, PhD, and Loukas Barton, PhD

Signature:  _____

Signature: 

Consultant Firm: Dudek
38 North Marengo Avenue
Pasadena, California 91101

USGS Quads: Torrance

Resources: No archaeological resources identified within the Project site or 1.5-mile records search radius

Acreage: 2.6 acres

Keywords: Phase I Archaeological Survey Investigation, prehistoric, historic, Dominguez Channel, El Camino College

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EXECUTIVE SUMMARY

El Camino Community College District retained Dudek to assess the potential for ground disturbing activities proposed for the El Camino College Fire Academy Project (Project) to impact cultural resources. The proposed Project would include construction of eight structures, ancillary structures, a fire tower, a physical training area, and installation of landscaping. Proposed depth of ground disturbance will not extend deeper than 8 feet (ft) below existing ground surface with a minimum depth of 12 inches (in) of disturbance across the site.

This report documents the results of a California Historical Resources Information System (CHRIS) records search; a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; in-depth review of geotechnical, archival, academic, and ethnographic information; an intensive pedestrian survey; analysis of potential for proposed Project site to contain cultural resources; as well as management recommendations. This report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines; El Camino Community College District (District) is the lead agency responsible for compliance with the CEQA.

A CHRIS records search indicates that two cultural resource studies have previously addressed the entirety of the proposed Project site resulting in no archaeological resources identified. Additionally, a search of the NAHC SLF was negative for known Native American heritage resources to exist within the proposed Project site. A pedestrian survey of the proposed Project site was conducted with negative results. However, a majority of the proposed Project site is paved, significantly limiting the observation of exposed native soils and resulting in less than reliable survey findings. A geotechnical study conducted in 2021 by Leighton Consulting, Inc. indicates fill soils exist from surface to between 7.5 to 10 ft below ground surface (bgs) within the southern and western portions of the proposed Project site. Underlying the fill soils are native soils documented to be Quaternary Old Alluvial Valley Deposits from the Pleistocene to Holocene geological age. The presence of fill soils demonstrates that the native soils upon and within which intact cultural deposits have the potential to exist would not be observable during the pedestrian survey. A review of historical maps and aerial photographs indicates that the proposed Project site was undeveloped as early as 1896. In the early 1930s, the Dominguez Channel was formally channelized; the 1941 historic aerial depicts the channel as it is today. The proposed Project site appears to remain undeveloped until at least 1972, when it is shown as a paved parking lot.

Considering the results of the CHRIS records search, NAHC SLF search, review of historical maps and aerial photographs, review of a geotechnical report prepared for the Project, pedestrian survey, and the proposed depths of ground disturbance for the Project (between 12 in and 8 ft bgs), the potential to encounter unknown subsurface archaeological resources along the western and southern boundaries of the proposed Project site is unlikely. The potential to encounter subsurface intact resources within the paved parking lot is unknown due to the inability to observe native soils during the pedestrian survey and that no previous archaeological

survey has occurred prior to placement of fill soils and development of the site. Therefore, it is possible for intact archaeological deposits to be encountered within the native alluvial soils during Project construction. Based on the findings of this investigation, the following anticipatory measures as well as measures to ensure proper treatment of any unknown cultural resources that may be encountered as a result of proposed Project construction are recommended: Workers Environmental Awareness Program (WEAP) training, retention of a qualified archaeologist to provide monitoring as appropriate and to address inadvertent discoveries, and an inadvertent discovery clause included on all construction plans. With the proper implementation of the prescribed measures, the potential impact to cultural resources is considered to be less than significant.

1 INTRODUCTION

El Camino Community College District (District) retained Dudek to complete an archaeological resources assessment for the El Camino College Fire Academy Project (Project or proposed Project) in accordance with the California Environmental Quality Act (CEQA). This report documents the results of a California Historical Resources Information System (CHRIS) records search; a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; in-depth review of geotechnical, archival, academic, and ethnographic information; an intensive pedestrian survey; analysis of potential for proposed Project site to contain cultural resources; as well as management recommendations. The District is the lead agency responsible for compliance with CEQA.

1.1 Project Personnel

Dudek Lead Archaeologist Linda Kry, BA, RA, conducted the pedestrian survey, co-authored the report, and provided management oversight and recommendations for cultural resources. Dudek Associate Archaeologists Jennifer De Alba, BA and Kira Archipov, BS, co-authored the report. Dudek Archaeologists Micah J. Hale, Ph.D and Loukas Barton, Ph.D., contributed to the prehistoric and ethnohistoric contexts. Dudek Senior Archaeologist Heather McDaniel McDevitt, MA, RPA, co-authored the report and provided senior review for quality assurance/quality control and appropriate application of the CEQA.

1.2 Project Location

The proposed Project site is located on the El Camino College campus at 16007 Crenshaw Boulevard in the City of Torrance (City), Los Angeles County, California (Figure 1, Project Location). Nearby cities include Lawndale, Gardena, Los Angeles, Carson, Lomita, Rolling Hills, Palos Verdes Estates, Redondo Beach . The proposed Project site falls on public land survey system (PLSS) 7.5-minute United States Geologic Survey Torrance Quadrangle, Township 3 South, Range 14 West, Section 27 (Figure 1). The approximately 2.6-acre proposed Project site is located on the southern portion of the existing El Camino College campus, south of West Redondo Beach Boulevard in the existing Parking Lot L and is composed of one parcel - Assessor Identification Number (AIN) 4092-001-904 (Figure 2).

1.3 Project Description

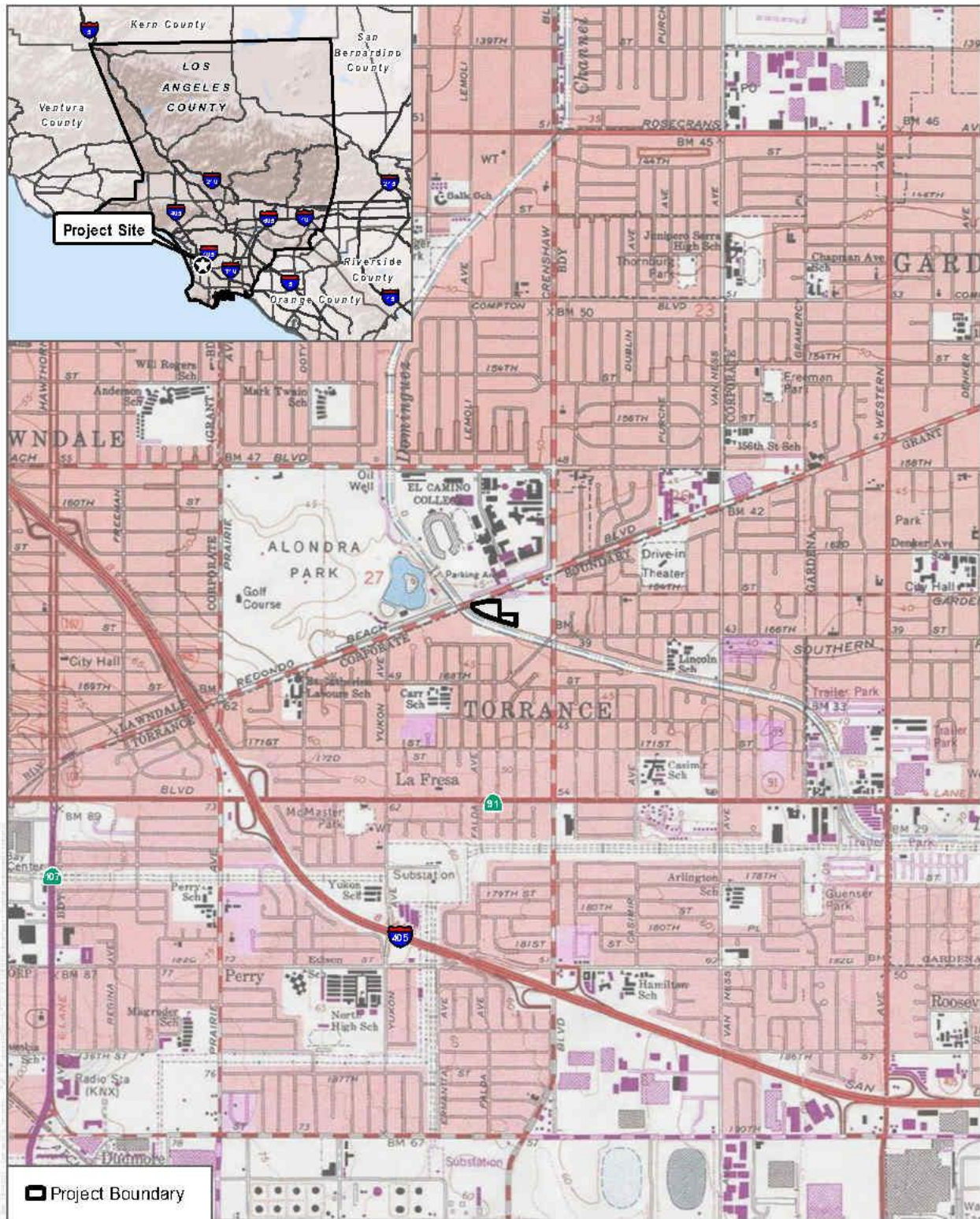
The proposed Project would involve the construction of the El Camino College Fire Training Facility including the construction of the following structures as well as installation of hard and soft scape elements (Figure 3). Four one-story classroom structures constructed on the southern perimeter of the site, each occupying a 24-foot by 40-foot area. A one-story locker room building, including showers, restrooms, and lockers, constructed on the southern perimeter occupying a 60-foot by 40-foot area. A one-story modular multipurpose room located constructed on the southern perimeter occupying a 40-foot by 72-foot area. A

one-story administrative office structure constructed on the southern perimeter occupying a 24-foot by 42-foot area. A fire apparatus storage structure constructed on the western perimeter including three apparatus bays occupying a 60-foot by 50-foot area. A four-story fire tower constructed in the center of the Project site with a physical training area surrounding the fire tower on all four sides. The ventilation props storage area constructed on the southern perimeter of the site occupying a 28,500 square foot area. The existing row of trees located at the eastern and southern perimeters would remain in place and two landscaped areas would be installed to the east and west of the classrooms and modular administration office structures. Finally, a perimeter fence would be installed around the entire Project site.

Vehicular access to the proposed Project site would be via Redondo Beach Boulevard, Crenshaw Boulevard, and West 164th Street. No parking spaces would be available within the Project site boundary; however, the proposed Project would be located adjacent to an existing parking lot providing parking for employees, students and visitors.

Current Project design indicates that the minimum depth of ground disturbance for the proposed Project site is 12 inches (in) below the existing ground surface across the site for the demolition and removal of existing pavement and base, an assumed 5 ft below ground surface (bgs) for utility trenching, and a maximum depth of 8 feet (ft) below the existing ground surface for the scarification and excavation preparation of new building foundations.

ARCHAEOLOGICAL RESOURCES ASSESSMENT FOR THE EL CAMINO COLLEGE FIRE ACADEMY PROJECT



SOURCE: USGS 7.5 Minute Series Inglewood Quadrangle
Township 33; Range 14W; Section 27



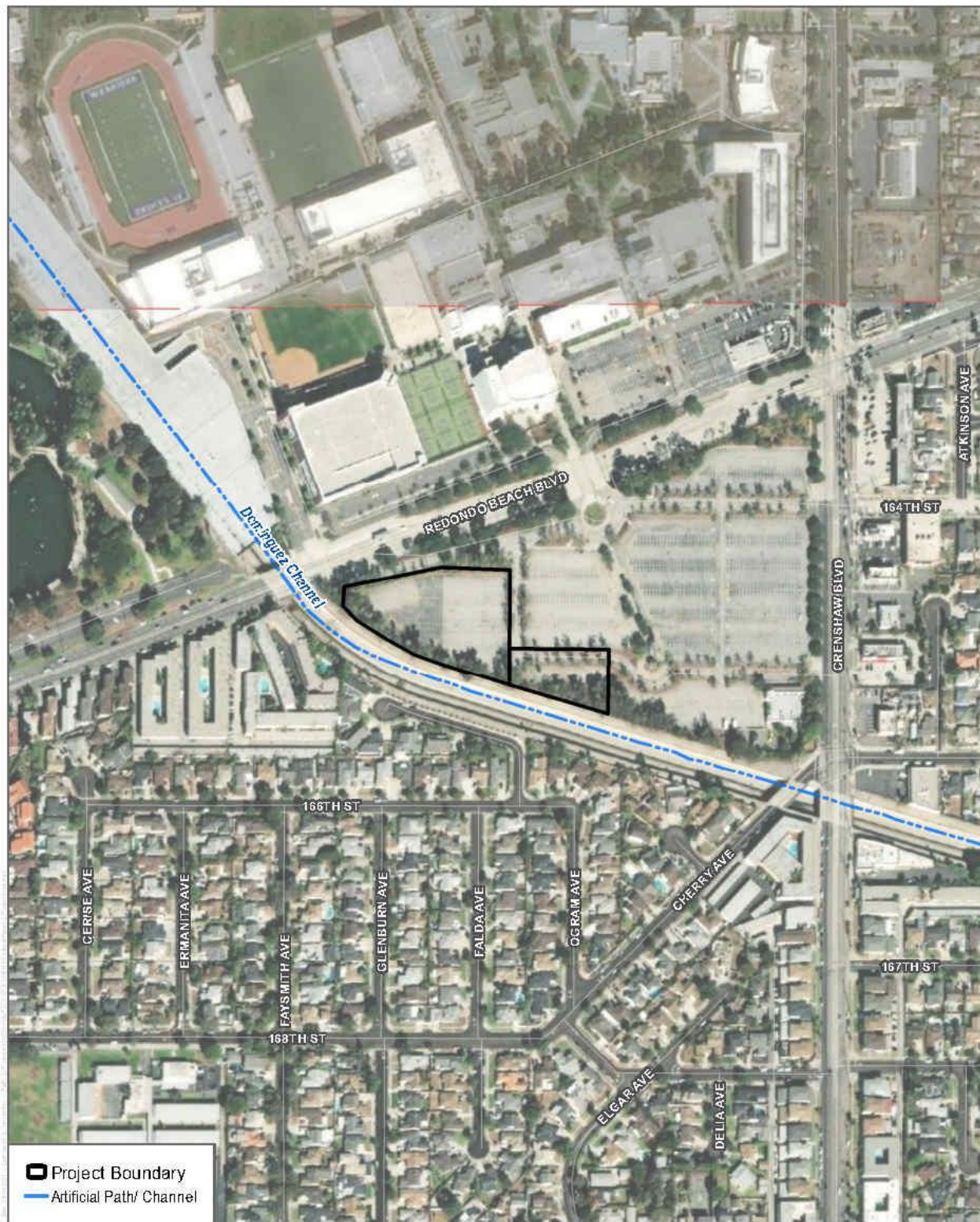
FIGURE 1

Regional Location and Vicinity

El Camino College Fire Academy Project

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ARCHAEOLOGICAL RESOURCES ASSESSMENT FOR THE EL CAMINO COLLEGE FIRE ACADEMY PROJECT



SOURCE: DigitalGlobe, 2017

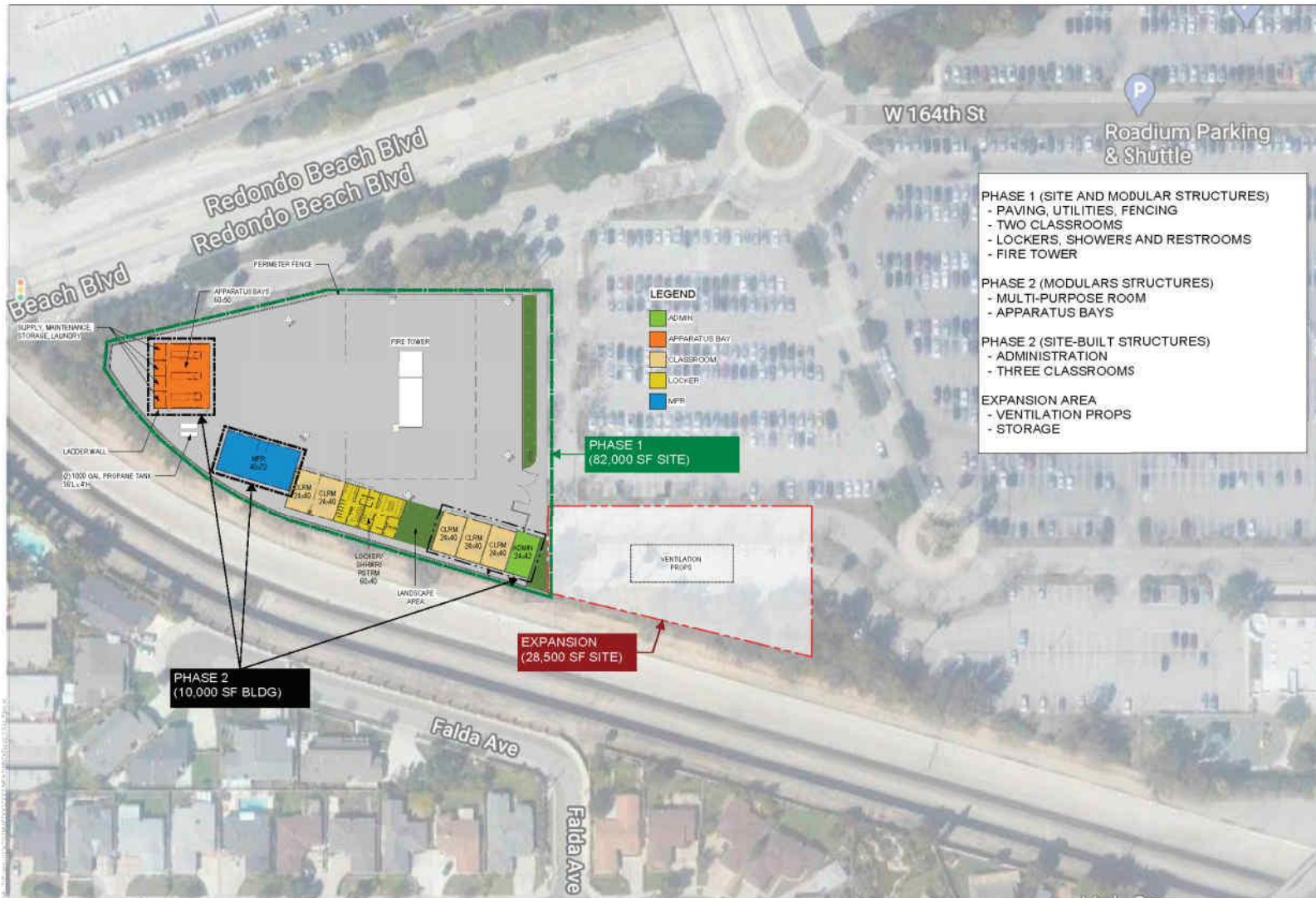


FIGURE 2

Project Area

El Camino College Fire Academy Project

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SOURCE: Perkins Eastman 2021

FIGURE 3

Site Plan

El Camino College Fire Academy Project



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2 REGULATORY SETTING

Work for this Project was conducted in compliance with the California Environmental Quality Act (CEQA). The regulatory framework as it pertains to cultural resources under CEQA is detailed below.

Under the provisions of CEQA, including the CEQA Statutes (PRC Sections 21083.2 and 21084.1), the CEQA Guidelines (14 CCR 15064.5), and California Public Resources Code (PRC) Section 5024.1 (14 CCR 4850 et seq.), properties expected to be directly or indirectly affected by a proposed project must be evaluated for California Register of Historical Resources (CRHR) eligibility (PRC Section 5024.1).

The purpose of the CRHR is to maintain listings of the state’s historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term historical resources includes a resource listed in or determined to be eligible for listing in the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a]). The criteria for listing properties in the CRHR were developed in accordance with previously established criteria developed for listing in the National Register of Historic Places. The California Office of Historic Preservation regards “any physical evidence of human activities over 45 years old” as meriting recordation and evaluation (OHP 1995:2).

2.1 State

The California Register of Historical Resources

A cultural resource is considered “historically significant” under CEQA if the resource meets one or more of the criteria for listing on the CRHR. The CRHR was designed to be used by state and local agencies, private groups, and citizens to identify existing cultural resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The following criteria have been established for the CRHR. A resource is considered significant if it:

1. is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. is associated with the lives of persons important in our past;
3. 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; or
4. has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, historical resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be able to convey the reasons for their significance. Such integrity is evaluated in regard to the retention of location, design, setting, materials, workmanship, feeling, and association.

Under CEQA, if an archeological site is not a historical resource but meets the definition of a “unique archeological resource” as defined in PRC Section 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as follows:

- 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

Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a “unique archaeological resource” under CEQA (PRC Section 21083.2) are viewed as not significant. Under CEQA, “A non-unique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects” (PRC Section 21083.2[h]).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from a proposed project are thus considered significant if the project (1) physically destroys or damages all or part of a resource; (2) changes the character of the use of the resource or physical feature within the setting of the resource, which contributes to its significance; or (3) introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

California Environmental Quality Act

As described further, the following CEQA statutes (PRC Section 21000 et seq.) and CEQA Guidelines (14 CCR 15000 et seq.) are of relevance to the analysis of archaeological, historic, and tribal cultural resources:

- PRC Section 21083.2(g) defines “unique archaeological resource.”
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines “historical resources.” In addition, CEQA Guidelines Section 15064.5(b) defines the phrase “substantial adverse change in the significance of an historical resource”; it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines “tribal cultural resources.”
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating

impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause “a substantial adverse change in the significance of an historical resource” (PRC Section 21084.1; CEQA Guidelines Section 15064.5(b)). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of PRC Section 5024.1(q)), it is an “historical resource” and is presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (PRC Section 21084.1; CEQA Guidelines Section 15064.5(a)).

A “substantial adverse change in the significance of an historical resource” reflecting a significant effect under CEQA 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” (CEQA Guidelines Section 15064.5(b)(1); PRC Section 5020.1(q)). In turn, the significance of a historical resource is materially impaired when a project does any of the following:

- (1) 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; or
- (2) 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 PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (3) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA (CEQA Guidelines Section 15064.5(b)(2)).

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any “historical resources,” then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource’s historical significance is materially impaired.

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 (PRC Sections 21083.2(a)–(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:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC Section 21083.2(g)).

Impacts on nonunique 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 nonunique archaeological resource qualifies as a TCR (PRC Sections 21074(c) and 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 State Assembly Bill 52

Assembly Bill (AB) 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that tribal cultural resources (TCRs) must be considered under CEQA and also provided for additional Native American consultation requirements for the lead agency. Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe and that is either:

- On or determined to be eligible for the California Register of Historical Resources or a local historic register; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project site, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

Section 1 (a)(9) of AB 52 establishes that “a substantial adverse change to a tribal cultural resource has a significant effect on the environment.” Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

California Health and Safety Code Section 7050.5

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. California 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 (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 NAHC within 24 hours (Section 7050.5(c)). NAHC will notify the “most likely descendant.” With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains, and items associated with Native Americans.

3 ENVIRONMENTAL SETTING

3.1 Environmental Setting and Current Conditions

The proposed Project site is located in a developed urban area in the City of Torrance and is located within the South Bay region of the Los Angeles metropolitan area of Los Angeles County. The Project site is approximately 4.5 miles east of the Pacific Ocean and is bordered by the concrete-lined Dominguez Channel, which was constructed prior to 1952. The proposed Project site's current topography is gently sloping from north to south with an elevation ranging from 47 to 50 feet (ft) above mean sea level (amsl).

The proposed Project is situated within the northernmost Peninsular Ranges Geomorphic Province (Norris and Webb 1990; CGS 2002). This geomorphic province is characterized by northwest trending mountain ranges and valleys that extend over 900 miles from the tip of the Baja Peninsula to the Transverse Ranges (i.e., the San Bernardino and San Gabriel Mountains in Southern California). Regionally, the Peninsular Ranges are bounded to the east by the Colorado Desert and the west by the continental shelf and offshore islands (Santa Catalina, Santa Barbara, San Nicholas, and San Clemente) (Norris and Webb 1990; CGS 2002). Regional mountain ranges in the Peninsular Ranges Geomorphic Province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges Batholith (Southern California Batholith) (Jahns 1954).

More specifically, the proposed Project is located within the Los Angeles Basin. The basin is a sedimentary region connected to an anomalous group of east west-trending mountains collectively known as Transverse Ranges. The present basin is a coastal lowland area whose floor is marked by elongated low ridges and groups of hills that are located on the edge of the Pacific Plate (Jahns 1973). According to surficial geological mapping by Saucedo (2016) at a scale of 1:100,000, the proposed Project site is entirely underlain by older Quaternary alluvium (map unit Qoa) that is Pleistocene age (~2.58 million years ago–12,000 years ago). The terminal 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 that have potential to preserve cultural material in context, depending on the area-specific topographical setting.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2021), soils within the southern portion of the proposed Project site, which accounts for 50 percent of the site, are dominated by the Urban Land (55 percent) with minor components, including Centinela soils (20 percent), Typic Xerorthents (two percentages provided for this soils series: 15 and 5 percent), and Aquic Haploxerrets (5 percent). The remaining 50 percent of the proposed Project site, to the north, is dominated by Urban Land (50 percent), Windfetch (25 percent), Typic Haploxerolis (15 percent), Sepulveda (5 percent), Thums (4 percent) and Abaft (1 percent). A brief description of each major soil series (greater than 20 percent) is provided below:

- **Urban Land:** Urban soil refers to soils in areas of high population density in a largely built environment and can include human-transported or human-altered materials, minimally altered materials, or intact native soils.
- **Centinela:** The Centinela series consists of 0 to 9 percent slopes, characterized as well drained soils that formed in a thin surface mantle of human-transport materials (or Urban Land soils) overlying alluvium from marine or mixed rock sources. Centinela soils are on alluvial fans remnant, inset fans, fluvio-marine bottoms and low lying terraces.
- **Windfetch:** The Windfetch series consists of 0 to 12 percent slopes, characterized as well drained soils that formed in a thin, discontinuous layer of human transport materials (or Urban Land soils) overlying uplifted alluvium from marine and other mixed rock sources. Windfetch soils are defined as follows: loam, fine sandy loam, silt loam, clay, or clay loam with textures changing at depth.

The proposed Project site is currently developed and in use as a El Camino College Lot L with landscaping along the perimeter that provided for observations of exposed soils, including few raised landscaped areas within the central portion of the proposed Project site along the entrance and exit routes. However, a review of the geotechnical study indicates that the entire proposed Project site is overlain by fill soils precluding the observation of native soils.

4 CULTURAL SETTING

4.1 Prehistoric Overview

Evidence for continuous human occupation in Southern California spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad period 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. To be more inclusive, 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 500–1769), and Ethnohistoric (post-AD 1769).

4.1.1 Paleoindian Period (pre-5500 BC)

Evidence for Paleoindian occupation in the region is tenuous. Our 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 the region is located in coastal Southern California (though contemporaneous sites are present in the Channel Islands) derives from SDI-4669/W-12 in La Jolla. A human burial from SDI-4669 was radiocarbon dated to 9,590–9,920 years before present (95.4percent 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 ground stone, 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 ground stone tools. Prime examples of this pattern are sites that were studied by Emma Lou Davis (1978) on Naval Air Weapons Station China Lake 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 multi-component fluted point site, and MNO-680—a single component Great Basined Stemmed point site (see Basgall et al. 2002). At MNO-679 and -680, ground stone 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 San Diego region that possibly dates between 10,365 and 8200 BC (Warren et al. 2004). Termed San Dieguito (see also Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in 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 (see also Warren 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos's 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.

San Dieguito sites are rare in the inland valleys, with one possible candidate, RIV-2798/H, located on the shore of Lake Elsinore. Excavations at Locus B at RIV-2798/H produced a toolkit consisting predominately of flaked stone tools, including crescents, points, and bifaces, and lesser amounts of groundstone tools, among other items (Grenda 1997). A calibrated and reservoir-corrected radiocarbon date from a shell produced a date of 6630 BC. Grenda (1997) suggested this site represents seasonal exploitation of lacustrine resources and small game and resembles coastal San Dieguito assemblages and spatial patterning.

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 other trends in Southern California deserts, where hunting-related tools were replaced by processing tools during the early Holocene (see Basgall and Hall 1990).

4.1.2 Archaic Period (8000 BC – AD 500)

The more than 2,500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in Southern California. If San Dieguito is the only recognized Paleoindian component in the coastal Southern California, 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 (see Hale 2001, 2009).

The Archaic pattern, which has also been termed the Millingstone Horizon (among others), is relatively easy to define with assemblages that consist primarily of processing tools, such as millingstones, 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

(see Basgall and Hall 1990; Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurred until the bow and arrow was adopted around AD 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remained low. After the bow was 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 millingstones and handstones decreased in proportion relative to expedient, unshaped ground stone 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, complemented only by the addition of the bow and ceramics.

4.1.3 Late Prehistoric Period (AD 500–1769)

The period of time following the Archaic and before Ethnohistoric times (AD 1769) 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. In general, this period is defined by the addition of arrow points and ceramics, as well as the widespread use of bedrock mortars. 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. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces. 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 before AD 1400. Millingstones and handstones persisted in higher frequencies than mortars and pestles until the last 500 years (Basgall and Hall 1990); even then, weighing the economic significance of millingstone-handstone versus mortar-pestle technology is tenuous due to incomplete information on archaeological assemblages.

4.2 Ethnographic Overview

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 (Geiger and Meighan 1976; Harrington 1935; Laylander 2000; Boscana 1846; Kroeber 1923, 1925; Du Bois 1905, 1906). 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) by recording languages and oral histories within the region. Ethnographic research by Dubois, Kroeber, Harrington, 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 life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, aboriginal culture was increasingly supplied by individuals born in California after considerable contact with Europeans. As Robert F. Heizer (1978) stated, 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.

4.2.1 Gabrielino/Tongva

The ethnohistoric (and to a lesser degree, archaeological) record indicates that the majority of the work proposed for this Project and vicinity was occupied by the Gabrielino/Tongva. Surrounding cultural groups included the Chumash and Tataviam to the north and northwest, the Serrano and Cahuilla to the north and east, and the Juaneño/Acjachemen and Luiseño to the south and east.

The name “Gabrielino” (also spelled “Gabrieliño,” “Gabrieleño,” and “Gabrileño”) refers to the Indigenous people of the Los Angeles Basin and surrounding areas who were conscripted by the Spanish to construct and attend Mission San Gabriel Arcángel, established in 1771. Though many of these people shared similar customs and spoke a similar language, the Spanish name was also applied to other groups of people who spoke different languages and practiced different customs (Kroeber 1925; Bean and Smith 1978). Many of these people were also conscripted to construct and attend Mission San Fernando Rey de España (established in 1797) and along with several other groups were thus called “Fernandeño” by the Spanish. These names therefore reference shared experience during the Spanish colonial era rather than uniform language or custom predating Spanish intrusion. In many cases, the names by which Native Americans in southern California identified themselves have been lost. However, we do know that at least some of the people from the area that is today Los Angeles called themselves Kumivit (Bean and Smith 1978), while others may have been referred to as Tobikhar, meaning “settlers” and perhaps derived from the word Tovar meaning “earth” (Gatschet 1876 and Hoffman 1885 cited in Heizer 1968; McCawley 1994a), Kij or Kizh, which translate as “houses” (Hale 1846 and Buschmann 1856 cited in Heizer 1968), the Spanish derivative “Kichireno” (Harrington notes cited in McCawley 1994a) and Tongva (Merriam 1955; Golla 2011 citing Harrington's notes on p.312). Today, many Indigenous people from the area with ancestries tied to Mission San Gabriel identify themselves as Tongva (King 1994; Golla 2011), while other groups with direct lineal connection to individuals who lived at Mission San Gabriel identify themselves

differently (for example, the Gabrieleño Band of Mission Indians - Kizh Nation). In August of 1994, the California Assembly Joint Resolution No. 1996 recognized the “Gabrielinos” as the aboriginal tribe of the Los Angeles Basin. To be inclusive of all ethnolinguistically related tribal entities within the region, and to maintain consistency with the historical and anthropological literature about the ethnolinguistic population of the broader Los Angeles Basin, we refer to all as “Gabrielino/Tongva” in this report.

Gabrielino/Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands: Santa Catalina, San Clemente, and San Nicolas. The Gabrielino/Tongva established large, permanent villages in the fertile lowlands along rivers and streams, and in sheltered areas along the coast, stretching from the foothills of the San Gabriel Mountains to the Pacific Ocean. A total tribal population has been estimated of at least 5,000, but recent ethnohistoric work suggests a number approaching 10,000 (O’Neil 2002). Houses constructed by the Gabrielino/Tongva were large, circular, domed structures made of willow poles thatched with tule that could hold up to 50 people (Bean and Smith 1978). Indeed, the word *kizh* or *kij* was the word used by many Gabrielino/Tongva to refer to these houses (Heizer 1968; Johnston 1962). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Cleared fields for races and games were created adjacent to Gabrielino/Tongva villages (McCawley 1996). Archaeological sites composed of villages with various sized structures have been identified.

The largest, and best documented, ethnographic Gabrielino/Tongva settlement was *Yanga* (also known as *Yaangna*, *Janga*, and *Yabit*), which was in the vicinity of downtown Los Angeles (McCawley 1996; NEA and King 2004). This settlement was reportedly first encountered by the Portola expedition in 1769, and in 1771, Mission San Gabriel was established. *Yanga* provided a large number of individuals to this mission; however, following the founding of the Pueblo of Los Angeles in 1781, opportunities for local paid work became increasingly common, which had the result of reducing the number of Native American neophytes from the immediately surrounding area (NEA and King 2004). Mission records indicate that 179 Gabrielino/Tongva inhabitants of *Yanga* were brought to San Gabriel Mission (NEA and King 2004; King 2000). Based on this information, *Yanga* may have been the most populated village in the western Gabrielino/Tongva territory. Second in size, and less thoroughly documented, the village of *Cahuenga* was located just north of *Cahuenga Pass*.

Father Juan Crespí passed through the area near *Yanga* on August 2-3, 1769. The pertinent sections from his translated diary are provided here:

Sage for refreshment is very plentiful at all three rivers and very good here at the *Porciúncula* [the Los Angeles River]. At once on our reaching here, eight heathens came over from a good sized village encamped at this pleasing spot among some trees. They came bringing two or three large bowls or baskets half-full of very good sage with other sorts of grass seeds that they consume; all brought their bows and arrows but with the strings removed from the bows. In his hands the chief bore strings of shell beads of the sort that they use, and on reaching the camp they threw the handfuls of these beads at each of us. Some of the heathens came up smoking on pipes made of baked clay, and they blew

three mouthfuls of smoke into the air toward each one of us. The Captain and myself gave them tobacco, and he gave them our own kind of beads, and accepted the sage from them and gave us a share of it for refreshment; and very delicious sage it is for that purpose.

We set out at a half past six in the morning from this pleasing, lush river and valley of Our Lady of Angeles of La Porciúncula. We crossed the river here where it is carrying a good deal of water almost at ground level, and on crossing it, came into a great vineyard of grapevines and countless rose bushes having a great many open blossoms, all of it very dark friable soil. Keeping upon a westerly course over very grass-grown, entirely level soils with grand grasses, on going about half a league we came upon the village belonging to this place, where they came out to meet and see us, and men, women, and children in good numbers, on approaching they commenced howling at us though they had been wolves, just as before back at the spot called San Francisco Solano. We greeted them and they wished to give us seeds. As we had nothing at hand to carry them in, we refused (Brown 2001: 339-343).

The Portola party passed westward through the La Brea Tar Pits area (CA-LAN-159) the following day. This was a known area of Native American use for hunting and the gathering of tar and other area-specific resources. A pertinent excerpt from Father Juan Crespi's August 3, 1769 diary entry is provided here:

The Captain told me that when they scouted here, in a ravine about half a league to the westward they came upon about forty springs of pitch, or tar, boiling in great surges up out of the ground, and saw very large swamps of this tar, enough to have caulked many ships. (Brown 2001: 341)

Upon leaving the La Brea Tar Pits, the Portola expedition continued westward, camping on August 4, 1769 near what is now the route of Interstate 405 before heading northward into the mountains. Details of the day's travels are provided below:

At a quarter past six in the morning we set out from this copious spring at the San Esteban Sycamores We pursued our way northwestward and on going about a quarter-league [0.85 mile], we came into a little flat hollow between small knolls, and then onward across level tablelands of dark friable soil....we turned west-northwestward and on going two hours, all over level soil, came to the watering place: two springs rising at the foot of a high tableland, their origin being higher up on the large plain here....At this spot we came upon a village at the aforesaid tableland and as soon as we arrived and set up camp, six very friendly, compliant tractable heathens came over, who had their little houses roofed with grass, the first we have been seeing of this sort. They brought four or six bowls of the usual seeds and good sage which they presented to our Captain. On me they bestowed a good-sized string of the sort of beads they all have, made of white seashells and red ones, though not very bright-colored, that look to be coral. (Brown 2001: 345-349)

The name of the settlement encountered near the August 4, 1769 Portola camp is unknown and would have been located approximately 3 miles of Kuruvunga near Santa Monica and 5 miles from Sa'anga near the mouth of Ballona Creek. Sa'anga, has also been referred to as Guaspeta or Guashna, (NEA and King 2004), Saan (Kroeber 1925), or Saa'anga or Waachnga (McCawley 1996). Ethnohistoric research completed by John Johnson (1988) pertaining to the inhabitants of San Clemente Island and Santa Catalina Island indicates that there were many marriage ties between these islands and a settlement near the Ballona wetlands. Mission records indicate that a total of 95 conscripts came from this place; 87 of these individuals were brought to Mission San Gabriel and the remaining eight to Mission San Fernando (NEA and King 2004). These records further suggest that marriage was common with the surrounding outside villages, but perhaps most often occurring with members of the larger village of Yanga.

More than 15 miles southwest of the proposed Project site, just north of Alamitos Bay and west of the San Gabriel River, Povuu'nga (also Puvunga or Pubuna) was a large Gabrielino/Tongva community and an important ritual center. Indeed, it was considered the birthplace of the Supreme Creator, Chinigchinich (Chengiichngech), and the First Chief, Ouiot (Wewyoot), and was therefore of central importance to the Gabrielino/Tongva as well as to neighboring groups who practiced the same religion at the time (Boscana 1846; Bean and Smith 1978; McCawley 1994a, 1994b).

At the time of Spanish contact, the basis of Gabrielino/Tongva religious life was a reverence for Chinigchinich, the last of a series of heroic entities. Chinigchinich (more typically referenced obliquely as Y-yo-ha-rig-nain, - "The Giver of Life") gave instruction on laws and institutions, and also taught the people how to dance, the primary sacred act for this society. He later withdrew to the heavens, where he rewarded the faithful and punished those who disobeyed his laws (Kroeber 1925). The Chinigchinich religion seems to have been relatively new when the Spanish arrived. At that time, it was spreading south into the Southern Tatic groups even as Christian missions were under construction and may represent a mixture of Native and Christian belief and practice (McCawley 1996).

The significance of Povuu'nga to Gabrielino/Tongva culture and identity was such that its abandonment around 1805 signified "the final collapse of the economic and social integrity of south coastal Gabrielino society" with their fate then "irrevocably tied to the missions and the ranchos" of the colonial introgressors (McCawley 1994b: 3-30). Nevertheless, a festival honoring Chinigchinich returned to the area in 1992 (Altschul 1994), and today the presumed location of Povuu'nga, a 22-acre parcel on the west side of the CSULB campus is protected by Declaration of Restrictive Covenant (Enriquez 2021). Other named settlements near the Project Area include Suanga (Soabit – presumably in Wilmington), Chowenga (Chaawwenga – presumably in San Pedro), Atababit (perhaps near Cabrillo Beach in San Pedro), and Juyubit (presumably near the mouth of the Los Angeles River). Identification of Gabrielino/Tongva settlement and rancheria location has been notoriously difficult (NEA and King 2004; Heizer 1968; McCawley 1996; King 1994; Stoll, Douglass, and Ciolek-Torello 2016; Johnston 1962; Engelhardt 1927; Merriam 1968).

In light of existing documentary and archaeological evidence, the Gabrielino/Tongva subsistence economy was centered on gathering and hunting. The surrounding environment was rich and varied, and people exploited mountains, foothills, valleys, deserts, riparian, estuarine, and open and rocky coastal eco-niches. Like that of most Native Californians, acorns were a staple food. Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Freshwater and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals (both terrestrial and marine), were also consumed (McCawley 1994a; Reddy et al. 2016; Reddy 2015; Kroeber 1925; Bean and Smith 1978; McCawley 1996).

A wide variety of tools and implements were used by the Gabrielino/Tongva to gather and collect food. These included the bow and arrow, traps and snares, nets, blinds, throwing sticks and slings, spears, harpoons, and hooks. Groups residing near the ocean used oceangoing plank canoes and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands (McCawley 1996). Gabrielino/Tongva people processed food with a variety of tools, including hammerstones and anvils, mortars and pestles, manos and metates, strainers, leaching baskets and bowls, knives, bone saws, and wooden drying racks. Food was consumed from a variety of vessels. Catalina Island steatite was used (and refashioned) to make ollas and cooking vessels (Blackburn 1963; Kroeber 1925; McCawley 1996).

Deceased Gabrielino/Tongva were either buried or cremated, with inhumation more common on the Channel Islands and the neighboring mainland coast with cremation predominant on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996). Cremation ashes have been found in archaeological contexts buried with stone bowls and in shell dishes (Ashby and Winterbourne 1966), as well as scattered among broken ground stone implements (Cleland, York, and Willey 2007). Archaeological data such as these correspond with ethnographic descriptions of an elaborate mourning ceremony that included a wide variety of offerings, including seeds, stone grinding tools, otter skins, baskets, wood tools, shell beads, bone and shell ornaments, and projectile points and knives. Offerings varied with the gender and status of the deceased (Johnston 1962; McCawley 1996). At the behest of the Spanish missionaries, cremation essentially ceased during the post-Contact period (McCawley 1996).

To date, perhaps the most exceptional accounts of Gabrielino/Tongva belief, custom, folk-lore, and language prior to the modern era come from two elaborate sources: a series of 22 letters written for the Los Angeles Star in 1852 by Hugo Reid, a Scottish immigrant to California, who transcribed the memories of his wife, Victoria Bartolomea Reid, a Gabrielino/Tongva woman from the Comicrabit rancharia (Heizer 1968), and interviews conducted in 1903 with Mrs. James Rosemyer (Narcissa Higuera), a Gabrielino/Tongva woman who then resided in Bakersfield (Merriam 1955). These manuscripts include (among other things) delicate, poetic, and dramatic accounts about the purpose and disposition of plants and animals in the Gabrielino/Tongva world, spirituality, social hierarchy, mortuary custom, naming convention, song, and many other aspects of Gabrielino/Tongva life, as well as accounts and assessments of the atrocities visited upon these people by the friars and soldiers of Spanish Mission imperialism (also see Welch 2006).

Sadly, much of the Gabrielino/Tongva language has been lost since the 1930s, though enough survives in the written record to permit classification of it as part of the Takic sub-group of the Uto-Aztecan language family, closely related to the languages of neighboring peoples, including Serrano, Kitanemuk, Tataviam, Luiseño, Juaneño/Acjachemen, Cahuilla, and Cupeño, which are together related to other languages of the Northern Uto-Aztecan branch that includes the Numic, Tubatulabal, and Hopi languages (Golla 2011). The formal morphology of the language has been summarized by UCLA linguistics professor Pamela Munro (Munro 2000), and a comprehensive dictionary of Gabrielino/Tongva language based on the notes of J. P. Harrington is under revision by Munro in collaboration with Gabrielino/Tongva scholars. Of note for the current Project Area, the particular variant of Gabrielino/Tongva language spoken in the vicinity of Long Beach and San Pedro may have been more similar to that spoken on Santa Catalina and the other southern Channel Islands, further illustrating the ethnic and cultural connections and contrasts among coastal/island peoples and those of the interior Los Angeles Basin (writes John P. Harrington in the Introduction to Johnston 1962: vii-viii).

4.3 Historic-Period Overview

The written history of the State of California is generally divided into three periods: the Spanish Period (1769–1821), Mexican Period (1821–1848), and American Period (1846–present). Although Spanish, Russian, and British explorers visited the area for brief periods between 1529 and 1769, the Spanish Period in California begins with the establishment in 1769 of a settlement at San Diego and the founding of Mission San Diego de Alcalá, the first of 21 missions constructed between 1769 and 1823. Independence from Spain in 1821 marks the beginning of the Mexican Period, and the signing of the Treaty of Guadalupe Hidalgo in 1848, ending the Mexican–American War, signals the beginning of the American Period when California became a territory of the United States.

4.3.1 Spanish Period (1769–1821)

Spanish explorers made sailing expeditions along the coast of southern California between the mid-1500s and mid-1700s. In search of the legendary Northwest Passage, Juan Rodríguez Cabrillo stopped in 1542 at present-day San Diego Bay. With his crew, Cabrillo explored the shorelines of present Catalina Island as well as San Pedro and Santa Monica Bays. Much of the present California and Oregon coastline was mapped and recorded in the next half-century by Spanish naval officer Sebastián Vizcaíno. Vizcaíno's crew also landed on Santa Catalina Island and at San Pedro and Santa Monica Bays, giving each location its long-standing name. The Spanish crown laid claim to California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1885; Gumprecht 1999).

More than 200 years passed before Spain began the colonization and inland exploration of Alta California. The 1769 overland expedition by Captain Gaspar de Portola marks the beginning of California's Historic period, occurring just after the King of Spain installed the Franciscan Order to direct religious and colonization matters in assigned territories of the Americas. With a band of 64 soldiers, missionaries, Baja (lower) California Native Americans, and Mexican civilians, Portola established the Presidio of San Diego, a fortified military outpost, as the first Spanish settlement in Alta California. In July of 1769, while Portola was exploring southern California,

Franciscan Fr. Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill, the first of the 21 missions that would be established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

The Portola expedition first reached the present-day boundaries of Los Angeles in August 1769, thereby becoming the first Europeans to visit the area. Father Crespi named “the campsite by the river Nuestra Señora la Reina de los Angeles de la Porciúncula” or “Our Lady the Queen of the Angeles of the Porciúncula.” Two years later, Friar Junípero Serra returned to the valley to establish a Catholic mission, the Mission San Gabriel Arcángel, on September 8, 1771 (Kyle 2002). Mission San Fernando Rey de España was established nearly 30 years later on September 8, 1797.

4.3.2 Mexican Period (1821–1846)

A major emphasis during the Spanish Period in California was the construction of missions and associated presidios to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish Period, only two of which were successful and remain as California cities (San José and Los Angeles). Several factors kept growth within Alta California to a minimum, including the threat of foreign invasion, political dissatisfaction, and unrest among the indigenous population. After more than a decade of intermittent rebellion and warfare, New Spain (Mexico and the California territory) won independence from Spain in 1821. In 1822, the Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955).

Extensive land grants were established in the interior during the Mexican Period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. Nine ranchos were granted between 1837 and 1846 in the future Orange County (Middlebrook 2005). Among the first ranchos deeded within the future Orange County were Manuel Nieto’s Rancho Las Bolsas (partially in future Los Angeles County), granted by Spanish Governor Pedro Fages in 1784, and the Rancho Santiago de Santa Ana, granted by Governor José Joaquín Arrillaga to José Antonio Yorba and Juan Pablo Peralta in 1810 (Hallan-Gibson 1986). The secularization of the missions (enacted 1833) following Mexico’s independence from Spain resulted in the subdivision of former mission lands and establishment of many additional ranchos. The proposed Project site fell within Rancho San Pedro land grant, which was conferred by Spain in 1784, as the first private land concession in Southern California, to Portola Expedition member Juan Jose Dominguez. Dominguez developed the 43,119.13-acre rancho agriculturally by planting wheat. Grain remained a regional staple until the Dominguez heirs sold a portion of Rancho San Pedro to William Sanford, John Downey, and Benjamin Wilson in 1854 (GPA 2012: 6; State Lands Commission 1982: 50).

During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico. The number of

nonnative inhabitants increased during this period because of the influx of explorers, trappers, and ranchers associated with the land grants. The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

4.3.3 American Period (1846–Present)

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican-American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American Period.

California officially became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories (Waugh 2003). Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for southern California as neighbor states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005).

5 BACKGROUND RESEARCH

5.1 SCCIC Records Search

On August 27, 2021, staff at the South Central Coast Information Center (SCCIC), located on the campus of California State University, Fullerton, provided the results of a CHRIS records search for the proposed Project site and a 0.5-mile radius. Due to COVID-19, the SCCIC notified researchers that they are only able to provide data for Los Angeles County that has already been digitized. As such, not all available data stored in CHRIS may be provided in the records search. The CHRIS records search results provided by the SCCIC included their digitized collections of mapped prehistoric and historic archaeological resources and historic built-environment resources; Department of Parks and Recreation site records; technical reports; archival resources; and ethnographic references. The confidential records search results are also provided in Confidential Appendix A.

5.1.1 Previously Conducted Cultural Resource Studies

Results of the cultural resources records search indicate that 11 previous cultural resource studies have been conducted within 0.5-mile of the proposed Project site between 1993 and 2012. Of these studies, two (2) overlap the entirety of proposed Project site; LA-2904, and LA-10333. Table 1, below, details all 11 previous cultural resources studies followed by a brief summary of the reports overlapping the proposed Project site.

Table 1. Previous Technical Studies Within a 0.5-Mile Radius of the Proposed Project Site

SCCIC Report No. (LA-)	Authors	Date	Title	Proximity to Proposed Project Site
02904	Stickel, Gary E.	1993	Draft Report a Phase I Cultural Resources Literature Search for the West Basin Water Reclamation Project	Overlaps
09219	Bonner, Wayne H.	2007	Cultural Resources Records Search and Site Visit Results for Sprint Nextel Candidate LA60XC310G/CA5565D (Gagne), 2500 Redondo Beach Boulevard, Torrance, Los Angeles County, California	Outside
10218	Bonner, Wayne H.	2009	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate LA33705B (Yukon Square), 3588 Redondo Beach Blvd, Torrance, Los Angeles County, CA.	Outside
10333	McKenna, Jeanette M.	2009	A Brief Historic Context Statement Prepared for the General Plan Update: The City of Torrance, Los Angeles County, California	Overlaps
11528	O'Connell, Keith	2011	Modification to Proposed Communications facility Alondra Park, 15916 Crenshaw Boulevard Agrdena, California 90506	Outside

Table 1. Previous Technical Studies Within a 0.5-Mile Radius of the Proposed Project Site

SCCIC Report No. (LA-)	Authors	Date	Title	Proximity to Proposed Project Site
11617	Bonner, Wayne	2011	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0656 (Cavalry Baptist), CASPR No: 3551015757, 15916 Crenshaw Boulevard, Gardena, Los Angeles County, California	Outside
11902	Bonner, Wayne	2010	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC, Candidate LA0656-04 (Calvary Baptist Church), 15916 Crenshaw Boulevard, Gardena, Los Angeles County, CA	Outside
11903	Bonner, Wayne	2010	Cultural Resources Records Search and Site Visit Results for Clearwire Candidate CA-LOSO539B (Crossroads), 15916 Crenshaw Boulevard, Gardena, CA	Outside
12052	Bonner, Wayne	2012	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02150A (LA150-LA-150-10)15916 Crenshaw Boulevard, Gardena, California	Outside
12054	Supernowicz, Dana	2012	Cultural Resources Study of the Crossroads Learning Center Project MetroPCS California, LLC Site No. MLAX04199 15916 Crenshaw Boulevard, Gardena, Los Angeles County, California 90249	Outside
12483	Supernowicz, Dana	2012	Cultural Resources Study of the Crossroads Learning Center Project MetroPCS California, LLC Site No. MLAX04199, 15916 Crenshaw Boulevard, Gardena, Los Angeles County, California 90249	Outside

Report LA-02904

Draft Report A Phase 1 Cultural Resource Literature Search for the West Basin Water Reclamation Project (Stickel 1993) documents the results of a cultural resources study consisting of literature review and archival research. The area of study overlaps the entirety of the proposed Project site. The archival records search identified three (3) previously recorded archaeological sites, none of which overlap the proposed Project site. No further recommendations or details are provided. No new cultural resources were identified as a result of this study.

Report No. LA-10333

An Historic Context Statement Prepared for the General Plan Update: The City of Torrance, Los Angeles County, California (McKenna 2009) documents the known cultural resources within the City of Torrance (City) limits in preparation for a general plan update. The report consists of background and archival research, which identified 141 historic built environment resources and 12 prehistoric-era archaeological resources. None of these resources overlap the proposed Project site. McKenna recommended the following in order to preserve

and protect cultural resources: 1) paleontological monitoring should occur when necessary and protocol should be consistent with the standards and guidelines of the Natural History Museum of Los Angeles; 2) the current Chair of the Gabrielino/Tongva of the Los Angeles Basin should be contacted and notified of any and all ground disturbing activities within the City; 3) the City conduct a city-wide survey to identify any potentially significant buildings/structures; 4) upon completion of this survey, the City should develop a zone for historic sensitivity or district designation. No new cultural resources were identified as a result of this study.

5.1.2 Previously Recorded Cultural Resources

The available SCCIC records indicate that four (4) cultural resources have been previously recorded within 0.5-mile of the Project site, none of which overlap or are adjacent to the Project site. All four resources are historic built environment resources; no archaeological cultural resources were identified as a result of the records search. Table 2, below, summarizes all previously recorded cultural resources identified within the search area.

Table 2. Previously Recorded Cultural Resources within a 0.5-Mile Radius of the Proposed Project Site

SCCIC ID	Description	Recording Events	NRHP Status	Proximity to Proposed Project Site
P-19-187542	Ancillary building known as the Field House, associated with El Camino College and constructed in 1949.	2003 (T. Gregory)	7R: Identified in Reconnaissance Level Survey: not evaluated	480m (1575ft) northwest of the proposed Project site
P-19-187543	Classroom building known as the Business Building, associated with El Camino College and constructed in 1953.	2003 (T. Gregory)	7R: Identified in Reconnaissance Level Survey: not evaluated	300m (985ft) northeast of the proposed Project site
P-19-187544	A set of classroom buildings known collectively as the Humanities Building, associated with El Camino College and constructed in 1950. OHP Property #148763	2003 (T. Gregory)	2S2: Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the CR.	420m (1380ft) northeast of the proposed Project site
P-19-190051	Two-story church, Calvary Baptist Church, originally constructed in 1956. OHP Property #181357	2010 (K.A. Crawford); 2012 (Dana E. Supernowicz)	6Y: Determined to be ineligible for NR by consensus through Section 106 process – Not evaluated for CR or Local Listing.	528m (1730ft) northeast of the proposed Project site

5.2 Review of Historical Maps and Aerial Photographs

Dudek consulted historical maps and aerial photographs through the Nationwide Environmental Title Research, LLC (NETR) to better understand any human-made modification or changes resulting from natural events to the proposed Project site and surrounding properties. Dudek also consulted historical maps to further identify available cultural data about the proposed Project site and surrounding areas. All sources consulted are further discussed below for all available years.

5.2.1 Historical Topographic Maps

Historical Topographic maps reviewed are available for the years 1896 through 2018 (NETR 2021a).

- The 1896 to 1927 topographic maps show the proposed Project site and surrounding area as undeveloped. There are train tracks, labeled “Redondo”, south of the proposed Project site, Redondo Beach Boulevard to the north, an unnamed road to the east (presumably Crenshaw Boulevard), and a slough (brackish body of water) is depicted southeast of the proposed Project site.
- The 1930 topographic map shows a portion of the slough northwest of Redondo Beach Boulevard and southwest of Crenshaw Boulevard with a section of waterway connecting the two slough portions. The section of connecting water does not appear to be channelized and partially overlaps the proposed Project site’s southern boundary.
- In the 1934 topographic map the waterway appears to be formally channeled and West 164th Street is also depicted for the first time.
- The 1941 topographic map titles the previously depicted channel as “Dominguez Channel”.
- The 1942 topographic map shows no significant changes to the proposed Project site and surrounding areas.
- The 1952 topographic maps does not show any significant changes to the proposed Project site however the pond within Alondra Park and El Camino Jr College are depicted.
- The 1957 topographic map shows no significant changes to the proposed Project site and immediate vicinity.
- The 1965 topographic map depicts an increase of development south of the Dominguez Channel and east of Crenshaw Boulevard. The following topographic maps show no significant changes to the proposed Project site.

While topographic maps are informative, they don't show the specific changes to a landscape overtime and at times, are inconsistent with what is depicted year to year. Nonetheless, the information gathered contributes to the understanding of the chronological development of the study area.

5.2.2 Historical Aerial Photographs

Available historical aerial photographs included years 1952 through 2018 (NETR 2021b).

- The 1952 aerial shows the proposed Project site as undeveloped. The Dominguez Channel is present south of the proposed Project site and West Redondo Beach Boulevard is present to the northwest. The areas south of Dominguez Channel, North of West Redondo Beach Boulevard and east of Crenshaw Boulevard are mostly developed. This is consistent with what is depicted in the 1952 topographic map.
- The 1963 aerial shows an increase in vegetation growth within the proposed Project site. The section of the proposed Project site which borders the Dominguez Channel appears to have increased in elevation.
- The 1972 aerial shows the proposed Project site as a paved parking lot.
- The 1980 aerial shows some minor vegetation growth along the western and southern perimeter of the proposed Project site.
- The 1994 to 2018 aerials show no significant changes to the proposed Project site.

5.2.3 Other Historical Maps

The following section is a review of additional historical maps, including maps provided through the SCCIC records search (USGS 1896 and U.S. Army Corps of Engineers 1944 maps) and Sanborn Fire Insurance Maps.

- The 1896 Map prepared by USGS Survey Director Charles D. Walcott, depicts the Redondo area of Los Angeles County. It shows the proposed Project site as undeveloped with a slough depicted southeast and outside of the proposed Project site.
- The 1944 Map prepared by the Army Corps of Engineers also depicts the Redondo area of Los Angeles County. The map shows Dominguez Channel, Crenshaw Boulevard, Redondo Beach Boulevard, and West 164th Street. The former slough is labeled as Laguna Dominquez and is shown as southeast of the proposed Project site

A search of Sanborn Fire Insurance maps did not result in identifying any maps depicting the proposed Project site.

5.2.4 1938 Kirkman-Harriman Historical Map Review and Review of Academic Literature

Dudek cultural resources specialists reviewed pertinent academic and ethnographic literature for information pertaining to past Native American use of the proposed Project site. This review included consideration of sources commonly identified through consultation, notably the 1938 Kirkman-Harriman Historical Map (Figure 6). Based on this map, the proposed Project site is approximately 0.13 miles southeast of the confluence of then southwest–northeast-trending “New Salt Road 1848 – 1878,” noted to be an old or “ancient” road established in 1848; over 2.25 miles west of the north-south oriented “Old Salt Road,” also noted to be an old or “ancient” road; over 2.5 miles west of the nearest mapped unnamed Native American village; and over 1.5 miles west of a tributary that travels south to a slough that is over 3.5 miles to the southeast of the proposed Project site. None of the features identified on the 1938 Kirkman-Harriman Historical Map intersect, overlap or are adjacent to the proposed Project site. Furthermore, no archaeological evidence of the nearest village on the 1938 Kirkman-Harriman map was provided in the SCCIC records search results or review of other archaeological information. This is likely due to the over 2.5-mile distance from the nearest mapped village location to the proposed Project site and is outside of the proposed Project’s records search buffer.

It should be noted that this map is highly generalized due to scale and age and may be somewhat inaccurate with regard to distance and location of mapped features. Additionally, this map, is considered a secondary source of information as it was prepared based on review of historic documents and notes more than 100 years following secularization of the missions (in 1833). Although the map contains no specific primary references, it matches with the details documented by the Portolá expedition (circa 1769–1770). The map is a valuable representation of post-contact mission history; however, it is limited to a specific period of Native American history and substantiation of the specific location and uses of the represented individual features should be verified by archaeological records and/or other primary documentation.

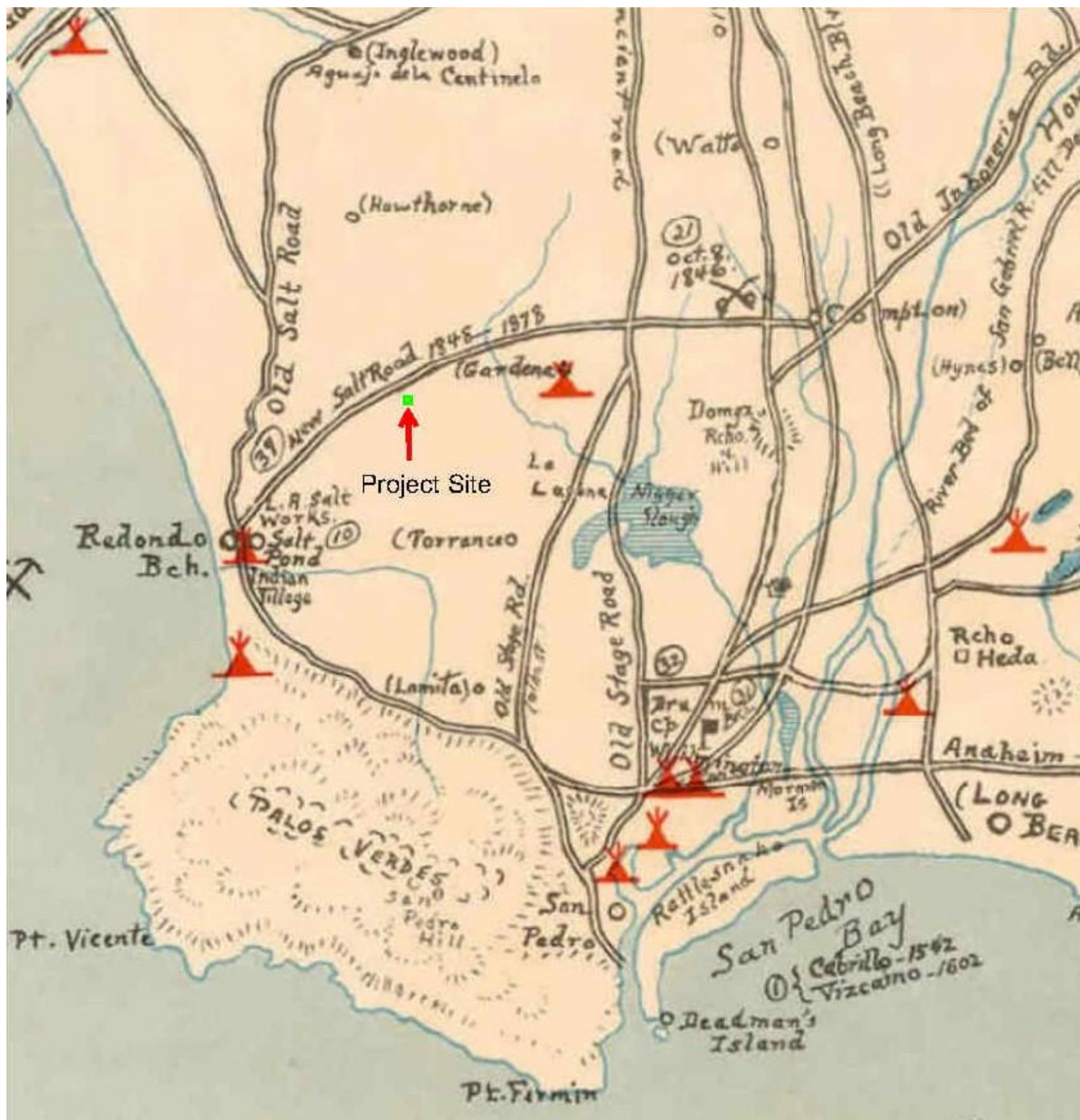


Figure 4. 1938 Kirkman-Harriman Historical Map (Proposed Project site depicted in green and pointed to by red arrow)

5.3 Native American Coordination

5.3.1 NAHC SLF Search

Dudek requested a search of the SLF on August 5, 2021, to determine the presence of any Native American cultural resources within the proposed Project site. The NAHC maintains and reviews the SLF. Andrew Green, Cultural Resources Analyst, provided the SLF search results on September 2, 2021. The NAHC SLF records search results were negative for known Native American heritage resources within the proposed Project site. The NAHC identified nine (9) Native American individuals who would potentially have specific knowledge as to whether or not other cultural resources are identified within the proposed Project site that could be at-risk.

Note: Sacred Land Files maintained by the NAHC represent a curation of “ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California” (nahc.gov 2021) provided by Tribal entities and Native American representatives. For various reasons, Tribal entities and Native American representatives do not always report sacred lands or TCRs to the NAHC; as such, the NAHC’s SLF is not necessarily a comprehensive list of known TCRs and searches of the SLF must be considered in concert with other research and not used as a sole source of information regarding the presence of TCRs. Additionally, results of the SLF provided relate to the general regional area within and surrounding the proposed Project site and don’t necessarily equate to the existence of resources within the specific area occupied by the proposed Project site.

5.3.2 Assembly Bill 52 Consultation

The proposed Project is subject to compliance with Assembly Bill (AB) 52 (PRC 21074), which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives that have requested notification who are traditionally or culturally affiliated with the geographic area of the proposed Project site. All records of correspondence related to AB 52 notification and any subsequent consultation are on file with the District. A summary of the consultation record is provided and addressed in the Mitigated Negative Declaration document for the proposed Project.

5.4 Geotechnical Report Review

The geotechnical report, *Geotechnical Exploration Proposed New Fire Training Facility El Camino College 16007 Crenshaw boulevard Torrance, Los Angeles County, California* (Leighton Consulting, Inc. 2021), was prepared for the El Camino Community College District in August 2021. The report details the results of subsurface explorations at a series of locations within the proposed Project site, to determine subsurface conditions. According to the report, seven (7) hollow-stem auger borings were completed on May 5 and 6, 2021. The borings are located in the southern half of the proposed Project site, along the southern and western boundaries. The borings were drilled to maximum depths ranging from 10 to 51.5 feet below ground surface (bgs). The results of the borings indicated fill soils encountered from 7.5 to 10 feet bgs underlain by native soils encountered from 7.5 to 51.5 feet bgs. The fill soils are recorded as Undocumented Fill [Afu] and described as a thin veneer of dark brown silty sand overlaying grayish brown to dark gray lean clay and fat clay. It is noted that no fill placement has been documented at this site, so Leighton Consulting, Inc. theorizes that the fill may have been placed around 1949, in accordance with the construction of the school. The native soils are recorded as Quaternary Old Alluvial Valley Deposits [Qoa] and described as interbedded fat clay, lean clay, and sandy clay. The results of the subsurface testing are summarized in Table 3 below.

Table 3. Boring Results of Subsurface Testing Conducted by Leighton Consulting 2021

Boring	0-15 ft	15-30 ft	30-45 ft	45-60 ft	60-75 ft
B-1	0-10 ft: Fill Soils		10-26.5 ft: Native Soils		
B-2	0-7.5 ft: Fill Soils	7.5-51.5 ft: Native Soils			
B-3	0-8.5 ft: Fill Soils	8.5-10 ft: Native Soils			
B-4	0-8.5 ft: Fill Soils	8.5-10 ft: Native Soils			
B-5	0-10 ft: Fill Soils		10-26.5 ft: Native Soils		
B-6	0-10 ft: Fill Soils		10-51.5 ft: Native Soils		
B-7	0-7.5 ft: Fill Soils		7.5-26.5 ft: Native Soils		
Fill Soils – Undocumented Fill			Native Soils – Quaternary Old Alluvial Valley Deposits		

5.5 Archaeological Survey

5.5.1 Methods

Dudek Lead Archaeologist, Linda Kry, conducted a reconnaissance-level survey of the proposed Project site on December 8, 2021. The survey was conducted using standard archaeological procedures and techniques. Due to the developed nature of the proposed Project site, the pedestrian survey consisted of opportunistic examination of exposed ground surface within landscaping elements. 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, and building materials). Ground disturbances such as burrows, cut banks, bases of trees and bushes were also visually inspected for exposed subsurface materials. No artifacts were collected during the survey.

All fieldwork was documented using field notes; digital photography; iPad technology with close-scale field maps; and aerial photographs. All field notes, photographs, and records related to the current study are on file at Dudek's Pasadena, California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

5.5.2 Results

As previously described in Section 1.2 Project Location, the proposed Project site is comprised of one parcel that is approximately 2.6 acres. Based on observations made during the survey, approximately 90 percent of the site is paved and currently serves as Parking Lot L with no visible soils. The other approximately 10 percent of the proposed Project site represents the landscaped areas along the northern, western, and southern perimeter of the site with a few raised landscaped elements within the central portion of the proposed Project site, along the driveways of the parking lot. Ground surface visibility within the landscaped areas of the proposed Project site was variable, from 30 to 100 percent, and as such, in areas of dense ground coverage, surface scrapes were occasionally implemented, when necessary, to enhance detection of archaeological materials that may have been obscured on the surface. No cultural materials were identified within the landscaped areas.

As previously mentioned in Section 5.4 Geotechnical Report Review, subsurface exploratory boring investigations encountered fill soils from surface to between 7.5 to 10 ft bgs within all seven investigated areas within the landscaped areas of the proposed Project site. The presence of the fill soil is an indication that any potential cultural material present before the placement of the fill soils would have been previously buried, destroyed or displaced from the primary depositional location. Additionally, the presence of fill soils demonstrates that the native soils upon and within which cultural deposits would exist in context was not observed during the survey. Moreover, the majority of the proposed Project site (approximately 90 percent) is paved, preventing observation of exposed soils (fill or native) at the time of the survey. In consideration of these factors, observation of intact native soils was not possible, resulting in less than reliable survey results.

6 SENSITIVITY ANALYSIS

No prehistoric or historic-era archaeological resources have been identified as a result of background research, CHRIS database records search, NAHC SLF search, or the archaeological pedestrian survey. While the proposed Project site has been subject to two previous cultural resource investigations, neither study included a pedestrian survey of the proposed Project site. This suggests that the proposed Project site has not been subject to any surveys prior to the placement of fill soils or development of the proposed Project site.

According to the historical maps and aerial photographs review, the proposed Project site was undeveloped as early as 1896. Roads are shown surrounding the proposed Project site between 1892 and 1927, including Redondo Beach Boulevard to the north, an unnamed road to the east that likely represents the route of present-day Crenshaw Boulevard, and railroad tracks labeled as “Redondo” to the south, with a slough depicted to the southeast and outside of the proposed Project site footprint. By 1930, there is a waterway depicted as partially overlapping the southern boundary of the proposed Project site that appears to originate from the slough. That waterway represents the present-day Dominguez Channel, which appears to have been underway to be formally channelized in the early 1930s with the channel’s current state apparent by 1941. The proposed Project site appears to remain undeveloped until at least 1972, when it is shown as a paved parking lot.

A review of a geotechnical report prepared for the proposed Project site determined that fills soils were encountered between 7.5 to 10 ft from the existing ground surface within all seven (7) exploratory boring locations. As previously stated, current Project design indicates that the minimum depth of ground disturbance for the proposed Project site is 12 in below the existing ground surface across the site for the demolition and removal of existing pavement and base, an assumed 5 ft bgs for trenching for utilities, and a maximum depth of 8 ft below the existing ground surface for the scarification and excavation for new building foundations. Of note, the geotechnical investigations were limited to the landscaped areas along the perimeter of the proposed Project site accounting for approximately 10 percent of the site; the majority of the proposed Project site is paved and was not subject to any subsurface exploratory investigations and therefore, subsurface geological conditions within the paved areas are unknown. Given this, the proposed depths of ground disturbance (between 12 in and 8 ft bgs), specifically along the western and southern boundary where subsurface boring was conducted, would all encounter fill soils during Project construction, with the exception of boring locations B-2 and B-7, which encountered native soils at 7.5 ft bgs. As such, due to the presence of fill soils and paved areas within the proposed Project site, observation of intact native soils was not possible during the pedestrian survey.

In consideration of all these factors, including the limitations of the subsurface exploratory boring and the findings in the geotechnical report prepared for the proposed Project (boring conducted only in landscape beds), the potential to encounter unknown intact archaeological resources between current grade and 7.5 to 10 ft bgs along the western and southern perimeter of the proposed Project site is unlikely. However, the

potential to encounter unknown intact archaeological resources within the paved parking lot is unknown considering the lack of opportunity to observe native soils during the pedestrian survey and that no previous archaeological survey has occurred prior to placement of fill soils or development of the site. Furthermore, the Dominguez Channel, which borders the proposed Project site to the south, was not channelized until the early 1940s and prior to channelization, intersected the southern portion of the proposed Project site. Therefore, the potential to encounter intact archaeological deposits within native soils during Project construction along the western and southern perimeter of the proposed Project site (7.5 to 8 ft bgs) is unlikely. Because the paved parking lot was not subjected to subsurface exploratory boring, the potential for intact archaeological deposits to exist within the proposed depths of disturbance within approximately 90 percent of the proposed Project site, is unknown. Given that topographic maps depict a slough southeast of the proposed Project site between 1896 to 1927 and that this slough was not formally channelized until the early, there is a potential for the proposed Project site to be buried in alluvial and flood deposits beneath fills soils. In the event that unanticipated archaeological resources are encountered during Project implementation, impacts to these resources may be significant. As such, management recommendations are provided in Section 7 to ensure that measurements are in place for the proper treatment of any inadvertently discovered archaeological resources and that potential impacts to archaeological resources and human remains would be reduced to less than significant.

7 FINDINGS AND RECOMMENDATIONS

The specific goals of this report are as follows: to better understand the potential for cultural resources to exist within the proposed Project site through extensive background research and a pedestrian survey; and to consider the potential for yet unidentified archaeological resources to be impacted by proposed Project ground disturbances. The summary of findings for this report is provided below.

7.1 Summary of Findings

A CHRIS records search was conducted to identify the presence of cultural resources within the proposed Project site and 0.5-mile radius. Although two previous cultural resource studies, identified through SCCIC records, overlap the entirety of the proposed Project site, neither study included an archaeological pedestrian survey as part of the investigation but rather, focused on background and archival research. No previously recorded prehistoric or historic-era resources were identified within the proposed Project site through the SCCIC records. Additionally, a search of the NAHC's SLF for the proposed Project site and surrounding 0.5-mile area did not identify the presence of Native American resources. In addition to this, a reconnaissance-level pedestrian survey of the proposed Project site did not identify any cultural resources. A review of historical maps and aerial images shows that the proposed Project site was undeveloped since at least 1896 and was not paved and utilized as a parking lot until at least 1972. In the early 1930s, a waterway is shown as partially overlapping the southern portion of the proposed Project site, and appears to be an offshoot of the slough to the southeast and outside of the proposed Project site. The slough, referred to in 1938 as Laguna Dominguez Slough, was later subject to draining and then channelized to become the present-day Dominguez Channel.

These activities, including the level of development within the proposed Project site and immediate vicinity during the first half of the twentieth century, may have disturbed, displaced, or destroyed any cultural resources within the site. Although archaeological sensitivity within the proposed Project site is considered low, it is possible that intact archaeological deposits are present at subsurface levels within native soils. As previously discussed, subsurface exploratory boring was conducted at seven locations and these locations were limited to the landscape areas along the western and southern boundary of the proposed Project site; no subsurface exploratory testing was conducted within the paved parking lot, which accounts for the majority of the site (approximately 90 percent). Given the subsurface conditions at the locations of the areas tested and in consideration of the proposed depths of ground disturbance for the Project (12 in to 8 ft bgs) the potential to encounter intact subsurface archaeological resources along the western and southern boundary is unlikely; however, the potential to encounter resources within the paved parking lot is unknown. The archaeological survey conducted did not result in the identification of surficial evidence of cultural material; however, due to the presence of fill soils, observation of intact native soils was not possible, resulting in less than reliable survey results.

For these reasons, the proposed Project site should be treated as potentially sensitive for archaeological resources. The following measures have been developed to ensure that any inadvertent discovery of archaeological resources will be treated appropriately and in accordance with CEQA regulations: preconstruction training, retention of an on-call archaeologist to respond to and address inadvertent discoveries, and inadvertent discovery clause implemented and included on all construction plans associated with ground disturbing activities. Dudek further recommends monitoring be conducted during ground disturbing activities from 7.5 ft below current grade along the western and southern perimeter and after the removal of pavement and base within the parking lot area, and an additional survey be conducted once fill soils and pavement/base have been removed from the entire site. If cultural materials are observed during the course of ground disturbing activities below fill soils, then subsurface testing may be required. With the implementation of the recommendations provided below, the proposed Project will have a less than significant impact on archaeological resources.

7.2 Recommendations

Workers Environmental Awareness Program Training. All construction personnel and monitors who are not trained archaeologists should be briefed regarding unanticipated discoveries prior to the start of construction activities. Informational pamphlet and/or a presentation shall be prepared in order to ensure proper identification and treatment of inadvertent discoveries. The purpose of the Workers Environmental Awareness Program (WEAP) training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. Each worker should be instructed in the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor.

Archaeological Construction Monitoring and Supplemental Pedestrian Survey. A qualified archaeologist should be retained and on-call to respond and address any inadvertent discoveries identified for the duration of construction activities. Additionally, in consideration of the potential to encounter intact cultural deposits beneath fill soils, the qualified archaeologist shall monitor ground disturbing activities 7.5 ft below current grade along the western and southern perimeter as well as monitor ground disturbance within the parking lot area after the removal of pavement. An additional survey be conducted once fill soils and pavement/base have been removed from the entire site to ensure no cultural deposits underly the fill layer and/or pavement/base. A qualified archaeological principal investigator, meeting the Secretary of the Interior's Professional Qualification Standards, should oversee and adjust monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor will be responsible for maintaining daily monitoring logs.

Inadvertent Discovery of Cultural Resources Clause. In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed Project, all construction work occurring within 100 feet of the find should immediately stop and a qualified archaeologist is notified immediately to assess the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work such as preparation of an archaeological treatment plan, testing, data recovery, or monitoring may be warranted.

If monitoring is conducted, an archaeological monitoring report should be prepared within 60 days following completion of ground disturbance and submitted to the District for review. This report should document compliance with approved mitigation, document the monitoring efforts, and include an appendix with daily monitoring logs. The final report should be submitted to the SCCIC.

Inadvertent Discovery of Human Remains Clause. An inadvertent discovery clause, written by an archaeologist should be added to all construction plans associated with ground-disturbing activities. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the Los Angeles County Coroner should be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains should occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner should notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the MLD from the deceased Native American. The MLD should complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.

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APPENDIX A

CONFIDENTIAL SCCIC Records Search Results

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APPENDIX B

Native American Heritage Commission Sacred Lands File Search Results

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NATIVE AMERICAN HERITAGE COMMISSION

September 2, 2021

Jennifer De Alba
DudekVia Email to: jdealba@dudek.com**Re: 13453 El Camino College Fire Academy Project, Los Angeles County**

Dear Ms. De Alba:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

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

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment

CHAIRPERSON
Laura Miranda
LuiseñoVICE CHAIRPERSON
Reginald Pagaling
ChumashSECRETARY
Merri Lopez-Keifer
LuiseñoPARLIAMENTARIAN
Russell Attebery
KarukCOMMISSIONER
William Mungary
Paiute/White Mountain
ApacheCOMMISSIONER
**Julie Tumamait-
Stenslie**
ChumashCOMMISSIONER
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