

Appendix “E”

Phase I/II Cultural Resources Assessment Update for the TR38605 Project

A PHASE I AND II CULTURAL RESOURCES ASSESSMENT UPDATE FOR THE TR38605 PROJECT

TR38605 RIVERSIDE COUNTY, CALIFORNIA

**APNs 270-070-005, -006, and -007, and 270-160-005
Sections 32 and 33, Township 3 South, Range 5 West
of the *Lake Mathews, California* USGS Quadrangle**

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June 1, 2023

***Fieldwork Performed: June 14, October 25, and
December 29, 2016, and January 25 through February 3, 2017***

***Key Words: 95.96 acres; bedrock milling and lithic prospecting site; not CEQA-significant;
monitoring recommended.***

Archaeological Report Summary Information

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Report Title: A Phase I and II Cultural Resources Assessment Update for the TR38605 Project, Riverside County, California

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Assessor's Parcel Numbers: 270-070-005, -006, and -007, and 270-160-005

Lead Agency Identifiers: TR38605

USGS Quadrangle: Sections 32 and 33, Township 3 South, Range 5 West of the *Lake Mathews, California* USGS Quadrangle

Study Area: 95.96 acres plus off-site improvements

Key Words: Archaeological survey and testing program; County of Riverside; project area is 95.96 acres plus off-site improvements; *Lake Mathews* USGS topographic quadrangle; bedrock milling; lithic prospecting; historic trash scatters; not CEQA-significant; monitoring recommended.

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1.0 MANAGEMENT SUMMARY/ABSTRACT

The following report describes the updated results of the cultural resources survey and testing program conducted by BFSA Environmental Services, a Perennial Company (BFSA [formerly Brian F. Smith and Associates, Inc.]), for the TR38605 Project. As proposed by Adkan Engineers, the project originally included 325.4 acres located southwest of Mockingbird Reservoir, north of Lake Mathews, and east of Interstate 15 within an unincorporated area of northwestern Riverside County, California. The project has since been modified to only include 95.96 acres. The project is situated within portions of Sections 32 and 33, Township 3 South, Range 5 West, as shown on the USGS (7.5-minute) *Lake Mathews, California* topographic map. The project includes Assessor's Parcel Numbers (APNs) 270-070-005, -006, and -007, and 270-160-005.

The subject property includes an area north of El Sobrante Road and east of McAllister Street that has been used agriculturally for many decades for dry farming and orchards. The subject property has been most recently used as an orchard for the past several decades, which is a land use common to this area. With the exception of the northwest corner of the project, the old orchards have recently been completely removed and plowed under, leaving a generally barren landscape. No existing structures are situated within the project, although some features remain that are associated with the orchard operations, including a large concrete reservoir. The TR38605 Project is a proposed development of 163 single-family residences and associated water quality basins, park space, and associated infrastructure. The project will also include two off-site access roads into the project from El Sobrante Road and via an unnamed dirt road along the eastern boundary of the project.

BFSA conducted the archaeological assessment to locate and record any cultural resources present within the project in compliance with the California Environmental Quality Act (CEQA) and following County of Riverside Cultural Resource Guidelines (Draft). During the 2017 study, 11 previously unrecorded cultural resources were identified. Of these sites, two resources (sites P-33-26654 and P-33-26658) were identified in the updated 95.96-acre project. These sites include one prehistoric quartz lithic artifact scatter (P-33-26654) and one bedrock milling feature site (P-33-26658). BFSA conducted a significance testing and evaluation program at each site from January 25 through February 3, 2017. Because none of the sites identified during the survey produced any significant artifacts or subsurface deposits, sites P-33-26654 and P-33-26658 were determined to lack significance according to CEQA criteria and, therefore, were not considered eligible for listing in the California Register of Historic Resources (CRHR).

1.1 Purpose of Investigation

The purpose of this investigation was to determine if any cultural resources would be affected by the current modifications to the proposed land development. This updated study consisted of processing an updated records search of previously recorded archaeological sites on or near the property, the completion of a review of the previous studies conducted by BFSA for

the project, a review of the testing and evaluation program for the project, and an updated impact assessment of cultural resources that may be impacted by updates to the proposed development. The project development map (see Figure 2.0–3) shows the current limits of grading for the proposed TR38605 Project, which have been modified in scale from 325.4 acres to the 95.96 acres that now constitute the project.

1.2 Major Findings

Previous work by Smith and Stropes (2017) and Smith, Hahnen, and Stropes (2018) indicates that the entire property has been previously disturbed, disked, or graded in the past, and dirt roads intersect various portions of the project. As a result of the 2017 and 2018 studies, eight prehistoric and three historic sites were discovered within the larger study area. Of these sites, only two (P-33-26654 and P-33-26658) were identified in the current updated project area. BFSA conducted Phase II testing at sites P-33-26654 and P-33-26658 from January 25 through February 3, 2017, to identify any subsurface artifact concentrations and determine site boundaries. Shovel test pit (STP) excavations were undertaken at each of the identified cultural resources; however, no cultural materials were recovered from the subsurface tests at any of the sites. Surface examinations at P-33-26654 and P-33-26658 resulted in the recovery of a small amount of prehistoric debitage from site P-33-26654. Because the Phase II testing program did not produce any significant surface or subsurface artifact concentrations at any of the sites, sites P-33-26654 and P-33-26658 were determined to be not CEQA-significant and not eligible for listing in the CRHR (Smith, Hahnen, and Stropes 2018).

Department of Parks and Recreation (DPR) site record forms were prepared for all discovered resources and submitted to the Eastern Information Center (EIC) at the University of California at Riverside (UCR) following the 2018 BFSA study (Appendix B). A copy of this updated study will be permanently filed with the EIC at UCR. All prehistoric artifacts were previously prepared for curation with the Pechanga Band of Luiseño Mission Indians in Temecula, California in 2018. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

1.3 Recommendation Summary

The TR38605 Project will result in direct impacts to recorded cultural resources P-33-26654 and P-33-26658 which has been evaluated as not CEQA-significant. Based upon the current project design, Site P-33-26658 will be preserved as part of a 38,680-square-foot open space lot. Since neither of these sites qualify as Historical Resources, no site-specific mitigation measures are required. However, due to the presence of cultural resources documenting prehistoric and historic use of this property, the potential exists that other unidentified cultural resources may exist within the project area that may be exposed during grading. In order to identify any cultural resources uncovered by the development of this project, all earthwork (grading or trenching) shall be monitored by an archaeologist and a Native American representative.

2.0 **INTRODUCTION**

BFSA was retained by the applicant to conduct an updated cultural resources study for the proposed TR38605 Project located southwest of Mockingbird Reservoir, north of Lake Mathews, and east of Interstate 15, within an unincorporated area of northwestern Riverside County, California. The updated archaeological study was conducted in order to comply with CEQA and County of Riverside Cultural Resource Guidelines (Draft) with regards to development-generated impacts to cultural resources based upon a decrease in the size of the originally proposed project footprint. The project is located in an area of low to moderate cultural resource sensitivity, as is suggested by known site density and predictive modeling. Sensitivity for cultural resources in a given area is usually indicated by known settlement patterns, which in the northwestern Riverside County area are focused around environments with accessible food and water.

The TR38605 Project is a planned residential subdivision that originally encompassed 325.4 acres on the north side of El Sobrante Road, and east of McAllister Street. However, the updated project design has limited the scale of the project to only 95.96 acres within the previous project footprint (Figure 2.0–1). The subject property currently encompasses APNs 270-070-005, -006, and -007 and 270-160-005. The project is situated within portions of Sections 32 and 33, Township 3 South, Range 5 West of the USGS (7.5-minute) *Lake Mathews, California* topographic map (Figure 2.0–2). The development will include 163 single-family residences and associated water quality basins, park space, and associated infrastructure. The project will also include two off-site access roads into the project from El Sobrante Road and via an unnamed dirt road along the eastern boundary of the project. (Figure 2.0–3).

Previous studies conducted by BFSA in 2017 and 2018 included the survey of the current project area (Smith and Stropes 2017 and Smith, Hahnlen, and Stropes 2018) and noted that nearly the entire property had been disturbed, disked, or graded in the past, and that dirt roads intersect various portions of the project. The testing program for sites P-33-26654 and P-33-26658 were previously conducted by Allison Reynolds, Charles Callahan, Clarence Hoff, Jason Griffin, Jillian Hahnlen, Jezreel Ontiveros, Kirstie McPeck, Stephanie Balk, Stephanie Nelson, and Stephen Anderson with the assistance of Cameron Linton from the Pechanga Band of Luiseño Mission Indians (Smith, Hahnlen, and Stropes 2018). Tracy Stropes prepared the updated technical report and created the report graphics, and Jacob Tidwell conducted technical editing and report production. Qualifications of key personnel are provided in Appendix A.

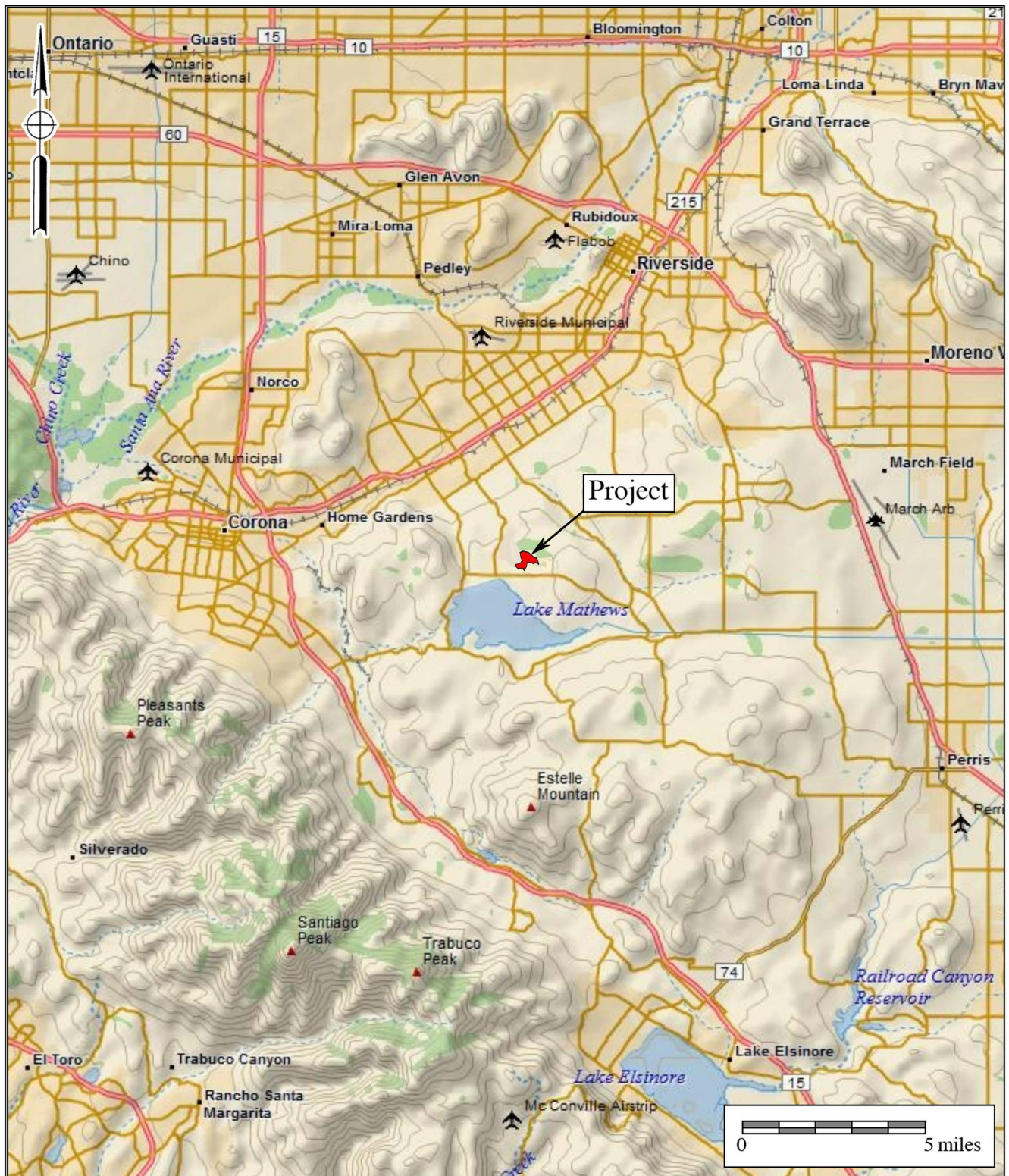


Figure 2.0–1
General Location Map
 The TR38605 Project
 DeLorme (1:250,000 series)

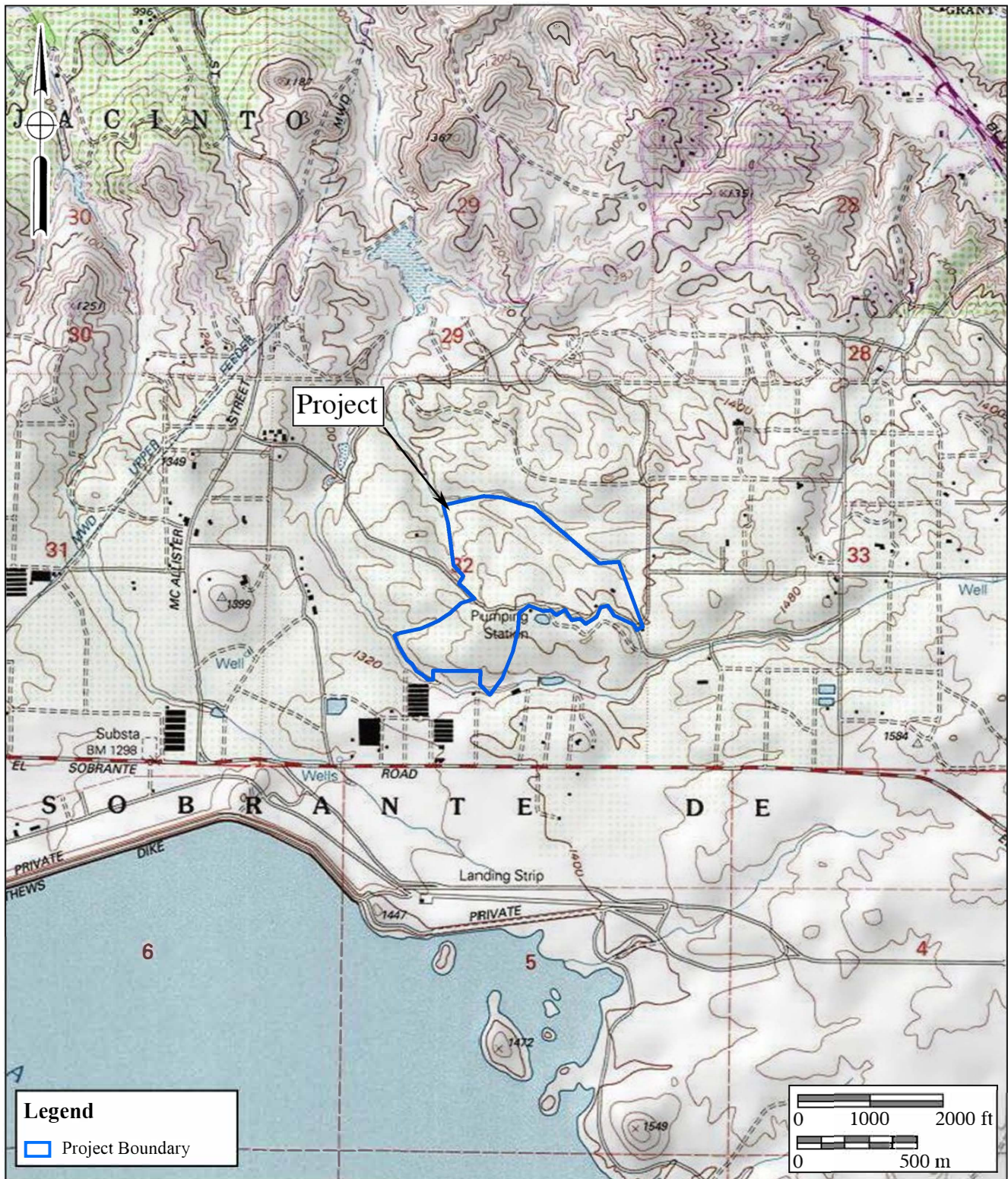
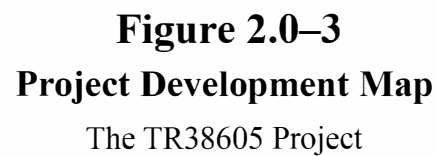


Figure 2.0–2
Project Location Map
 The TR38605 Project

USGS Lake Mathews Quadrangle (7.5-minute series)



2.1 Previous Work

Prior to the Smith and Stropes (2017) and Smith, Hahnen, and Stropes (2018) studies, the EIC at UCR did not report any recorded archaeological sites or previous studies within the project boundaries. However, the Smith and Stropes (2017) and Smith, Hahnen, and Stropes (2018) studies identified two cultural resources (P-33-26654 and P-33-26658) within the current 95.96 acre project area. The Smith, Hahnen, and Stropes (2018) study identified these sites as a quartz lithic artifact scatter (P-33-26654) and one bedrock milling feature site (P-33-26658). The 2018 (Smith, Hahnen, and Stropes) study previously evaluated these sites as not eligible to the CRHR and not CEQA significant.

2.2 Project Setting

The 95.96 acre TR38605 Project is located in west-central Riverside County, approximately 6.5 miles east of Interstate 15, 3.5 miles south of Highway 9, and less than a mile north of Lake Mathews. The property is situated between Mockingbird Reservoir to the northeast and Lake Mathews to the southwest, each of which drain from the surrounding slopes of the Santa Ana Mountains. The property is located on the boundary of the Perris Valley/Hills and the Santa Ana Mountains, as defined by the United States Department of Agriculture (Forest Service and Natural Resources Conservation Service) and the United States Department of the Interior (Bureau of Land Management [BLM]) (USDA and USDI 2001).

The general geomorphology of the region consists of moderate to steep slopes with rounded summits and narrow valleys. Elevations on the project range from approximately 1,000 to 1,300 feet above mean sea level and soils consist of shallow Typic Xerorthents and Typic Haploxeralfs over Mesozoic granitic rocks (USDA and USDI 2001). Rapid water runoff contributes to erosion, resulting in exposed granitic bedrock on the upper slopes and knolls of the property. Small drainages are dry in the summer; only the largest streams (such as the Santa Ana River) retain water throughout the year.

Vegetation in the area of the property is dominated by California sagebrush and California buckwheat vegetative series. Mammals within the region include mule deer, coyote, bobcat, mountain lion, ground squirrel, and kangaroo rat; birds include hawk, eagle, owl, quail, mourning dove, mockingbird, jay, heron, crow, finch, and sparrow. Species of concern in the area include the cactus wren, California gnatcatcher, least Bell's vireo, foothill and mountain yellow-legged frog, orange-throated whiptail lizard, and California mountain kingsnake (USDA and USDI 2001). Current land use within the project includes citrus tree orchards on the higher slopes of the northwest area of the property with dirt access roads throughout. The remainder of the artificially terraced slopes, which were once used for citrus farming, have been recently cut down.

2.3 Cultural Setting – Archaeological Perspectives

The archaeological perspective seeks to reconstruct past cultures based upon the material remains left behind. This is done by using a range of scientific methodologies, almost all of which draw from evolutionary theory as the base framework. Archaeology allows one to look deeper

into history or prehistory to see where the beginnings of ideas manifest via analysis of material culture, allowing for the understanding of outside forces that shape social change. Thus, the archaeological perspective allows one to better understand the consequences of the history of a given culture upon modern cultures. Archaeologists seek to understand the effects of past contexts of a given culture upon *this* moment in time, not culture in context *in* the moment.

Despite this, a distinction exists between “emic” and “etic” ways of understanding material culture, prehistoric lifeways, and cultural phenomena in general (Harris 1991). While “emic” perspectives serve the subjective ways in which things are perceived and interpreted by the participants within a culture, “etic” perspectives are those of an outsider looking in hoping to attain a more scientific or “objective” understanding of the given phenomena. Archaeologists, by definition, will almost always serve an etic perspective as a result of the very nature of their work. As indicated by Laylander et al. (2014), it has sometimes been suggested that etic understanding, and therefore an archaeological understanding, is an imperfect and potentially ethnocentric attempt to arrive at emic understanding. In contrast to this, however, an etic understanding of material culture, cultural phenomena, and prehistoric lifeways can address significant dimensions of culture that lie entirely beyond the understanding or interest of those solely utilizing an emic perspective. As Harris (1991:20) appropriately points out, “Etic studies often involve the measurement and juxtaposition of activities and events that native informants find inappropriate or meaningless.” This is also likely true of archaeological comparisons and juxtapositions of material culture. However, culture as a whole does not occur in a vacuum and is the result of several millennia of choices and consequences influencing everything from technology, to religions, to institutions. Archaeology allows for the ability to not only see what came before, but to see how those choices, changes, and consequences affect the present. Where possible, archaeology should seek to address both emic and etic understandings to the extent that they may be recoverable from the archaeological record as manifestations of patterned human behavior (Laylander et al. 2014).

To that point, the culture history offered herein is primarily based upon archaeological (etic) and ethnographic (partially emic and partially etic) information. It is understood that the ethnographic record and early archaeological records were incompletely and imperfectly collected. In addition, in most cases, more than a century of intensive cultural change and cultural evolution had elapsed since the terminus of the prehistoric period. Coupled with the centuries and millennia of prehistoric change separating the “ethnographic present” from the prehistoric past, this has affected the emic and etic understandings of prehistoric cultural settings. Regardless, there remains a need to present the changing cultural setting within the region under investigation. As a result, both archaeological and Native American perspectives are offered when possible.

2.3.1 Introduction

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Takic groups are the three general cultural periods represented in Riverside County. The following discussion of the cultural history of Riverside County references the San Dieguito Complex, Encinitas Tradition, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex,

since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component present in the Riverside County area was primarily represented by the Cahuilla, Gabrielino, and Luiseño Indians.

Absolute chronological information, where possible, will be incorporated into this archaeological discussion to examine the effectiveness of continuing to interchangeably use these terms. Reference will be made to the geological framework that divides the archaeologically-based culture chronology of the area into four segments: the late Pleistocene (20,000 to 10,000 years before the present [YBP]), the early Holocene (10,000 to 6,650 YBP), the middle Holocene (6,650 to 3,350 YBP), and the late Holocene (3,350 to 200 YBP).

2.3.2 Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

Archaeologically, the Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused the glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

2.3.3 Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

Archaeological data indicates that between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast (Warren and True 1961). This complex is locally known as the La Jolla Complex (Rogers 1939; Moriarty 1966), which is regionally associated with the Encinitas Tradition (Warren 1968) and shares cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex appeared in southern California coastal areas and focused upon coastal resources and the development of deeply stratified shell middens that were primarily located around bays and lagoons. The older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and some of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of over 7,000 years in this region, beginning over 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools that are closely associated with the marine resources of the area,

cobble-based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused upon shellfish collection and nearshore fishing. This suggests an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads.

The coastal lagoons in southern California supported large Milling Stone Horizon populations circa 6,000 YBP, as is shown by numerous radiocarbon dates from the many sites adjacent to the lagoons. The ensuing millennia were not stable environmentally, and by 3,000 YBP, many of the coastal sites in central San Diego County had been abandoned (Gallegos 1987, 1992). The abandonment of the area is usually attributed to the sedimentation of coastal lagoons and the resulting deterioration of fish and mollusk habitat. This is a well-documented situation at Batiquitos Lagoon, where over a two-thousand-year period, dominant mollusk species occurring in archaeological middens shift from deep-water mollusks (*Argopecten* sp.) to species tolerant of tidal flat conditions (*Chione* sp.), indicating water depth and temperature changes (Miller 1966; Gallegos 1987).

This situation likely occurred for other small drainages (Buena Vista, Agua Hedionda, San Marcos, and Escondido creeks) along the central San Diego coast where low flow rates did not produce sufficient discharge to flush the lagoons they fed (Buena Vista, Agua Hedionda, Batiquitos, and San Elijo lagoons) (Byrd 1998). Drainages along the northern and southern San Diego coastline were larger and flushed the coastal hydrological features they fed, keeping them open to the ocean and allowing for continued human exploitation (Byrd 1998). Peñasquitos Lagoon exhibits dates as late as 2,355 YBP (Smith and Moriarty 1985) and San Diego Bay showed continuous occupation until the close of the Milling Stone Horizon (Gallegos and Kyle 1988). Additionally, data from several drainages in Camp Pendleton indicate a continued occupation of shell midden sites until the close of the period, indicating that coastal sites were not entirely abandoned during this time (Byrd 1998).

By 5,000 YBP, an inland expression of the La Jolla Complex is evident in the archaeological record, exhibiting influences from the Campbell Tradition from the north. These inland Milling Stone Horizon sites have been termed “Pauma Complex” (True 1958; Warren et al. 1961; Meighan 1954). By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based upon the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples. Evidence from the 4S Project in inland San Diego County suggests that these inland sites may represent seasonal components within an annual subsistence round by La Jolla

Complex populations (Raven-Jennings et al. 1996). Including both coastal and inland sites of this time period in discussions of the Encinitas Tradition, therefore, provides a more complete appraisal of the settlement and subsistence system exhibited by this cultural complex.

More recent work by Sutton has identified a more localized complex known as the Greven Knoll Complex. The Greven Knoll Complex is a redefined northern inland expression of the Encinitas Tradition first put forth by Mark Sutton and Jill Gardener (2010). Sutton and Gardener (2010:25) state that “[t]he early millingstone archaeological record in the northern portion of the interior southern California was not formally named but was often referred to as ‘Inland Millingstone,’ ‘Encinitas,’ or even ‘Topanga.’” Therefore, they proposed that all expressions of the inland Milling Stone in southern California north of San Diego County be grouped together in the Greven Knoll Complex.

The Greven Knoll Complex, as postulated by Sutton and Gardener (2010), is broken into three phases and obtained its name from the type-site Greven Knoll located in Yucaipa, California. Presently, the Greven Knoll Site is part of the Yucaipa’t Site (SBR-1000) and was combined with the adjacent Simpson Site. Excavations at Greven Knoll recovered manos, metates, projectile points, discoidal cogged stones, and a flexed inhumation with a possible cremation (Kowta 1969:39). It is believed that the Greven Knoll Site was occupied between 5,000 and 3,500 YBP. The Simpson Site contained mortars, pestles, side-notched points, and stone and shell beads. Based upon the data recovered at these sites, Kowta (1969:39) suggested that “coastal Milling Stone Complexes extended to and interdigitated with the desert Pinto Basin Complex in the vicinity of the Cajon Pass.”

Phase I of the Greven Knoll Complex is generally dominated by the presence of manos and metates, core tools, hammerstones, large dart points, flexed inhumations, and occasional cremations. Mortars and pestles are absent from this early phase, and the subsistence economy emphasized hunting. Sutton and Gardener (2010:26) propose that the similarity of the material culture of Greven Knoll Phase I and that found in the Mojave Desert at Pinto Period sites indicates that the Greven Knoll Complex was influenced by neighbors to the north at that time. Accordingly, Sutton and Gardener (2010) believe that Greven Knoll Phase I may have appeared as early as 9,400 YBP and lasted until about 4,000 YBP.

Greven Knoll Phase II is associated with a period between 4,000 and 3,000 YBP. Artifacts common to Greven Knoll Phase II include manos and metates, Elko points, core tools, and discoidals. Pestles and mortars are present; however, they are only represented in small numbers. Finally, there is an emphasis upon hunting and gathering for subsistence (Sutton and Gardener 2010:8).

Greven Knoll Phase III includes manos, metates, Elko points, scraper planes, choppers, hammerstones, and discoidals. Again, small numbers of mortars and pestles are present. Greven Knoll Phase III spans from approximately 3,000 to 1,000 YBP and shows a reliance upon seeds and yucca. Hunting is still important, but bones seem to have been processed to obtain bone grease more often in this later phase (Sutton and Gardener 2010:8).

The shifts in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods eventually became the primary dietary resource (Sutton 2011a). Sutton's (2011b) argument posits that the development of mortars and pestles during the middle Holocene can be attributed to the year-round exploitation of acorns as a main dietary provision. Additionally, the warmer and drier climate may have been responsible for groups from the east moving toward coastal populations, which is archaeologically represented by the interchange of coastal and eastern cultural traits (Sutton 2011a).

2.3.4 Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)

Many Luiseño hold the world view that as a population they were created in southern California. Archaeological and anthropological data, however, proposes a scientific/archaeological perspective, suggesting that at approximately 1,350 YBP, Takic-speaking groups from the Great Basin region moved into Riverside County, marking the transition to the Late Prehistoric Period. An analysis of the Takic expansion by Sutton (2009) indicates that inland southern California was occupied by "proto-Yuman" populations before 1,000 YBP. The comprehensive, multi-phase model offered by Sutton (2009) employs linguistic, ethnographic, archaeological, and biological data to solidify a reasonable argument for population replacement of Takic groups to the north by Penutians (Laylander 1985). As a result, it is believed that Takic expansion occurred starting around 3,500 YBP moving toward southern California, with the Gabrielino language diffusing south into neighboring Yuman (Hokan) groups around 1,500 to 1,000 YBP, possibly resulting in the Luiseño dialect.

Based upon Sutton's model, the final Takic expansion would not have occurred until about 1,000 YBP, resulting in Vanyume, Serrano, Cahuilla, and Cupeño dialects. The model suggests that the Luiseño did not simply replace Hokan speakers, but were rather a northern San Diego County/southern Riverside County Yuman population who adopted the Takic language. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far-reaching as the Colorado River Basin and cremation of the dead.

2.3.5 Protohistoric Period (Late Holocene: 1790 to Present)

Ethnohistoric and ethnographic evidence indicates that three Takic-speaking groups occupied portions of Riverside County: the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times are difficult to place, but the project is located well within the borders of ethnographic Luiseño territory. This group

was a seasonal hunting and gathering people with cultural elements that were very distinct from Archaic Period peoples. These distinctions include cremation of the dead, the use of the bow and arrow, and exploitation of the acorn as a main food staple (Moratto 1984). Along the coast, the Luiseño made use of available marine resources by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of nourishment for Luiseño groups. Elaborate kinship and clan systems between the Luiseño and other groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian and other resources from the eastern deserts, as well as steatite from the Channel Islands.

According to Charles Handley (1967), the primary settlements of Late Prehistoric Luiseño Indians in the San Jacinto Plain were represented by Ivah and Soboba near Soboba Springs, Jusipah near the town of San Jacinto, Ararah in Webster's Canyon en route to Idyllwild, Pahsitha near Big Springs Ranch southeast of Hemet, and Corova in Castillo Canyon. These locations share features such as the availability of food and water resources. Features of this land use include petroglyphs and pictographs, as well as widespread milling, which is evident in bedrock and portable implements. Groups in the vicinity of the project, neighboring the Luiseño, include the Cahuilla and the Gabrielino. Ethnographic data for the three groups is presented below.

Luiseño: An Archaeological and Ethnographic Perspective

When contacted by the Spanish in the sixteenth century, the Luiseño occupied a territory bounded on the west by the Pacific Ocean, on the east by the Peninsular Ranges mountains at San Jacinto (including Palomar Mountain to the south and Santiago Peak to the north), on the south by Agua Hedionda Lagoon, and on the north by Aliso Creek in present-day San Juan Capistrano. The Luiseño were a Takic-speaking people more closely related linguistically and ethnographically to the Cahuilla, Gabrielino, and Cupeño to the north and east rather than the Kumeyaay who occupied territory to the south. The Luiseño differed from their neighboring Takic speakers in having an extensive proliferation of social statuses, a system of ruling families that provided ethnic cohesion within the territory, a distinct worldview that stemmed from the use of datura (a hallucinogen), and an elaborate religion that included the creation of sacred sand paintings depicting the deity Chingichngish (Bean and Shippek 1978; Kroeber 1976).

Subsistence and Settlement

The Luiseño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Villages were comprised of areas that were publicly and privately (by family) owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast that were intensively used from January to March when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. The Luiseño remained at village sites for the remainder of the year, where food resources were within a day's travel (Bean and

Shipek 1978; Kroeber 1976).

The most important food source for the Luiseño was the acorn, six different species of which were used (*Quercus californica*, *Quercus agrifolia*, *Quercus chrysolepis*, *Quercus dumosa*, *Quercus engelmannii*, and *Quercus wislizenii*). Seeds, particularly of grasses, flowering plants, and mints, were also heavily exploited. Seed-bearing species were encouraged through controlled burns, which were conducted at least every third year. A variety of other stems, leaves, shoots, bulbs, roots, and fruits were also collected. Hunting augmented this vegetal diet. Animal species taken included deer, rabbit, hare, woodrat, ground squirrel, antelope, quail, duck, freshwater fish from mountain streams, marine mammals, and other sea creatures such as fish, crustaceans, and mollusks (particularly abalone, or *Haliotis* sp.). In addition, a variety of snakes, small birds, and rodents were eaten (Bean and Shipek 1978; Kroeber 1976).

Social Organization

Social groups within the Luiseño nation consisted of patrilinear families or clans, which were politically and economically autonomous. Several clans comprised a religious party, or nota, which was headed by a chief who organized ceremonies and controlled economics and warfare. The chief had assistants who specialized in particular aspects of ceremonial or environmental knowledge and who, with the chief, were part of a religion-based social group with special access to supernatural power, particularly that of Chingichngish. The positions of chief and assistants were hereditary, and the complexity and multiplicity of these specialists' roles likely increased in coastal and larger inland villages (Bean and Shipek 1978; Kroeber 1976; Strong 1929).

Marriages were arranged by the parents, often made to forge alliances between lineages. Useful alliances included those between groups of differing ecological niches and those that resulted in territorial expansion. Residence was patrilocal (Bean and Shipek 1978; Kroeber 1976). Women were primarily responsible for plant gathering and men principally hunted, but at times, particularly during acorn and marine mollusk harvests, there was no division of labor. Elderly women cared for children and elderly men participated in rituals, ceremonies, and political affairs. They were also responsible for manufacturing hunting and ritual implements. Children were taught subsistence skills at the earliest age possible (Bean and Shipek 1978; Kroeber 1976).

Material Culture

House structures were conical, partially subterranean, and thatched with reeds, brush, or bark. Ramadas were rectangular, protected workplaces for domestic chores such as cooking. Ceremonial sweathouses were important in purification rituals; these were round and partially subterranean thatched structures covered with a layer of mud. Another ceremonial structure was the wámkis (located in the center of the village, serving as the place of rituals), where sand paintings and other rituals associated with the Chingichngish religious group were performed (Bean and Shipek 1978; Kroeber 1976).

Clothing was minimal; women wore a cedar-bark and netted twine double apron, and men wore a waist cord. In cold weather, cloaks or robes of rabbit fur, deerskin, or sea otter fur were

worn by both sexes. Footwear included deerskin moccasins and sandals fashioned from yucca fibers. Adornments included bead necklaces and pendants made of bone, clay, stone, shell, bear claw, mica, deer hooves, and abalone shell. Men wore ear and nose piercings made from cane or bone, which were sometimes decorated with beads. Other adornments were commonly decorated with semiprecious stones including quartz, topaz, garnet, opal, opalite, agate, and jasper (Bean and Shipek 1978; Kroeber 1976).

Hunting implements included the bow and arrow. Arrows were tipped with either a carved, fire-hardened wood tip or a lithic point, usually fashioned from locally available metavolcanic material or quartz. Throwing sticks fashioned from wood were used in hunting small game, while deer head decoys were used during deer hunts. Coastal groups fashioned dugout canoes for nearshore fishing and harvested fish with seines, nets, traps, and hooks made of bone or abalone shell (Bean and Shipek 1978; Kroeber 1976).

The Luiseño had a well-developed basket industry. Baskets were used in resource gathering, food preparation, storage, and food serving. Ceramic containers were shaped by paddle and anvil and fired in shallow, open pits to be used for food storage, cooking, and serving. Other utensils included wood implements, steatite bowls, and ground stone manos, metates, mortars, and pestles (Bean and Shipek 1978; Kroeber 1976). Additional tools such as knives, scrapers, choppers, awls, and drills were also used. Shamanistic items include soapstone or clay smoking pipes and crystals made of quartz or tourmaline (Bean and Shipek 1978; Kroeber 1976).

Cahuilla: An Archaeological and Ethnographic Perspective

At the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the San Bernardino Mountains, Orocopia Mountain, and the Chocolate Mountains to the west, Salton Sea and Borrego Springs to the south, Palomar Mountain and Lake Mathews to the west, and the Santa Ana River to the north. The Cahuilla are a Takic-speaking people closely related to their Gabrielino and Luiseño neighbors, although relations with the Gabrielino were more intense than with the Luiseño. They differ from the Luiseño and Gabrielino in that their religion is more similar to the Mohave tribes of the eastern deserts than the Chingichngish religious group of the Luiseño and Gabrielino. The following is a summary of ethnographic data regarding this group (Bean 1978; Kroeber 1976).

Subsistence and Settlement

Cahuilla villages were typically permanent and located upon low terraces within canyons in proximity to water sources. These locations proved to be rich in food resources and also afforded protection from prevailing winds. Villages had areas that were publicly owned and areas that were privately owned by clans, families, or individuals. Each village was associated with a particular lineage and series of sacred sites that included unique petroglyphs and pictographs. Villages were occupied throughout the year; however, during a several-week period in the fall, most of the village members relocated to mountain oak groves to take part in acorn harvesting (Bean 1978; Kroeber 1976).

The Cahuilla's use of plant resources is well documented. Plant foods harvested by the Cahuilla included valley oak acorns and single-leaf pinyon pine nuts. Other important plant species included bean and screw mesquite, agave, Mohave yucca, cacti, palm, chia, quail brush, yellowray goldfield, goosefoot, manzanita, catsclaw, desert lily, mariposa lily, and several other species such as grass seed. Several agricultural domesticates were acquired from the Colorado River tribes including corn, bean, squash, and melon grown in limited amounts. Animal species taken included deer, bighorn sheep, pronghorn antelope, rabbit, hare, rat, quail, dove, duck, roadrunner, and a variety of rodents, reptiles, fish, and insects (Bean 1978; Kroeber 1976).

Social Organization

The Cahuilla was not a political nation, but rather a cultural nationality with a common language. Two non-political, non-territorial patrimoieties were recognized: the Wildcats (túktem) and the Coyotes (?ístam). Lineage and kinship were memorized at a young age among the Cahuilla, providing a backdrop for political relationships. Clans were comprised of three to 10 lineages; each lineage owned a village site and specific resource areas. Lineages within a clan cooperated in subsistence activities, defense, and rituals (Bean 1978; Kroeber 1976).

A system of ceremonial hierarchy operated within each lineage. The hierarchy included the lineage leader, who was responsible for leading subsistence activities, guarding the sacred bundle, and negotiating with other lineage leaders in matters concerning land use, boundary disputes, marriage arrangements, trade, warfare, and ceremonies. The ceremonial assistant to the lineage leader was responsible for organizing ceremonies. A ceremonial singer possessed and performed songs at rituals and trained assistant singers. The shaman cured illnesses through supernatural powers, controlled natural phenomena, and was the guardian of ceremonies, keeping evil spirits away. The diviner was responsible for finding lost objects, telling future events, and locating game and other food resources. Doctors were usually older women who cured various ailments and illnesses with their knowledge of medicinal herbs. Finally, certain Cahuilla specialized as traders, who ranged as far west as Santa Catalina and as far east as the Gila River (Bean 1978; Kroeber 1976).

Marriages were arranged by parents from opposite moieties. When a child was born, an alliance formed between the families, which included frequent reciprocal exchanges. The Cahuilla kinship system extended to relatives within five generations. Important economic decisions, primarily the distribution of goods, operated within this kinship system (Bean 1978; Kroeber 1976).

Material Culture

Cahuilla houses were dome-shaped or rectangular, thatched structures. The home of the lineage leader was the largest, located near the ceremonial house with the best access to water. Other structures within the village included the men's sweathouse and granaries (Bean 1978; Kroeber 1976).

Cahuilla clothing, like other groups in the area, was minimal. Men typically wore a

loincloth and sandals; women wore skirts made from mesquite bark, animal skin, or tules. Babies wore mesquite bark diapers. Rabbit skin cloaks were worn in cold weather (Bean 1978; Kroeber 1976).

Hunting implements included the bow and arrow, throwing sticks, and clubs. Grinding tools used in food processing included manos, metates, and wood mortars. The Cahuilla were known to use long grinding implements made from wood to process mesquite beans; the mortar was typically a hollowed log buried in the ground. Other tools included steatite arrow shaft straighteners (Bean 1978; Kroeber 1976).

Baskets were made from rush, deer grass, and skunkbrush. Different species and leaves were chosen for different colors in the basket design. Coiled-ware baskets were either flat (for plates, trays, or winnowing), bowl-shaped (for food serving), deep, inverted, and cone-shaped (for transporting), or rounded and flat-bottomed for storing utensils and personal items (Bean 1978; Kroeber 1976).

Cahuilla pottery was made from a thin, red-colored ceramic ware that was often painted and incised. Four basic vessel types are known for the Cahuilla: small-mouthed jars, cooking pots, bowls, and dishes. Additionally, smoking pipes and flutes were fashioned from ceramic (Bean 1978; Kroeber 1976).

Gabrielino: An Archaeological and Ethnographic Perspective

The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange counties. The southern extent of this culture area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978; Kroeber 1976).

Subsistence and Settlement

The Gabrielino lived in permanent villages and occupied smaller resource-gathering camps at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams and in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray and shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin and porpoise, various waterfowl species, numerous fish species, purple sea urchin, and mollusks, such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mohave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and numerous snake species (Bean and Smith 1978; Kroeber 1976).

Social Organization

Little is known about the social structure of the Gabrielino; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting tribute from the village(s) under his jurisdiction, and arbitrating disputes within the village(s). The status of the chief was legitimized by his safekeeping of the sacred bundle, a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978; Kroeber 1976).

Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978; Kroeber 1976).

Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing (Bean and Smith 1978; Kroeber 1976).

Material Culture

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a yuvar, an open-air structure built near the chief's house (Bean and Smith 1978; Kroeber 1976).

Clothing was minimal; men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain, yucca fiber sandals were worn. Women often used red ochre upon their faces and skin for adornment or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wood paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978; Kroeber 1976).

2.3.6 Ethnohistoric Period (1769 to Present)

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents, oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodriguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastian Viscaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Viscaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at “San Miguel”; 60 years later, Viscaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged

from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas (Chapman 1921).

Up until this time, the only known way to feasibly travel from Sonora to Alta California was by sea. In 1774, Juan Bautista de Anza, an army captain at Tubac, requested and was given permission by the governor of the Mexican State of Sonora to establish an overland route from Sonora to Monterey (Chapman 1921). In doing so, Juan Bautista de Anza passed through Riverside County and described the area in writing for the first time (Caughey 1970; Chapman 1921). In 1797, Father Presidente Lausen (of Mission San Diego de Alcalá), Father Norberto de Santiago, and Corporal Pedro Lisalde (of Mission San Juan Capistrano) led an expedition through southwestern Riverside County in search of a new mission site to establish a presence between San Diego and San Juan Capistrano (Engelhardt 1921). Their efforts ultimately resulted in the establishment of Mission San Luis Rey in Oceanside, California.

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked upon a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or capilla, at a Cahuilla rancheria called Guachama (Beattie and Beattie 1939). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of estancias at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1939). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin

to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as “ranchos,” covered expansive portions of California and by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the ranchos in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many ranchos, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission ... We plead and beseech you ... to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The Mexican and American ranchers did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines,

business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969; Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. While a much larger population was now settling in California, this was primarily in the central valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry that was established during the earlier rancho period. However, by 1859, the first United States Post Office in what would eventually become Riverside County was set up at John Magee's store on the Temecula Rancho (Gunther 1984).

During the same decade, circa 1852, the Native Americans of southern Riverside County, including the Luiseño and the Cahuilla, thought they had signed a treaty resulting in their ownership of all lands from Temecula to Aguanga east to the desert, including the San Jacinto Valley and the San Gorgonio Pass. The Temecula Treaty also included food and clothing provisions for the Native Americans. However, Congress never ratified these treaties, and the promise of one large reservation was rescinded (Brigandi 1998).

With the completion of the Southern Pacific Railroad in 1869, southern California saw its first major population expansion. The population boom continued circa 1874 with the completion of connections between the Southern Pacific Railroad in Sacramento to the transcontinental Central Pacific Railroad in Los Angeles (Rolle 1969; Caughey 1970). The population influx brought farmers, land speculators, and prospective developers to the region. As the Jurupa area became more and more populated, circa 1870, Judge John Wesley North and a group of associates founded the city of Riverside on part of the former rancho.

Although the first orange trees were planted in Riverside County circa 1871, it was not until a few years later when a small number of Brazilian navel orange trees were established that the citrus industry truly began in the region (Patterson 1971). The Brazilian navel orange was well suited to the climate of Riverside County and thrived with assistance from several extensive irrigation projects. At the close of 1882, an estimated half a million citrus trees were present in California. It is estimated that nearly half of that population was in Riverside County. Population growth and 1880s tax revenue from the booming citrus industry prompted the official formation of Riverside County in 1893 out of portions of what was once San Bernardino County (Patterson 1971).

Shortly thereafter, with the start of World War I, the United States began to develop a military presence in Riverside County with the construction of March Air Reserve Base. During World War II, Camp Haan and Camp Anza were constructed in what is now the current location of the National Veteran's Cemetery. In the decades that followed, populations spread throughout the county into Lake Elsinore, Corona, Norco, Murrieta, and Wildomar. However, a significant portion of the county remained largely agricultural well into the 1970s. Following the 1970s, Riverside saw a period of dramatic population increase as the result of new development, more than doubling the population of the county with a population of over 1.3 million residents (Patterson 1971).

2.4 Research Goals

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project area through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is the northwestern portion of Riverside County. The scope of work for the archaeological program conducted for the TR38605 Project included the review of previous survey work for the 95.96-acre area. Given the area involved and the narrow focus of the cultural resources study, the research design for this project was necessarily limited and general in nature. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of the identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of characteristics, as well as the resource's ability to address regional research topics and issues.

Although initial site evaluation investigations are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The basic research effort employed is focused upon gathering sufficient data to determine the boundaries of each resource, the depth, stratigraphy, and contents of any subsurface deposits, and the overall integrity of the site. Testing and recordation of the contents of the site would provide the basis to complete an analysis of spatial relationships of artifacts, features, and natural resources. Ultimately, this information forms the foundation to determine the cultural affiliation of the site, the period of occupation, site function, and potential to address more focused research questions. The following research questions take into account the size and location of the project discussed above.

Research Questions:

- Can located cultural resources be situated with a specific time period, population, or individual?
- Do the types of located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do the located sites compare to others reported from different surveys conducted in the area?
- How do the located sites fit existing models of settlement and subsistence for valley environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project area

occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with these primary research goals in mind:

- 1) To identify cultural resources occurring within the project;
- 2) To determine, if possible, site type and function, context of the deposit, and chronological placement of each cultural resource identified;
- 3) To place each cultural resource identified within a regional perspective; and
- 4) To provide recommendations for the treatment of each of the cultural resources identified.

3.0 METHODOLOGY

The archaeological program for the TR38605 Project consisted of an institutional records search, a review of previous studies for the 95.96 acre property, a review of the previous evaluation program for sites P-33-26654 and P-33-26658 within the project area, and preparation of this updated technical report. This archaeological study conformed to County of Riverside Cultural Resource Guidelines (Draft) and the statutory requirements of CEQA Section 15064.5. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO March, 1995).

3.1 Archaeological Records Search

The updated records search conducted by the EIC at UCR was reviewed for an area of one mile surrounding the project in order to determine the presence of any previously recorded sites. Results of the records search are provided in Appendix C and discussed in Section 4.1. The EIC also provided the standard review of the National Register of Historic Places and the Office of Historic Preservation Historic Property Directory. Land patent records, held by the BLM and accessible through the BLM General Land Office website, were also reviewed for pertinent project information. In addition, the BFSA research library was consulted for any relevant historical information.

3.2 Report Preparation and Recordation

This report contains information regarding previous studies, statutory requirements for the project, a brief description of the setting, research methods employed, and the overall results of the updated study. The report includes all appropriate illustrations and tabular information needed to make a complete and comprehensive presentation of these activities, including the methodologies employed and the personnel involved. A copy of the final updated technical report will be placed at the EIC at UCR. Any newly recorded sites, or sites requiring updated information, will be recorded on the appropriate DPR forms, which will be filed with the EIC.

3.3 Native American Consultation

BFSA previously requested a review of the Sacred Lands Files (SLF) by the Native American Heritage Commission (NAHC) in May of 2016, and an update in December of 2016, to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within one mile of the project. The NAHC SLF search did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the search radius. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter. BFSA provided the letters to Native American representatives at least two weeks prior to the initiation of the field survey.

Responses were received during the two-week interim period and after the date of the field survey. None of the tribal responses received during the two-week interim period requested participation in the survey. The Soboba Band of Luiseño Indians previously requested that they be included in the mandated AB 52 consultation process, the Morongo Band of Mission Indians previously indicated that the project is considered a Traditional Use Area that they have cultural ties with, and the Pechanga Band of Luiseño Mission Indians previously indicated that they have concerns about Tribal Cultural Resources (TCRs) and the Traditional Cultural Landscape (TCL) “that comprises much of this region” (the letter states that this designation is currently under review by the United States Army Corps of Engineers and the State Historic Preservation Office).

A site visit was conducted on November 17, 2016, that included representatives from the Pechanga Band of Luiseño Mission Indians, the County of Riverside, the previous applicant, the project engineer, and BFSa. The goal of the meeting was to provide the representatives from the Pechanga Band and the County of Riverside an opportunity to review the property and observe the identified prehistoric sites, as well as to provide design input and recommendations with regards to the prehistoric cultural resources identified within the project Area of potential Effect (APE). All correspondence conducted previously for the project is provided in Appendix D.

3.4 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of Riverside County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the CEQA criteria that a resource must meet in order to be determined important.

3.4.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term “historical resource” includes the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] SS5024.1, 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 significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural,

engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC SS5024.1, Title 14, Section 4852) including the following:

- a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - b) Is associated with the lives of persons important in our past;
 - c) 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
 - d) Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

- 1) 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.
- 2) The significance of an historical resource is materially impaired when a project:
 - a) 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 CRHR; or
 - b) 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,

- c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

- 1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
- 2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
- 3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21803.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- 4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

- (d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in PRC SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

- 1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
- 2) The requirement of CEQA and the Coastal Act.

4.0 **RESULTS**

4.1 **Records Search Results**

An updated archaeological records search for the project was requested from the EIC at UCR. The EIC reported 87 cultural resource locations recorded within a one-mile radius (Table 4.1–1). Although no sites were recorded within the project area, two of the sites (P-33-023019 and P-33-023020) are located just on the edge of the project boundaries. The field survey, and a review of the site record forms, verified that the sites are located along the northern boundary of the APE, just outside of the project.

The sites located within one mile of the TR38605 Project include: 50 bedrock milling feature sites, six bedrock milling feature sites with associated lithic scatters, one bedrock milling feature site with two possible quartz quarries, two bedrock milling feature sites with possible rock enclosures and prehistoric isolates, four prehistoric quartz quarry sites with associated debitage scatters, three lithic scatters, one lithic scatter with associated habitation debris, and six prehistoric isolated artifacts. Historic sites include: one historic building foundation with an associated trash scatter, one historic building foundation, one historic rock pile, one historic rock cairn, the historic Lake Mathews Dam, one historic water retention basin, three historic trash scatters, one historic well/cistern and a trash scatter, one historic building foundation with a trash scatter and a possible rock cairn, one historic house, and one isolated historic Model A Ford vehicle. The site record form for Site P-33-004423 is missing from the records search, so its classification is unknown. The majority of these recorded sites are situated near Lake Mathews, or to the north and east of the project.

Table 4.1–1
Archaeological Sites Located Within a
One-Mile Radius of the TR38605 Project

Site	Description	Distance From the Project (m)
P-33-000326	Prehistoric bedrock milling feature(s)	926.7
P-33-001284		756.0
P-33-001298		562.9
P-33-002209		1,592.2
P-33-002265		1,008.3
P-33-002266		680.7
P-33-002569		679.7
P-33-002570		641.8
P-33-003082		1,495.3
P-33-003851		871.0
P-33-003852		925.9

Site	Description	Distance From the Project (m)
P-33-003853		991.6
P-33-003854		858.3
P-33-003855		877.7
P-33-003856		946.3
P-33-004366		1,092.3
P-33-004372		1,566.5
P-33-004376		11,586.1
P-33-004425		878.8
P-33-004426		770.7
P-33-004427		1,391.0
P-33-004428		1,370.9
P-33-004429		1,207.9
P-33-004430		1,143.9
P-33-004431		1,105.7
P-33-004435		880.5
P-33-004438 <i>(Updated to include P-33-004440 in 2005)</i>		645.3
P-33-004439		691.3
P-33-004440 <i>(Determined to be part of P-33-004438 in 2005)</i>		765.1
P-33-004441		737.8
P-33-004442		663.2
P-33-004443		577.7
P-33-004452		1,470.6
P-33-004487		960.2
P-33-006650		1,107.6
P-33-006651		483.4
P-33-006758		1,236.7
P-33-006759		1,376.4
P-33-007377		1,110.3
P-33-007379		1,349.3
P-33-007380		1,548.0
P-33-007569		1,325.8
P-33-007571		975.6
P-33-016085		654.2
P-33-016089		1,292.8
P-33-16090		1,045.5

Site	Description	Distance From the Project (m)
P-33-16092		761.4
P-33-16095		1,510.9
P-33-16115		457.1
P-33-023902		137.0
P-33-000328	Prehistoric bedrock milling feature(s) and associated lithic artifacts	843.5
P-33-000392		1,580.5
P-33-001239		781.1
P-33-002568		716.3
P-33-004421		1,479.2
P-33-006763		1,194.6
P-33-004423	Site form missing	1,585.4
P-33-004424	Prehistoric bedrock milling features and two possible quartz quarries	979.4
P-33-023014	Prehistoric bedrock milling feature(s), possible rock enclosure, and prehistoric isolate	373.3
P-33-023016		409.1
P-33-004437	Prehistoric quartz quarry and debitage scatter	807.5
P-33-012465		1,412.5
P-33-023015		555.5
P-33-023017		84.1
P-33-001240	Prehistoric lithic scatter	1,109.0
P-33-023018		20.0
P-33-023019		On APE boundary
P-33-007378	Prehistoric lithic scatter and habitation debris	1,161.5
P-33-016040	Prehistoric isolated artifact	784.6
P-33-013489		1,421.8
P-33-023013		258.5
P-33-016039		883.1
P-33-012734		1,117.4
P-33-021732		1,310.6
P-33-004374/H	Historic building foundations and historic trash scatter	1,488.8
P-33-023020	Historic building foundation	On APE boundary
P-33-004436/H	Historic rock pile	853.0
P-33-004448/H	Historic rock cairn	1,014.9
P-33-007244/H	Historic Lake Mathews Dam	961.4
P-33-16107/H	Historic water retention basin	489.8
P-33-007560	Historic trash scatter	1,042.6

Site	Description	Distance From the Project (m)
P-33-021733		917.4
P-33-0021734		1,574.6
P-33-0012467/H	Historic well/cistern and trash scatter	1,322.9
P-33-012466/H	Historic building foundation with a trash scatter and possible rock cairn	1,276.2
P-33-024047	Historic house	476.5
P-33-013488	Historic Model A Ford vehicle	1,605.1

A total of 36 previous studies, which primarily consist of Phase I assessments, have been completed within one mile of the project (Table 4.1–2). None of these studies crossed the current APE.

Table 4.1–2
Previous Studies Conducted Within a
One-Mile Radius of the TR38605 Project

Aislin-Kay, Marnie

- 2004 Letter Report: Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate SC-213-01 (Holt Property), 16595 McAllister Street, Riverside, Riverside County, California. Michael Brandman Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Archaeological Research, Inc.

- 1974 Archaeological Report – Project W.O. 5-3764, Box Springs Feeder. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Arkush, Brooke S.

- 1989 Letter Report: A Twenty Acre Extension, Tentative Tract 17989. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Bowles, Larry L.

- 1981 An Archaeological Assessment of TP 17939. Archaeological Consultant. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Brown, Robert S.

- 1989 Archaeological Survey of the Spanish Mill Project: A 300 Acre Property (Tentative Tract

24800) in Riverside County, CA. Archaeological Resource Management Corp. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Clifford, James and Brian F. Smith

- 2002 A Cultural Resources Survey of the Van Buren Boulevard Collector Project in Association with the Lake Mathews Gold and Country Club. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Cotrell, Marie

- 1977 Report for an Archaeological Resource Survey Conducted on a 237-Acre Parcel in the Southwest Riverside Area, in Riverside County. Archaeological Resource Management Corp. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Davis, Alan

- 1981 An Archaeological Assessment of Tentative Tract 17989, in Mockingbird Canyon, Riverside County, CA. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Desautels, Roger J.

- 1981 Archaeological Report on the Lake Mathews Project Located in the Lake Mathews Area of the County of Riverside. Scientific Resources Surveys, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Drover, Christopher E.

- 1982 Archaeological Assessment of Tentative Parcel Map 18472, Near Arlington Heights, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1989 A Cultural Resource Assessment of the La Sierra Project Near Lake Mathews, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1991 A Cultural Resource Assessment: Western Municipal Water District 7,920' 12" Diameter Pipeline, Woodside, California. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1992a Environmental Impact Evaluation: A Cultural Resource Assessment of the 18-Acre Municipal Water District Lake Mathews Project, Lake Mathews USGS Quadrangle, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1992b A Cultural Resource Assessment of the Western Municipal District's Lake Mathews Water

Reclamation Line Project, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

- 1994 Environmental Impact Evaluation: A Cultural Resources Assessment of the Proposed 10-Acre Gamboa Rodeo Ring Project APN 270-160-014+015. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 2001 A Cultural Resource Inventory: Cacciatori Conditional Use Permit. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Goodwin, Riordan and Jennifer Reynolds

- 2005 Archaeological Monitoring Program, La Sierra West Tract 30295, Riverside County, California. LSA Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Hoover, Anna M., Kirstie R. Blevins, and Steven P. McCormick

- 2004 A Phase I Archaeological Survey Report on the Bermuda Dune Property, 5 Acres, APN 609-052-002, City of La Quinta, County of Riverside, California. L&L Environmental, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Jones and Stokes Associates, Inc.

- 2000 Final Cultural Resources Inventory Report for the Williams Communications, Inc., Fiber Optic Cable System Installation Project, Riverside to San Diego, CA Vol. I-IV. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

LeCount, Lisa J. and Carmen A. Weber

- 1992 Lake Mathews Cultural Resources Reconnaissance Survey. Chambers Group, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Lerch, Michael K.

- 1983 Cultural Resource Assessment of the Santa Ana Watershed Project Authority Proposed Imported Water Conveyance System, Riverside County, CA. San Bernardino County Museum Association. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Love, Bruce

- 1990 A Cultural Resources Assessment of McAllister Street Between Riverside City Limits and El Sobrante Road North of Lake Mathews in Riverside County. Archaeological Resource Unit. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

McKenna, Jeanette A.

- 2000 A Phase I Cultural Resources Investigation of the Vesta Telecommunications, Inc. Fiber Optic Alignment, Riverside County to San Diego County, CA. McKenna et al. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Meier, K. Harley, James Clifford, and Brian F. Smith

- 2004 A Cultural Resources Study for the El Sobrante Estates Project, County of Riverside, APN 269-060-101, 269-060-011, and 269-060-012. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Salpas, Jean A.

- 1981 An Archaeological Assessment of Parcel 17326. Archaeological Consultant. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Scientific Resource Surveys, Inc.

- 1981 Cultural Resource Report on 1330 Acres Located Adjacent to Lake Mathews in the County of Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Smith, Brian F., Claire M. Allen, and Jennifer R. Kraft

- 2015 A Phase I and II Cultural Resource Report for the Lake Ranch Project, TR 36730, Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Smith, Brian F., Claire M. Allen, Mary M. Lenich, and Jennifer R. Kraft

- 2013 A Phase I and II Cultural Resource Assessment for the Citrus Heights II Project, TTM 36475, Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Stropes, Tracy A. and Brian F. Smith

- 2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, TTM 36390; Specific Plan 325 (Amendment No. 1), Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 2016 Cultural Resources Mitigation Monitoring Report for Phase I of the Citrus Heights Development Project, TR 36390; Specific Plan 325 (Amendment No. 1), Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Swenson, James D.

- 1980 Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel 9219, Mockingbird Canyon Area of Riverside County, California. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Tuma, Michael W. and Brian F. Smith

- 2001a A Cultural Resource Study for the McAllister Hills Golf and Country Club Specific Plan. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 2001b A Cultural Resource Study for the McAllister Hills Golf and Country Club Specific Plan, County of Riverside, California. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Wade, Sue A.

- 2004 Cultural Resource Survey and Archaeological Evaluations for the Mockingbird Ridge Project. Heritage Resources. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

White, Laurie

- 2000 Letter Report: Records Search Results for Sprint PCS Facility RV54XC467A (K-9 Academy), Near Lake Mathews, Riverside County, California. Michael Brandman Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Whitney-Desautels, Nancy

- 1987 Archaeological Assessment Form: TT 23253 and 23062. Scientific Resources Surveys, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

The EIC reviewed the following historic sources:

- The National Register of Historic Places Index
- The Office of Historic Preservation, Archaeological Determinations of Eligibility
- The Office of Historic Preservation, Directory of Properties in the Historic Property Data File
- The 15' USGS *Riverside* topographic map (1901, 1942)
- The 30' USGS *Elsinore* topographic map (1901)

These sources did not indicate the presence of archaeological resources within the project. However, for records searches and background research, the absence of positive results does not

necessarily indicate the absence of historic resources. The records search did denote the presence of recorded sites in the vicinity of the project. Given the historic settlement of the region and the frequency of sites known to be surrounding the project, there is a moderate potential for archaeological discoveries. The largest number of sites indicated by the records search suggests that bedrock milling features should be the primary site type within the property. The large number of dirt roads next to canyons also suggests potential for historic dumping sites. The complete records search results are provided in Appendix C.

BFSA also requested a SLF search from the NAHC to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within one mile of the project. The NAHC SLF search did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the search radius. In accordance with the recommendations of the NAHC, BFSA contacted all Native American consultants listed in the NAHC response letter. BFSA provided the letters to Native American representatives at least two weeks prior to the initiation of the field survey.

Responses were received during the two-week interim period and after the date of the field survey. None of the tribal responses received during the two-week interim period requested participation in the survey. The Soboba Band of Luiseño Indians did request that they be included in the mandated AB 52 consultation process, the Morongo Band of Mission Indians indicated that the project is considered a Traditional Use Area that they have cultural ties with, and the Pechanga Band of Luiseño Mission Indians indicated that they have concerns about TCRs and the TCL “that comprises much of this region” (the letter states that this designation is currently under review by the United States Army Corps of Engineers and the State Historic Preservation Office).

A site visit conducted on November 17, 2016, included representatives from the Pechanga Band of Luiseño Mission Indians, the County of Riverside, the applicant, the project engineer, and BFSA. The goal of the meeting was to provide the representatives from the Pechanga Band and the County of Riverside an opportunity to review the property and observe the identified prehistoric sites, as well as to provide design input and recommendations with regards to the prehistoric cultural resources identified within the project APE. All correspondence is provided in Appendix D.

4.1.1 Historic Research Results

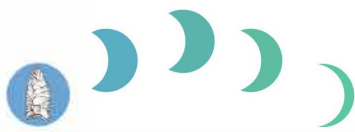
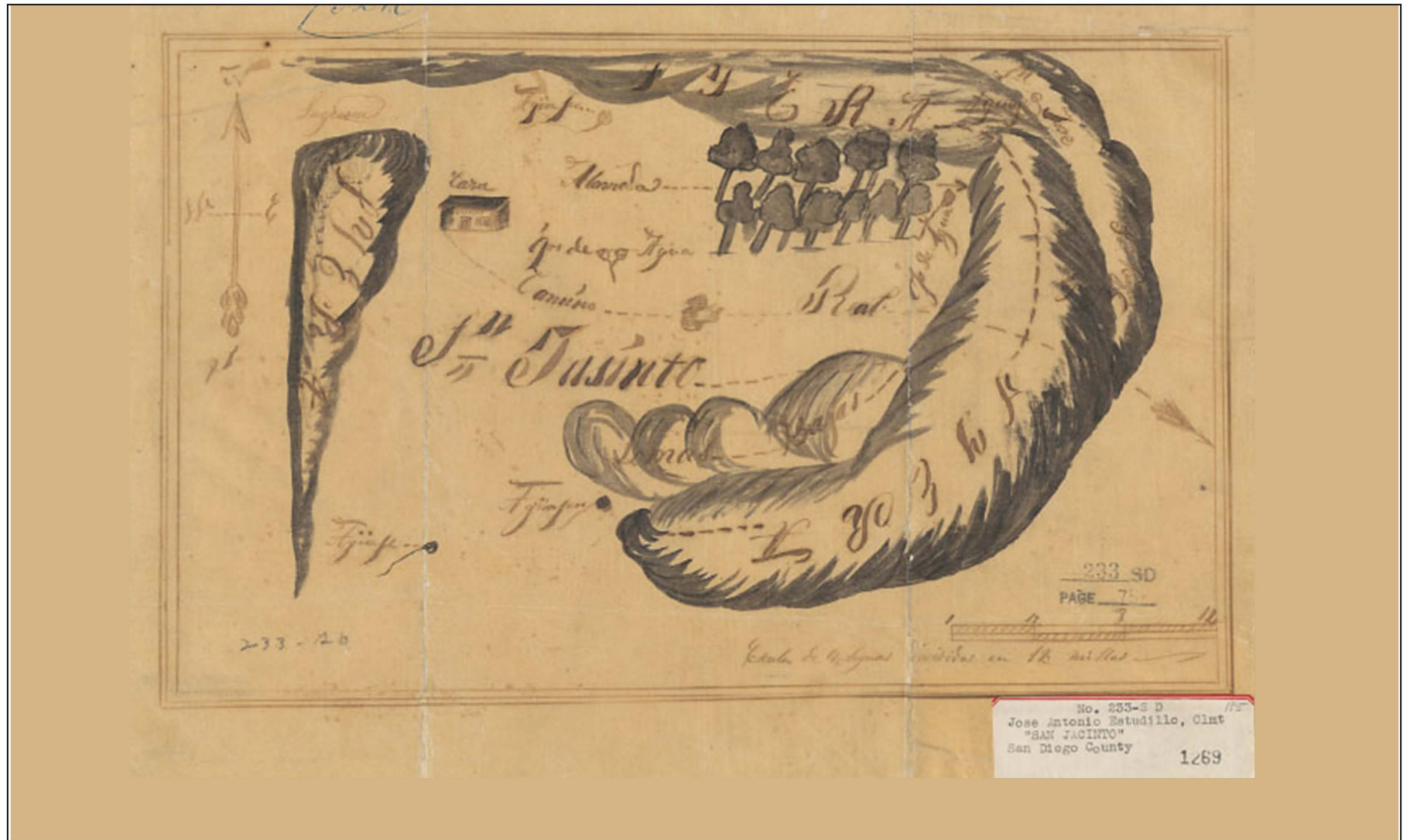
The TR38605 Project is located within the former Rancho Sobrante de San Jacinto land grant recorded in 1851 (Figure 4.1–1). The grant, originally given to Maria del Rosario Estudillo de Aguirre, included 48,847 acres in present-day San Bernardino County. Rancho Sobrante de San Jacinto was one of three divisions of the Rancho San Jacinto Viejo, which was owned by her father, José Antonio Estudillo, totaling 133,000 acres.

The land was surveyed and sectioned in 1853 (Figure 4.1–2). According to the notes on the map, the sections of land that include the project were not surveyed, as they were considered “too rough to be measured with accuracy and valueless” (see Figure 4.1–2). Despite this lack of

value, Doña Rosario and her husband, Don José Antonio Aguirre, who primarily lived in San Diego, kept animals on the land until sometime after Don Antonio's death in 1860 (Haggland 1983).

A plat map from 1866 (Figure 4.1–3) shows that Maria del Rosario de Aguirre was still the owner of the land grant, also referred to as Lot 37, at that time. The land was resurveyed and recorded by the United States Surveyor General in 1891 (Figure 4.1–4) as an update to the 1853 map. The sections not surveyed in 1853 remained undeveloped in 1891, with the estimated acreage of the portion of Lot 37 that was not surveyed at 6,036 acres. USGS map data from 1898 to the present (Figure 4.1–5) reveals that the TR38605 Project remained undeveloped, aside from a few roads (paved and unpaved) that crossed through the project boundaries.

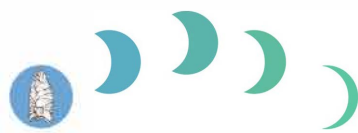
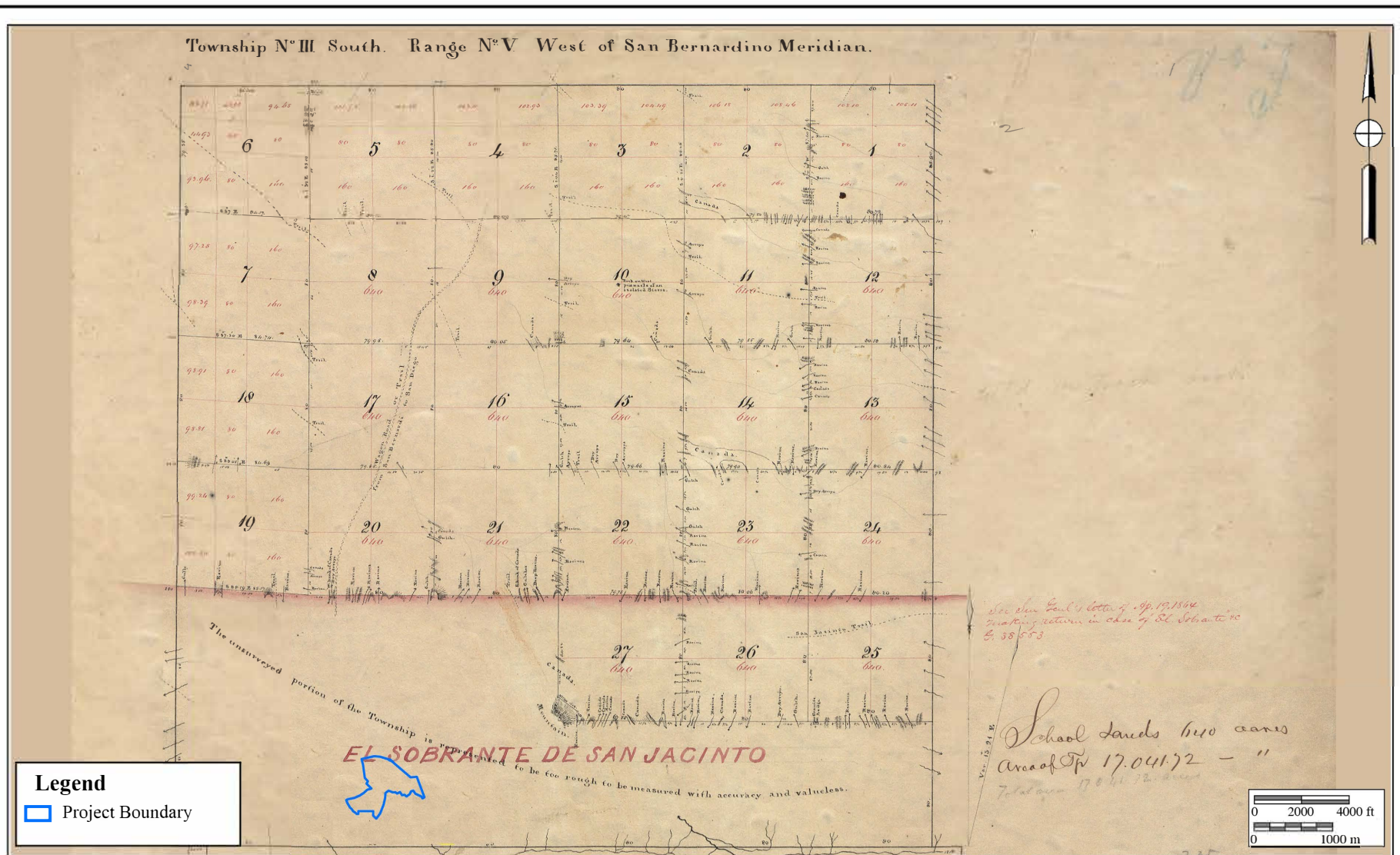
A review of historic aerial photographs indicates that the property has been partially dry farmed since the 1940s. The 1948 aerial photographs available for the western region of the project APE indicate that a large amount of grading has occurred in the northwest corner of the property. Further, historic imagery and historic USGS maps indicate that the construction of the reservoir and the planting of the surrounding orchards occurred sometime between 1960 and 1966. The property was largely cleared of the orchards by 2009.



BFS Environmental Services
A Perennial Company

Figure 4.1–1
Rancho Sobrante Map

The TR38605 Project



BFSA Environmental Services
A Perennial Company

Figure 4.1-2
1853 Survey Map
The TR38605 Project

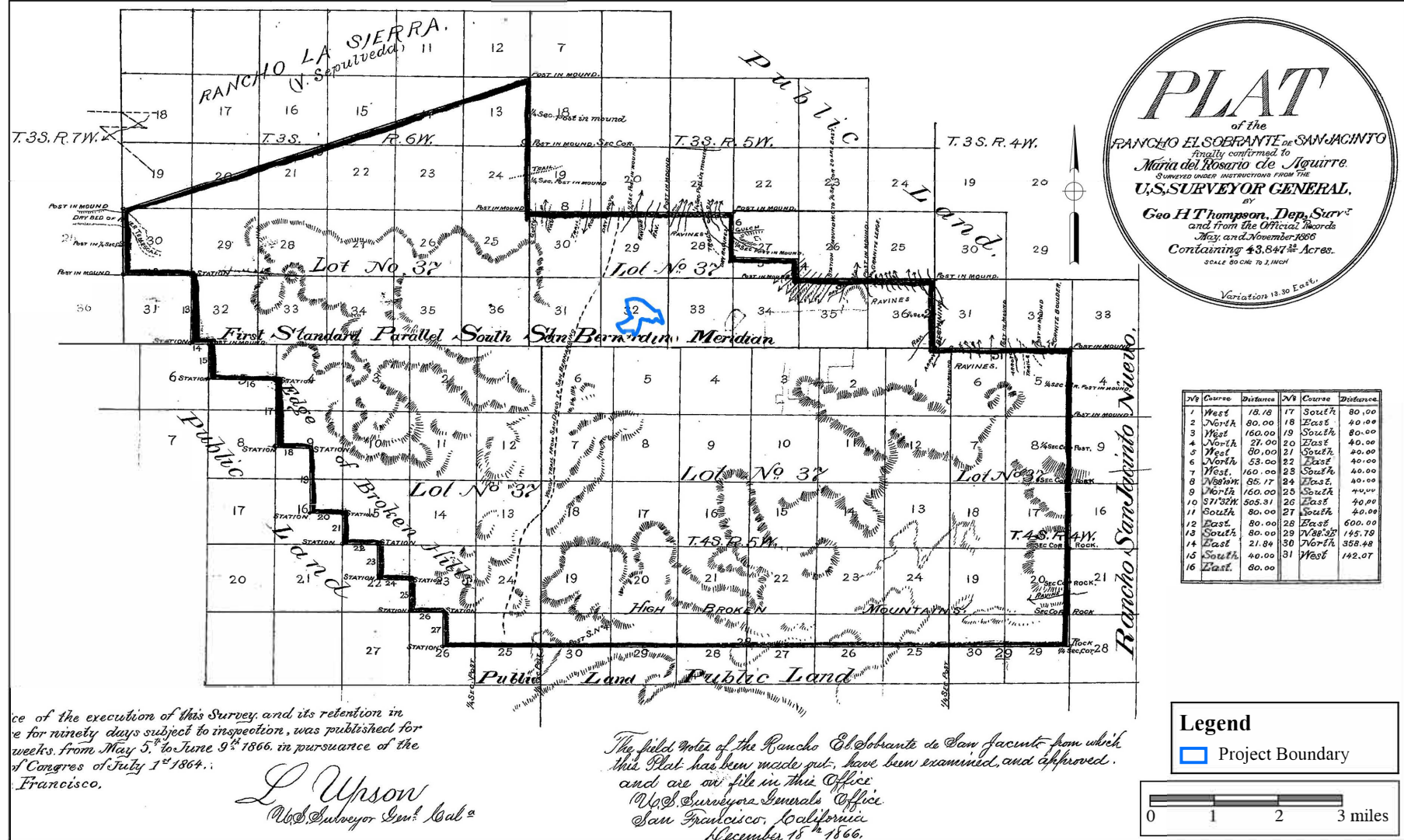


Figure 4.1-3
1866 PLAT Map
The TR38605 Project



BFS Environmental Services
A Perennial Company

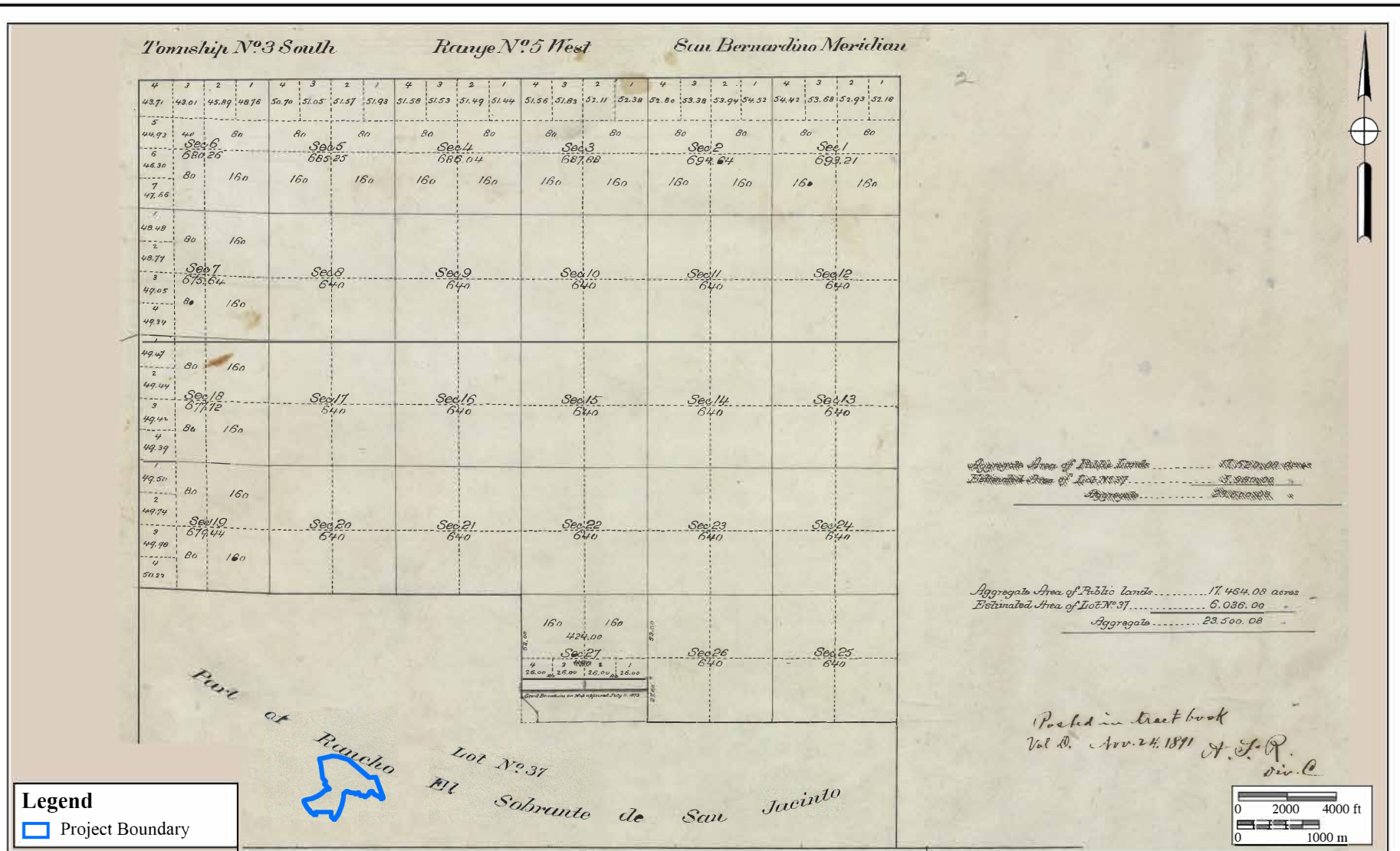


Figure 4.1-4
1891 Survey Map
The TR38605 Project

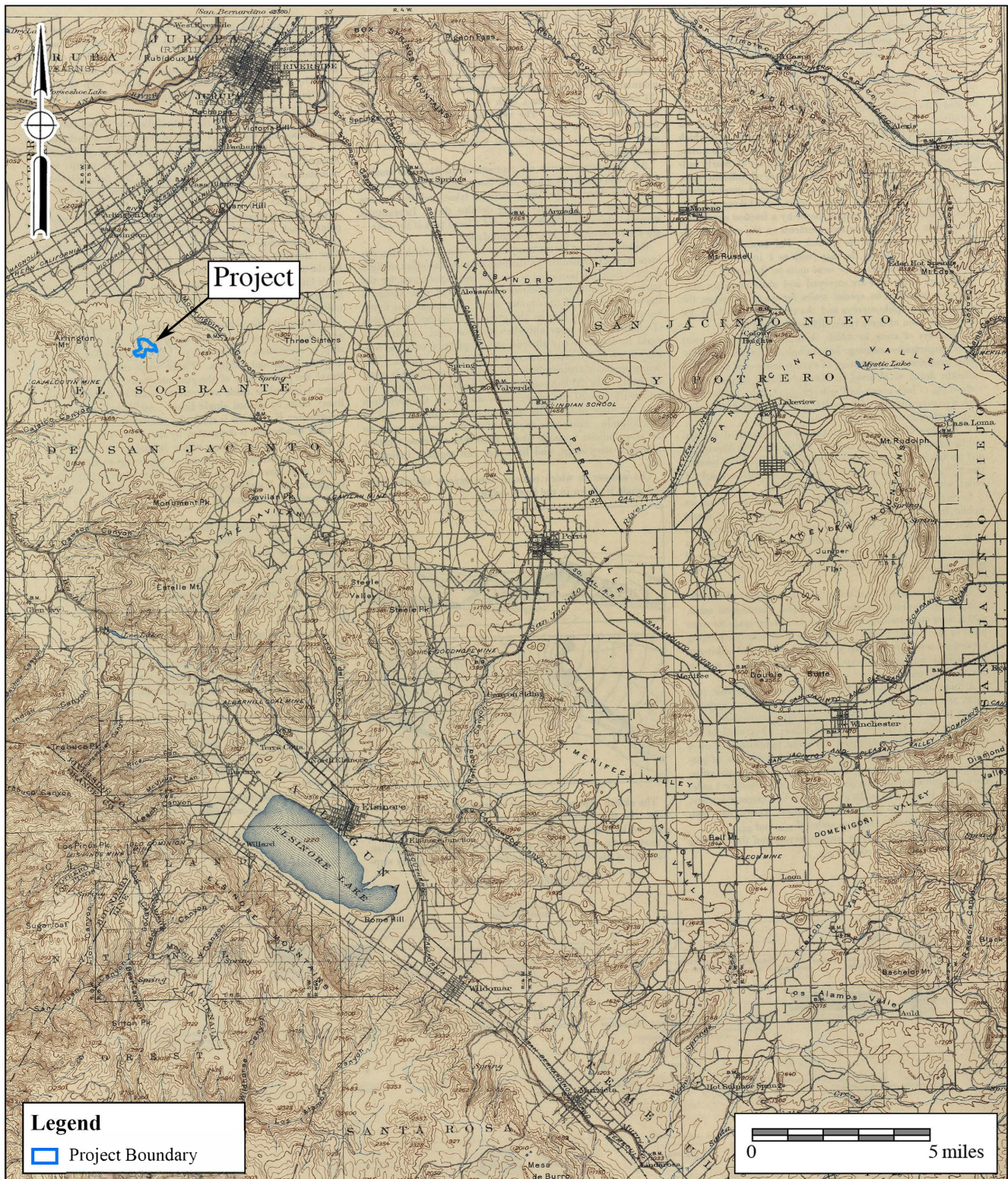


Figure 4.1–5
1898 *Elsinore* USGS Map
The TR38605 Project

USGS *Elsinore* Quadrangle (1:125,000 series)

4.2 Results of the Field Survey

Previous survey work was conducted by BFSA President Brian F. Smith and Principal Archaeologist Tracy A. Stropes for the TR38605 Project on June 14, 2016 (see Smith and Stropes 2017). The property was visited again on October 25, 2016 to assist with site relocation for detailed engineering maps, and again on November 17, 2016 for Native American inspection and review. The off-site road alignments were surveyed on December 29, 2016. The archaeological survey of the property was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately five- to 15-meter intervals. The entire property was accessible and good to excellent ground visibility was reported. The property topography is characterized by rolling hills cut by canyons, sloping generally to the north, with drainages flowing to the northwest.

The previous study (Smith and Stropes 2017) indicated that nearly the entire property has been disturbed by past agricultural use, primarily for citrus orchards, and many areas have been disturbed by the construction of a reservoir, rural residential dumping, the grading of roads, the terracing of slopes for agricultural use, and the subsequent removal of those fields. This characterization of the property as moderately to severely surficially disturbed is relevant to the consideration of cultural resources being present within the project. The overviews of the property from the 2017 (Smith and Stropes) study are provided in Plates 4.2–1 through 4.2–4.



Plate 4.2–1: Overview of the project, facing west.



Plate 4.2–2: Overview of the project, facing east.



Plate 4.2–3: Overview of the off-site sewer alignment, facing east.



Plate 4.2–4: Overview of the West El Sobrante Road off-site access road, facing northwest.

The survey resulted in the identification of two cultural resources within the current updated study area that include:

- **P-33-26654:** Prehistoric quartz lithic scatters.
- **P-33-26658:** Bedrock milling feature(s).

The locations of the sites are provided on Figure 4.2–1. Phase II significance testing and evaluations were recommended for both sites identified within the updated project area, as stipulated by CEQA and County of Riverside guidelines. The following sections detail the results of Phase II testing at each site conducted in 2017 (Smith, Hahnen, and Stropes 2018). The locations of the cultural resources within the updated development and off-site improvement areas are shown on Figure 4.2–2.

Figure 4.2-1
Cultural Resource Location Map

(Deleted for public review; bound separately)

Figure 4.2-2
Cultural Resources Shown on Project Impact Map
(Deleted for Public Review; Bound Separately)

4.3 Results of Significance Testing – Site P-33-26654

4.3.1 Site Description

Site P-33-26654 was identified during the Phase I archaeological survey in 2016 (Smith and Stropes 2017) as a prehistoric quartz lithic scatter located in the north/central portion of the project, approximately 380 meters north of the central reservoir in the middle of a northwest-to-southeast-trending, minimally used dirt road (see Figure 4.2–1). The approximately 80-square-meter site includes a low frequency scatter of quartz debitage. During a second visit to the property on October 25, 2016, for detailed mapping, it was noted that recent, unusually heavy rains had washed much of the material away. Disturbances at the site include natural erosion, construction of a dirt road, and impacts from travel along the road. Vegetation at the site during the survey was minimal, which allowed for excellent surface visibility. The setting of the site is shown in Plate 4.3–1.



Plate 4.3–1: Overview of Site P-33-26654, facing north.

4.3.2 Description of Field Investigations

The field investigations at P-33-26654 were conducted in 2017 (Smith, Hahnen, and Stropes 2018) using the standard methodologies described in Section 3.0. Testing of the site was previously conducted on February 3, 2017, and involved collecting surface artifacts and excavating six shovel tests. The area of the site was defined by the quartz debitage scatter. The site measures approximately 26.2 feet (8.0 meters) from north-to-south and 32.8 feet (10.0 meters) from east-to-west, covering an area of approximately 262.5 square feet (80.0 square meters). The configuration of the site is shown on Figure 4.3–1.

Surface Recordation

The entire surface of the site was inspected for artifacts. Eight fragments of quartz debitage were recorded using sub-meter GPS technology, provenienced from the nearest STP, collected in bags labeled with provenience information, and returned to the BFSA laboratory. The surface artifact recovery is shown on Figure 4.3–1 and summarized in Table 4.3–1.

Table 4.3–1

Surface Collection Data
Site P-33-26654

Surface Collection	Object Type	Material Type	Quantity	Cat. No.(s)
1	Debitage	Quartz	1	1
2			1	2
3			1	3
4			1	4
5			1	5
6			1	6
7			1	7
8			1	8
Total			8	

Figure 4.3–1
Excavation Location Map
Site P-33-26654

(Deleted for Public Review; Bound Separately)

Subsurface Excavation

The potential for subsurface archaeological deposits at Site P-33-26654 was investigated in 2017 by excavating six STPs throughout the known site area, according to the locations of the surface recovery (see Figure 4.3–1) (Smith, Hahnen, and Stropes 2018). All of the shovel tests were excavated in decimeter levels to 30 centimeters. The soil from the shovel tests was characterized as reddish brown (5YR 4/3), semi-compact, clayey silt. No artifacts were recovered from the STPs excavated at Site P-33-26654 (Table 4.3–2).

Table 4.3–2
Shovel Test Excavation Data
Site P-33-26654

Shovel Test	Depth (cm)	Soils Encountered	Object Type	Quantity	Cat. No.(s)
1	0-10	Reddish brown (5YR 4/3), semi-compact, clayey silt		No Recovery	
	10-20				
	20-30				
2	0-10	Reddish brown (5YR 4/3), semi-compact, clayey silt		No Recovery	
	10-20				
	20-30				
3	0-10	Reddish brown (5YR 4/3), semi-compact, clayey silt		No Recovery	
	10-20				
	20-30				
4	0-10	Reddish brown (5YR 4/3), semi-compact, clayey silt		No Recovery	
	10-20				
	20-30				
5	0-10	Reddish brown (5YR 4/3), semi-compact, clayey silt		No Recovery	
	10-20				
	20-30				
6	0-10	Reddish brown (5YR 4/3), semi-compact, clayey silt		No Recovery	
	10-20				
	20-30				
Total				0	

4.3.3 Discussion

Site P-33-26654 was previously identified as a small prehistoric quartz lithic scatter that measures approximately 262.5 square feet (80.0 square meters) (Smith and Stropes 2017). The scatter is located north of the central reservoir in the middle of a northwest-to-southeast-trending, minimally used dirt road in the north/central portion of the APE. Cultural materials at the site consist of eight fragments of quartz debitage. Because no features or subsurface deposits were

identified at the site during testing (Smith, Hahnen, and Stropes 2018), the function of the site in the overall context of the prehistoric use of this area is difficult to interpret. Several similar quartz scatters were recorded on the property immediately north of Greentree Ranch.

4.3.4 Summary

The investigations of Site P-33-26654 (Smith and Stropes 2017 and Smith, Hahnen, and Stropes 2018) revealed that the site was used as a lithic procurement site. The debitage represents reduction technology, which suggests manufacture and use of prehistoric lithic tools. The integrity of the site appears to have been impacted by agricultural use and erosion. As a result, the site was found to be in poor condition. Shovel test investigations (Smith, Hahnen, and Stropes 2018) did not identify any subsurface deposits at the site. Due to a lack of a subsurface component, according to the criteria listed in CEQA, Section 15064.5, the site was evaluated as not CEQA-significant. The level of information already obtained from this site, including documentation of boundaries and collection of the artifacts present, has exhausted the research potential of the site. No further archaeological investigations are recommended for Site P-33-26654.

4.4 Results of Significance Testing – Site P-33-26658

4.4.1 Site Description

Site P-33-26658 was identified during the Phase I archaeological survey (Smith and Stropes 2017) as a prehistoric bedrock milling site located in the central portion of the APE, approximately 210 meters west of the central reservoir (see Figure 4.2–1). The approximately 70-square-meter site consists of two bedrock milling features, each with one slick. Vegetation at the site during the survey was minimal and included native grasses, weeds, and a single pomegranate tree along the western edge of the site. Disturbances at the site include natural erosion, bioturbation in the form of small mammal burrows, and impacts from previous agricultural activities. The setting of the site is shown in Plate 4.4–1.



Plate 4.4–1: Overview of Site P-33-26658, facing southeast.

4.4.2 Description of Field Investigations

The previous field investigations at P-33-26658 were conducted in 2017 (Smith, Hahnen, and Stropes 2018) using the standard methodologies described in Section 3.0. The field investigations were conducted on January 31, 2017 and consisted of removing soil and vegetation from the margins of the bedrock milling features and excavating eight shovel tests. The area of the site is defined by the bedrock milling feature locations and measures approximately 23.0 feet (7.0 meters) from north-to-south and 32.8 feet (10.0 meters) from east-to-west, covering an area of approximately 754.4 square feet (70.0 square meters). The configuration of the site is shown on Figure 4.4–1.

Surface Recordation

The entire surface of the site was inspected for artifacts and milling features. No cultural materials were identified on the surface of the site; however, two bedrock milling features (BMFs A and B) were identified, each containing one slick (see Figure 4.4–1). The slicks range in length from 20.0 to 31.0 centimeters, with widths of 21.0 and 30.0 centimeters and depths of 0.5 and 1.0 centimeter (Table 4.4–1). The milling surfaces on the features are shown in Plates 4.4–2 and 4.4–3 and Figures 4.4–2 and 4.4–3.

Table 4.4–1
Bedrock Milling Feature Data
Site P-33-26658

Feature	Surface	Milling Type	Dimensions (cm)		
			Length	Width	Depth
A	1	Slick	31.0	30.0	1.0
B	1		20.0	21.0	0.5

Figure 4.4–1
Excavation Location Map
Site P-33-26658

(Deleted for Public Review; Bound Separately)



Plate 4.4-2: BMF A at Site P-33-26658, facing west.



Plate 4.4-3: BMF B at Site P-33-26658, facing southwest.

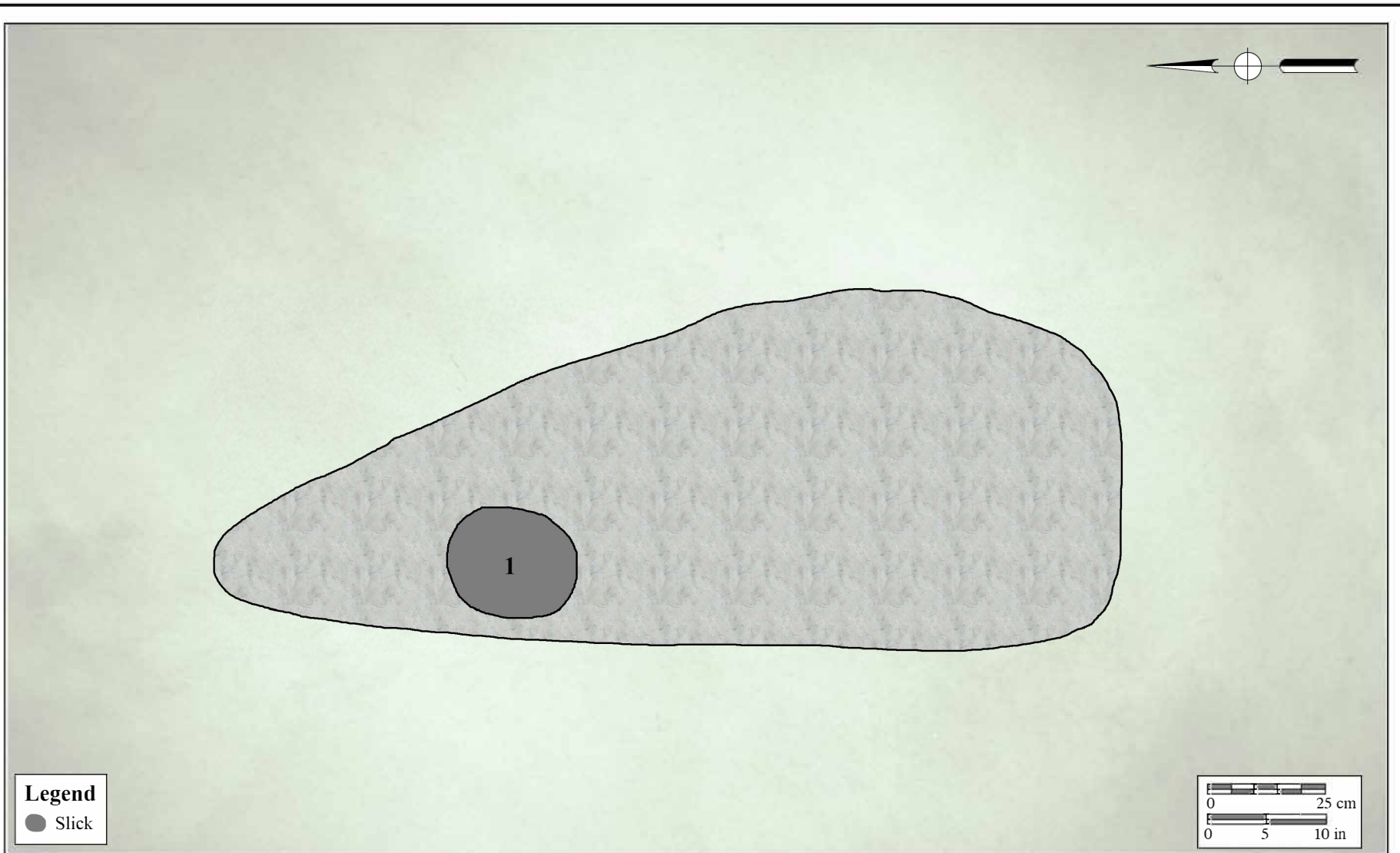


Figure 4.4-2
Bedrock Milling Feature A

Site P-33-26658

The TR38605 Project

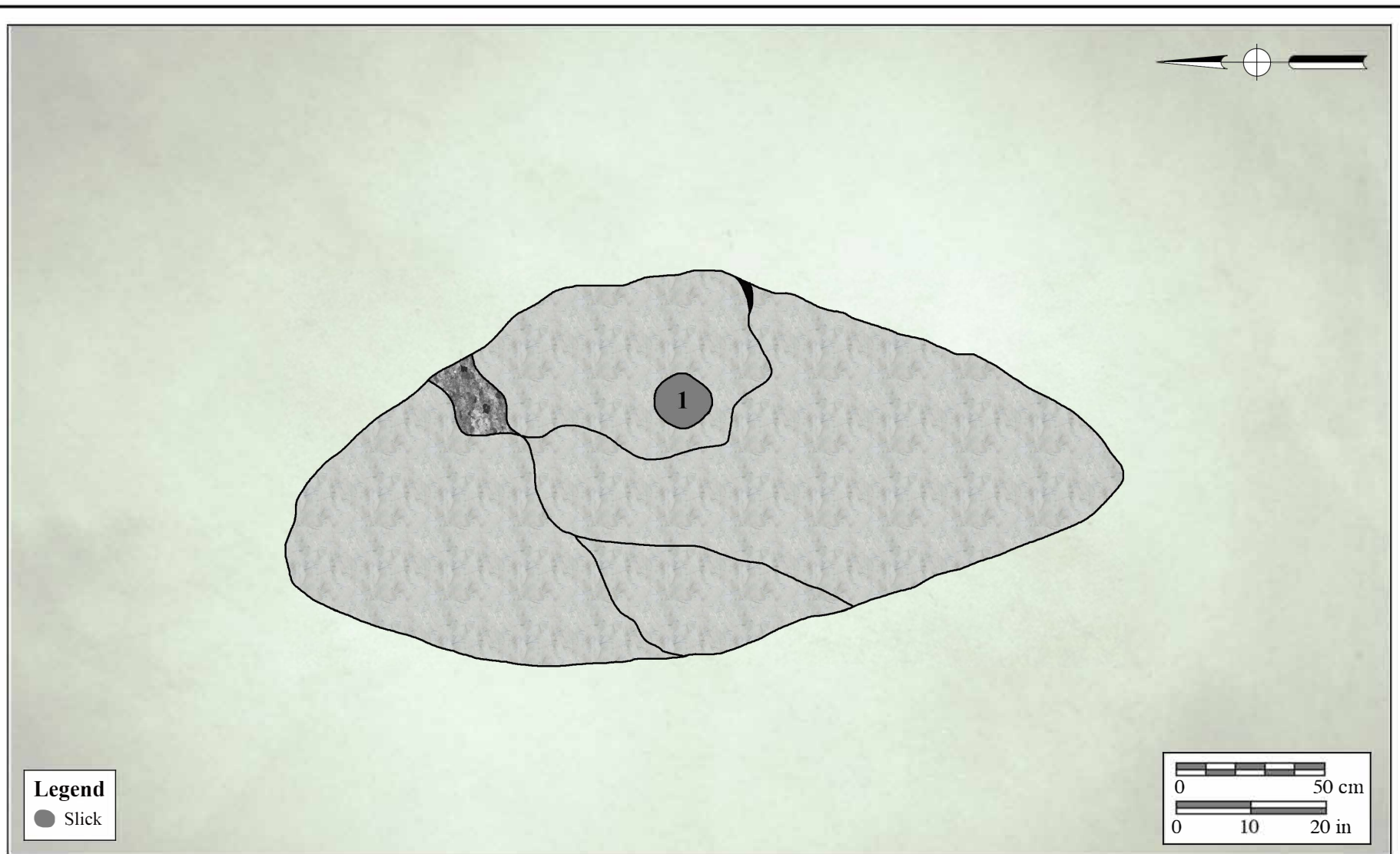


Figure 4.4-3
Bedrock Milling Feature B

Site P-33-26658

The TR38605 Project

Subsurface Excavation

The potential for subsurface archaeological deposits at Site P-33-26658 was investigated by excavating eight STPs across the site in a radial pattern (see Figure 4.4–1) (Smith, Hahnen, and Stropes 2018). All of the shovel tests were excavated in decimeter levels to a minimum of 30 centimeters or until bedrock was encountered. The soil from the shovel tests can be characterized as reddish brown (5YR 4/3), semi-compact, silty sand. No artifacts were recovered from the STPs excavated at Site P-33-26658 (Table 4.4–2).

Table 4.4–2
Shovel Test Excavation Data
Site P-33-26658

Shovel Test	Depth (cm)	Soils Encountered	Object Type	Quantity	Cat. No.
1	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
2	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
3	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
4	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
5	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
6	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
7	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
8	0-10	Reddish brown (5YR 4/3), semi-compact, silty sand	No Recovery		
	10-20				
	20-30				
Total				0	

4.4.3 Discussion

Site P-33-26658 is a small bedrock milling site that encompasses approximately 754.4 square feet (70.0 square meters) in the central portion of the APE, approximately 210 meters west of the central reservoir (Smith and Stropes 2017). No cultural materials were identified on the surface of the site or from the subsurface excavations; however, two bedrock milling features, each with one slick, were identified and recorded (Smith, Hahnlén, and Stropes 2018). Because of the minimally used milling surfaces and the lack of surface or subsurface cultural materials, it is likely that Site P-33-26658 was a minimally used prehistoric bedrock milling site.

4.4.4 Summary

The investigations of Site P-33-26658 (Smith and Stropes 2017 and Smith, Hahnlén, and Stropes 2018) confirmed that this site was a minimally used milling station. The identified features indicate that site activities primarily focused upon floral and/or faunal food processing. Shovel test investigations did not identify any subsurface deposits at the site. The level of information already obtained from this site, including documentation of boundaries and milling features, has exhausted its research potential. This site is evaluated as not CEQA-significant due to the lack of any artifacts or cultural deposits at the site. No further archaeological investigations are recommended for Site P-33-26658.

5.0 RECOMMENDATIONS

The updated cultural resources study for the TR38605 Project resulted in the identification of two archaeological sites: one prehistoric lithic artifact scatter (P-33-26654) and one bedrock milling feature site (P-33-26658) within the updated development envelope. In order to accurately evaluate the archaeological sites and potential impacts of the project development on these resources, an archaeological testing program was required to augment the level of work completed as part of the Phase I survey. The testing programs for these sites were previously conducted in 2017 (Smith, Hahnen, and Stropes 2018) and were completed in accordance with County of Riverside report guidelines and CEQA (Section 15064.5) significance evaluation criteria. These guidelines allow an archaeological/historical resource to be identified as important if it can be demonstrated that the area, or persons associated with that area, exemplifies or reflects significant aspects of the cultural, political, economic, or social history of the nation, state, or local area. Based upon the previous studies and evaluations for resources within the project area, and due to the lack of any significant subsurface deposits at any of the sites, all of the identified resources were determined to retain no further research potential beyond recording their locations and attributes, which has been completed. Negative subsurface tests provide the foundation from which to state that the potential for buried cultural deposits at all of the sites is unlikely, and no significantly different information would be gathered from further investigations. At the request of the Pechanga Band of Indians, bedrock milling feature site P-33-26658 will be placed in open space (Figure 5.0–1). In addition, due to concerns of the Native American representatives involved in the project and due to the potential to encounter buried cultural materials during grading, it is recommended that all earth disturbance associated with the development of the project be monitored by an archaeologist and a Native American representative during any grading activity.

5.1 Mitigation Monitoring

Monitoring during ground-disturbing activities, such as grading or trenching, by a qualified archaeologist is recommended to ensure that if buried features (*i.e.*, human remains, hearths, or cultural deposits) are present, they will be handled in a timely and proper manner. The scope of the monitoring program is provided below.

Mitigation Monitoring and Reporting Program (MMRP)

A MMRP to mitigate potential impacts to undiscovered buried cultural resources within the TR38605 project area shall be implemented to the satisfaction of the lead agency. This program shall include, but not be limited to, the following actions:

- 1) Prior to issuance of a grading permit, the applicant shall provide written verification in the form of a letter from the project archaeologist to the lead agency stating that a

certified archaeologist has been retained to implement the monitoring program.

- 2) The project applicant shall provide Native American monitoring during grading. The Native American monitor shall work in concert with the archaeological monitor to observe ground disturbances and search for cultural materials.
- 3) The certified archaeologist shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program.
- 4) During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and tribal representative shall be on-site, as determined by the consulting archaeologist, to perform periodic inspections of the excavations. The frequency of inspections will depend upon the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The consulting archaeologist shall have the authority to modify the monitoring program if the potential for cultural resources appears to be less than anticipated.
- 5) Isolates and clearly non-significant deposits will be minimally documented in the field so the monitored grading can proceed.
- 6) In the event that previously unidentified cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The archaeologist shall contact the lead agency at the time of discovery. The archaeologist, in consultation with the lead agency, shall determine the significance of the discovered resources. The lead agency must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the lead agency before being carried out using professional archaeological methods. If any human bones are discovered, the county coroner and lead agency shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains.
- 7) Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The project archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis.
- 8) All cultural material collected during the grading monitoring program shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees necessary for permanent curation.

- 9) A report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the lead agency prior to the issuance of any building permits. The report will include DPR Primary and Archaeological Site Forms.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Tracy A. Stropes M.A., RPA
Principal Investigator
County of Riverside Registration #168

June 1, 2023

Date

7.0 **REFERENCES**

Aislin-Kay, Marnie

- 2004 Letter Report: Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate SC-213-01 (Holt Property), 16595 McAllister Street, Riverside, Riverside County, California. Michael Brandman Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

American Local History Network: Riverside County, California

- 1998 American Local History Network's Page for Riverside County, California. Electronic document, <http://www.usgennet.org/usa/ca/county/riverside/>, accessed March 28, 2006.

Archaeological Research, Inc.

- 1974 Archaeological Report – Project W.O. 5-3764, Box Springs Feeder. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Arkush, Brooke S.

- 1989 Letter Report: A Twenty Acre Extension, Tentative Tract 17989. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Bean, Lowell John

- 1978 Cahuilla. In *California*, edited by R.F. Heizer, pp. 575-587. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, Lowell John and Florence C. Shipek

- 1978 Luiseño. In *California*, edited by R.F. Heizer, pp. 550-563. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, Lowell John and Charles R. Smith

- 1978 Gabrielino. In *California*, edited by R.F. Heizer, pp. 538-549. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Beattie, George W. and Helen P. Beattie

- 1939 *Heritage of the Valley: San Bernardino's First Century*. Biobooks, Oakland, California.

Bowles, Larry L.

- 1981 An Archaeological Assessment of TP 17939. Archaeological Consultant. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Brigandi, Phil

- 1998 *Temecula: At the Crossroads of History*. Heritage Media Corporation, Encinitas, California.

Brown, Robert S.

- 1989 Archaeological Survey of the Spanish Mill Project: A 300-Acre Property (Tentative Tract 24800) in Riverside County, CA. Archaeological Resource Management Corp. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Byrd, Brian F.

- 1998 Harvesting the Littoral Landscape During the Late Holocene: New Perspectives from Northern San Diego County. *Journal of California and Great Basin Anthropology* 20(2):195-218.

Caughey, John W.

- 1970 *California: A Remarkable State's Life History*. 3rd ed. Prentice-Hall, Englewood Cliffs, New Jersey.

Chapman, Charles E.

- 1921 *A History of California: The Spanish Period*. The Macmillan Company, New York.

Clifford, James and Brian F. Smith

- 2002 A Cultural Resources Survey of the Van Buren Boulevard Collector Project in Association with the Lake Mathews Gold and Country Club. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Cook, Sherburne F.

- 1976 *The Conflict Between the California Indian and White Civilization*. University of California Press, Berkeley and Los Angeles, California.

Cotrell, Marie

- 1977 Report for an Archaeological Resource Survey Conducted on a 237-Acre Parcel in the Southwest Riverside Area, in Riverside County. Archaeological Resource Management Corp. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Davis, Alan

- 1981 An Archaeological Assessment of Tentative Tract 17989, in Mockingbird Canyon, Riverside County, CA. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Desautels, Roger J.

- 1981 Archaeological Report on the Lake Mathews Project Located in the Lake Mathews Area of the County of Riverside. Scientific Resources Surveys, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Drover, Christopher E.

- 1982 Archaeological Assessment of Tentative Parcel Map 18472, Near Arlington Heights, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1989 A Cultural Resource Assessment of the La Sierra Project Near Lake Mathews, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1991 A Cultural Resource Assessment: Western Municipal Water District 7,920' 12" Diameter Pipeline, Woodside, California. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1992a Environmental Impact Evaluation: A Cultural Resource Assessment of the 18-Acre Municipal Water District Lake Mathews Project, Lake Mathews USGS Quadrangle, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1992b A Cultural Resource Assessment of the Western Municipal District's Lake Mathews Water Reclamation Line Project, Riverside County, CA. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 1994 Environmental Impact Evaluation: A Cultural Resources Assessment of the Proposed 10-Acre Gamboa Rodeo Ring Project APN 270-160-014+015. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 2001 A Cultural Resource Inventory: Cacciatori Conditional Use Permit. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Engelhardt, Zephyrin

- 1920 *San Diego Mission*. James M. Barry Company, San Francisco, California.

Erlandson, Jon M. and Roger H. Colten (editors)

- 1991 An Archaeological Context for Archaeological Sites on the California Coast. In *Hunter-Gatherers of Early Holocene Coastal California*. Perspectives in California Archaeology, Volume 1, Institute of Archaeology, University of California, Los Angeles.

Fagan, B.

- 1991 *Ancient North America: The Archaeology of a Continent*. Thames and Hudson. London.

Gallegos, Dennis

- 1987 A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Dieguito-La Jolla: Chronology and Controversy*, edited by Dennis Gallegos. San Diego County Archaeological Society Research Paper No. 1.
- 1992 Patterns and Implications of Coastal Settlement in San Diego County: 9000 to 1300 Years Ago. In *Essays on the Prehistory of Maritime California*, edited by Terry Jones. Center for Archaeological Research, Davis, California.

Gallegos, Dennis R. and Carolyn E. Kyle

- 1988 Five Thousand Years of Maritime Subsistence at Ballast Point Prehistoric Site SDI-48 (W-164) San Diego, California. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, California.

Goodwin, Riordan and Jennifer Reynolds

- 2005 Archaeological Monitoring Program, La Sierra West Tract 30295, Riverside County, California. LSA Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Gunther, Jane Davies

- 1984 *Riverside County, California, Place Names: Their Origins and Their Stories*. Rubidoux Printing, Riverside, California.

Handley, C.

- 1967 The Sun City Story. *Sun City News*, Sun City, California.

Haggland, Mary H.

- 1983 Don José Antonio Aguirre: Spanish Merchant and Ranchero. In *The Journal of San Diego History*, San Diego Historical Society Quarterly, Winter 1938:29(1), edited by Thomas L. Scharf, Managing Editor.

Hoover, Anna M., Kirstie R. Blevins, and Steven P. McCormick

- 2004 A Phase I Archaeological Survey Report on the Bermuda Dune Property, 5 Acres, APN 609-052-002, City of La Quinta, County of Riverside, California. L&L Environmental, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Jones and Stokes Associates, Inc.

- 2000 Final Cultural Resources Inventory Report for the Williams Communications, Inc., Fiber Optic Cable System Installation Project, Riverside to San Diego, CA Vol. I-IV. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Koerper, Henry, C., Jonathan E. Ericson, Christopher E. Drover, and Paul E. Langenwaller, II

- 1986 Obsidian Exchange in Prehistoric Orange County. *Pacific Coast Archaeological Society Quarterly* 22 (1):33-69.

Kroeber, A.L.

- 1976 *Handbook of the Indians of California*. Reprinted. Dover Editions, Dover Publications, Inc., New York. Originally published 1925, Bulletin No. 78, U.S. Government Printing Office, Washington, D.C.

LeCount, Lisa J. and Carmen A. Weber

- 1992 Lake Mathews Cultural Resources Reconnaissance Survey. Chambers Group, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Lerch, Michael K.

- 1983 Cultural Resource Assessment of the Santa Ana Watershed Project Authority Proposed Imported Water Conveyance System, Riverside County, CA. San Bernardino County Museum Association. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Love, Bruce

- 1990 A Cultural Resources Assessment of McAllister Street Between Riverside City Limits and El Sobrante Road North of Lake Mathews in Riverside County. Archaeological Resource Unit. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Martin, P.S.

- 1967 Prehistoric Overkill. In *Pleistocene Extinctions: The Search for a Cause*, edited by P. Martin and H.E. Wright. Yale University Press: New Haven.
- 1973 The Discovery of America. *Science* 179(4077): 969-974.

Masters, Patricia M.

- 1983 Detection and Assessment of Prehistoric Artifact Sites off the Coast of Southern California. In *Quaternary Coastlines and Marine Archaeology: Towards the Prehistory of Land Bridges and Continental Shelves*, edited by P.M. Masters and N.C. Flemming, pp. 189-213. Academic Press, London.

McKenna, Jeanette A.

- 2000 A Phase I Cultural Resources Investigation of the Vesta Telecommunications, Inc. Fiber Optic Alignment, Riverside County to San Diego County, CA. McKenna et al. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Meier, K. Harley, James Clifford, and Brian F. Smith

- 2004 A Cultural Resources Study for the El Sobrante Estates Project, County of Riverside, APN 269-060-101, 269-060-011, and 269-060-012. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Meighan, Clement W.

- 1954 A Late Complex in Southern California Prehistory. *Southwestern Journal of Anthropology* 10(2).

Miller, J.

- 1966 *The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons*. Master's thesis. University of California, San Diego.

Moratto, Michael J.

- 1984 *California Archaeology*. Academic Press, New York.

Moriarty, James R., III

- 1966 Culture Phase Divisions Suggested by Topological Change Coordinated with Stratigraphically Controlled Radiocarbon Dating in San Diego. *Anthropological Journal of Canada* 4(4):20-30.

Moss, M.L. and J. Erlandson

- 1995 Reflections on North American Coast Prehistory. *Journal of World Prehistory* 9(1):1-46.

Patterson, Tom

- 1971 *A Colony for California: Riverside's First Hundred Years*. Press-Enterprise Company, Riverside, California.

Pourade, Richard F.

- 1964 *The Glory Years*. Union-Tribune Publishing Company, San Diego.

Raven-Jennings, Shelly, Brian F. Smith and Johnna L. Buysse

- 1996 The Results of a Cultural Resource Study at the 4S Ranch, Rancho Bernardo, County of San Diego. Unpublished report on file at the South Coastal Information Center at San Diego State University, San Diego, California.

Riverside County

- N.d. Welcome to Riverside County, California: Riverside County History. Electronic document, http://www.co.riverside.ca.us/county_info/history.asp, accessed March 28, 2006.

Rogers, Malcolm J.

- 1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. In *San Diego Museum Papers* (No. 3 – 1989 printing). San Diego Museum of Man, San Diego, California.

Rolle, Andrew F.

- 1969 *California: A History* (Second Edition). Thomas Y. Crowell Company, New York.

Salpas, Jean A.

- 1981 An Archaeological Assessment of Parcel 17326. Archaeological Consultant. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Scientific Resource Surveys, Inc.

- 1981 Cultural Resource Report on 1330 Acres Located Adjacent to Lake Mathews in the County of Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Shumway, George, Carl L. Hubbs, and James R. Moriarty, III

- 1961 Scripps Estate Site, San Diego, California: A La Jolla Site Dated 5,460-7,370 Years Before the Present. *Annals of the New York Academy of Sciences* 93(3).

Smith, Brian F. and James R. Moriarty, III

- 1985 The Archaeological Excavations at Batiquitos Pointe and Batiquitos Bluffs. Unpublished report on file at the City of Carlsbad.

Smith, Brian F. and Tracy A. Stropes

- 2017 A Phase I Cultural Resources Report for the Greentree Ranch Project, TR37217, Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Smith, Brian F., Claire M. Allen, and Jennifer R. Kraft

- 2015 A Phase I and II Cultural Resource Report for the Lake Ranch Project, TR 36730, Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished

report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Smith, Brian F., Jillian L. Hahnen, and Tracy A. Stropes

- 2018 A Phase I and II Cultural Resources Assessment for the Greentree Ranch Project, TR37217, Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Smith, Brian F., Claire M. Allen, Mary M. Lenich, and Jennifer R. Kraft

- 2013 A Phase I and II Cultural Resource Assessment for the Citrus Heights II Project, TTM 36475, Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

State Historic Preservation Office (SHPO)

- 1995 Instructions for Recording Historical Resources. Office of Historic Preservation, Sacramento.

Strong, William Duncan

- 1929 Aboriginal Society in Southern California. *University of California Publications in American Archaeology and Ethnology* 26(1).

Stropes, Tracy A. and Brian F. Smith

- 2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, TTM 36390; Specific Plan 325 (Amendment No. 1), Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 2016 Cultural Resources Mitigation Monitoring Report for Phase I of the Citrus Heights Development Project, TR 36390; Specific Plan 325 (Amendment No. 1), Riverside County, California. Brian F. Smith and Associates, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Swenson, James D.

- 1980 Environmental Impact Evaluation: An Archaeological Assessment of Tentative Parcel 9219, Mockingbird Canyon Area of Riverside County, California. Archaeological Research Unit, U.C. Riverside. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

True, Delbert L.

- 1958 An Early Complex in San Diego County, California. *American Antiquity* 23(3).

- 1980 The Pauma Complex in Northern San Diego County. *The Journal of New World Archaeology* 3(4):1-39.

Tuma, Michael W. and Brian F. Smith

- 2001a A Cultural Resource Study for the McAllister Hills Golf and Country Club Specific Plan. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.
- 2001b A Cultural Resource Study for the McAllister Hills Golf and Country Club Specific Plan, County of Riverside, California. Brian F. Smith and Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

USDA and USDI

- 2001 Ecological Subregions of California. Presented by the Forest Service (USDA), Natural Resources Conservation Service (USDA), and Bureau of Land Management (USDI). Electronic document, <http://www.r5.fs.fed.us/ecoregions>, accessed December 28, 2016.

Wade, Sue A.

- 2004 Cultural Resource Survey and Archaeological Evaluations for the Mockingbird Ridge Project. Heritage Resources. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Wallace, William J.

- 1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.

Warren, Claude N. (editor)

- 1968 Cultural Tradition and Ecological Adaptation on the Southern Coast. In *Archaic Prehistory in the Western United States*, edited by C.I. Williams. *Eastern New Mexico University Contributions in Anthropology* 1(3): 1-14.

Warren, Claude N. and D.L. True

- 1961 The San Dieguito Complex and its Place in California Prehistory. In *Archaeological Survey Annual Report 1960-1961*. University of California Press, Los Angeles, California.

White, Laurie

- 2000 Letter Report: Records Search Results for Sprint PCS Facility RV54XC467A (K-9 Academy), Near Lake Mathews, Riverside County, California. Michael Brandman Associates. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

Whitney-Desautels, Nancy

1987 Archaeological Assessment Form: TT 23253 and 23062. Scientific Resources Surveys, Inc. Unpublished report on file at the Eastern Information Center at the University of California at Riverside, Riverside, California.

APPENDIX A

Qualifications of Key Personnel

Tracy A. Stropes, MA, RPA

Director/Principal Investigator

BFSA Environmental Services, A Perennial Company

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Education

Master of Arts, Anthropology, San Diego State University, California 2007

Bachelor of Science, Anthropology, University of California, Riverside 2000

Professional Memberships

Register of Professional Archaeologists

Society for California Archaeology

Archaeological Institute of America

Experience

Director/Principal Investigator
BFSA Environmental Services, a Perennial Company

March 2009–Present
Poway, California

Project Management of all phases of archaeological investigations for local, state, and federal agencies, field supervision, lithic analysis, National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) site evaluations, and authoring/coauthoring of cultural resource management reports.

Archaeological Principal Investigator
TRC Solutions

June 2008–February 2009
Irvine, California

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, MRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist
Archaeological Resource Analysts

June 2006–May 2008
Oceanside, California

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist
Gallegos & Associates

September 1996–June 2006
Carlsbad, California

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

**Project Archaeologist
Macko Inc.**

**September 1993–September 1996
Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

**Archaeological Field Technician
Chambers Group Inc.**

**January 1993–September 1993
Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

**Archaeological Field Technician
John Minch and Associates**

**May 1992–September 1992
San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Professional Accomplishments

Mr. Stropes is a professional archaeologist with over 30 years of experience in cultural resource management. His experience includes over ten years in project management, report authorship, lithic analysis, laboratory management, Native American consultation, and editing for several technical reports for numerous projects throughout southern California. Mr. Stropes has conducted cultural resource surveys, archaeological site testing and evaluations for National Register eligibility and California Environmental Quality Act (CEQA) compliance, mitigation of resources through data recovery for archaeological sites, budget and report preparation, and direction of crews of all sizes for projects ranging in duration from a single day site visit to one year. Mr. Stropes is a Registered Professional Archaeologist and on the list of archaeological consultants qualified to conduct archaeological investigations southern California and the County of San Diego. He has served as project archaeologist for numerous projects and composed data recovery and preservation programs for sites throughout California for both CEQA and NEPA level compliance. He has acted as teaching assistant for archaeological field classes at several sites in Orange (Cypress College), Los Angeles (Cypress College), and San Diego Counties (San Diego State University). In addition, Mr. Stropes was employed to teach discussion sessions for introduction to cultural anthropology classes at SDSU. Internationally, Mr. Stropes has acted as field surveyor for the Natural History Foundation of Orange County & Institucion Nacional de Antropologia y Historia surveying and relocating several sites in northern Baja California. Mr. Stropes has served as the senior project archaeologist on the following select projects.

1900 and 1912 Spindrift Drive: An extensive data recovery and mitigation monitoring program at the Spindrift Site, an important prehistoric archaeological habitation site stretching across the La Jolla area. The project resulted in the discovery of over 20,000 artifacts and nearly 100,000 grams of bulk faunal remains and marine shell, indicating a substantial occupation area (2013-2014).

Ocean Breeze Ranch: An extensive CEQA and Section 106 archaeological investigation of 1,400 acres and 20 cultural resources, both prehistoric and historic, within the Bonsall neighborhood of the county of San Diego. The project included an assessment of sites for eligibility for listing on the California Register of Historical Resources, the County of San Diego Resource Protection Ordinance, and the National Register of Historic Places, which resulted in the identification of four CRHR-eligible, RPO-significant, and NRHP-eligible sites.

Citracado Parkway Extension: An ongoing project in the city of Escondido to mitigate impacts to an important archaeological occupation site. Various archaeological studies have been conducted by BFSA, including CEQA-level survey and testing programs and Section 106 historic resources studies, resulting in the identification of a significant cultural deposit within the project area (2009-present).

Otay Ranch Village 13: An extensive archaeological investigation of nearly 2,000 acres and 84 archaeological sites, both prehistoric and historic, within the county of San Diego, which included prehistoric habitation sites, quarry sites, resource processing sites, and extensive lithic scatters. The project included an assessment of sites for eligibility for listing on the National Register of Historic Places (2016-2018).

Westin Hotel and Timeshare (Grand Pacific Resorts): Data recovery and mitigation monitoring program in the city of Carlsbad consisted of the excavation of 176 one-square-meter archaeological data recovery units which produced thousands of prehistoric artifacts and ecofacts, and resulted in the preservation of a significant prehistoric habitation site. The artifacts recovered from the site presented important new data about the prehistory of the region and Native American occupation in the area (2017).

Cantarini Ranch: A Section 106 archaeological assessment and evaluation for the NRHP of 15 archaeological sites and three isolates, including NRHP-significant prehistoric temporary camp/habitation sites, in the city of Carlsbad (2015-2017).

Citracado Business Park West: An archaeological survey and testing program at a significant prehistoric archaeological site and historic building assessment for a 17-acre project in the city of Escondido. The project resulted in the identification of 82 bedrock milling features, two previously recorded loci and two additional and distinct loci, and approximately 2,000 artifacts (2018).

College Boulevard: A Section 106 archaeological assessment and evaluation for the NRHP of seven archaeological sites, including prehistoric temporary camp/habitation sites, bedrock milling feature sites, and both prehistoric and historic artifact scatters in the city of Carlsbad (2015).

The Everly Subdivision Project: Data recovery and mitigation monitoring program in the city of El Cajon resulted in the identification of a significant prehistoric occupation site from both the Late Prehistoric and Archaic Periods, as well as producing historic artifacts that correspond to the use of the property since 1886. The project produced an unprecedented quantity of artifacts in comparison to the area encompassed by the site, but lacked characteristics that typically reflect intense occupation, indicating that the site was used intensively for food processing (2014-2015).

APPENDIX B

Site Record Forms

(Deleted for Public Review; Bound Separately)

APPENDIX C

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX D

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX E

Confidential Maps

(Deleted for Public Review; Bound Separately)