CULTURAL RESOURCES STUDY FOR THE ARROW PLAZA PROJECT

BLOOMINGTON, SAN BERNARDINO COUNTY, CALIFORNIA

APNs 0258-161-43 and -45

Lead Agency:

County of San Bernardino 385 North Arrowhead Avenue San Bernardino, California 92415

Preparer:

Brian F. Smith and Associates, Inc. 14010 Poway Road, Suite A Poway, California 92064

Signature

Project Proponent:

Arrow Plaza LLC c/o Lilburn Corporation 1905 Business Center Drive San Bernardino, California 92408



Archaeological Database Information

Authors: Jillian L.H. Conroy and Brian F. Smith, M.A.

Consulting Firm: Brian F. Smith and Associates, Inc.

14010 Poway Road, Suite A Poway, California 92064

(858) 679-8218

Client/Project Proponent: Arrow Plaza LLC

c/o Lilburn Corporation 1905 Business Center Drive

San Bernardino, California 92408

Report Date: April 29, 2022

Report Title: Cultural Resources Study for the Arrow Plaza Project,

Bloomington, San Bernardino County, California

Type of Study: Phase I Cultural Resources Survey

USGS Quadrangle: Section 21, Township 1 South, Range 5 West of the *Fontana*,

California (7.5-minute) USGS Quadrangle.

Acreage: 2.78 acres

Key Words: Survey; no cultural resources identified; Fontana USGS

Quadrangle; archaeological monitoring of grading

recommended.

Table of Contents

Section	<u>Description</u>	<u>Page</u>
MANA	AGEMENT SUMMARY/ABSTRACT	iv
1.0	INTRODUCTION	1.0-1
	1.1 Project Description	1.0-1
	1.2 Environmental Setting	1.0-5
	1.3 Cultural Setting	1.0-5
	1.3.1 Prehistoric Period	1.0-5
	1.3.2 Historic Period	1.0-8
	1.4 Results of the Archaeological Records Search	1.0-11
	1.5 Applicable Regulations	1.0–13
	1.5.1 California Environmental Quality Act	1.0–13
2.0	RESEARCH DESIGN	2.0-1
3.0	ANALYSIS OF PROJECT EFFECTS	3.0-1
	3.1 Survey Methods	3.0-1
	3.2 Results of the Field Survey	3.0-1
4.0	MANAGEMENT CONSIDERATIONS – MITIGATION MEASURE	S AND
	DESIGN CONSIDERATIONS	4.0-1
	4.1 Cultural Resources Monitoring Program	4.0-1
5.0	LIST OF PREPARERS AND ORGANIZATIONS CONTACTED	5.0–1
6.0	REFERENCES CITED	6.0–1

List of Appendices

Appendix A – Resumes of Key Personnel

Appendix B – Archaeological Records Search*

Appendix C – NAHC Sacred Lands File Search*

^{*}Deleted for public review and bound separately in the Confidential Appendix

List of Figures

Figure	<u>Description</u>	<u>Page</u>
Figure 1.1–1	l General Location Map	.1.0–2
_	2 Project Location Map (USGS)	
	3 Site Plan	
	<u>List of Plates</u>	
<u>Plate</u>	<u>Description</u>	<u>Page</u>
Plate 3.2–1	Overview of the project from the northwest corner, facing southeast	.3.0–2
	Overview of the project from the northeast corner, facing southwest	
	Overview of the project from the southeast corner, facing northwest	
Plate 3.2–4	Overview of the project from the southwest corner, facing northeast	.3.0–3
	List of Tables	
Table	<u>Description</u>	<u>Page</u>
Table 1.1–1	Project Site and Surrounding Land Use and Zoning	.1.0–1
Table 1.4–1	Cultural Resources Within One-half Mile of the Project	.1.0–12

MANAGEMENT SUMMARY/ABSTRACT

In response to a request from Arrow Plaza LLC, a cultural resources study was conducted by Brian F. Smith and Associates, Inc. (BFSA) for the proposed Arrow Plaza Project. The 2.78-acre study area for the project is identified as Assessor's Parcel Numbers (APNs) 0252-161-43 and -45 and is located within the unincorporated community of Bloomington, San Bernardino County, California. The project lies within Section 21, Township 1 South, Range 5 West as shown on the U.S. Geological Survey (USGS) *Fontana, California* Quadrangle. According to the aerial photographs, the property was used agriculturally from at least the late 1930s. The property is currently vacant.

The purpose of this investigation was to locate and record any cultural resources within the project and subsequently evaluate any resources as part of the County of San Bernardino environmental review process conducted in compliance with the California Environmental Quality Act (CEQA). The archaeological investigation of the project also includes the review of an archaeological records search performed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project or in the immediate vicinity. A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC).

Survey conditions were very good, and ground visibility was excellent throughout the property. The Phase I survey of the Arrow Plaza Project did not result in the identification of any cultural resources within the project's boundaries.

Based upon the results of the current study, mitigation monitoring is recommended for the project development. Although aerial photographs indicate that the property has been disturbed by past use, there is still a potential to encounter deposits associated with the prehistoric and historic uses of the property. Therefore, it is recommended that all earthwork required to develop the property be monitored by a qualified archaeologist and a Native American representative. The protocols to be followed for the mitigation monitoring of the property are presented in Section 4.0 of this report. A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

1.0 <u>INTRODUCTION</u>

1.1 Project Description

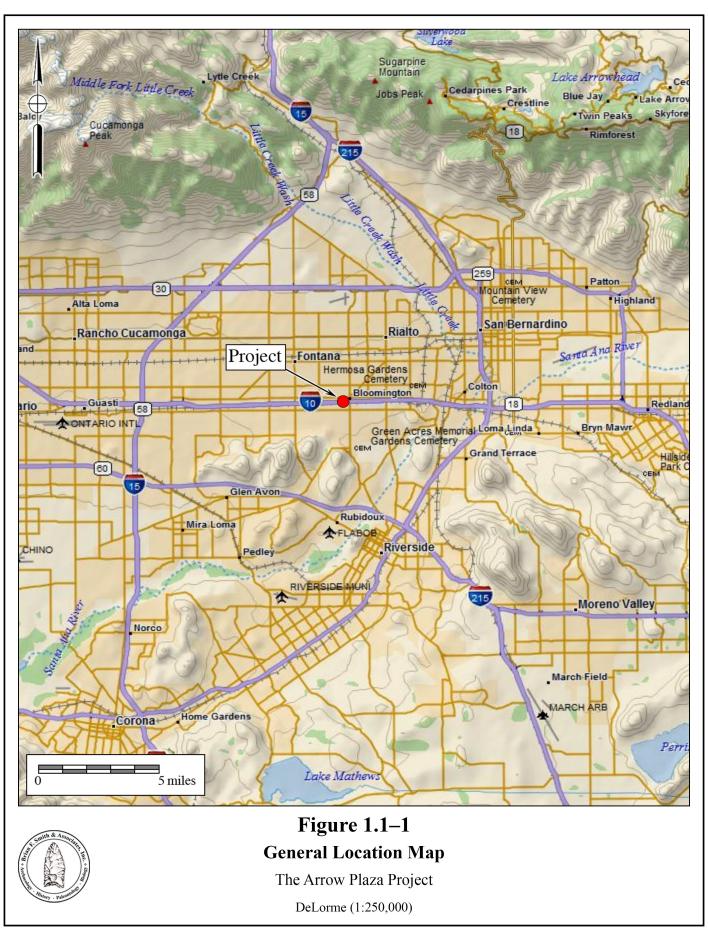
The archaeological survey program for the Arrow Plaza Project was conducted in order to comply with CEQA and County of San Bernardino environmental compliance procedures. Arrow Plaza LLC has submitted an application to the County of San Bernardino for a Conditional Use Permit for a proposed convenience store, gas station, restaurant, and hotel. The decision to request this cultural resources investigation was based upon cultural resource sensitivity of the locality as 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 southwestern San Bernardino County were focused around freshwater resources and a food supply.

The 2.78-acre project is located at the southwest corner of Valley Boulevard and Linden Avenue, at 18497 Valley Boulevard within the unincorporated community of Bloomington, San Bernardino County, California (Figure 1.1–1). The property, which comprises APNs 0252-161-43 and -45, is situated within Section 21, Township 1 South, Range 5 West as shown on the USGS *Fontana, California* Quadrangle (Figure 1.1–2). The property is currently vacant and surrounded by developed uses as shown in Table 1.1–1.

<u>Table 1.1–1</u>
Project Site and Surrounding Land Use and Zoning

Property	Existing Use	Zoning	Land Use Category
Arrow Plaza Project	Vacant land		
North	Markets, restaurants		
East	USPS facility, abandoned gas station, restaurant, and parking lot	Valley Corridor / Commercial	Special Development
South	Self-storage		
West	Mobile home park	Valley Corridor / Bloomington Enterprise	

As designed, the hotel is proposed to be 11,877 Square Feet (SF) with a total of 87 rooms on five floors and a total five-story height of 60 feet. The convenience store is proposed to be 2,400 SF, and the restaurant is proposed to be 2,500 SF. A total of 137 parking stalls will be provided including five handicap accessible and six clean air/vanpool/electric vehicle spaces. Landscaping will be provided primarily along the site perimeters and in parking areas and total 17,526 SF, or 17.50 percent of the site. The gas station canopy is proposed to be 21 feet in height and will cover six islands with a total of 12 pumping stations. The convenience store and restaurant



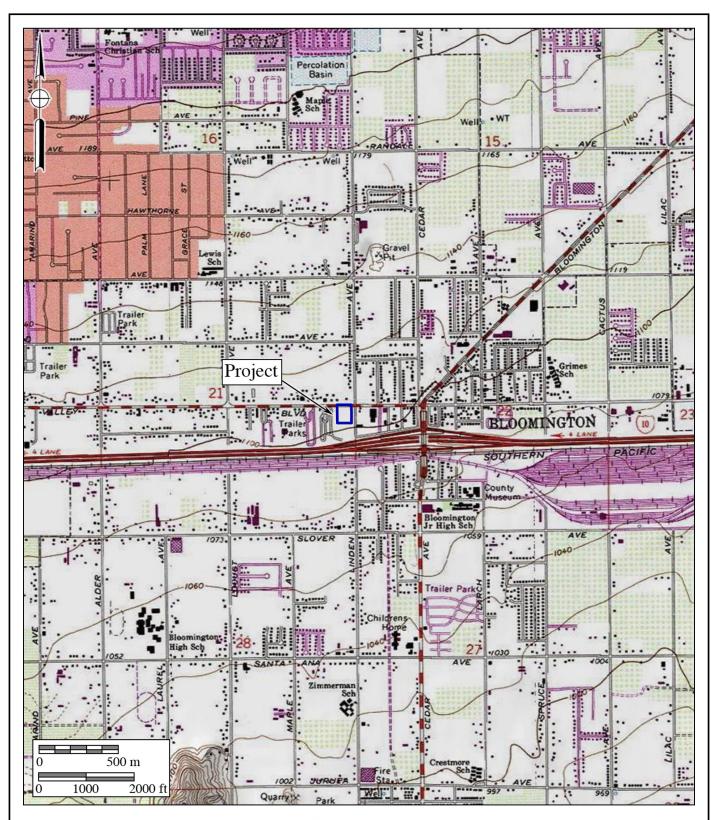




Figure 1.1–2 Project Location Map

The Arrow Plaza Project

USGS San Bernardino South and Fontana Quadrangles (7.5-minute series)

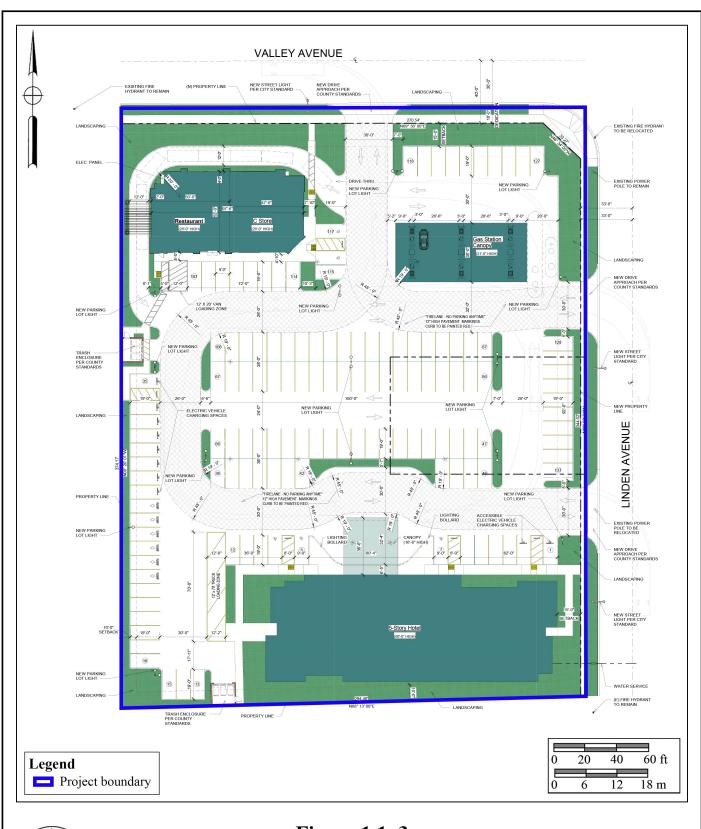




Figure 1.1–3
Site Plan

The Arrow Plaza Project

will be a maximum height of 26 feet. Parking lot and security lighting will be provided throughout the site (Figure 1.1–3).

1.2 Environmental Setting

The Arrow Plaza Project is located in the Peninsular Ranges Geologic Province of southern California. The range, which lies in a northwest to southeast trend through the county, extends some 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. The subject property is located within the broad, fault-bounded alluvial valley of the Santa Ana Wash between the San Bernardino Mountains to the north, Jurupa Mountains to the southwest, and the Box Springs Mountains to the southeast.

Soils within the project consist of Tujunga loam sand (TuB), which is comprised of somewhat excessively drained loamy sands. The TuB soil profile forms on alluvial fans of zero to five percent slopes to 60 inches. Minor components of TuB include Tujunga gravelly loamy sand (10 percent) and Hanford sandy loam (five percent) (NRCS 2022). The subject property is relatively flat, with elevations ranging from approximately 1095 to 1100 feet above mean sea level.

1.3 Cultural Setting

1.3.1 Prehistoric Period

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in San Bernardino County. The following discussion of the cultural history of San Bernardino 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 in San Bernardino County was represented by the Cahuilla, Serrano, and potentially the Vanyume Indians.

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

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

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 while utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

Archaic Period (Early and Middle Holocene: circa 9000 to 1300 YBP)

The Archaic Period of prehistory begins with the onset of the Holocene around 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change throughout North America (Antevs 1953; Van Devender and Spaulding 1979). The general warming trend caused sea levels to rise, lakes to evaporate, and drainage patterns to change. In southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and sea levels. The coastal shoreline at 8,000 YBP, depending upon the particular area of the coast, was near the 20-meter isobath, or one to four kilometers further west than its present location (Masters 1983).

The rising sea level during the early Holocene created rocky shorelines and bays along the coast by flooding valley floors and eroding the coastline (Curray 1965; Inman 1983). Shorelines were primarily rocky with small littoral cells, as sediments were deposited at bay edges but rarely discharged into the ocean (Reddy 2000). These bays eventually evolved into lagoons and estuaries, which provided a rich habitat for mollusks and fish. The warming trend and rising sea levels generally continued until the late Holocene (4,000 to 3,500 YBP).

At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established (Gallegos 1985; Inman 1983; Masters 1994; Miller 1966; Warren and Pavesic 1963). Many former lagoons became saltwater marshes surrounded by coastal sage scrub by the late Holocene (Gallegos 2002). The sedimentation of the lagoons was significant in that it had profound effects on the types of resources available to prehistoric peoples. Habitat was lost for certain large mollusks, namely *Chione* and *Argopecten*, but habitat was gained for other small mollusks, particularly *Donax* (Gallegos 1985; Reddy 2000). The changing lagoon habitats resulted in the decline of larger shellfish, loss of drinking water, and loss of Torrey Pine nuts, causing a major depopulation of the coast as people shifted inland to reliable freshwater sources and intensified their exploitation of terrestrial small game and plants, including acorns (originally proposed by Rogers 1929; Gallegos 2002).

The Archaic Period in southern California is associated with several different cultures, complexes, traditions, periods, and horizons, including San Dieguito, La Jolla, Encinitas, Milling Stone, Pauma, and Intermediate.

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

Around approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Bernardino County, marking the transition to the Late Prehistoric Period. This period has been 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 the 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.

Protohistoric Period (Late Holocene: 1790 to Present)

Prior to the arrival of the Spanish missionaries, the San Bernardino area was inhabited by the Cahuilla, Serrano, and potentially the Vanyume Indians. The territory of the Vanyume was covered by small and relatively sparse populations focused primarily along the Mojave River, north of the Serrano and southeast of the Kawaiisu. It is believed that the southwestern extent of their territory went as far as Cajon Pass and portions of Hesperia. Bean and Smith (1978) noted that it was uncertain if the Vanyume spoke a dialect of Serrano or a separate Takic-based language. However, King and Blackburn (1978) suggest that the Vanyume and other Kitanemuk speakers once occupied most of Antelope Valley. In contrast to the Serrano, the Vanyume maintained friendly social relations with the Mohave and Chemehuevi to the east and northeast (Kroeber 1976). As with the majority of California native populations, Vanyume populations were decimated around the 1820s by placement in Spanish missions and asistencias. It is believed that by 1900, the Vanyume had become extinct (Bean and Smith 1978). However, given the settlement patterns reported for the Vanyume, it is more probable that the population was dispersed rather than completely wiped out.

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 cult of the Luiseño and Gabrielino. The following is a summary of ethnographic data regarding this group (Bean 1978; Kroeber 1976).

Cahuilla villages were typically permanent and located on low terraces within canyons in proximity to water sources. These locations proved to be rich in food resources and afforded protection from prevailing winds. Villages had areas that were publicly owned as well as 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 Serrano and Vanyume, however, were primarily hunters and gatherers. Individual family dwellings were likely circular, domed structures. Vegetal staples varied with locality; acorns and piñon nuts were found in the foothills, and mesquite, yucca roots, cacti fruits, and piñon nuts were found in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Heizer 1978). Deer, mountain sheep, antelopes, rabbits, and other small rodents were among the principal food packages. Various game birds, especially quail, were also hunted. The bow and arrow were used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, often during mourning ceremonies (Benedict 1924; Drucker 1937; Heizer 1978). manufactured goods included baskets, some pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats, bags, storage pouches, and nets (Heizer 1978). Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1971; Drucker 1937; Benedict 1924).

Much like the Vanyume, the Serrano suffered large population decreases during the early 1800s. While the missionaries are credited with developing the first stable water supply in the area by diverting water from Mill Creek into a zanja that terminated at the Asistencia de Mission San Gabriel on Barton Road, the task was completed through labor provided by the Serrano. The zanja, known as the Mill Creek Zanja, is located in Redlands, California. It has been listed on the National Register of Historic Places (NRHP) since 1976.

1.3.2 Historic Period

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).

Native Californians may have first coalesced with Europeans around 1769 when the first Spanish mission was established in San Diego. In 1771, Friar Francisco Graces first searched the Californian desert for potential mission sites. Interactions between local tribes and Franciscan priests occurred by 1774 when Juan Bautista De Anza made an exploration of Alta California.

Serrano contact with the Europeans may have occurred as early as 1771 or 1772, but it was not until approximately 1819 that the Spanish directly influenced the culture. The Spanish established asistencias in San Bernardino, Pala, and Santa Ysabel. Between the founding of the asistencia and secularization in 1834, most of the Serranos in the San Bernardino Mountains were removed to the nearby missions (Beattie and Beattie 1951:366) while the Cahuilla maintained a high level of autonomy from Spain (Bean 1978).

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 as compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The ranchers, both Mexican and American, 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.

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).

1.4 Results of the Archaeological Records Search

An archaeological records search for a one-half mile radius was requested by BFSA from the SCCIC at CSU Fullerton on April 1, 2022. Results were received from the SCCIC on April 21, 2022. The SCCIC records search results indicated that there are 35 previously recorded resources located within one-half mile of the project, none of which are located with the project's boundaries (Table 1.4–1). These resources include 33 historic structures and two historic features and artifacts associated with one of the historic structures. The records search results also indicated that a total of 13 cultural resources studies have been conducted within one-half mile of the project. None of these studies include the subject property.

Table 1.4–1
Cultural Resources Within One-half Mile of the Project

Site Number	Resource Type
CA-SBR-8542H	Commercial building and single-family residence
CA-SBR-8543H, CA-SBR-8544H	Historic features and artifacts associated with CA-SBR-8542H
CA-SBR-8551H, P-36-020322, P-36-020325, P-36-020326, P-36-020330, P-36-020333, P-36-020334, P-36-020335, P-36-020568, P-36-020569, P-36-021608, and P-36-021610	Single-family residence
P-36-020317, P-36-020318, P-36-020319, P-36-020320, P-36-020321, P-36-020324, P-36-020327, P-36-020328, P-36-020329, and P-36-020571	Single-family residence with an associated ancillary building
P-36-020323	Multi-family property
P-36-015135, P-36-020570, P-36-020572, and P-36-020573	Commercial building
P-36-020331 and P-36-021607	Educational building
P-36-020332	Library, commercial building, government building, and community center
CA-SBR-10,330H	Railroad alignment

In addition, BFSA reviewed the following historic sources:

- The NRHP Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility
- The OHP, Built Environment Resources Directory
- 1896, 1898, and 1901 San Bernardino 15-minute USGS maps
- 1943 Fontana 1:31,680-scale USGS map
- 1953, 1969, 1975, and 1985 Fontana 7.5-minute USGS maps
- Aerial photographs (1938, 1948, 1959, 1966, 1967, 1968, 1980, 1994, 2002, and 2018)

These sources did not indicate the presence of any additional archaeological resources within the project. According to the aerial photographs, the property was used agriculturally from at least the late 1930s to the early 1980s. A residence is visible on the 1938 aerial photograph and the 1943 USGS map shows that it was removed between 1969 and 1980. The absence of positive results, however, does not necessarily indicate the absence of historic resources.

BFSA also requested a SLF search from the NAHC to search for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within

one mile of the project. As of the date of this report, no response has been received. All correspondence is provided in Appendix C.

1.5 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 San Bernardino County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA, provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 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 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 Public Resources Code or identified as significant in an historical resource survey, meeting the requirements of Section 5024.1(g) of the Public Resources Code, 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 (Public Resources Code 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 Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1[g] of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code 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 Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of 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 Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code 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 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code 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) states:

- (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 Public Resources Code 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 requirements of CEQA and the Coastal Act.

2.0 RESEARCH DESIGN

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 through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is southwestern San Bernardino County. The scope of work for the cultural resources study conducted for the Arrow Plaza Project included the survey of a 2.78-acre study area. Given the area involved and the presence of nearby archaeological sites, the research design for this project was focused upon realistic study options. 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 identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of factors, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs 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 following research questions consider the small size and location of the project discussed above.

Research Questions:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any 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 located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for mountainous 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 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 the following 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 resource(s), 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 cultural resources identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources study of the project site consisted of an institutional records search, archival research, an intensive cultural resource survey of the entire 2.78-acre study area, and the preparation of this technical report. This study was conducted in conformance with Section 21083.2 of the California Public Resources Code and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

3.1 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 10 meters apart while visually inspecting the ground surface. All potentially sensitive areas where cultural resources might be located were closely inspected. Photographs documenting survey areas and overall survey conditions were taken frequently.

3.2 Results of the Field Survey

Field archaeologist Clarence Hoff conducted the archaeological survey for the Arrow Plaza Project on April 7, 2022. The archaeological survey was an intensive reconnaissance consisting of a series of survey transects across the project. At the time of the survey, the project was vacant and had been cleared and grubbed prior to the field visit. While weeds and grasses were observed throughout the property, approximately 100 percent of the ground surface was visible as a result of the clearing and grubbing. Modern trash was also observed throughout the property along with a dirt and gravel road along the northern perimeter that comprised less than five percent of the subject property. Plates 3.2–1 to 3.2–4 depict the conditions of the project at the time of the survey.

According to the aerial photographs, the property was cleared and used agriculturally from at least 1938 through the early 1980s when the southern half of the property was used for trailer and semi-truck parking. A cleared area with a structure is visible in the northeast corner of the property from at least 1938 through the early 1980s. Another cleared area with a structure was developed in the central-eastern portion of the property that is first visible on the 1980 aerial photograph. This cleared area is indentified as APN 0252-161-43. Dirt roads crossed through the property throughout the 1980s and 1990s. By 2002, all structures had been removed from the property, and it remained vacant with the exception of large vehicle parking along the southern boundary through the 2000s and 2010s. The survey did not result in the identification of any historic or prehistoric cultural resources within the project.



Plate 3.2–1: Overview of the project from the northwest corner, facing southeast.



Plate 3.2–2: Overview of the project from the northeast corner, facing southwest.



Plate 3.2–3: Overview of the project from the southeast corner, facing northwest.



Plate 3.2-4: Overview of the project from the southwest corner, facing northeast.

4.0 <u>MANAGEMENT CONSIDERATIONS – MITIGATION MEASURES</u> AND DESIGN CONSIDERATIONS

The Phase I archaeological assessment for the Arrow Plaza Project was negative for the presence of cultural resources. As stated previously, the subject property has been utilized agriculturally from at least the late 1930s. When land is cleared, disked, or otherwise disturbed, evidence of surface artifact scatters is typically lost. Whether or not cultural resources have ever existed on the Arrow Plaza Project is unclear. The current status of the property appears to have affected the potential to discover any surface scatters of artifacts, and cultural materials that may have been on-site could have been masked by past grading and construction. Given the close proximity of the project to a water resource (the Santa Ana River and Lytle Creek) and that the prior development within the project might mask archaeological deposits, there is a potential that buried archaeological deposits are present within the project boundaries. Therefore, it is recommended that the project be allowed to proceed with the implementation of a Cultural Resources Monitoring Program (CRMP) conducted by an archaeologist and Native American representative during grading of the property. Monitoring is only recommended following the demolition of the existing structures and only for any grading required for the new facility. The CRMP recommended as a condition of approval for this property is presented in Section 4.1.

4.1 Cultural Resources Monitoring Program

The proposed development of the Arrow Plaza Project may encounter unrecorded cultural deposits or features. To mitigate for potential impacts to resources that have not been detected, a CRMP is recommended as a condition of approval. The scope of the CRMP is provided below:

General Procedures and Protocols to Be Implemented During Construction Monitoring During Grading

- A. Monitor(s) Shall Be Present During Grading/Excavation/Trenching
 - 1. The archaeological monitor shall be present for grading or trenching following the demolition of the existing facility.
 - 2. The Principal Investigator (PI) may submit a detailed letter to the County of San Bernardino during earthwork to inform the County of a modification to the monitoring program when field conditions require a change in monitoring status, including suspension of monitoring if it is determined that no further monitoring is needed.

B. Discovery Notification Process

1. In the event of an archaeological discovery, either historic or prehistoric, the archaeological monitor shall direct the contractor to temporarily divert all soil-disturbing activities, including but not limited to, digging, trenching, excavating, or

grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources. If the discovered resource is associated with the prehistoric Native American occupation of this area, a Native American representative from a local tribe should be contacted to review and participate in the evolution of the discovered resource.

2. The monitor shall immediately notify the PI (unless monitor is the PI) of the discovery, and subsequently the property owner shall be notified of the discovery.

C. Determination of Significance

- 1. The PI shall evaluate the significance of the resource. If human remains are involved, follow protocol in Section D, below.
 - a. The PI shall immediately notify the lead agency to discuss significance determination and shall also submit a letter indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) to the lead agency to review and approve. Impacts to significant resources must be mitigated by the implementation of the ADRP before ground-disturbing activities in the area of discovery will be allowed to resume.
 - c. If the resource is not significant, the PI shall submit a letter to the County of San Bernardino indicating that artifacts will be collected, curated, and documented in the final monitoring report. The letter shall also indicate that no further work is required.

D. Discovery of Human Remains

If human remains are discovered, work shall halt in that area until a determination can be made regarding the provenance of the human remains, and the following procedures as set forth in CEQA Section 15064.5(e), the California Public Resources Code (Sec. 5097.98), and the State Health and Safety Code (Sec. 7050.5) shall be undertaken:

I. Notification

- 1. The archaeological monitor shall notify the PI, if the monitor is not qualified as a PI.
- 2. The PI shall notify the medical examiner after consultation with the lead agency, either in person or via telephone.

II. Isolate discovery site

1. Work shall be directed away from the location of the discovery and any

- nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the medical examiner in consultation with the PI concerning the provenance of the remains.
- 2. The medical examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.
- 3. If a field examination is not warranted, the medical examiner will determine, with input from the PI, if the remains are or are most likely to be of Native American origin.

III. If human remains ARE determined to be Native American

- 1. The medical examiner will notify the NAHC within 24 hours. By law, **ONLY** the medical examiner can make this call.
- 2. The NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
- 3. The MLD will contact the PI within 24 hours or sooner after the medical examiner has completed coordination to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources Code, and the State Health and Safety Code.
- 4. The MLD will have 48 hours to make recommendations to the property owner or representative for the treatment or disposition with proper dignity of the human remains and associated grave goods.
- 5. Disposition of Native American human remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the NAHC; OR
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with Public Resources Code 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner; THEN
 - c. Upon the discovery of multiple Native American human remains during a ground-disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree upon the appropriate treatment measures, the human remains and grave goods buried with the

Native American human remains shall be reinterred with appropriate dignity.

IV. If human remains are **NOT** Native American

- 1. The PI shall contact the medical examiner and notify them of the historicera context of the burial.
- 2. The medical examiner will determine the appropriate course of action with the PI and lead agency staff (Public Resources Code 5097.98).
- 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the lead agency. The decision for internment of the human remains shall be made in consultation with the lead agency, the applicant/landowner, and any known descendant group.

Post-Construction

A. Preparation and Submittal of Draft Monitoring Report

- 1. The PI shall submit to the County a draft monitoring report (even if negative) prepared in accordance with the agency guidelines, which describes the results, analysis, and conclusions of all phases of the archaeological monitoring program (with appropriate graphics).
 - a. For significant archaeological resources encountered during monitoring, the ADRP shall be included in the draft monitoring report.
 - b. Recording sites with the State of California Department of Parks and Recreation (DPR) shall be the responsibility of the PI, including recording (on the appropriate forms-DPR 523 A/B) any significant or potentially significant resources encountered during the archaeological monitoring program.
- 2. The PI shall submit a revised draft monitoring report to the County for approval, including any changes or clarifications requested by the County.

B. Handling of Artifacts

- 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and cataloged.
- 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- 3. The cost for curation is the responsibility of the property owner.

C. Curation of Artifacts

1. Any artifacts recovered from the project shall be curated in an approved facility, such as the Western Science Center. Native American artifacts may be repatriated to a local tribal representative.

D. Final Monitoring Report(s)

1. The PI shall submit the approved final monitoring report to the County and any interested parties.

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the Arrow Plaza Project was directed by Principal Investigator Brian F. Smith. The archaeological fieldwork was conducted by field archaeologist Clarence Hoff. The report text was prepared by Jillian L.H. Conroy and Brian Smith and report graphics were prepared by Jillian Conroy. Technical editing and report production were conducted by Summer Forsman. The archaeological records search was conducted at the SCCIC at CSU Fullerton.

6.0 REFERENCES CITED

Antevs, Ernst

1953 The Postpluvial or the Neothermal. *University of California Archaeological Survey Reports* 22:9–23. Berkeley, 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 Charles R. Smith

1978 Serrano. In *California*, edited by R.F. Heizer, pp. 570–574. 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 Robert F. Heizer, pp. 550–563. 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.
- 1951 Heritage of the Valley: San Bernardino's First Century. Biobooks, Oakland, California.

Benedict, Ruth Fulton

1924 A Brief Sketch of Serrano Culture. *American Anthropologist* 26(3).

Brigandi, Phil

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

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.

Cook, Sherburne F.

1976 The Conflict Between the California Indian and White Civilization. University of

California Press, Berkeley and Los Angeles, California.

Curray, Joseph R.

1965 Late Quaternary History: Continental Shelves of the United States. *Quaternary of the United States*, edited by H.E. Wright Jr. and D.G. Frey, pp. 723–735. Princeton University Press, New Jersey.

Drucker, Philip

1937 Culture Element Distributions: V. Southern California. *Anthropological Records* 1(1):1–52. University of California, Berkeley.

Erlandson, John 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*, edited by J.M. Erlandson and R.H. Colten. Perspectives in California Archaeology, Volume 1, Institute of Archaeology, University of California, Los Angeles.

Fagan, Brian M.

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

Gallegos, Dennis

- 1985 Batiquitos Lagoon Revisited. In *Cultural Resource Management Casual Papers* 2(1). Department of Anthropology, San Diego State University.
- 2002 Southern California in Transition: Late Holocene Occupation of Southern San Diego County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry Jones. Cotsen Institute of Archaeology, University of California, Los Angeles.

Gunther, Jane Davies

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

Heizer, Robert F.

1978 Trade and Trails. In *California*, edited by Robert F. Heizer, pp. 690–693. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Inman, Douglas L.

1983 Application of Coastal Dynamics to the Reconstruction of Paleocoastlines in the Vicinity of La Jolla, California. *Quaternary Coastlines and Marine Archaeology*, edited by Patricia M. Masters and N.C. Flemming, pp. 1–49. Academic Press, Inc., Orlando, Florida.

King, Chester DeWitt and Thomas C. Blackburn

1978 Tataviam. In *California*, edited by Robert F. Heizer. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Kroeber, Alfred 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.

Martin, Paul S.

- 1967 Prehistoric Overkill. In *Pleistocene Extinctions: The Search for a Cause*, edited by Paul S. Martin and H.E. Wright. Yale University Press, New Haven, Connecticut.
- 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 Patricia M. Masters and Nicholas C. Fleming, pp. 189–213. Academic Press, London.
- 1994 Archaeological Investigations at Five Sites on the Lower San Luis Rey River, San Diego County, California, edited by Michael Moratto, pp. A1-A19. INFOTEC Research, Inc., Fresno, California and Gallegos and Associates, Pacific Palisades, California.

Miller, Jaquelin Neva

1966 The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons. Master's thesis, Scripps Institution of Oceanography, University of California at San Diego.

Moratto, Michael J.

1984 California Archaeology. Academic Press, New York.

Moss, Madonna L. and Jon M. Erlandson

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

Natural Resources Conservation Service (NRCS)

Web Soil Survey. Electronic document, https://websoilsurvey.sc.egov.usda.gov/ App/WebSoilSurvey.aspx, accessed March 24, 2022.

Patterson, Tom

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

California.

Pourade, Richard F.

- 1961 *Time of the Bells*. The History of San Diego Volume 2. Union-Tribune Publishing Company, San Diego, California.
- 1963 The Silver Dons. In *The History of San Diego* (Volume 3). Union-Tribune Publishing Company, San Diego, California.

Reddy, Seetha

2000 Settling the Highlands: Late Holocene Highland Adaptations on Camp Pendleton, San Diego County California. Prepared for the Army Corps of Engineers by ASM Affiliates. Manuscript on file at South Coastal Information Center at San Diego State University, San Diego, California.

Rogers, Malcolm

1929 Archaeological Field Work in North America During 1928, California. *American Anthropologist* 31(2):340–341.

Rolle, Andrew F.

1969 California: A History. 2nd ed. Thomas Y. Crowell Company, New York.

State Historic Preservation Office (SHPO)

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

Strong, William Duncan

1971 Aboriginal Society in Southern California. Reprint of 1929 *Publications in American Archaeology and Ethnology* No. 26, University of California, Berkeley.

Van Devender, Thomas R. and W. Geoffrey Spaulding

1979 Development of Vegetation and Climate in the Southwestern United States. *Science* 204(4394):701–710.

Warren, Claude N. and M.G. Pavesic

1963 Shell Midden Analysis of Site SDI-603 and Ecological Implications for Cultural Development of Batiquitos Lagoon, San Diego County, Los Angeles. *University of California, Los Angeles, Archaeological Survey Annual Report* 1960-1961:246–338.

APPENDIX A

Resumes of Key Personnel

Brian F. Smith, MA

Owner, Principal Investigator

Brian F. Smith and Associates, Inc. 14010 Poway Road • Suite A •

Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: bsmith@bfsa-ca.com



Education

Master of Arts, History, University of San Diego, California

1982

Bachelor of Arts, History, and Anthropology, University of San Diego, California

1975

Professional Memberships

Society for California Archaeology

Experience

Principal Investigator
Brian F. Smith and Associates, Inc.

1977–Present Poway, California

Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Corps of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the Southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects, some of which included Broadway Block (2019), 915 Grape Street (2019), 1919 Pacific Highway (2018), Moxy Hotel (2018), Makers Quarter Block D (2017), Ballpark Village (2017), 460 16th Street (2017), Kettner and Ash (2017), Bayside Fire Station (2017), Pinnacle on the Park (2017), IDEA1 (2016), Blue Sky San Diego (2016), Pacific Gate (2016), Pendry Hotel (2015), Cisterra Sempra Office Tower (2014), 15th and Island (2014), Park and G (2014), Comm 22 (2014), 7th and F Street Parking (2013), Ariel Suites (2013), 13th and Marker (2012), Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft

Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

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).

<u>San Diego Airport Development Project</u>: An extensive historic assessment of multiple buildings at the San Diego International Airport and included the preparation of Historic American Buildings Survey documentation to preserve significant elements of the airport prior to demolition (2017-2018).

<u>Citracado Parkway Extension</u>: A still-ongoing project in the city of Escondido to mitigate impacts to an important archaeological occupation site. Various archaeological studies have been conducted by BFSA resulting in the identification of a significant cultural deposit within the project area.

<u>Westin Hotel and Timeshare (Grand Pacific Resorts)</u>: 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).

<u>The Everly Subdivision Project</u>: 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).

<u>Ballpark Village</u>: A mitigation and monitoring program within three city blocks in the East Village area of San Diego resulting in the discovery of a significant historic deposit. Nearly 5,000 historic artifacts and over 500,000 grams of bulk historic building fragments, food waste, and other materials representing an occupation period between 1880 and 1917 were recovered (2015-2017).

<u>Archaeology at the Padres Ballpark</u>: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSA recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

<u>4S Ranch Archaeological and Historical Cultural Resources Study</u>: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

<u>Charles H. Brown Site</u>: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

<u>Del Mar Man Site</u>: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

<u>Site W-20, Del Mar, California</u>: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

<u>City of San Diego Reclaimed Water Distribution System</u>: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

<u>Master Environmental Assessment Project, City of Poway</u>: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

<u>Draft of the City of Carlsbad Historical and Archaeological Guidelines</u>: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

<u>The Mid-Bayfront Project for the City of Chula Vista</u>: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—included project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February- September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

<u>Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County:</u> Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

<u>Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California</u>: Project manager/director of the investigation of nine sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites

for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—included project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

<u>Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California</u>: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

<u>Monitoring of Grading for the Herschel Place Project, La Jolla, California</u>: Project archaeologist/ monitor—included monitoring of grading activities associated with the development of a single- dwelling parcel. September 1999.

<u>Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California</u>: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report, in prep. July-August 1999.

<u>Survey</u> and <u>Evaluation</u> of <u>Cultural Resources</u> for the <u>Palomar Christian Conference Center Project</u>, <u>Palomar Mountain</u>, <u>California</u>: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Otay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997- January 2000.

Phase I, II, and II Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

APPENDIX B

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)