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TECHNICAL MEMORANDUM

To: Stacie Henderson
CAJA Environmental Services, LLC
15350 Sherman Way, Suite 315
Van Nuys, California 91406

From: Rafaella Lisboa, Project Manager

Date: March 9, 2023

Re: **Archaeological Resources Assessment for the Proposed Chaminade College Preparatory High School Project, West Hills, California / SWCA Project No. 067816**

INTRODUCTION

CAJA Environmental Services, LLC (CAJA), retained SWCA Environmental Consultants (SWCA) to conduct an archaeological resources assessment for the proposed Chaminade College Preparatory High School Project (project), located in the West Hills neighborhood of the city of Los Angeles, California. The study was carried out to identify the presence of archaeological resources on the project site and assess the potential for encountering undocumented archaeological resources as a result of project implementation. In accordance with the approved scope of work, built architectural resources are not addressed.

The proposed project will expand and update the school campus with a total lot area of approximately 25.86 acres, including a new three-story school building, updated parking areas, remodeled athletic fields, new student quads, and renovated classrooms and offices on the existing campus (located on approximately 21.03 acres at 7500 Chaminade Avenue, 23241 Cohasset Street, and 23260 Saticoy Street; “Main Campus”), an expanded school campus to include approximately 4.83 acres located across Saticoy Street at 23217–23255 Saticoy Street and 7619–7629 Woodlake Avenue proposed for new athletic and parking facilities (new “North Campus”), and a new pedestrian bridge across Saticoy Street (“pedestrian bridge”). This memorandum summarizes the environmental and cultural context for the project and its vicinity, presents the results of background research conducted through the California Historical Resources Information System (CHRIS) and additional archival sources, provides findings with regard to potential archaeological constraints, and offers recommendations for future work based on the findings. Since the project site is fully paved, landscaped, or otherwise developed, thereby obscuring the original ground surface, an archaeological resources survey was not conducted as part of this study. The studies were conducted in accordance with the California Environmental Quality Act (CEQA), with the City of Los Angeles (City) as lead agency.

This archaeological resources assessment was prepared by Project Manager Rafaella Lisboa, M.A., RPA, who conducted background research and authored the report, under the direction of Principal Investigator Michael Bever, Ph.D., RPA, who meets the Secretary of the Interior’s Professional Qualifications Standards (PQS) for archaeology.

PROJECT DESCRIPTION

The project consists of changing the existing Main Campus and adding a new North Campus. The changes to the Main Campus include a partial demolition of existing surface parking lots, demolition of approximately 32,204 square feet of existing classroom buildings, including the removal of existing portable buildings, and the addition of approximately 60,760 square feet of new floor area to include a new administrative, multi-purpose and classroom building, renovation of existing offices, and the addition of electric vehicle (EV) parking and charging stations within most existing surface parking lots.

The project also involves the expansion of the high school to the North Campus on the north side of Saticoy Street, including the demolition of the existing structures on site totaling approximately 58,706 square feet and the existing surface parking lot. The expansion to the North Campus includes the development of approximately 8,494 square feet of floor area within a proposed athletic field pool house, locker rooms, and proposed building to house restrooms and concessions. The balance of the North Campus site will include a proposed new soccer and baseball field, a new pool and two new surface parking lots. The maximum depth of excavation within the Main Campus area is 8 feet; the North Campus area will be excavated to a maximum depth of 20 feet below surface.

A new pedestrian bridge will be constructed to span Saticoy Street, connecting the North Campus to the Main Campus. The pedestrian bridge will have access at the surface parking lot of the North Campus and the new main entrance to the high school on the Main Campus. In addition, new fencing and vehicular gates, to be located along the northeast drive aisle, parent drop-off along Chaminade Avenue, and the easternmost access along Cohasset Street, will be provided on the Main Campus to complete the perimeter security. New 10-foot-high ornamental fencing will be provided around the perimeter of the North Campus.

New construction on the Main Campus includes a multistory building at the main entrance that will include administrative offices, counseling offices, a library, a multi-purpose room, classrooms, and laboratories. The existing single-story administrative office buildings at the southeast corner of the Main Campus will undergo renovation but will not increase in floor area or height. A new surface parking lot will be constructed in place of the existing paved driveway adjacent to the single-story office building at the southeast corner of the Main Campus. Finally, additional improvements to the Main Campus will include minor demolition and resurfacing of the existing baseball field along Cohasset Street, to be reutilized as a softball field, and the removal and resurfacing of the north surface parking lot to create a new landscaped quad area adjacent to the new administrative building.

Improvements to the North Campus include a baseball field, practice soccer fields, swimming pool, associated facilities, and surface parking. The baseball and soccer fields are inclusive of 40-foot-high safety netting along a portion of the outfield perimeter; a 26-foot-high electric scoreboard located in left-center field facing Saticoy Street; single-story locker rooms, batting cages, and bull pens located along the first and third base-lines; bleachers providing approximately 350 seats and a shade structure reaching 19 feet in height are located behind home plate; and an approximately 100-square-foot press box located between the home and visiting seating sections. Eight stadium light standards ranging in height from 70 to 90 feet are proposed, with the 70-foot light standards located along the perimeter of left and right field and the 80- and 90-foot light standards along Saticoy Street and adjacent to the new surface parking lot. To the west of the baseball field, a 1,540-square-foot single story concession and restroom building (16 feet in height), a 95-stall surface parking lot, and entrance to the pedestrian bridge are proposed.

To the east of the baseball field, an in ground pool with four 40-foot-tall light standards, a single-story (19-foot-high), 6,094-square-foot athletic field and pool house, and 19 surface parking stalls is proposed. There are currently four ingress/egress points along Saticoy Street which will be reduced to the two

access points for this project. There are currently two ingress/egress points along Woodlake Avenue, which will be reduced to one ingress/egress driveway at the approximate location of the existing north access point.

PROJECT LOCATION

The project site comprises five parcels. This includes 7500 Chaminade Avenue (Assessor's Parcel Numbers [APNs] 2027-005-002 and -009), which contains the high school campus (the Main Campus). The proposed project will develop another property designated as the North Campus, which is located at the northwest corner of Saticoy Street and Woodlake Avenue, at 23255 Saticoy Street, 7629 Woodlake Avenue, and 7621 Woodlake Avenue (APNs 2027-005-005, -006, and -007). Combined, the Main Campus and proposed North Campus total approximately 25.9 acres. The proposed North Campus is currently developed with a multi-tenant mini shopping center and surface parking lot, built between 1962 to 1964 (Figure A-1 in Appendix A). The project site is in Section 35, Township 2 North, Range 17 West, and is plotted on the U.S. Geological Survey (USGS) Calabasas, California, quadrangle (Figure A-2 in Appendix A).

REGULATORY SETTINGS

State Regulations

The California Office of Historic Preservation (OHP), a division of the California Department of Parks and Recreation (DPR), is responsible for carrying out the duties described in the California Public Resources Code (PRC) and maintaining the California Historic Resources Inventory and California Register of Historical Resources (CRHR). The state-level regulatory framework also includes CEQA, which requires the identification and mitigation of substantial adverse impacts that may affect the significance of eligible historical and archaeological resources.

California Environmental Quality Act

CEQA requires a lead agency to analyze whether historic or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (PRC 21084.1). Answering this question is a two-part process. First, the determination must be made as to whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential "substantial adverse change in the significance" of the resource.

HISTORICAL RESOURCES

According to Section 15064.5 of the CEQA Guidelines, for the purposes of CEQA, historical resources are defined as follows:

- A resource listed in, or formally determined eligible . . . for listing in the [CRHR] (PRC 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the [PRC] or identified as significance in a historic resources survey meeting the requirements of Section 5024.1(g) of the [PRC].
- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall

be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing in the [CRHR] (as defined in PRC Section 5024.1, Title 14 CCR, Section 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) does not meet National Register of Historic Places (NRHP) criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be a historical resource (PRC 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines, Section 15064.5[b]).

ARCHAEOLOGICAL RESOURCES

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

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

If it can be demonstrated that a proposed project will cause damage to a unique archaeological resource, the lead agency may require that 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 21083.2[a]–[c]). CEQA notes that if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered to be a significant effect on the environment (CEQA Guidelines, Section 15064.5[c][4]).

California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. According to PRC 5024.1(c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

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

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR.

Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code (CHSC) Section 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at CCR Section 15064.5; PRC Section 5097.98 illustrates the process to be followed in the event that remains are discovered. If human remains are discovered during construction, no further disturbance to the site shall occur, and the County Coroner must be notified (CCR 15064.5 and PRC 5097.98).

Local Regulations

Los Angeles Historic-Cultural Monuments

Local landmarks in the City of Los Angeles are known as Historic-Cultural Monuments (HCMs) and are under the aegis of the City of Los Angeles Planning Department, Office of Historic Resources (OHR). An HCM, monument, or local landmark is defined in the Cultural Heritage Ordinance as follows:

Historic-Cultural Monument (Monument) is any site (including significant trees or other plant life located on the site), building or structure of particular historic or cultural significance to the City of Los Angeles, including historic structures or sites in which the broad cultural, economic or social history of the nation, State or community is reflected or exemplified; or which is identified with historic personages or with important events in the main currents of national, State or local history; or which embodies the distinguishing characteristics of an architectural type specimen, inherently valuable for a study of a period, style or method of construction; or a notable work of a master builder, designer, or architect whose individual genius influenced his or her age (Municipal Code Section 22.171.7).

City of Los Angeles General Plan

The Conservation Element of the City of Los Angeles General Plan recognizes paleontological resources in Section 3: "Archaeological and Paleontological" (II-3) and identifies protection of paleontological resources as an objective (II-5). The General Plan identifies site protection as important, stating, "Pursuant to CEQA, if a land development project is within a potentially significant paleontological area, the developer is required to contact a bona fide paleontologist to arrange for assessment of the potential impact and mitigation of potential disruption of or damage to the site. If significant paleontological resources are uncovered during project execution, authorities are to be notified and the designated paleontologist may order excavations stopped, within reasonable time limits, to enable assessment, removal or protection of the resources" (City of Los Angeles 2001).

City of Los Angeles CEQA Thresholds of Significance

The City of Los Angeles' CEQA Thresholds of Significance Guide (City of Los Angeles 2006) Section D:1 specifies that the determination of significance for paleontological resources shall be made on a case-by-case basis, taking into consideration the following factors:

- Whether, or the degree to which, the project might result in the permanent loss of, or loss of access to, a paleontological resource; and
- Whether the paleontological resource is of regional or statewide significance (City of Los Angeles 2006).

SETTING

Environmental Setting

The project site is located in the West Hills neighborhood of the City, situated in the western portion of the San Fernando Valley. The project site is within a highly developed and urbanized area bordered by the Simi Hills to the west, Chatsworth to the north, Canoga Park to the east, and U.S. Route 101 to the south (Figure A-3 in Appendix A). The immediate vicinity of the project site is characterized primarily by residential properties. Geographically, the project site is located 4 miles north of the Santa Monica Mountains and 2 miles southwest of Chatsworth Reservoir, which is formed on the eastern margin of the Simi Hills. The project site is situated on a relatively flat, alluvial plain with a slight southern aspect at an elevation of approximately 255 meters (m) (837 feet) above mean sea level. The surficial geology of the site has been identified as late to middle Pleistocene old alluvial fan deposits, undivided (Qof) and late Miocene Modelo Formation, undivided (Tm). According to the paleontological resources study conducted for this project, the depth to the underlying, previously undisturbed sediments is unknown, but likely very shallow (e.g., 3 feet below ground surface) (Carson 2022). Historical topographic maps show two intermittent streams in the vicinity of the project site: Dayton Creek approximately 0.6 miles to the north, and Bell Creek approximately 0.7 mile to the south. Dayton Creek connects to Chatsworth Creek, which is located approximately 0.7 mile east of the project site. Both Chatsworth and Bell Creeks connect to the south-flowing Los Angeles River, currently located approximately 2.1 miles southeast of the project site (Figure A-4 in Appendix A).

CULTURAL SETTING

Prehistoric Period

In the past several decades, researchers have devised numerous prehistoric chronological sequences to aid in understanding cultural changes in southern California. Building on early studies and focusing on data synthesis, Wallace (1955, 1978) developed a prehistoric chronology for the southern California coastal region that is still widely used today and is applicable to near-coastal and many inland areas. Four horizons are presented in Wallace's prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Although Wallace's 1955 synthesis initially lacked chronological precision due to a paucity of absolute dates (Moratto 1984:159), this situation has been alleviated by the availability of thousands of radiocarbon dates obtained by southern California researchers in the last three decades (Byrd and Raab 2007:217). Given this, several revisions were subsequently made to Wallace's 1955 synthesis using radiocarbon dates and projectile point assemblages (e.g., Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The summary of prehistoric chronological sequences for southern California coastal and near-coastal areas presented below is a composite of information in Wallace (1955) and Warren (1968), as well as later studies, including Koerper and Drover (1983).

Horizon I: Early Man (ca. 10,000–6000 B.C.)

The earliest accepted dates for archaeological sites on the southern California coast are from two of the northern Channel Islands, located off the coast of Santa Barbara. On San Miguel Island, Daisy Cave clearly establishes the presence of people in this area ca. 10,000 years ago (Erlandson 1991:105). On Santa Rosa Island, human remains have been dated from the Arlington Springs site to ca. 13,000 years ago (Johnson et al. 2002). Present-day Orange and San Diego Counties contain several sites dating from 9,000 to 10,000 years ago (Byrd and Raab 2007:219; Macko 1998:41; Mason and Peterson 1994:55–57; Sawyer and Koerper 2006). Although the dating of these finds remains controversial, several sets of human remains from the Los Angeles Basin (e.g., “Los Angeles Man,” “La Brea Woman,” and the Haverly skeletons) apparently date to the middle Holocene, if not earlier (Brooks et al. 1990; Erlandson et al. 2007:54).

Recent data from Horizon I sites indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas (e.g., Jones et al. 2002) and a greater emphasis on large-game hunting inland.

Horizon II: Milling Stone (6000–3000 B.C.)

Set during a drier climatic regime than the previous horizon, the Milling Stone horizon is characterized by subsistence strategies centered on collecting plant foods and small animals. The importance of seed processing is apparent in the dominance of stone grinding implements in contemporary archaeological assemblages, namely milling stones (metates) and hand stones (manos). Recent research indicates that Milling Stone horizon food procurement strategies varied in both time and space, reflecting divergent responses to variable coastal and inland environmental conditions (Byrd and Raab 2007:220).

Horizon III: Intermediate (3000 B.C.–A.D. 500)

The Intermediate horizon is characterized by a shift toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard seed resources to the increasing importance of the acorn (e.g., Glassow et al. 1988; True 1993).

Horizon IV: Late Prehistoric (A.D. 500–Spanish contact)

In the Late Prehistoric horizon, there was an increase in the use of plant food resources in addition to an increase in land and sea mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric horizon, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of smaller bone and shell circular fishhooks; perforated stones; arrow shaft straighteners made of steatite; a variety of bone tools; and personal ornaments such as beads made from shell, bone, and stone. There was also an increased use of asphalt for waterproofing and as an adhesive. Late Prehistoric burial practices are discussed in the Native American Ethnographic Overview section below.

By A.D. 1000, fired clay smoking pipes and ceramic vessels were being used at some sites (Drover 1971, 1975; Meighan 1954; Warren and True 1961). The scarcity of pottery in coastal and near-coastal sites

implies that ceramic technology was not well developed in that area, or that occupants were trading with neighboring groups to the south and east for ceramics. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that functioned in the same capacity as ceramic vessels.

During this period, there was an increase in population size accompanied by the advent of larger, more permanent villages (Wallace 1955:223). Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round. The populations of these villages may have also increased seasonally.

In Warren's (1968) cultural ecological scheme, the period between A.D. 500 and European contact, which occurred as early as 1542, is divided into three regional patterns: Chumash (Santa Barbara and Ventura Counties), Takic/Numic (Los Angeles, Orange, and western Riverside Counties), and Yuman (San Diego County). The seemingly abrupt introduction of cremation, pottery, and small triangular arrow points in parts of modern-day Los Angeles, Orange, and western Riverside Counties at the beginning of the Late Prehistoric period is thought to be the result of a Takic migration to the coast from inland desert regions. Modern Gabrielino, Juaneño, and Luiseño people in this region are considered the descendants of the Uto-Aztecans, Takic-speaking populations that settled along the California coast in this period.

Ethnographic Overview

Alfred Kroeber was the first scholar to propose boundaries of traditional territories inhabited by California Native American populations following Spanish contact. Kroeber's ethnographic work (1925) established the conventions for names and territorial boundaries, drawn heavily from linguistic groupings, on which subsequent scholarly research would be based (Bean and Smith 1978). These proposed tribal boundaries, however, are far from exact and subsequent scholars have suggested alternate delineations for traditional tribal territories for the region (cf. Johnson 2006). Based on more recent iterations of traditional tribal territory boundaries, the project site is located just within the boundaries of the Ventureño Chumash (King 2011) along a shared border with the Gabrielino to the east, and the Tataviam to the northeast. Therefore, ethnographic contexts for all three tribal groups are presented below.

Chumash

The project area is a cultural transition zone and was traditionally occupied by the Ventureño Chumash (Grant 1978a–c; Kroeber 1925). The Chumash people lived between Malibu in Los Angeles County and San Marcos Creek near the Monterey County line, on all four of the northern Channel Islands, and as far east as the edge of Kern County (Milliken and Johnson 2005). The Chumash territory was divided into seven parts, each representing various linguistic subgroups, some of which were nearly mutually unintelligible (Kroeber 1925; Milliken and Johnson 2005). Most of our information regarding Chumash traditional culture comes from the ethnographic studies conducted by J. P. Harrington, who worked among the surviving Chumash population between 1912 and 1958. The following descriptions of Chumash society are compiled from scant ethnographic and ethnohistoric sources that entail numerous biases and should be taken as general accounts of Native lifeways observed at the time of European contact and later (after indigenous lifeways had been severely disrupted by European presence in the Americas) that likely preclude primary aspects of cultural identity and practices.

The term “Chumash” is derived from a Native American word initially applied to the people living on Santa Cruz Island (King 1994); though Chumash now refers to the entire linguistic and ethnic group of societies that occupied the coast between San Luis Obispo and northwestern Los Angeles County, including the northern Channel Islands, and inland to the western edge of the San Joaquin Valley.

Neighboring groups included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino (Tongva) to the south.

The Chumash spoke at least six closely related Chumashan languages, which have been divided into two broad groups—Northern Chumash (consisting only of Obispeño) and Southern Chumash (Purisimeño, Ineseño, Barbareño, Ventureño, and Island Chumash) (Mithun 2001). While Island Chumash was the most divergent of the five southern languages, Ventureño may have had the most internal variation with at least six distinct dialects. The Chumashan languages are considered by some to be part of the Hokan language family, though others consider Chumashan to be an isolate stock with a long history in the Santa Barbara region, and not part of the Hokan linguistic family (Mithun 2001). As much of these languages were lost during the past several hundred years post-European contact, it is likely that debate regarding their origins will continue.

Numerous large Chumash villages extended along the Santa Barbara coastline at the time of European contact, particularly at the mouths of large drainages (Grant 1978a:Figure 1) suggesting extensive use of the greater area by Indigenous peoples. At the time of Spanish contact in 1542 and again in 1769, accounts describe settlement along the Santa Barbara Channel coast as relatively dense with multiple large villages. Estimates of total Chumash population for the initial Contact period vary from 8,000–10,000 (Kroeber 1925:551) to 18,000–22,000 (Cook and Heizer 1965:21). Coastal Ventureño and Barbareño Chumash villages were described as containing anywhere from 30 to 120 houses with several hundred to over 1,000 inhabitants and multiple canoes (Brown 2001; Grant 1978b). Early accounts by Spanish explorers note that inland villages were smaller than their coastal counterparts, with 100–500 occupants.

Permanent Chumash villages located along the coast contained hemispherical dwellings arranged in close groups. These were constructed of bent poles and covered by grass or tule mats. Average family dwellings measured approximately 6–7 m (20–23 feet) and had a hole in the roof through which light could enter and smoke would escape, and in rainy weather, these holes were covered with animal skins. Larger dwellings were also described for housing related family groups; these measured approximately 15–17 m (50–56 feet) and could contain around 60 people (Brown 2001; Hudson and Blackburn 1981). Houses in the smaller inland villages were described as rectangular and more like those found among the adjacent Takic speakers, though style and types of artifacts were distinctly like those used by the coastal Chumash (Grant 1978a:518). The chief's house was often the largest dwelling, encompassing his extended household and providing for his hospitality duties. Villages often contained storehouses, one or more subterranean sweat lodges, and a semi-circular dance ground and associated sacred ceremonial enclosure, with a nearby game field surrounded by low walls (McCall and Perry 1986). Satellite gathering or processing areas included earth ovens used to roast yucca and other foods, rockshelters, quarries, and bedrock mortars for processing acorns and similar plant resources (King 1994).

Each Chumash village had a formal cemetery, generally separate from the village proper. Ethnographic records indicate that cemeteries were marked by tall painted poles and frequently had an entrance area where ceremonies were performed. Within the cemetery, stone, wood, or bone markers identified burial sites. Occasionally, individual burials were marked by painted boards with markings indicating the occupation or clan of the deceased (Gamble et al. 2001). Prior to burial, a wake was held in a sacred enclosure. Individuals were then interred face down in a flexed position with personal objects, including effigies, steatite pipes, bowls, ollas, beads, and other grave goods. Social differentiation and hierarchy are inferred from archaeological studies that identified distinct areas appearing to denote high- and low-status families within the cemetery grounds (King 1969).

Chumash society was organized into craft guilds including canoe building, bead making, basketry making, woodworking, and weapon making, among others (Miller 1988). Being a guild member had

strong economic advantages. Membership was primarily open to the upper class, and ranking members of the guilds were ‘*antap* society members. Chumash society was divided into three classes (McCall and Perry 1986). Upper class members held the important social and religious positions, including chief, canoe builders and owners, and members in the ‘*antap* society. The middle class contained about half the population, mainly hunters, gatherers, and general workers, and social outcasts and unproductive people populated the lower class. Unlike their southern neighbors, the Chumash did not have a lineage organization and most elite marriages were matrilineal.

Every village had a chief, or *wot*, who was usually male, but hereditary rights to this role were passed down matrilineally (Johnson 1987). The *wot* had both political and religious ceremonial duties to perform; his assistant, the *paha*, helped officiate at rituals. Other officials known as *ksen* were “messengers who traveled from place to place, making announcements and gathering news for the *wot*” (McCall and Perry 1986:40). A large village usually had three to four chiefs, one of whom would be the head chief (Brown 2001). Other portions of Chumash territory were organized into provinces, or groups of villages that were ruled by a single chief.

Chumash subsistence practices varied somewhat between coastal and inland groups based on available resources, but like many indigenous Californian groups, the acorn was a dietary staple. Acorns were gathered in the autumn and stored in villages, where they were ground to a meal, leached, and then cooked daily. In addition to acorns—mainly from the coast live oak (*Quercus agrifolia*)—other nuts, such as pine nuts and walnuts, were collected. Chumash diet also included cattail roots, fruits, and pads from *Opuntia* cactus, along with bulbs and tubers (Miller 1988; Timbrook 2007). *Yucca* stalks were harvested and roasted, and the buds and flowers were also gathered and consumed. Staples included small hard seeds of several annual and perennial plants such as grass, chia and other sages, and buckwheat. Seasonal resources included berries (blackberry, elderberry, grape, madrone, laurel, and wild cherry), mushrooms, and cress.

Seeds were processed using various grinding implements including wooden and stone mortars, pestles, bedrock mortars, and hand stones. Tools used to gather plant foodstuffs consisted of at least several forms of gathering and winnowing baskets, woven seed beaters, and sharpened digging sticks. A variety of basket styles were manufactured for the processing and serving of foods, including straining and leaching acorn meal, and processed meal and other foods were cooked in water-tight baskets (Miller 1988). Other baskets were made for storing grains, acorns, meal, prepared foods, and other dietary resources. Carved steatite bowls, ollas, and comals also were used for cooking, and meals were sometimes served on wooden plates and bowls.

On the coast, shellfish was harvested from intertidal habitats and fishing was conducted from shore as well as from wooden plank canoes (*tomol*), which may also have been employed for marine mammal hunting. The *tomol* not only facilitated marine resource procurement but also facilitated interaction between the mainland and the Channel Islands. Seals, sea lions, otters, porpoises, and whales were hunted with harpoons. Deep-sea fish such as bonito, sea bass, halibut, barracuda, yellowtail, and shark were caught with hooks and lines, harpoons, and deep or shoreline nets. Digging sticks were used to procure clams and scallops from the beach sands, and flat bone or wood wedges were used to pry mussels and abalone from intertidal rocks during low tides.

Local Chumash populations captured mule deer, antelope, cottontail, jackrabbit, mice, and wood rats; mountain and valley quail, dove, and resident and migratory waterfowl, among other birds; and various types of reptiles, amphibians, and insects. Larger animals, such as mule deer, coyote, and fox, were hunted with the bow and arrow; smaller game was captured with traps and snares. Hunting was accomplished by various means, with the bow and arrow, spears, slings, throwing sticks, traps, and deadfalls (Hudson and Blackburn 1979). Hunting parties were comprised of up to eight people;

communal hunting groups used large nets and clubs, and individuals used throwing sticks to kill smaller prey like rabbits and hares (Brown 2001). Bone and shell were used to produce a wide range of utilitarian and nonutilitarian items, such as eating utensils, ornaments, whistles, gorges, fishhooks, harpoons, awls, and antler wedges. The steatite industry was especially developed in the southern areas, manifested in a variety of ornaments, vessel forms, and ceremonial objects.

Trade was an integral component of Chumash subsistence, and trade relationships among inland, coastal, and island groups were well established, though the specifics of what was traded between island and mainland groups is less clear. Coastal Chumash traded with their inland Chumash neighbors, who in turn traded with their Yokut, Tataviam, Kitanemuk, and Gabrielino neighbors to the north, east, and south (Miller 1988). Extensive trade network increased the diversity of goods available throughout Chumash territory, encouraged craft specialization, and established the coastal villages as middlemen. The coastal villages were well positioned with their access to abundant marine resources; they built and kept the boats that moved trade goods across the channel and likely profited from this exchange.

The Chumash are well known for their material culture, which included highly decorated utilitarian tools and ceremonial items, as well as rock art (Grant 1978a–b; Hudson and Blackburn 1984, 1986). Carved steatite items included bowls decorated with beads, medicine tubes, effigies, beads, pipes, and charmstones. Rock paintings are found in sheltered locations near the coast and inland to the farthest reaches of the Chumash sphere. In the interior region inhabited by the Cuyama Chumash who spoke the Ineseño dialect, archaeological and ethnographic evidence strongly suggest a Chumash affiliation with the Carrizo Plain rock art, where the rock paintings—mostly pictographs comprised of polychrome abstract designs and some petroglyphs—reach a high degree of development. Despite being recognized as the location of the most extensive rock art, the Carrizo Plain area is among the least studied of Chumash regions. The remote location of the majority of Chumash rock art suggests the paintings may represent shrines or sacred areas.

Chumash religion was well developed and integrated into everyday life. Rituals and ceremonies were observed throughout the year; the most important was performed at the Winter Solstice, when a large festival was held in honor of the Sun. Astronomers carefully marked the shortest day of the year to know when to begin the rites and dances and used the observation to recalibrate their calendar. The *Hutush* autumn harvest festival, a time of thanksgiving, celebrated the Earth Goddess as provider of all foods (McCall and Perry 1986). Ceremonies were performed in everyday life and to mark special occasions; rituals were performed to name children, cure the sick of various ailments, and initiate young men into the mysteries of religion. The ‘*antap* society, restricted to the upper class, was also the federation of shamans who controlled ceremonial observances.

Gabrielino/Tongva

The name Gabrielino (sometimes spelled Gabrieleno or Gabrieleño) denotes those people who were administered by the Spanish from Mission San Gabriel Arcángel. By the same token, Native Americans in the sphere of influence of Mission San Fernando Rey de España were historically referred to as Fernandeseño (Kroeber 1925). This group is now considered to be a regional dialect of the Gabrielino language, along with the Santa Catalina Island and San Nicolas Island dialects (Bean and Smith 1978). In the post-Contact period, Mission San Gabriel included natives of the greater Los Angeles area, as well as members of surrounding groups such as Kitanemuk, Serrano, and Cahuilla. There is little evidence that the people we call Gabrielino had a broad term for their group; rather, they identified themselves as an inhabitant of a specific community through the use of locational suffixes (e.g., a resident of Yaanga was called a Yabit, much the same way that a resident of New York is called a New Yorker) (Dakin 1978:222).

Native words that have been suggested as labels for the broader group of Native Americans in the Los Angeles region include Tongva (or Tong-v) and Kizh (Kij or Kichereno); although there is evidence that these terms originally referred to local places or smaller groups of people within the larger group that we now call Gabrielino (Heizer 1968). Many present-day descendants of these people have taken on Tongva as a preferred group name because it has a native rather than Spanish origin and one group of descendants prefers the term Kizh (King 1994). The term Gabrielino/Tongva, which combines the most commonly used group names, is used in the remainder of this study to designate native people of the Los Angeles Basin and their descendants.

Gabrielino/Tongva lands encompassed the greater Los Angeles Basin and three Channel Islands—San Clemente, San Nicolas, and Santa Catalina. Their mainland territory was bounded on the north by the Chumash at Topanga Creek, the Serrano at the San Gabriel Mountains in the east, and the Juaneño on the south at Aliso Creek (Bean and Smith 1978:538; Kroeber 1925:636).

The Gabrielino/Tongva language, as well as that of the neighboring Juaneño/Luiseño, Serrano, and Tataviam/Alliklik, belongs to the Takic branch of the Uto-Aztecan language family, which can be traced to the Great Basin area (Mithun 2004:539, 543–544). This language family’s origin differs substantially from that of the Chumash to the north and the Ipai, Tipai, and Kumeyaay farther south. The language of the Ipai, Tipai, and Kumeyaay is derived from the California-Delta branch of the Yuman-Cochimi language family, which originated in the American Southwest (Mithun 2004:577). The Chumash language is unlike both the Yuman-Cochimi and Uto-Aztecan families and may represent a separate lineage (Mithun 2004:390). Linguistic analysis suggests that Takic-speaking immigrants from the Great Basin area began moving into southern California around 500 B.C. (Kroeber 1925:579). This migration may have displaced both Chumashan- and Yuman-speaking peoples, but the timing and extent of the migrations and their impact on indigenous peoples is not well understood. The Gabrielino/Tongva language consisted of two main dialects, Eastern and Western; the Western included much of the coast and the Channel Island population (King 2004). Lands of the Western group encompassed much of the western Los Angeles Basin and San Fernando Valley, northward along the coast to the Palos Verdes Peninsula (McCawley 1996:47).

Gabrielino/Tongva society was organized along patrilineal non-localized clans, a characteristic Takic pattern. Clans consisted of several lineages, each with their own ceremonial leader. The chief, or *tómyaar*, always came from the primary lineage of the clan/village. One or two clans generally made up the population of a village. Even though the Gabrielino/Tongva did not have a distinctly stratified society, there were two general classes of individuals: elites and commoners. The elites consisted of primary lineage members, other lineage leaders (who maintained a separate ceremonial language), the wealthy, and the elite families of the various villages who commonly married among themselves. The commoner class contained those from “fairly well-to-do and long-established lineages” (Bean and Smith 1978:543). A third, lower class consisted of slaves taken in war and individuals, unrelated to the inhabitants, who drifted into the village.

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 (Bean and Smith 1978:540), but recent ethnohistoric work suggests that a number approaching 10,000 seems more likely (O’Neil 2002). Several Gabrielino/Tongva villages appear to have served as trade centers, due in large part to their centralized geographic position in relation to the southern Channel Islands and to other tribes. These villages maintained particularly large populations and hosted annual trade fairs that would bring their population to 1,000 or more for the duration of the event (McCawley 1996:113–114).

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). Other structures served as sweathouses, menstrual huts, ceremonial enclosures, and probably communal granaries. Cleared fields for races and games, such as lacrosse and pole throwing, were created adjacent to Gabrielino/Tongva villages (McCawley 1996:27).

The Gabrielino/Tongva subsistence economy centered on gathering and hunting. The surrounding environment was rich and varied, and the tribe exploited mountains, foothills, valleys, and deserts as well as riparian, estuarine, and open and rocky coastal eco-niches. Like most Native Californians, acorns were the staple food (an established industry by the time of the early Intermediate period). Acorns were supplemented by the roots, leaves, seeds, and fruits of a wide variety of flora (e.g., islay, cactus, yucca, sages, and agave). Fresh and saltwater fish, shellfish, birds, reptiles, and insects, as well as large and small mammals, were also consumed (Bean and Smith 1978:546; Kroeber 1925:631-632; McCawley 1996:119-131). Groups residing near the ocean used ocean-going plank canoes (known as a *ti'at*) and tule balsa canoes for fishing, travel, and trade between the mainland and the Channel Islands. The ocean-going canoes were capable of holding six to 14 people and were also used for travel and trade between the mainland and the Channel Islands. The tule balsa canoes were used for near-shore fishing (Blackburn 1963; McCawley 1996:117-127).

The Gabrielino/Tongva participated in an extensive exchange network, trading coastal goods for inland resources. They exported Santa Catalina Island steatite products, roots, seal and otter skins, fish and shellfish, red ochre, and lead ore to neighboring tribes, as well as people as far away as the Colorado River. In exchange, they received ceramic goods, deer skin shirts, obsidian, acorns, and other items. This burgeoning trade was facilitated through craft specialists, a standard medium of exchange (*Olivella* bead currency), and the regular destruction of valuables in ceremonies, which maintained a high demand for these goods (McCawley 1996:112-115).

Deceased Gabrielino/Tongva were either buried or cremated, with inhumation being more common on the Channel Islands and the neighboring mainland coast and cremation predominating on the remainder of the coast and in the interior (Harrington 1942; McCawley 1996:157). Cremation ashes have been found in archaeological contexts buried within stone bowls and in shell dishes (Ashby and Winterbourne 1966:27), as well as scattered among broken ground stone implements (Cleland et al. 2007). Archaeological data such as this 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 sex and status of the deceased (Johnston 1962:52-54; McCawley 1996:155-165; Reid 1926:24-25). At the behest of the Spanish missionaries, cremation essentially ceased during the post-Contact period (McCawley 1996:157).

European contact with the Gabrielino/Tongva occurred as early as 1542 with the Spanish expedition led by Juan Rodriguez Cabrillo, followed by Sebastián Vizcaíno in 1602, who both visited Santa Catalina Island. Colonization of Gabrielino/Tongva lands did not begin in earnest until after the inland expedition led by Gaspar de Portolá in 1769. By 1771, four missions had been constructed in the region, including Mission San Gabriel, founded in Los Angeles County in September 1771 (Bean and Smith 1978:540-541; Engelhardt 1927; McCawley 1996:3-6).

In the early twentieth century, Gabrielino/Tongva who still lived in San Gabriel neighborhoods near the old mission joined the Mission Indian Federation and sought redress from the federal government over lost lands. A generation later, partly as an outgrowth of the Civil Rights Movement, Gabrielino/Tongva started to form political organizations of their own to affect handling of ancestral remains discovered at construction sites and to seek federal acknowledgement of their tribe. There are currently five such

organizations with total membership approaching nearly a thousand people. They are still struggling to receive federal recognition.

Tataviam

The Tataviam lived in the upper drainage of the Santa Clara River between the San Fernando Valley to the south and the top of Pastoria Creek in the Tehachapi Mountains to the north. To the east, their ancestral lands extended to part of the southern fringe of Antelope Valley. The core Tataviam population centered on the south sides of the Liebre, Sawmill, and Sierra Pelona Mountains. Neighboring groups include the Ventureño Chumash to the west, Emigdiano Chumash to the north, Kitanemuk to the northeast, Vanyume Serrano to the east, and Western Gabrielino to the south in the San Fernando Valley (Grant 1978a; Johnson and Earle 1990:193; King and Blackburn 1978:535).

The Tataviam language is a part of the Takic branch of the Uto-Aztecan language family, also spoken by the Western Gabrielino and Kitanemuk (Mithun 2001:540). This language family can be traced to the Great Basin area, which represents an origin different from the Chumash. According to Bright (1975), the Tataviam language may be “the remnant, influenced by Takic, of a language family otherwise unknown in southern California” or the language was probably Takic but not from the Serran or Cupan branches like Kitanemuk and Vanyume, respectively. The Tataviam language probably began to differentiate itself from the others around 1000 B.C. (King and Blackburn 1978:535). The name “Tataviam” itself is derived from the Kitanemuk’s designation for this group (King and Blackburn 1978:535). Kroeber (1925:614) referred to them as the “Alliklik,” named by the Ventureño Chumash to separate them from the Beñeme Serrano in the western Mojave Desert and Antelope Valley.

Information about Tataviam social organization and political structure is relatively limited, but there is no evidence that would substantially differentiate them from the Kitanemuk and Western Gabrielino. Tataviam villages ranged from large centers of around 200 individuals to small settlements of 10 to 15 people (King and Blackburn 1978:536). Intermediate-sized villages were dispersed between the larger centers, with smaller villages spaced around the larger villages. King and Blackburn (1978:534) estimate the total Tataviam population at the time of historic contact at no more than 1,000 people, with the widest possible territorial extent considered. Mortuary practices probably included cremation, as well as a mourning ceremony practiced in late summer or early fall (King and Blackburn 1978:535).

Archaeological data, the primary source of information available, indicate broad similarities among the Tataviam, Chumash, and Gabrielino (King and Blackburn 1978:536). Considering their environment and available data, it is probable that Tataviam relied more heavily on yucca as a staple than neighboring groups. Additional plant foods most likely included acorns, sage seeds, juniper seeds, and islay berries. Animal resources included small mammals such as rabbits and rodents, as well as deer and possibly antelope. Extensive trade networks developed between inland groups of the desert regions. They traded lithic material and large game animals with coastal groups for marine resources, shell, asphaltum, and steatite.

The first European visit to the general Tataviam area occurred in A.D. 1769, when Lieutenant Colonel Gaspar de Portolá led an overland expedition from the newly established settlement at San Diego in an attempt to find Monterey Bay. They traversed the San Fernando Valley in August 1769, passing to the north of where Mission San Fernando would be founded 28 years later. From there, they entered Tataviam territory in the Newhall-Saugus area through the Freemont Pass (Portolá 1909). The general vicinity was probably crossed again during the second Portolá expedition in 1770 and by the Friar Francisco Garces expedition in 1776 (Beck and Haase 1974:15). The Mission of San Fernando was founded in 1798 on the southern fringe of Tataviam lands, and by 1820, most of the population had been baptized at the mission. During this time, Tataviam often intermarried with surrounding Native American groups, most notably the Kitanemuk, and often attended and participated in Chumash ceremonies.

Following the Spanish period, interest in the Santa Clara Valley grew as fur trappers in the early 1800s, the discovery of gold in Placerita Canyon in 1842, and provisioning of miners heading for the gold strikes in the 1850s led to Euro-American settlement, ranching, and agriculture within the valley. Beef, grain, and other foodstuffs in demand by the miners resulted in an economic windfall for the ranches in the valley. As a consequence, the ranchers expanded their range into Tataviam hunting grounds and harvesting fields. Tataviam families and communities intermarried with and were absorbed into other Native American settlements in southern California during the late nineteenth century (Johnson and Earle 1990:209). Several Tataviam descendant families lasted into the twentieth century, but by 1916, there were no longer any Tataviam speakers (King and Blackburn 1978:536).

Native American Communities in the San Fernando Valley

In general, it has proven very difficult or impossible to establish definitively the precise location of Native American villages occupied after Spanish contact (McCawley 1996:31–32). Native American place names recorded during this period did not necessarily represent continually occupied settlements within discrete locations. Instead, in at least some cases, the communities were represented by several smaller camps scattered throughout an approximate geography, shaped by natural features subject to change over generations (Johnston 1962:122). In fact, many of the villages had long since been abandoned by the time ethnographers, anthropologists, and historians attempted to document any of their locations, at which point the former village sites were affected by urban and agricultural development, and Native American lifeways had been irrevocably changed. Kroeber remarked on the subject as follows:

Many of the latter (i.e., place-names) no doubt originally denoted villages; but it is usually impossible to determine. The Indians of this region, Serrano, Gabrielino, and Luiseño, have long had relations to the old ranchos or land grants, by which chiefly the country was known and designated until the Americans began to dot it with towns. The Indians kept in use, and often still retain, native names for these grants. Some were the designations of the principal village on the grant, others of the particular spot on which the ranch headquarters were erected, still others of the camp sites, or hills, or various natural features. The villages, however, are long since gone, or converted into reservations, and the Indians, with all their native terminology, think in terms of Spanish grants or American towns. Over much of southern California—the “Mission Indian” district—the opportunity to prepare an exact aboriginal village map passed away 50 years ago. (Kroeber 1925:616)

Efforts at relocating former settlements have been further complicated by the frequency with which alternative names and spellings for communities were used, and that there are conflicting reports on the meaning or locational references in the names. Although the precise location of any given village is subject to much speculation, it is clear the San Fernando Valley and greater Los Angeles area once contained many Gabrielino settlements, including several concentrated along the banks of major waterways, near the coast, and along the base of foothills.

The closest ethnographically documented villages to the project site are *Atavsanga* (also known as *Ataquama* or *Totongna*) located approximately 2 miles to the southwest, *Momonga* located 3.5 miles to the north (near present-day Chatsworth), and *Siutcanga* located approximately 8.4 miles to the southeast (near present-day Encino) (Figure A-5). As described above by Kroeber (1925) and later noted by others (e.g., Harrington 1986 [cited in McCawley 1996]), the settlements and placename are often correlated with the later Spanish and Mexican period ranchos. This appears to be because the ranchos developed around existing Native American settlements, partly because Native Americans intentionally established rancherias near the Spanish and Mexican ranch houses, and also because the ranchos were the most common means by which geographic locations were historically described. For example, *Atavsanga* and *Siutcanga* are both believed to have been located within the boundaries of Ranchos El Escorpion and

Encino, respectively. The project site is located approximately 0.7 miles north of Rancho El Escorpion (Figure A-6).

Trails and travel corridors between settlements shared a similar association so that the roads established by the Spanish between the missions, presidios, and pueblos likely followed existing footpaths used by Native Americans, some of which have been retained by contemporary street alignments. Some of these early trails are depicted in nineteenth century maps (see Figures A-6 and A-7). The closest such trail to the project site—labeled “Road from Ventura to Los Angeles” in Figure A-6—is plotted approximately 2.5 miles south of the project site. This is typically understood to have been the route taken by the first Spanish land expedition, and then maintained as part of the network of roads connecting the major settlements of the Mission system, known as El Camino Real (lit. “The Royal Road”). The “road,” however, was never a single trail. Many of these early travel routes were likely established along the trails previously used by Native Americans for foraging, communication, travel, and trade. Though foot trails can be ephemeral and completely change course from year to year, such trails are known to have existed between significant Gabrielino settlements, and temporary camps or other types of Native American features (such as burials) would have been common along these paths, especially where they intersect water sources or are located near other natural resources and culturally significant landmarks, including favorable viewsheds. The earliest survey maps created after California’s annexation into the United States offer some indication of the trail system operating prior to this time. Unfortunately, as with the location of settlements, maps of Native American trails were never drawn after Spanish contact and the routes described in ethnographic sources refer only to generalized travel corridors.

Historic Overview

The post-Contact history of California is divided into three periods that are defined by the ruling national government: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). Each period is briefly described below. Some chronologies include the Mission period (1769–1834), defined by the active span of those Spanish, and later Mexican, Catholic institutions. The Protohistoric period is used here to refer to the era of initial interaction between Native Americans and European explorers and settlers, ranging from 1542 through the early 1800s in outlying areas, where a mixture of native and nonnative cultural traits can be observed archaeologically.

Spanish Period (1769–1822)

The first Europeans to observe what became southern California were members of the 1542–1543 expedition of Juan Rodriguez Cabrillo. When sailing past Santa Monica Bay, Cabrillo noted the numerous campfires of the Gabrielino/Tongva and thus named the area the Bay of Smokes. Cabrillo and other early explorers sailed along the coast and made limited expeditions into Alta (upper) California between 1529 and 1769. Although Spanish, Russian, and British explorers briefly visited Alta California during this nearly 250-year span, they did not establish permanent settlements.

Gaspar de Portolá and Franciscan Father Junípero Serra established the first Spanish settlement in Alta California at San Diego in 1769. Mission San Diego de Alcalá was the first of 21 missions built by the Spanish between 1769 and 1823. Portolá continued north, passing near the project site in August of 1769, and reaching San Francisco Bay on October 31. The process of converting the local Native American population to Christianity through baptism and relocation to mission grounds was begun in this region by the Franciscan padres at the San Gabriel Mission, which was established in 1771 (Engelhardt 1927). The San Fernando Mission was founded 26 years later, its location chosen as a stopping point between the San Gabriel and San Buenaventura missions (Engelhardt 1927b). Most Native Americans from the Los Angeles Basin were persuaded to settle in the vicinity of the two missions. These included the Eastern Gabrielino of the plains as far south as the Santa Ana River and west to the Los Angeles River.

The padres also proselytized the Serrano of the San Gabriel and San Bernardino Mountains, as well as the Vanyume Serrano of the Mojave Desert; many of the western Cahuilla in the Coachella and San Jacinto Valley; some Luiseño of the San Jacinto Valley; and Western Gabrielino of the plains west of the Los Angeles River, San Fernando Valley, and the southern Channel Islands. The missions were charged with administering to the Native Americans within their areas. Although mission life gave the Native Americans the skills needed to survive in their rapidly changing world, the close quarters and regular contact with Europeans transmitted diseases for which they had no immunity, decimating their populations (McCawley 1996).

Mexican Period (1822–1848)

After the end of the Mexican Revolution against the Spanish crown (1810–1821), all Spanish holdings in North America (including both Alta and Baja California) became part of the newly formed Mexican Empire, and shortly thereafter, a constitutionally based United Mexican States. Under Mexican rule, the authority of the California missions gradually declined, culminating with their secularization. Events leading up to the secularization of the California missions spanned many years and much political upheaval, after which the Mexican Congress passed the Secularization Act in August 1833. Not only did the action divest the Franciscans of property, it also opened both of the Californias to colonization. The first 10 of the missions were secularized in 1834, San Gabriel among them.

Historical documents suggest that what followed was a period of intrigue, revolution, and lawlessness. With a disruption in trade came an increase in the number of American interlopers. Political resistance erupted on every front as Mexican citizens in California (*Californios*) vied for control of their ranchos against American intruders and Mexican authority. Although the Mexican government directed that each mission's lands, livestock, and equipment be divided among its neophytes, the majority of these holdings quickly fell into non-Indian hands. As mission landholdings passed into private hands, neophyte workers, who had become dependent on the missions, were left to fend for themselves.

If mission life was difficult for Native Americans, secularization was worse. After two generations of dependence upon the missions, they were suddenly disenfranchised. After secularization, “nearly all of the Gabrielinos went north while those of San Diego, San Luis and San Juan overran this county, filling the Angeles and surrounding ranchos with more servants than were required” (Dakin 1978[1939]:282)

Former mission lands were quickly divided and granted to private citizens for use as agricultural and pastoral land. Most of the land grants to Californios were located inland, a policy intended to increase the population away from the coastal areas where the Spanish settlements were concentrated (Dakin 1978[1939]:282). With no work at the mission, there was a far greater labor force in the region than could be employed.

After years of surreptitious commerce, the first party of American immigrants arrived in Los Angeles in 1841, including William Workman and John Rowland, who soon became influential landowners. As the possibility of a takeover of California by the United States loomed large in the 1840s, the Mexican government increased the number of land grants in an effort to keep the land in Mexican hands (Wilkman and Wilkman 2006). Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Gumprecht 1999). Trade in the region changed as well. British and American trade displaced supply ships from Mexico and, in 1841, the first party of American immigrants arrived at the Pueblo de Los Angeles.

American Period (1848–Present)

The United States took control of California in 1846, seizing Monterey, San Francisco, San Diego, and Los Angeles with little resistance. Los Angeles soon slipped from American control, however, and was

retaken in 1847. Approximately 600 U.S. sailors, marines, Army dragoons, and mountain men converged under the leadership of Colonel Stephen W. Kearney and Commodore Robert F. Stockton in early January of that year to challenge the California resistance, which was led by General Jose Maria Flores. The American party scored a decisive victory over the Californios in the Battle of the Rio San Gabriel and at the Battle of La Mesa the following day, effectively ending the war and opening the door for increased American immigration (Harlow 1992).

The 1848 Treaty of Guadalupe Hidalgo formally ended the war and required that legitimate land grants be honored. California was admitted as the 31st state on September 9, 1850. Pursuant to the Land Act of 1851 requiring claims be filed with the United States Public Lands Commission, Eulogio de Celis filed his claim in 1852; it was granted in 1873. After de Celis died in 1869, San Fernando Mission land was sold in 1874 to California State Senator Charles Maclay and his partner George K. Porter. Maclay founded the community of San Fernando in 1874 on his eastern section and included land for the Southern Pacific Railroad (SPRR) that would eventually construct a tunnel through the pass at San Fernando.

In 1903, George Porter sold his share of the land to Leslie Brand's newly syndicated San Fernando Mission Land Company. One of their major shareholders was Moses Sherman, who sat on the city water commission board that in 1905 approved plans for the Los Angeles Aqueduct and later exercised their option to buy Porter's land (Roderick 2001). The aqueduct was constructed between 1908 and 1913, which was preceded by a real estate boom in the San Fernando Valley, leading to the founding of several modern-day cities and communities, including Owensmouth in March of 1912—renamed Canoga Park in 1931. Around 1911, the Pacific Electric Railway had extended its lines from Hollywood to Van Nuys, sharing portions of track with SPRR, and connecting passenger rails to the northwest portion of the San Fernando Valley. The San Fernando Valley was annexed to Los Angeles County in 1917, and the region's economy slowly began shifting from agricultural to light industrial and commercial.

Chatsworth Reservoir and Chatsworth High Line Conduit

The Los Angeles Aqueduct was opened in 1913 and measured 233 miles long. The aqueduct diverted water from the Owens Valley to the San Fernando Reservoir. The Chatsworth Reservoir was built in 1918 and was fed from the San Fernando Reservoir by a conduit called the Chatsworth High Line (alternatively spelled or referred to as the Chatsworth Hi-Line) that ran along the northern edge of the San Fernando Valley. The Chatsworth Reservoir was the nineteenth and last water-retention basin developed to store and manage water imported via the Los Angeles Aqueduct. The reservoir was placed into service in 1919 and was created by two large earth-filled dams and two smaller dikes spanning gaps between hills. The reservoir dams were built using the hydraulic fill method where there was no mechanical compaction of the soil forming the dam. From 1919 to 1950, the reservoir was the main water storage facility for the western San Fernando Valley and primarily served agricultural irrigation needs. The reservoir use shifted toward domestic water supply as the valley shifted away from agricultural usage toward suburban housing. Following the 1971 Sylmar earthquake, the California Department of Water Resources Division of Safety of Dams determined that the Chatsworth dams would have to be completely rebuilt in order to be safe during a major earthquake. The reservoir was drained and taken out of service in 1972. The Chatsworth Nature Preserve/Reservoir Ecology Pond was established as mitigation for waterfowl habitat lost as a result of the draining of residual water from Chatsworth Reservoir following the 1971 Sylmar earthquake and was located at the northern end of the reservoir (Chatsworth Historical Society 2017). In 1997, the City Council renamed the 1,325-acre parcel Chatsworth Reservoir the Chatsworth Nature Preserve/Reservoir, forming the only nature preserve in the City of Los Angeles.

ARCHIVAL RESEARCH

Aerial Photograph Review

SWCA's archival research included a review of historical maps for the project site and vicinity and focused on documenting modifications to the physical setting and identifying any potential natural or artificial features with relevance to use by Native Americans (e.g., stream courses, vegetation, historical topography, roads, habitation markers) or use of the location by non-Native American people in the Historic period. Historical topographic maps show the project area appears to be used for agriculture or is vacant unused land from 1903 to 1944. A review of historical aerial photographs beginning in 1947, the earliest year for which an aerial map is available, shows both the Main and proposed North Campuses were being used as agricultural fields. This continued until 1959, as shown on an aerial photo from that year. Sometime between 1959 and 1967, the area was graded for the construction of the Chaminade College Preparatory high school and shopping mall where the proposed North Campus will be developed. An aerial photograph from 1967 shows the high school and shopping mall fully built by then (Historic Aerials 2021). The original buildings are still present on the project site, though it appears to have been subject to several alterations. The multi-tenant mini shopping center within the proposed North Campus area that is slated for demolition was built between 1962 to 1964 and expanded in 1981 to its current size. Between 1959 and 1967, residential development started on parcels immediately adjacent to the south and southwest boundaries of the project site, with residences showing in the parcels between Chaminade Avenue and Cohasset Street, between Cohasset Street and Valerio Street, and west of Platt Avenue. By 1977, the entire neighboring areas were developed with residences.

Cultural Resources Records Search

On August 23, 2021, SWCA requested a confidential search of CHRIS records from the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton, which houses the records for Los Angeles County. The purpose of the record search was to identify all previously conducted cultural resource surveys and all previously recorded cultural resources within the project area, including potential eligibility for inclusion in the NRHP and CRHR. The search included any previously recorded cultural resources and investigations within a 0.5-mile radius of the project site. The search also involved a review of the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. In addition, the search consisted of a review of all available historic USGS 7.5- and 15-minute quadrangle maps.

Previously Conducted Cultural Resource Studies

Results of the CHRIS records search indicate that six previous archaeological investigations have been conducted within 0.5 mile of the project site. None of these studies intersect the project site. Details pertaining to these studies are included in Confidential Appendix B.

Previously Recorded Cultural Resources

The CHRIS records search indicated that no previously recorded cultural resources have been identified within the project site or within a 0.5-mile radius of the project site.

Sacred Lands File Search

SWCA submitted a Sacred Lands File (SLF) search request for the project site to the Native American Heritage Commission (NAHC) on August 23, 2021. The NAHC's email response (Appendix C) was

received on September 24, 2021, indicating that the results for the SLF check conducted by through the NAHC was positive. The reply requested that associated California Native American tribes be contacted for more information. The NAHC provided a contact list of 14 Native American individuals or tribal organizations that may have knowledge of tribal cultural resources in or near the study area (Table 1). SWCA provided the contact list to CAJA on October 11, 2021, since they were in coordination with the City.

Table 1. Summary of Native American Individuals and Groups Culturally Affiliated with the Project Area.

Name and Title	Affiliation
Andrew Salas, Chairperson	Gabrieleño Band of Mission Indians–Kizh Nation
Anthony Morales, Chairperson	Gabrieleño/Tongva San Gabriel Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson	Barbareño/Ventureño Band of Mission Indians
Christina Conley, Tribal Consultant and Administrator	Gabrielino Tongva Indians of California Tribal Council
Charlez Alvarez	Gabrielino-Tongva Tribe
Jairo Avila, Tribal Historic Preservation Officer	Fernadeño Tataviam Band of Mission Indians
Sandonne Goad, Chairperson	Gabrielino Tongva Nation
Robert F. Dorame, Chairperson	Gabrielino Tongva Indians of California Tribal Council
Rudy Ortega, President	Fernadeño Tataviam Band of Mission Indians
Julio Quair, Chairperson	Chumash Council of Bakersfield
Mariza Sullivan, Chairperson	Coastal Band of the Chumash Nation
Fred Collins, Spokesperson	Northern Chumash Tribal Council
Mark Vigil, Chief	San Luis Obispo County Chumash Council
Kenneth Kahn, Chairperson	Santa Ynez Band of Chumash Indians

SUMMARY AND RECOMMENDATIONS

SWCA reviewed the results of CHRIS and SLF searches to identify the presence of cultural resources within the project site. The CHRIS records search indicated that there have been no cultural resources studies conducted within the project site, and that no cultural resources have been previously documented in the project site or within a 0.5-mile radius. The results of the SLF search conducted by the NAHC indicated that there are known tribal cultural resources in the vicinity of the project site. The NAHC provided a contact list of tribal representatives who may have more information about these known resources. SWCA provided the contact list to CAJA on October 11, 2021, since they were in coordination with the City.

The closest ethnographically documented Native American village sites in the general vicinity include *Atavsanga*, located approximately 2 miles southwest of the project site, and *Momonga* approximately 3.5 miles to the north, and *Siutcanga* located approximately 8.4 miles to the southeast. Two intermittent streams are located in the vicinity of the project site: Dayton Creek, approximately 0.6 mile to the north, and Bell Creek, approximately 0.7 mile to the south. Dayton Creek connects to Chatsworth Creek, which is located approximately 0.7 mile east of the project site.

Archival research indicated that beginning at least in the mid-1940s, the project site (both the Main and proposed North Campuses) was a plowed field associated with agricultural activities. The parcels were

graded sometime after 1959 for the construction of the Chaminade College Preparatory High School and shopping mall where the proposed North Campus will be developed.

Archaeological remains associated with prehistoric or historic Native Americans can occur below paved surfaces within developed urban settings. While the CHRIS records search results did not identify any such archaeological resources within the project site or vicinity, most of the project site was not inspected for archaeological resources before being developed. SWCA considers the greater region of the project site as having moderate sensitivity for prehistoric or historic Native American archaeological resources. However, the project site consists of a comparatively small area within the greater region and has been subject to multiple episodes of ground disturbances. As a result, archaeological materials once located on the surface or in shallow deposits are very unlikely to have been preserved within the project site, and though more deeply buried deposits could exist, SWCA considers the sensitivity for prehistoric and historic Native American archaeological resources to decrease within the project site, compared with the surrounding area.

Based on the above considerations, SWCA finds a **low potential for encountering prehistoric and Historic period Native American archaeological resources** within the project site. This is supported by the surficial geology of the site, which has been identified as late to middle Pleistocene old alluvial fan deposits, undivided (Qof) and late Miocene Modelo Formation, undivided (Tm). According to the paleontological resources study conducted for this project, the depth to the underlying, previously undisturbed sediments is unknown, but likely very shallow (e.g., 3 feet below ground surface) (Carson 2022). These types of sediments are naturally less likely to contain buried archaeological resources. The likelihood of encountering any cultural resources is further decreased due to the compromised integrity of the physical setting as a result of plowing, as evidenced by past agricultural activities as seen on historic aerial imagery, and the development of the school campus and commercial property. The maximum depth of excavation for the project is anticipated to be approximately eight feet below surface within the Main Campus area, which likely would be within previously disturbed or artificial fill. The North Campus area will be excavated to a maximum depth of 20 feet below surface, which would likely require excavation of underlying alluvial sediments and removal of the overlying artificial fill.

Historic period archaeological resources could be preserved below the current ground surface, especially within the artificial fill. The CHRIS results were negative for previously recorded historic-era archaeological sites. As previously mentioned, the project site consisted of agricultural land from at least 1928 to 1959, with the high school and the shopping center constructed between 1959 and 1967. This shopping center was expanded in 1981 to its current size. The lack of evidence of built structures within the project site prior to 1959, indicates there is a low potential to encounter structural remains, features, and artifacts associated with the agricultural fields from the late nineteenth to mid twentieth century. For these reasons, SWCA finds the project site has a **low sensitivity for containing Historic period (non-Native American) archaeological resources.**

The multi-tenant mini shopping center and surface parking lot located within the proposed North Campus area were built between 1962 to 1964; however, an assessment of built architectural resources was not included in this current scope and not addressed in this study. Because these buildings are at least 45 years old, SWCA recommends that they be assessed by a qualified architectural historian to determine if the properties qualify as historical resources for the purposes of CEQA. CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a “project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment” (PRC Section 21084.1). Answering this question is a two-part process: first, the determination must be made as to whether the proposed project involves cultural resources. Second, if cultural resources are present, the

proposed project must be analyzed for a potential “substantial adverse change in the significance” of the resource.

According to CEQA Guidelines Section 15064.5, historical resources are:

1. A resource listed in, or formally determined eligible for listing in, the California Register of Historical Resources (CRHR) (PRC 5024.1, Title 14 CCR, Section 4850 et seq);
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significance in a historic resources survey meeting the requirements of Section 5024.1(g) of the PRC;
3. Any building, structure, object, site, or district that the lead agency determines eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the California Register (as defined in PRC Section 5024.1, Title 14 CCR, Section 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be an historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines, Section 15064.5(b)).

CEQA Guidelines specify that “substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes “those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion” or eligibility for inclusion in the NRHP, CRHR, or local register. In addition, pursuant to CEQA Guidelines Section 15126.2, the “direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects.”

In order to satisfy the above-stated requirements of CEQA, SWCA recommends a built architectural resources study be conducted, where the buildings identified on the project site, including the buildings on the proposed North Campus, which will be demolished, be evaluated as historical resources. The evaluation should include property-specific research to fully characterize construction and development history, an examination of the building’s features and characteristics, and an accurate depiction of the building’s condition, historic integrity, alterations, and changes over time. The regulatory setting, methods, and results of the work, including any recommendations for additional work (if needed), should be compiled into a historic resources assessment report. SWCA recommends this work be carried out by a qualified architectural historian, defined as one who meets or exceeds the Secretary of Interior’s Professional Qualifications Standards for Architectural History.

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APPENDIX A

Figures

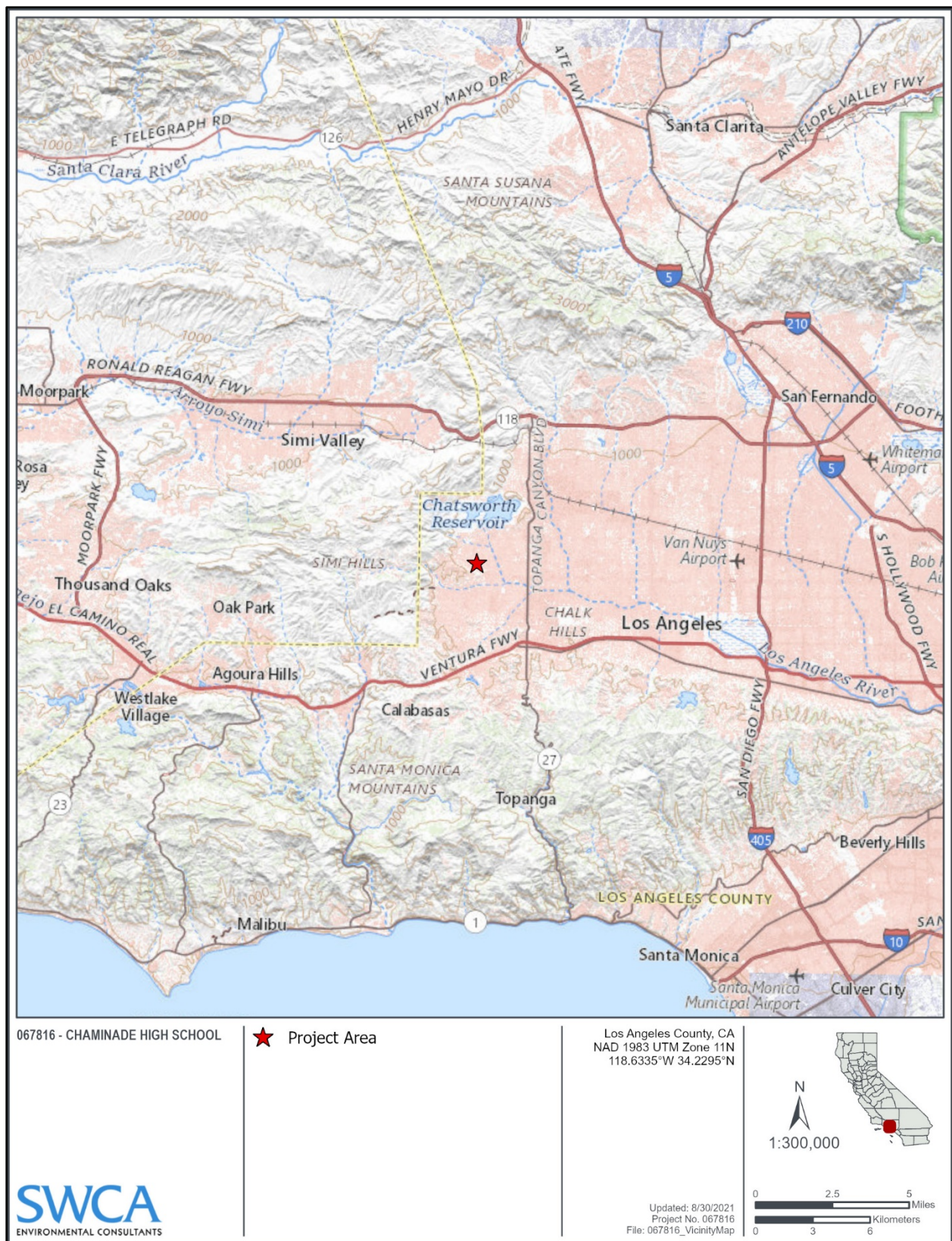


Figure A-1. Project site vicinity, 1:300,000 scale.

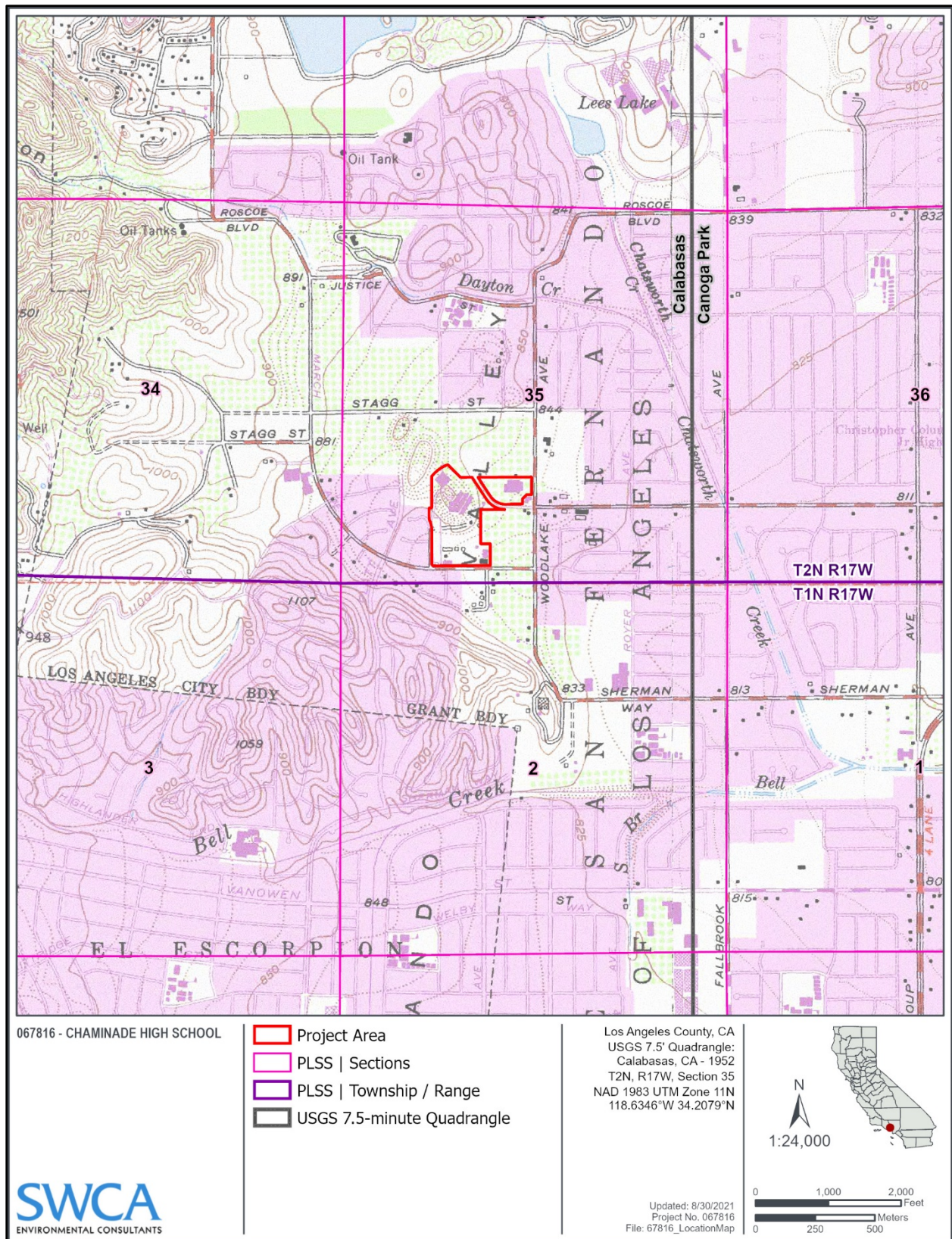


Figure A-2. Project site on the USGS Calabasas, California, 7.5-minute quadrangle.



Figure A-3. Project site shown on a 2021 aerial photograph.

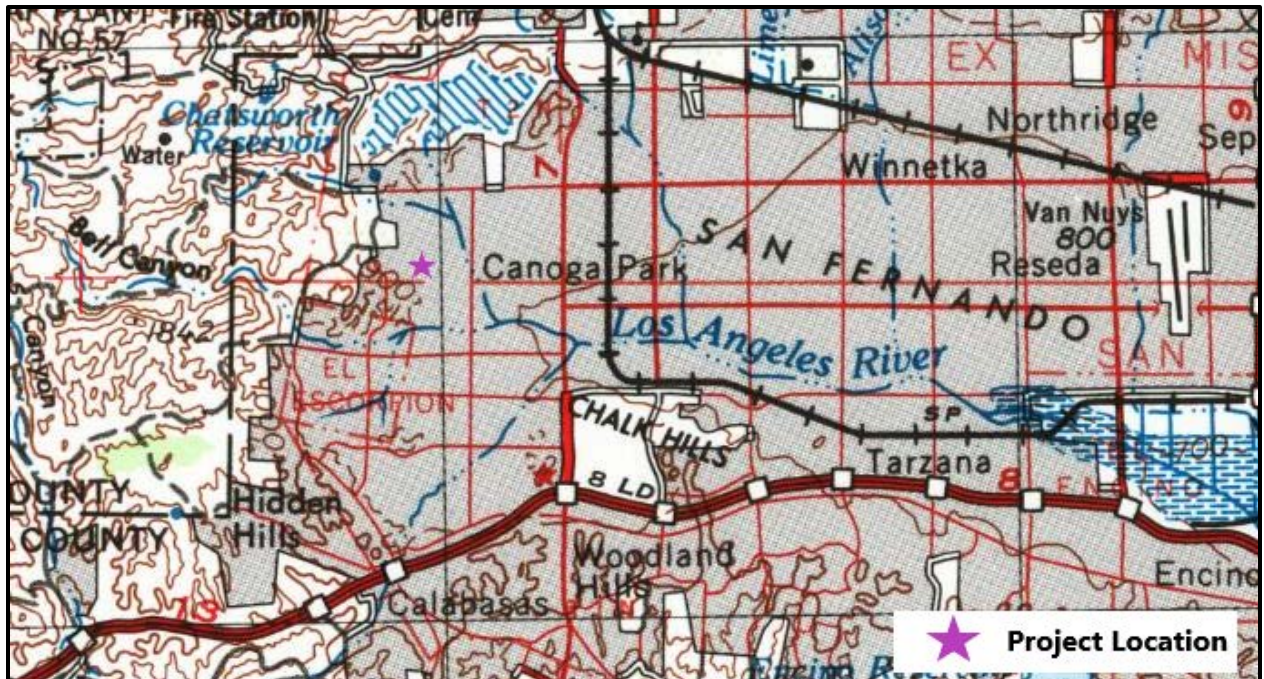


Figure A-4. Project location shown on a 1975 Los Angeles topographic map. Note the two intermittent streams in the vicinity of the project site: Dayton Creek to the north and Bell Creek to the south, as well as Chatsworth Creek, which is located approximately 0.7 miles east of the project site.

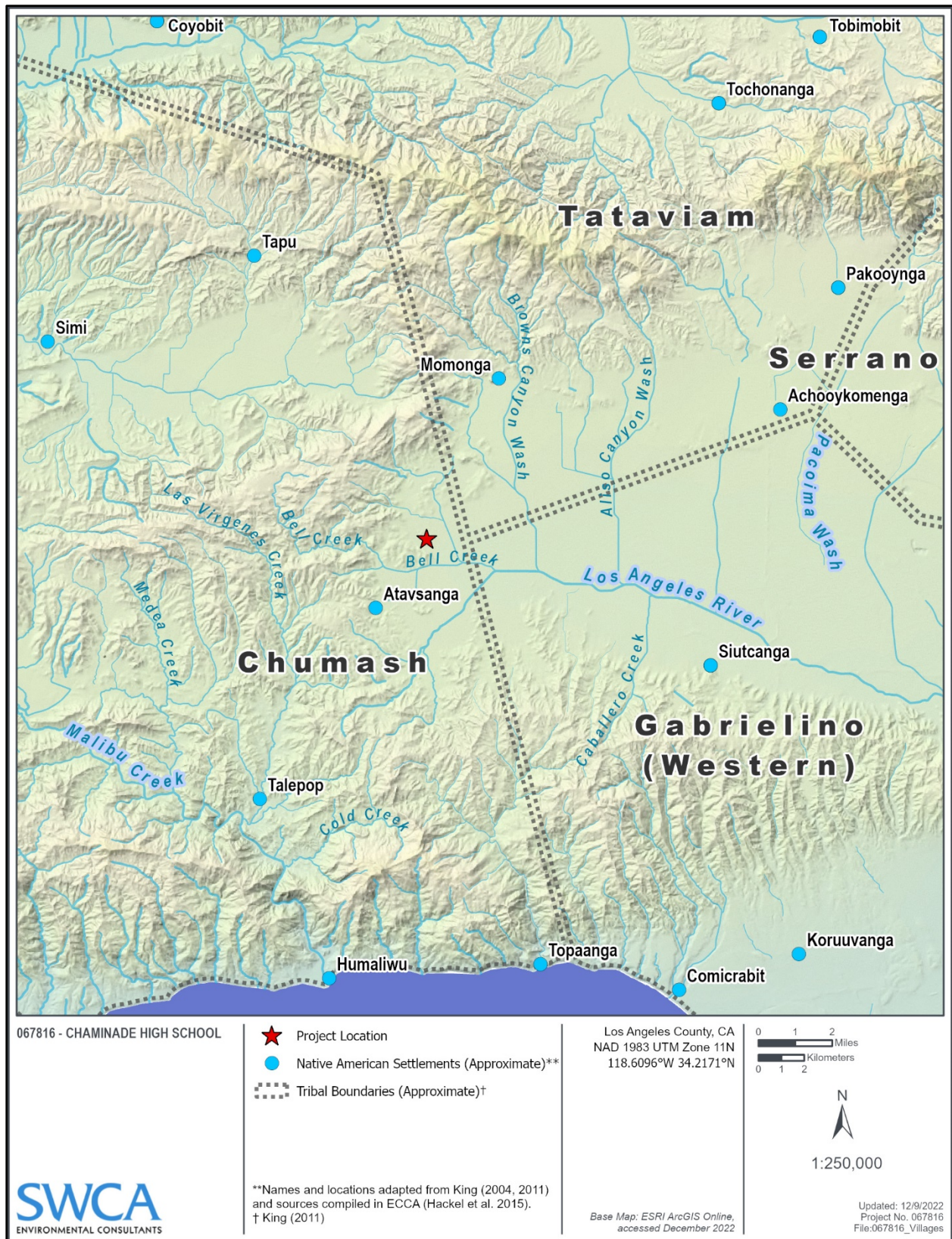


Figure A-5. Native American villages and place names (based on Fernand o Tataviam Band of Mission Indians [2022], Hackel et al. [2015], Johnson [1997], and King [2011]).

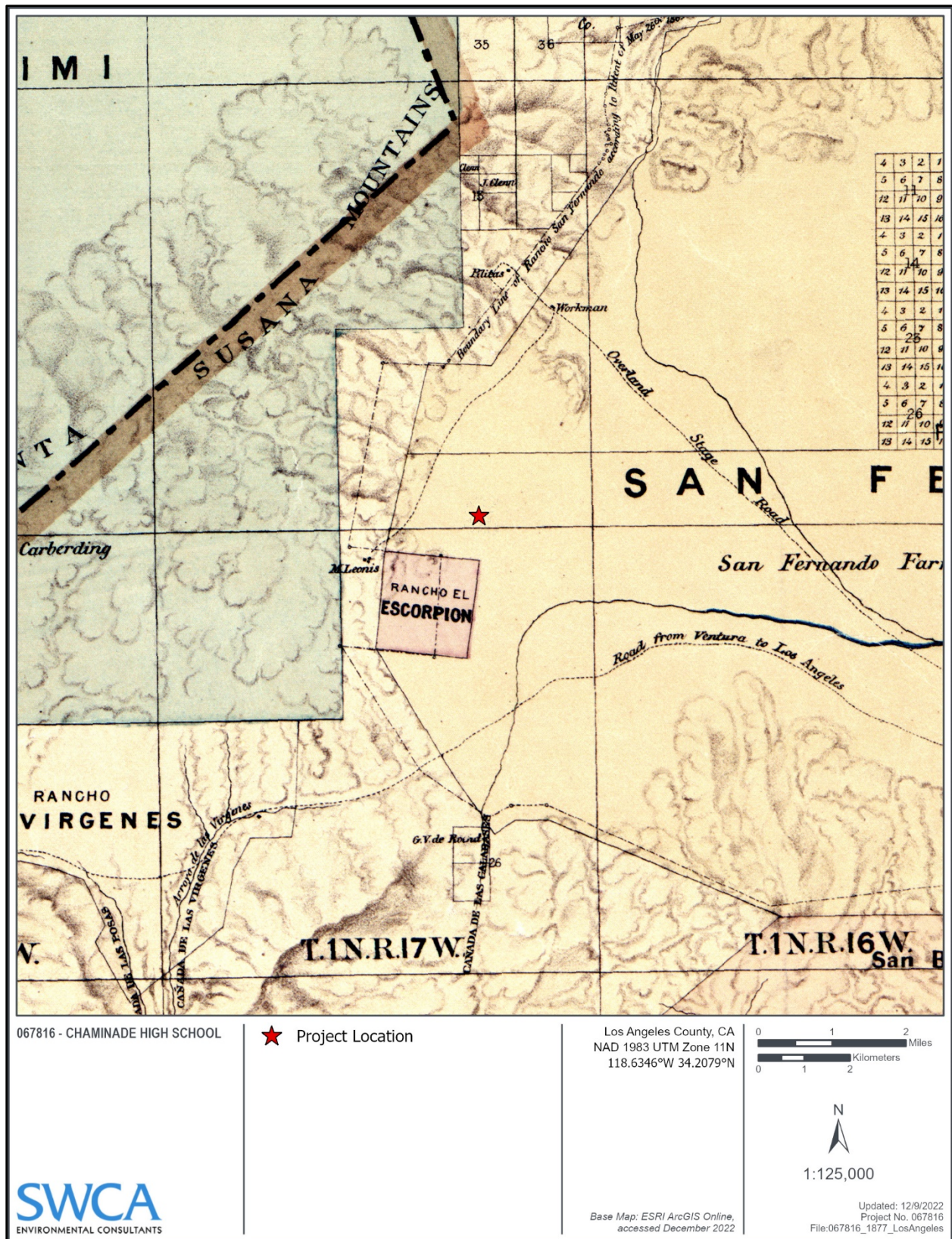


Figure A-6. Historical topographic map showing the project site in 1877.

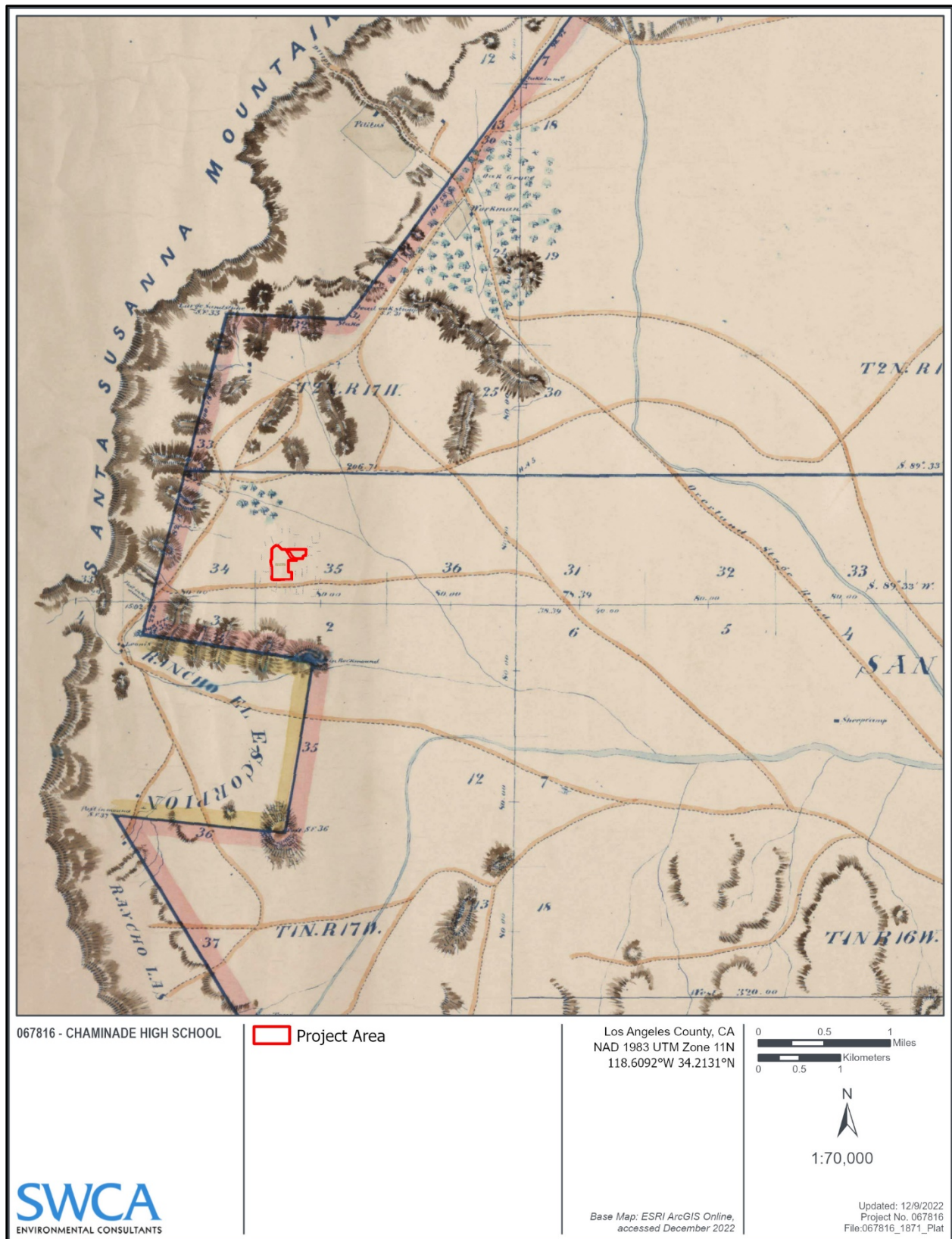


Figure A-7. Plat of the former Mission de San Fernando lands ca. 1871 annotated with the Historic-period ranchos located nearest to the project site.

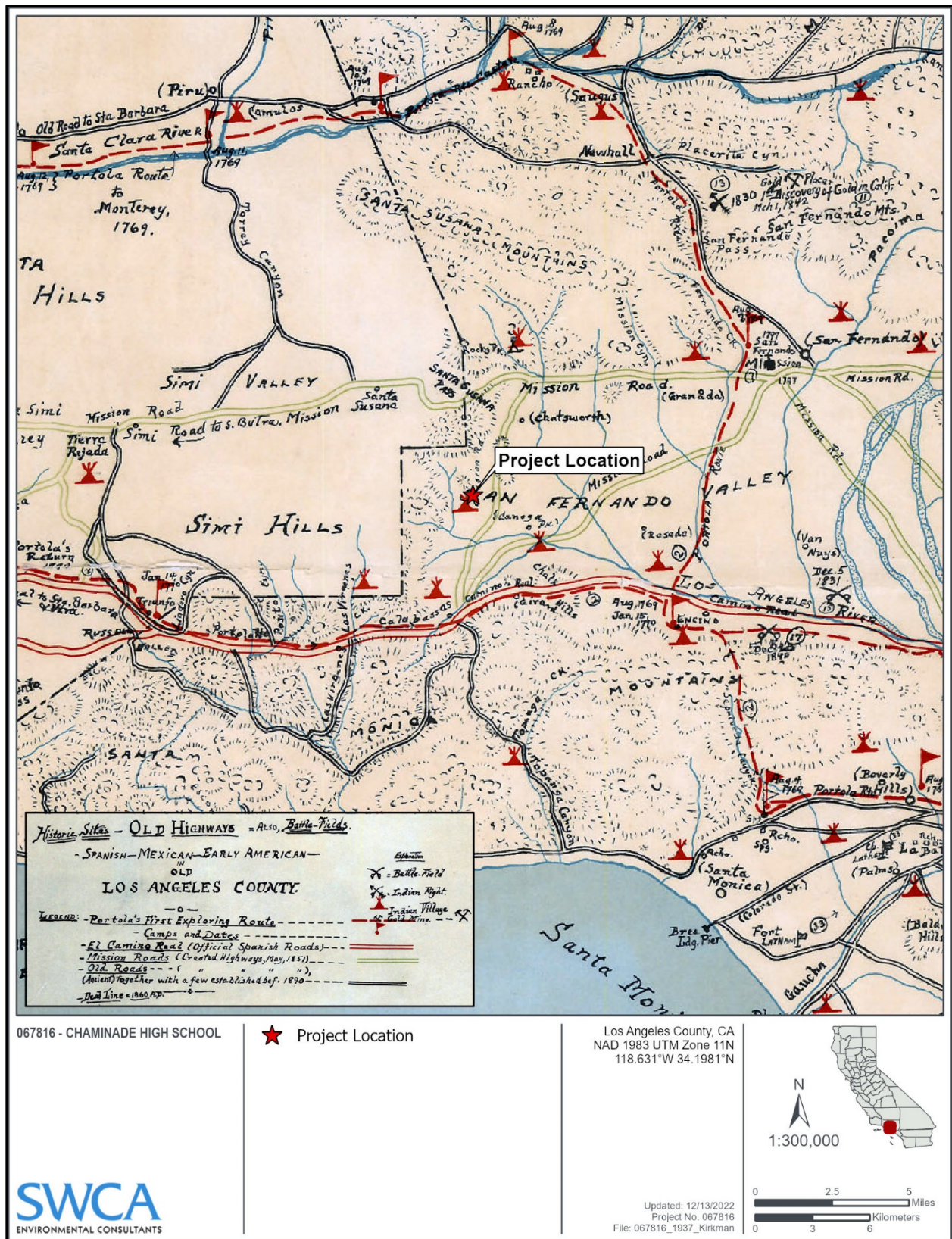


Figure A-8. Kirkman-Harriman's pictorial and historical map of Los Angeles County: 1860–1937.

APPENDIX B

SCCIC Record Search Results

Table B-1. Previous Cultural Resources Studies within 0.5 Mile of the Project Area

Report No.	Author (Affiliation)	Year	Study Title	Relationship to Project Area
LA-00475	Hector, Susan M. (University of California, Los Angeles Archaeological Survey)	1978	An Archaeological Resource Survey and Impact Assessment of Tract 34924 (sanger), Los Angeles County	Outside—within 0.5 mile
LA-01953	Singer, Clay A., and John E. Atwood (C.A. Singer & Associates, Inc.)	1989	Archaeological Monitoring at Tentative Tracts 34924, 41060, and 41062, Near Bell Canyon in the Community of West Hills, Los Angeles County, California	Outside—within 0.5 mile
LA-02011	McIntyre, Michael J. (Northridge Archaeological Research Center, CSUN)	1976	Assessment of the Archaeological Impact by the Development of Tentative Tract No. 27795	Outside—within 0.5 mile
LA-02014	McIntyre, Michael J. (Northridge Archaeological Research Center, CSUN)	1976	Assessment of the Archaeological Impact by the Development of Woodlake Avenue Between Leadwell Street to Bell Creek Channel (70 W.v)	Outside—within 0.5 mile
LA-03753	Anonymous (Department of Public Works)	1977	Historic Property Survey Woodlake Avenue and Bridge - Sherman Way to Bell Creek W.o. 61480 Woodlake Avenue - N/o Leadwell Street to Sherman Way W.o. 61825	Outside—within 0.5 mile
LA-09507	Bonner, Wayne H. and Sarah A. Williams (MBA)	2009	Cultural Resources Records Search and Site Visit Results for T. Mobile USA Candidate SV11662A (Fernando Monopalm), 7531 Fallbrook Ave, Los Angeles, Los Angeles County, California	Outside—within 0.5 mile

APPENDIX C

Sacred Lands File Search Results