

CULTURAL RESOURCES ASSESSMENT FOR THE JOSHUA TREE ESTATES PROJECT

COMMUNITY OF JOSHUA TREE,
SAN BERNARDINO COUNTY, CALIFORNIA

APN 0605-051-01

Lead Agency:

County of San Bernardino
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San Bernardino, California 92415

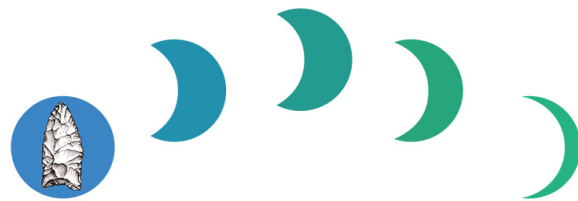
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<i>Report Title:</i>	Cultural Resources Assessment for the Joshua Tree Estates Project, Community of Joshua Tree, San Bernardino County, California
<i>Type of Study:</i>	Phase I and II Cultural Resources Survey
<i>USGS Quadrangle:</i>	Section 20, Township 1 North, Range 7 East of <i>Joshua Tree North, California</i> (7.5-minute) USGS Quadrangle
<i>Acreage:</i>	82.1 acres
<i>Key Words:</i>	Survey; Phase II testing and evaluation; historic cistern and refuse scatter (Site Temp-1); historic refuse scatter (Site Temp- 2); no CRHR-eligible resources; monitoring of future grading recommended.

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request by the applicant, a cultural resources assessment was conducted by BFS A Environmental Services, a Perennial Company (BFS A), for the Joshua Tree Estates Project. The project consists of a proposed subdivision of an 82.1-acre parcel (Assessor's Parcel Number [APN] 0605-051-01) bound by East Broadway, Laferney Avenue, and Sunever Road, in the Joshua Tree area of San Bernardino County, California. The project is situated within Section 20, Township 1 North, Range 7 East, as shown on the United States Geological Survey (USGS) (7.5-minute) *Joshua Tree North, California* topographic quadrangle. 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, at 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).

The review of the archaeological records search identified seven cultural resources within one mile of the project, none of which are located within the subject property. The resources identified during the records search include three prehistoric isolates, one multicomponent site, one historic trash scatter, and two historic isolates. A review of historic maps and aerial photographs (1953 through 2021) show that by 1953 one structure is located within the northeastern portion of the property just south of East Broadway. By 1970, an additional structure, possibly a shed, is also visible at this location. These structures are visible at this location through 1989. Subsequent photographs show the project as a vacant desert landscape.

The survey of the property was conducted on March 26, 2023. Survey conditions were generally moderate to good, and the survey did not result in the identification of any prehistoric resources within the project; however, the survey did identify two historic archaeological sites (Temp-1 and Temp-2). Site Temp-1 consists of a cistern and a historic artifact scatter at the location where structures are visible on the aerial photographs between 1953 and 1989. Site Temp-2 is a historic artifact scatter just northwest of the intersection of 3rd Street and Sunever Road. The site assemblage primarily consists of cans, metal, and glass fragments.

In order to accurately evaluate the identified archaeological sites and to assess the project's potential impacts to these resources, BFS A conducted a Phase II testing and evaluation study at Sites Temp-1 and Temp-2 on May 3, 2023. This included the detailed recordation of each site on Department of Parks and Recreation (DPR) site record forms (see Appendix B), collection of a representative sample of surface artifacts, and shovel test pit (STP) excavations at each of the sites.

The artifact assemblage for Site Temp-1 was found to date between the late 1960s and 1970s. The assemblage for site Temp-2 was found to date between the late 1950s and 1960s. No significant intact cultural materials were recovered from the surface examinations or subsurface tests. Because the Phase II testing program did not produce any significant surface or subsurface artifact concentrations, sites Temp-1 and Temp-2 were determined to be not CEQA-significant and not eligible for listing on the California Register of Historical Resources (CRHR).

The Joshua Tree Estates Project will result in direct impacts to sites Temp-1 and Temp-2, which have both been evaluated as not CEQA-significant and not eligible for listing on the CRHR. As such, no site-specific mitigation measures are recommended. However, the development of the subject property may impact cultural resources that have not been previously identified. Therefore, it is recommended that the project be conditioned with archaeological monitoring during ground-disturbing activities tied to the future residential development of the property. 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 INTRODUCTION

1.1 Project Description

The archaeological assessment for the Joshua Tree Estates Project was conducted to comply with CEQA and the County of San Bernardino environmental requirements. The 82.1-acre project is bound by East Broadway, Laferney Avenue, and Sunever Road in the Joshua Tree area of San Bernardino County, California (APN 0605-051-01) (Figure 1.1–1). The project is situated within Section 20, Township 1 North, Range 7 East, as shown on the USGS *Joshua Tree North, California* topographic quadrangle (Figure 1.1–2). The project proposes the subdivision of the property into 29 residential lots ranging in size between 2.01 and 2.36 acres, along with 11.00 acres dedicated for road development and improvements (Figure 1.1–3). The decision to request this investigation was based upon the 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.

1.2 Environmental Setting

The Joshua Tree Estates Project is located in the Mojave Desert Geomorphic Province of southern California. This area contains isolated mountain ranges separated by expanses of desert plains. The project is located within the Coyote Valley, south of the Bunker Mountains, east of the Bartlett Mountains, west of Coyote Lake, and north of Joshua Tree National Monument. A northeast-to-southwest trending ephemeral wash traverses the property. As shown on the geologic map by Thomas Dibblee (2008), most of the project area is composed of Holocene-aged alluvium. The Holocene alluvium is comprised of gravel, sand, silt, and clay deposited within the valley in the last 11,700 years. The southwestern corner of the project is mapped as Pleistocene-aged older alluvium, consisting of gravels and sand. The older alluvial deposits underlie the younger Holocene deposits at the project at unknown but likely variable depths. The age of the older alluvial deposits is estimated anywhere between 11,700 years to perhaps as much as two million years old. Soils within the project have not been mapped by the National Resources Conservation Service Web Soil Survey (NRCS 2019). Elevations within the project range from approximately 2,475 to 2,519 feet above mean sea level.

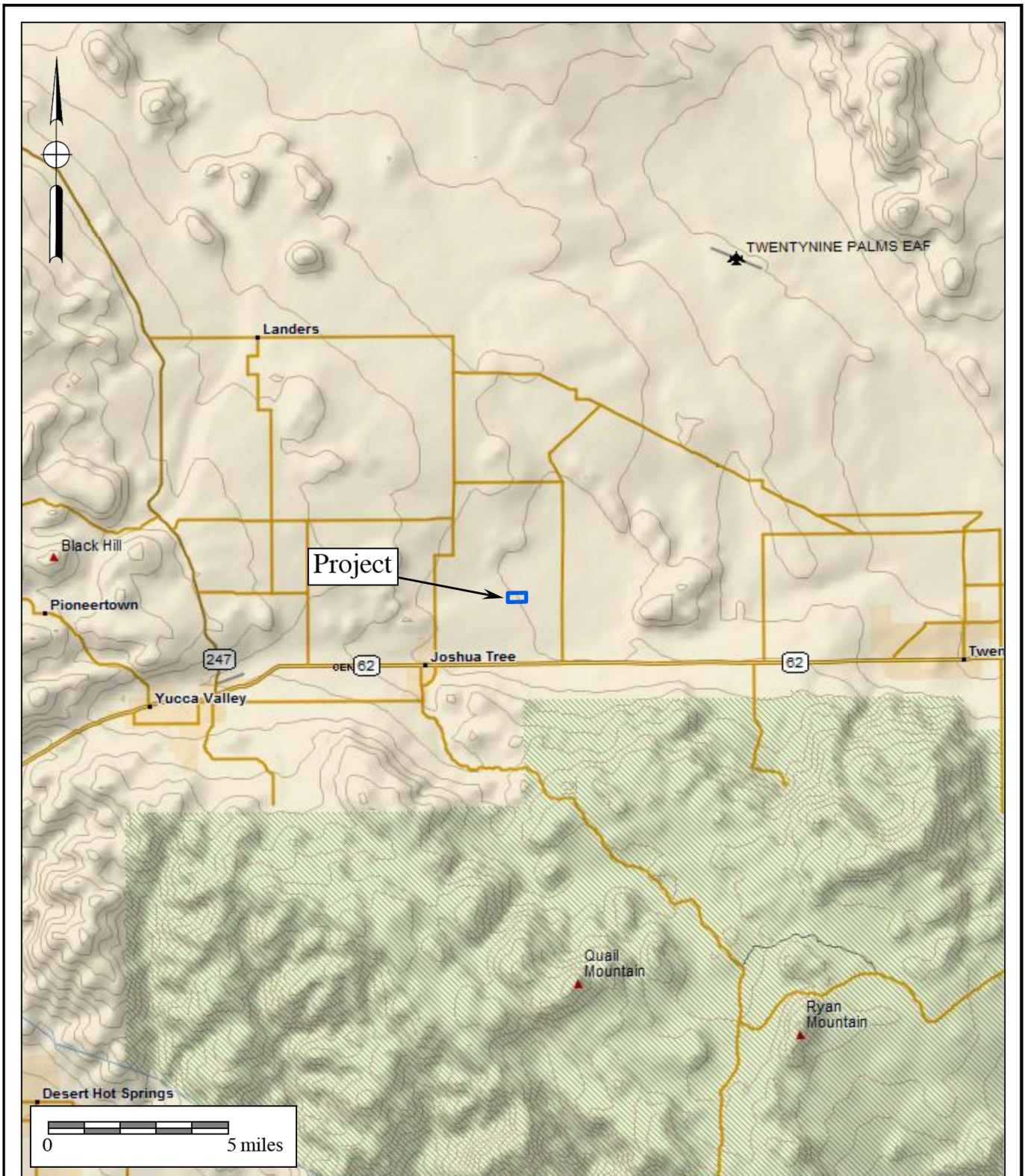


Figure 1.1-1
General Location Map
 The Joshua Tree Estates Project
 DeLorme (1:250,000 series)



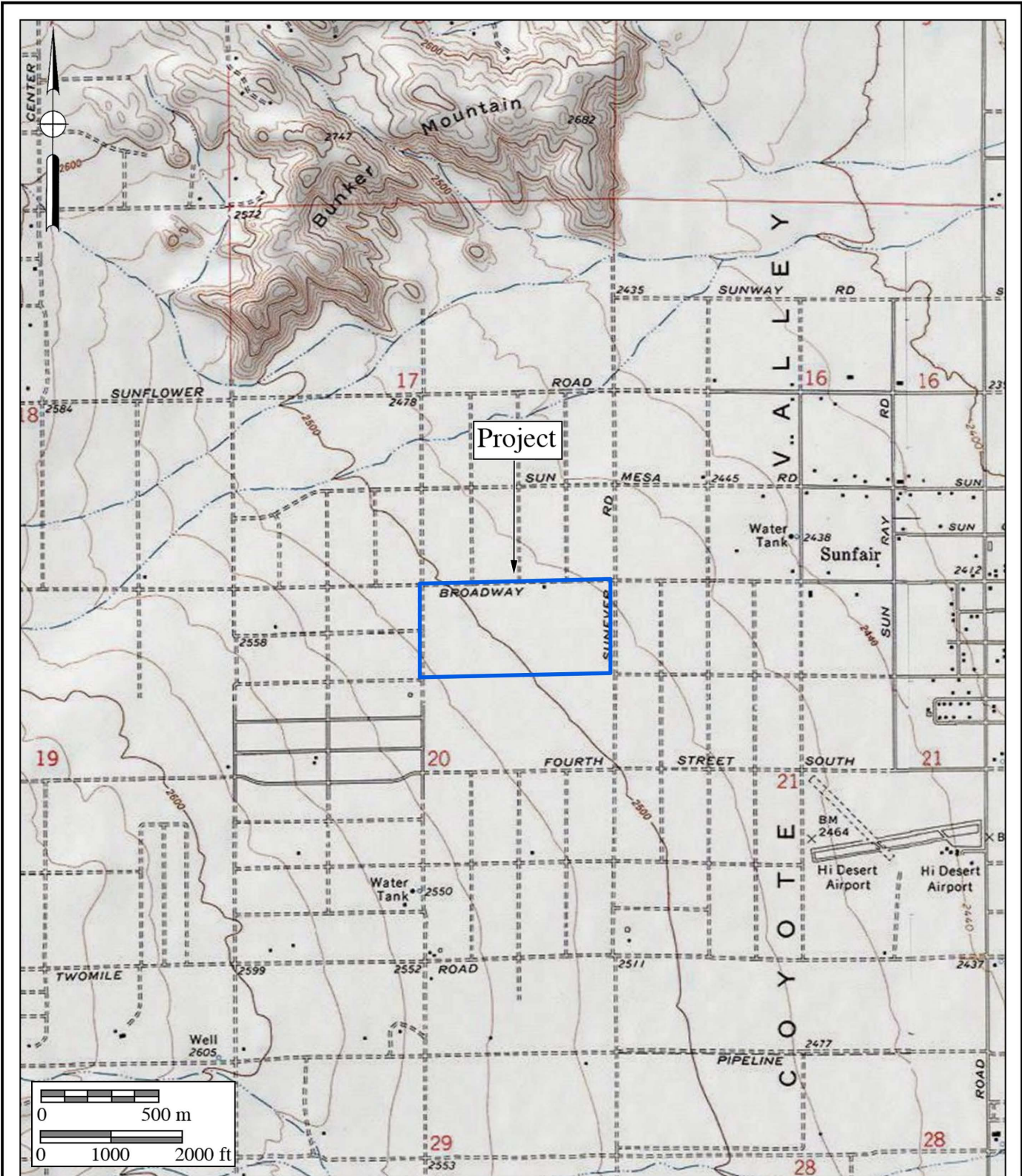
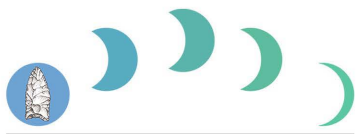


Figure 1.1-2
Project Location Map

The Joshua Tree Estates Project

USGS Joshua Tree North Quadrangle (7.5-minute series)



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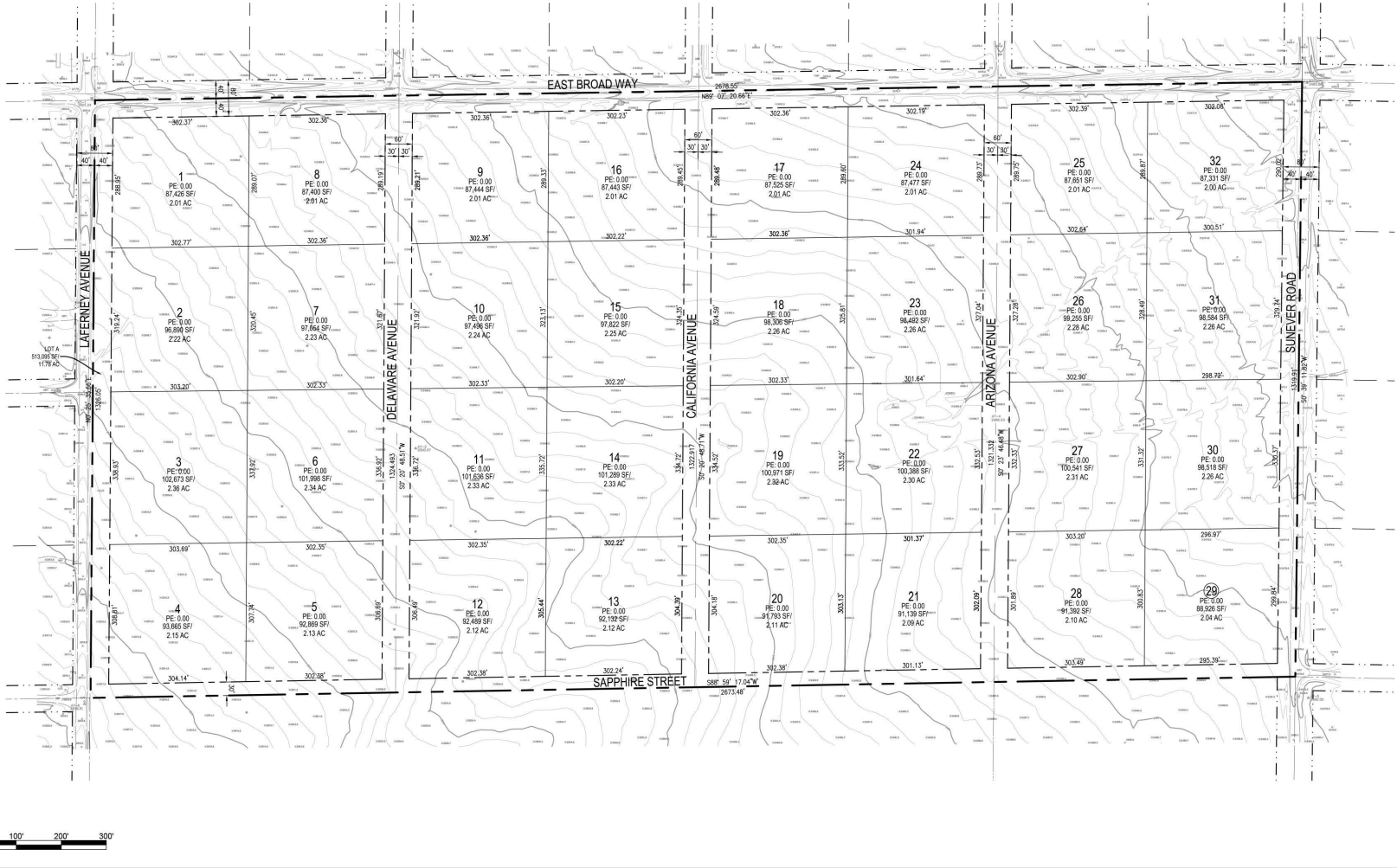


Figure 1.1-3
Project Development Map
The Joshua Tree Estates Project



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1.3 Cultural Setting

The subject property is located within the traditional territory primarily associated with the Serrano. Although the Mojave Desert is an area believed to have had limited prehistoric subsistence resources, it has historically supported a long and occasionally dense population. Evidence of villages and camps, burials, quarries, rock features, and bedrock mortars has been documented at archaeological sites across the desert, some of which contain evidence of a lengthy prehistoric time span. Although early archaeological remains are not found frequently, when they are, they are generally located along the margins of former pluvial lakes or in areas of dune deflation. In contrast, artifacts on the desert floor may be sparse, widely scattered, and mixed with the desert pavements. For the region, archaeologists have reached a broad consensus regarding the general cultural chronology. The identified sequence includes the Paleo Indian Period, the Lake Mojave Period, the Pinto Period, the Gypsum Period, the Saratoga Springs Period, and the Ethnohistoric Period.

1.3.1 Prehistoric Period

Paleo Indian Period (12,000 to circa 10,000 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).

Lake Mojave Period (Late Pleistocene: 10,000 to 7,000 YBP)

The earliest documented evidence of human occupation in the Mojave Desert and surrounding areas comes from the Paleo Indian Period, a cultural expression referred to as the Western Pluvial Lakes Tradition (WPLT). The WPLT occurred in the western Great Basin and covered an area that stretched from the now arid lands of southern California to Oregon. A cultural adaptation to pluvial conditions (e.g., lakes, marshes, and grasslands) flourished for thousands of years after approximately 9000 B.C., but disappeared in response to the warming and drying trends of the Altithermal climatic period (Moratto 1984). One of the most well known expressions of the

WPLT is the Lake Mojave Complex, which is thought to have covered a vast area including parts of the southwestern Great Basin and the Mojave Desert, and may have reached as far south as the San Diego area. Artifacts indicative of the Lake Mojave Complex include foliated points and knives, Lake Mojave points, Silver Lake points, and flaked-stone crescents. Similar artifacts have been subsequently recorded along the shoreline of many other pluvial lakes in the Mojave Desert. Archaeological studies by Mark Sutton (1988) suggested that, at the time of the Lake Mojave Complex, much of Antelope and Fremont valleys may have been covered by Pleistocene Lake Thompson. In her 1978 work, Davis (1978) argues that the wetlands generated as a result of such Pleistocene lakes would have been a great attraction to the region's early occupants. This would result in an adaptive strategy that was more generalized, focusing on hunting and the overall exploitation of wetland resources. In general, it is clear that cultures across California adapted to wetland environments generated by pluvial lake ecological systems (Moratto 1984).

Pinto Period (7,000 to 4,000 YBP)

The Pinto Period dates to the end of the Pleistocene, when the severe and dramatic environmental change from pluvial to arid conditions began (Moratto 1984). Pinto Period sites are found mostly near ephemeral lakes and now dry streams and springs, suggesting that as the region began to dry, new subsistence adaptations were necessary. Projectile points associated with the Pinto Period are characterized as larger atlatl dart points, as opposed to arrowhead points, which were introduced later. This period has been described as a highly mobile desert economy, with an emphasis on hunting, supplemented by the use of processed seeds (Moratto 1984). However, the collections believed to represent the Pinto Period are largely lacking in well-developed milling technologies according to Moratto (1984). Pinto Period artifacts have been interpreted as indications of temporary or seasonal occupations by small groups of people. Sites of this period are generally small in scale and are typically absent of a developed midden. More recent studies (Sutton et al. 2007) suggest that the Pinto Period may have actually started in the early Holocene, overlapping the Lake Mojave Period. A series of radiocarbon dates from Little Lake, Pinto Basin, Twentynine Palms and Fort Irwin suggest Pinto sites with antiquity of upwards of 9,000 years (Sutton et al. 2007), indicating these sites may be of greater antiquity than previously suggested.

Gypsum Period (4,000 to 1,500 YBP)

The presence of Humboldt Concave Base, Gypsum Cave, Elko Eared, or Elko corner-notched points are believed to be indicative of the Gypsum Period (radiocarbon dated from 4,000 to 1,500 YBP). The Gypsum Period reflects a more intensive desert occupation as temperatures began to regulate during the First Neoglacial episode at the beginning of the late Holocene (Warren 1984; Sutton et al. 2007). During this time, indications of trade with coastal populations are evidenced by the presence of shell beads in the archaeological record. An increase in milling stones and manos has been found in association with this period, which indicates an increased use

of hard seeds (Moratto 1984; Warren 1984; Sutton et al. 2007). In comparison to sites from the preceding periods, Gypsum Period sites are generally smaller, higher in frequency, and distributed across a range of environments. Further, Gypsum Period sites also display evidence of exploitation of *artiodactyls*, rabbits, and rodents, as well as a wide range of seeds. Adaptations resulting from better adapted technologies combined with what was likely more complex social organization likely facilitated the ease of adaptation to the warming and drying conditions that initiated circa 2,000 years ago. The continued use of the region during the Gypsum Period indicates an overall more successful adaptation to the warm and dry conditions during this period (Warren 1984; Sutton et al. 2007).

Several scholars associate this period with the division of the Uto-Aztecan language, approximately 3,000 to 2,500 years ago (Moratto 1984; Warren 1984; Sutton et al. 2007). The major language groups that emerged from this division are Numic, spoken by the Kawaiisu and Piute; Takic, spoken by the Kitanemuk, Serrano, Gabrielino, and other southern California Shoshonean speakers; Hopic, spoken in the southwest; and Tubatulabalic, spoken by the Tubatulabal in the southern Sierra Nevada Mountains. A shift in settlement patterns toward a more sedentary lifestyle occurred during this period, characterized by the emergence of large permanent or semi-permanent village sites and associated cemeteries.

Saratoga Springs Period (1,500 to 800 YBP)

The Saratoga Springs Period is characterized by a transition from larger dart points to smaller arrow points. The presence of arrow points suggest that the bow and arrow were introduced to the Mojave Desert during the Saratoga Springs Period. This, combined with evidence from rock art motifs, leads scholars to argue for a shift from atlatls to use of the bow and arrow either during the end of the Gypsum Period or the beginning of the Saratoga Springs Period. This technological advancement likely improved overall hunting efficiency and possibly the carrying capacity for local population (Warren 1984). This in turn may have resulted in a significant increase in population as suggested by archaeological data. During this period, the development of large village sites with cemeteries and well-developed middens indicate long-term occupations in comparison to previous periods. This period saw an increase in trade with Arizona and other areas of the southwest. Evidence in the archaeological record shows that Brown and Buff wares (pottery styles), characteristic of Arizona, made their way to the California desert by 900 A.D. It is also believed that the Anasazi mined turquoise in the eastern California desert about this time. While the presence of Hakataya influence may have extended as far north and west as the eastern Antelope Valley (Warren 1984), influence in the western Mojave appear to have been minimal. During the second half of the Saratoga Springs Period, the rise in temperatures and return to xeric conditions around A.D. 700 likely led to population decline, and eventually the terminus of the Saratoga Springs complex circa A.D. 1100 (Sutton et al. 2007).

Ethnohistoric Period (800 YPB to the Time of European Contact)

Prior to European presence in North America, Native American groups subsisted along the shores of the no longer extant lakes of the Great Basin region that covered the major portion of the present-day Mojave Desert. It was along these shores that Native Americans made their homes, produced their tools, and left an indelible mark upon the landscape. However, by the time the first Spanish explorers ventured into what is now southern California in 1769, the pluvial lakes had long since vanished, leaving the Mojave River to support primarily the Paiute and the Mohave tribes. Ethnohistoric and ethnographic evidence indicates that prior to the arrival of the Spanish missionaries, the area around the project was inhabited by the Serrano (Moratto 1984; Sutton et al. 2007). Ethnographic data for the Serrano is presented below.

Serrano: An Archaeological and Ethnographic Perspective

Aboriginally, the Serrano occupied an area east of present-day Los Angeles. According to Bean and Smith (1978b), definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data:

The Serrano were organized into autonomous localized lineages occupying definite, favored territories, but rarely claiming any territory far removed from the lineage's home base. Since the entire dialectical group was neither politically united nor amalgamated into supralineage groups, as many of their neighbors were, one must speak in terms of generalized areas of usage rather than pan-tribal holdings. (Strong [1971] in Bean and Smith 1978b)

However, researchers place the Serrano in the San Bernardino Mountains, east of Cajon Pass, and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley (Bean and Smith 1978b). Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam.

Subsistence and Settlement

Serrano village locations were typically located near water sources. Individual family dwellings were likely circular, domed structures. Daily household activities would either take place outside of the house out in the open, or under a ramada constructed of a thatched willow pole roof held up by four or more poles inserted into the ground. Families could consist of a husband, wife/wives, unmarried female children, married male children, the husband's parents, and/or widowed aunts and uncles. Rarely, an individual would occupy his own house, typically in the mountains. Serrano villages also included a large ceremonial house where the lineage leader would live, which served as the religious center for lineages or lineage-sets, granaries, and sweatshouses (Bean and Smith 1978b).

The Serrano were primarily hunters and gatherers. 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). Earth ovens were used to cook meat, bones were boiled to extract marrow, and blood was either drunk cold or cooked to a thicker consistency and then eaten. Some meat and vegetables were sun-dried and stored. 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).

Social Organization

The Serrano were part of “exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk^wutam* (Wildcat) and *wahi?iam* (Coyote)” (Bean and Smith 1978b). According to Strong (1971), details such as number, structure, and function of the clans are unknown. Instead, he states that clans were not political, but were rather structured based upon “economic, marital, or ceremonial reciprocity, a pattern common throughout Southern California” (Bean and Smith 1978b). The Serrano formed alliances amongst their own clans and with Cahuilla, Chemehuevi, Gabrielino, and Cupeño clans (Bean and Smith 1978b). Clans were large, autonomous, political, and landholding units formed patrilineally, with all males descending from a common male ancestor, including all wives and descendants of the males. However, even after marriage, women would still keep their original lineage, and would still participate in those ceremonies (Bean and Smith 1978b).

According to Bean and Smith (1978b), the cosmogony and cosmography of the Serrano are very similar to those of the Cahuilla:

There are twin creator gods, a creation myth told in “epic poem” style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, an Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero. (Bean [1962-1972] and Benedict [1924] in Bean and Smith 1978b)

The Serrano had a shaman, a person who acquired their powers through dreams, which were induced through ingestion of the hallucinogen datura. The shaman was mostly a curer/healer, using herbal remedies and “sucking out the disease-causing agents” (Bean and Smith 1978b).

Material Culture

The Serrano were very similar technologically to the Cahuilla. In general, 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 for floor and wall coverings, bags, storage pouches, cordage (usually comprised of yucca fiber), and nets (Heizer 1978).

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. 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 their land or put to work on the now privately-owned ranchos, most often as slave labor. Considering the brutality of the 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).

In 1846, war erupted between Mexico and the United States. In 1848, with the signing of the Treaty of Guadalupe Hidalgo, the region was annexed as a territory of the United States, and in 1850, California became a state. These events generated a steady flow of settlers into the area, including gold miners, entrepreneurs, health-seekers, speculators, politicians, adventurers, seekers of religious freedom, and individuals desiring to create utopian colonies. As the non-native population increased through immigration, the indigenous population rapidly declined from the high morbidity of European diseases, low birth rates, and conflict and violence. California became a state in 1850 and was divided into 21 counties. The dwindling native populations were eventually displaced into reservations after California became a state.

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. A much larger population was now settling in California, 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.

By the late 1880s and early 1890s, there was growing discontent between San Bernardino and Riverside, its neighbor 10 miles to the south, due to differences in opinion concerning religion, morality, the Civil War, politics, and fierce competition to attract settlers. After a series of instances in which charges were claimed about unfair use of tax monies to the benefit of only the city of San Bernardino, several people from Riverside decided to investigate the possibility of a new county. In May 1893, voters living within portions of San Bernardino County (to the north) and San Diego County (to the south) approved the formation of Riverside County. Early business opportunities were linked to the agriculture industry, but commerce, construction, manufacturing, transportation, and tourism also provided a healthy local economy.

A Brief History of the Project Vicinity

In the early 1860s, as gold mining in the Sierra Nevada mountains began to decline, many miners looked to the Mojave Desert. However, it was not until the discovery of silver in Calico and the construction of the Southern Pacific Railroad from Mojave to Daggett in 1882 that the region became a mining center. This gave rise to the now famous 20-mule teams. Ten teams were hitched together with two wagons and a water wagon to haul ore from Daggett to the town of Calico. The rich silver deposits gave birth to Calico Mines, Waterman Mines, and Daggett Mills (Kyle 1990). One of the most prevalent mines in the Morongo Basin region was the Desert Queen Mine, where gold was discovered in the 1890s. The mine remained in operation until 1961 (Chappell 1971). Although many miners hoped to find gold or silver, these ventures also bolstered the non-metallic mining industry, which remains a significant portion of the Morongo Basin and greater Mojave Desert commercial industry (Fife 1988).

Transportation has also been instrumental in the development of the Morongo Basin. In the 1930s, State Route (SR) 62, also known as the Twentynine Palms Highway) replaced the Banning-Dale Road as the preferred route through the Morongo Basin. The Banning-Dale Road had emerged in the 1910s, but the general alignment had been utilized since the 1840s or 1850s as a wagon trail reportedly established by Powell “Paulino” Weaver (Grubbs 2007).

In 1936 Joshua Tree National Monument was established, which also increased travel and the popularity of the Morongo Basin region (NPS 2019). Not long after, in 1937, the Joshua Tree Townsite Company built offices along Twentynine Palms Road (Smith 1996). An article published on the z107.7fm radio station website states that:

From 1941-1944, the population grew from 49 to 227 people. The first business block of 5 stores was built in 1945 and the first Post Office was built in 1946. In 1949, the area shared filming sites with nearby Pioneer Town and boasted a thriving

turkey industry; and in 1950, villagers celebrated the completion of their self-built fire station. In 1963, the Hi-Desert Memorial Hospital District was established, and the then Joshua Tree Fire Protection District expanded. The population climbed to 3,800 people by 1967 and up to 4,500 people by 1969. By the 1970s, the area began to see more extensive development, including a Modern hospital on White Feather Road and the completion of the Joshua Tree Community Center in 1979. (Smith 1996)

As part of the Desert Protection Bill, Joshua Tree National Monument was elevated to park status on October 31, 1994, and 234,000 acres were added to the new park’s boundaries (NPS 2019).

1.4 Results of the Archaeological Records Search

BFSA requested an archaeological records search for a one-mile radius around the project from the SCCIC at CSU Fullerton. The SCCIC records search identified seven cultural resources within one mile of the project, none of which are located within the subject property. The resources identified during the records search include three prehistoric isolates, one multicomponent site, one historic trash scatter, and two historic isolates (Table 1.4–1).

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

Site Number	Resource Type
P-36-025046, P-36-025048, and P-36-026907	Prehistoric isolate
P-36-028351	Multicomponent site containing two prehistoric lithic scatters, a prehistoric isolate, the historic Roy Williams Airport/Hi-Desert Airport, two historic trash scatters, and one historic isolate
P-36-025036	Historic trash scatter
P-36-025047 and P-36-025049	Historic isolate

The records search results also identified six cultural resource studies that have been conducted within one mile of the project, none of which include any portion of the project. The complete records search results can be found in Appendix C.

In addition, BFSA 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, Built Environment Resources Directory
- Bureau of Land Management (BLM) General Land Office (GLO) records

- Historic USGS maps
- Historic aerial photographs (1953, 1970, 1983, 1989, 1995, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2021)

The BLM GLO records show a 1930 patent was issued to Laura Burns for the property and surrounding area comprising the entirety of the northeast quarter of Section 20, Township 1 North, Ranch 7 East. San Bernardino County Assessor's data on file with the Property Information Management System show the project parcel was acquired by Kenneth and Neva Claypool in 1965. According to the aerial photographs, one structure is visible in the northeast quarter of the property by 1953, approximately 50 feet south of East Broadway. This structure is also visible on the 1955 USGS 15' *Joshua Tree* quadrangle map. By 1970, an additional structure, possibly a shed, is also visible at this location. Although the images are blurry, it does appear that the structures are still present on the 1983 and 1989 photographs. By 1995 the structures are no longer visible. Subsequent photographs show the project as a vacant desert landscape.

BFSA also requested a SLF search from the NAHC. The results were negative for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within one mile of the project. All correspondence is provided in Appendix D.

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. Several 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 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 a 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 a 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 a 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 a 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 a 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 a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.
- 2) The significance of a historical resource is materially impaired when a project:
 - a) Demolishes or materially alters in an adverse manner those physical characteristics of a 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 a 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 a 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 a historical resource, as defined in subsection (a).
- 2) If a lead agency determines that the archaeological site is a 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 area 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 included the survey of the 82.1-acre study area and CEQA significance evaluations of any archaeological resources identified on the project that would be affected as a result of the development. Given the area involved and the recorded presence of 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 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 ability of the resource to address regional research topics and issues.

Although elementary site testing 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 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 and inland foothill environments of the region?

Data Needs

At the test 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 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 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 ANALYSIS OF PROJECT EFFECTS

The cultural resources assessment of the project consisted of an institutional records search, archival research, an intensive cultural resource survey of the entire 81.2-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 Methods

3.1.1 Field Methodology

The survey was conducted by Consulting Archaeologist Brian F. Smith on March 26, 2023, with assistance from Kathryn Smith. Methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough survey of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 10 to 15 meters apart while visually inspecting the ground surface. The archaeological survey was an intensive reconnaissance consisting of a series of survey transects across the project, the entirety of which was accessible. All potentially sensitive areas where cultural resources might be located were closely inspected. Photographs documenting survey areas and overall survey conditions were taken frequently. During the survey, two historic trash scatters and a historic cistern identified as Sites Temp-1 and Temp-2 were located within the project. Based upon the results of the survey program, both sites were subjected to an archaeological test program and evaluated under CEQA criteria during a subsequent visit to the property.

3.1.2 Test Methods

Under the direction of Principal Investigator Tracy A. Stropes, M.A., RPA, the testing program and evaluation of Sites Temp-1 and Temp-2 within the project were implemented on May 3, 2023. The testing program was conducted by field archaeologists David Grabski and Sabrina Corcoran. Sites Temp-1 and Temp-2 were subjected to subsurface tests and were recorded using Trimble Nomad Global Positioning System (GPS) instruments. The testing program was accomplished using STPs that measured 25 centimeters in diameter and between 30 and 50 centimeters in depth. The STPs were excavated in 10-centimeter contour levels (parallel to the original ground surface). All excavated sediments were passed through one-eighth-inch mesh hardware screens. No significant subsurface deposits were identified at either site. The locations of all tests were mapped via GPS. All field data was recorded on appropriate forms, and photographs were used to document the excavations.

3.1.3 Laboratory and Cataloging Procedures

In keeping with generally accepted archaeological procedures and utilizing a classification system commonly employed in this region, collected artifacts would be categorized according to artifact class, material class, and technological class. Comparative collections at the BFSA laboratory are employed in identifying unusual or highly fragmentary specimens as necessary. After cataloging and identification, the collections are marked with the appropriate provenience and catalog information. Considering the artifact assemblage is redundant and that recovery from the test excavations did not identify any significant archaeological deposits or artifacts, no material will be curated.

Historic Artifact Sorting and Analysis

The sorting technique for historic artifact collections includes the sorting, identification, and cataloging of all materials returned to the BFSA laboratory. Bulk items such as small fragments of ceramic and nondescript glass and metal are weighed and cataloged en masse, by material type, for each level. All remaining artifacts are separated by class and type and bagged accordingly. All artifacts are identified and entered into a database to produce an artifact catalog.

Historic Artifact Functional Categories

Artifacts are prepared for cataloging according to standard laboratory practices. Items that are covered in dirt to the point of obscuring relevant characteristics are dry-brushed or wiped with a damp cloth in order to enhance the artifact description. Each catalog entry is bagged in a two-millimeter-thick archival-quality bag labeled with location and catalog number information. The information recorded about cataloged artifacts includes provenience and depth, material, quantity and/or weight, artifact type, functional category, and a brief description of the artifact(s), which includes any diagnostic information about manufacturing methods, brand or product marks, and manufacturers' marks. Artifacts sharing the same provenience, material, and color characteristics but that were fragmentary are assigned a single catalog number. Artifacts are classified by functional category for purposes of analysis. These functional categories have been outlined by Van Wormer et al. (2005) and include:

- *Consumer Items* – Consumer items consist of packaged items purchased and consumed on a regular basis. Generally, these include groceries such as condiments, other preserved foods, and beverages. Under most conditions, consumer items recovered from archaeological deposits came in containers that do not deteriorate over time, such as glass or ceramic bottles and jars, and in some instances, tin cans.
- *Kitchen Items* – Kitchen items are defined as objects used in tasks of food preparation, serving, and consumption. These types of artifacts may include ceramic kitchen and tableware, glass tableware, canning jars, canning jar lids and related items, dairy bottles, cooking utensils, and flatware.

- *Food Items* – Food items include butchered bone, fish bone, shellfish, and seeds.
- *Household Items* – Household items are mainly related to a house structure and its furnishings, as well as non-food-related items used by the inhabitants. Artifact classes and types considered part of this category include lamps, medicines, cleaning products, household ceramics and glassware, household plant pots, and batteries.
- *Garment Items* – Garment items include all items related to clothing, including objects such as buckles, buttons, beads, shoe parts, and fabric fragments.
- *Personal Items* – Personal items are associated with an individual rather than a household and are therefore not generally shared. Artifact classes and types in this category include grooming and hygiene products, some medicines, cosmetic/beauty products, clothing items, personal adornment items such as jewelry, eyeglasses, and hair adornment, keys, pocket tools, purses, smoking-related items, and portable musical instruments.
- *Toys and Games* – Toys and games are items that include doll parts, marbles, toy jacks and jars, and candy containers.
- *Currency Items* – Currency items include coins and tokens.
- *Livery Items* – Livery items are primarily concerned with the use and maintenance of horses and horse-drawn vehicles. This may include a range of items from common horseshoes to saddle and buggy parts.
- *Transportation Items* – Transportation items are related to the use of automobiles and bicycles instead of horses and horse-drawn vehicles. This may include bicycles, tricycles, and automobile hitches.
- *Munitions Items* – Munitions items are related to the use, maintenance, and repair of firearms. This may include a range of items from the firearm itself, spent cartridges, gunflints, musket balls, and fragmented parts.
- *Hardware Items* – Hardware items are manufactured items used in the construction or maintenance of a residence that include screws, bolts, washers, brackets, hinges, handles, wire fragments, and plumbing.

- *Building Materials* – Building materials include all items related to the construction and maintenance of buildings and structures. This includes items such as door and lock parts, nails, window glass, brick fragments, milled wood fragments, electrical hardware, etc.
- *Machinery Items* – Machinery items include all machine parts that are not directly related to agricultural activities.
- *Tools* – Tools generally include any hand tool used to build or maintain a structure or operate a business. Axes, shovels, chisels, and pencils are all common tools.
- *Unidentifiable Items* – Unidentifiable items are too small or fragmentary to identify to artifact type.

3.2 Results of the Field Survey

Consulting Archaeologist Brian F. Smith conducted the archaeological survey for the project on March 26, 2023, with assistance from Kathryn Smith. The vegetation across the landscape consisted primarily of creosote bushes, wildflowers, and sage (Plates 3.2–1 and 3.2–2). Ground visibility during the survey was considered moderate to good. However, accumulated wind-swept soil hindered ground visibility around the bases of creosote bushes. No prehistoric resources were identified during the survey; however, the survey did result in the identification of sporadic wind-blown isolated cans and metal fragments throughout the property as well as two historic archaeological sites (see Plate 3.2–1 through Plate 3.2–4). The two archaeological sites were labeled Site Temp-1 and Site Temp-2 at the time of the survey and have been recorded on the applicable 523 Series DPR forms (see Appendix B). Site Temp-1 is centered on the structural remains of a cistern in the general location where the historic photographs show structures between 1953 and 1989, while Site Temp-2 is a trash scatter located northwest of the intersection of 3rd Street and Sunever Road (Figures 3.2–1 and 3.2–2).



Plate 3.2-1: Overview of the property, facing east.



Plate 3.2-2: Overview of the project, facing west.



Plate 3.2-3: Overview of Site Temp-1, facing northeast.



Plate 3.2-4: Overview of Site Temp-2, facing north.

Figure 3.2-1
Cultural Resource Location Map

(Deleted for Public Review; Bound Separately)

Figure 3.2-2
Cultural Resource Locations
Shown on an Aerial Photograph

(Deleted for Public Review; Bound Separately)

3.3 Results of Significance Testing

3.3.1 Site Temp-1

Site Temp-1 was identified in the northeastern portion of the project just south of East Broadway and approximately 850 feet west of Sunever Road, in the location where structures are visible on aerial photographs from 1953 through 1989. A concrete-capped and concrete-walled buried cistern was identified at this location. The cistern measures approximately five square feet, with a rectangular opening in the northwest corner of the concrete cap (Plates 3.3–1 and 3.3–2). Water was visible approximately four feet below the cap, but the depth of the cistern could not be determined. Also noted just south of the cistern were three small cement post foundations. Spreading out from the cistern is a concentration of historic trash and building materials. The site measures 200 feet north-to-south by 220 feet east-to-west (see Figure 3.3–1).



Plate 3.3–1: Overview of Site Temp-1, facing east.



Plate 3.3–2: Overview of the cistern at Site Temp-1, facing east.

Surface Recordation

Prior to the initiation of subsurface excavations, the surface expression of the site was mapped and recorded in detail using GPS equipment with sub-meter capability (Figure 3.3–1). In addition to the cistern, scattered disarticulated lumber was also noted, some of was burned, and others appear to be buried and possibly part of a structural support for a residence. Within the concentration of scattered trash, domestic discards such as plateware (coffee cups, plates), bottle glass, metal containers, window glass, shotgun cartridges, and nails were noted (Plates 3.3–3 and 3.3–4). A representative sample of the artifact assemblage was collected from nine locations across the site consisting of one fragment of window glass, one glass vessel, nine glass bottles, one glass jar, three metal bottle closure/caps, three metal jar closures/clamps, six metal sanitary cans, 10 metal hardware/building materials, three metal bullet casings, nine metal nails, six metal screws, eight pieces of ceramic tableware, and two pieces of ceramic hotelware (Table 3.3–1).



Plate 3.3–3: Overview of Site Temp-1, facing west.



Plate 3.3–4: Close-up view of the historic artifacts at Site Temp-1.

Figure 3.3-1
Excavation Location Map
Site Temp-1

(Deleted for Public Review; Bound Separately)

Table 3.3-1
Surface Collection Data for Site Temp-1

Surface Collection	Object Type	Material Type	Quantity	Cat No.	
1	Nail	Metal	1	33	
			1	34	
			1	35	
			1	36	
	Hinge		1	37	
	Bottle		1	38	
	Tableware		Ceramic	1	39
			1	40	
2	Window Glass	Glass	1	41	
	Bottle		1	42	
			1	43	
	Jar	Metal	1	44	
	Hardware		1	45	
	Munitions		1	46	
			1	47	
	Can		1	48	
	Tableware	Ceramic	1	49	
			1	50	
			1	51	
	3	Nail	Metal	3	53
2				56	
Screw		2		54	
		1		55	
		1		57	
		1		58	
		1		59	
		1		60	
		2		61	
		1		62	
Hardware		1		63	
		2		65	
		Hinge		1	64
				1	64
4	Can	Metal	1	66	
	Bottle	Glass	1	67	
			1	68	

Surface Collection	Object Type	Material Type	Quantity	Cat No.
			1	69
			1	70
5	Jar	Metal	1	71
			1	72
		Glass	1	78
	Bottle	Metal	1	73
			1	74
		Glass	1	75
			1	76
Vessel	Glass	1	77	
6	Can	Metal	1	79
	Tableware	Ceramic	1	80
	Hotelware		1	81
7	Can	Metal	1	82
			1	83
8	Vessel	Ceramic	1	84
	Tableware		1	85
	Munitions	Metal	1	86
	Bottle	Glass	1	87
9	Hotelware	Ceramic	1	88
Total				
	-	-	62	-

Subsurface Excavations

In order to determine if any significant archaeological deposits exist at Site Temp-1, four STPs were excavated to depths between 30 and 50 centimeters within the concentration of the artifact scatter (see Figure 3.3-1). The native soil across the site includes a loosely compacted light brown and tan (2.5Y 6/4) sandy silt, which became more compacted the deeper the STP was excavated (Table 3.3-2). Ninety-two artifacts, mostly fragmented in nature, were recovered from the upper levels of the STPs (0 to 20 centimeters) (see Table 3.3-2). This material consists of four glass bottle fragments, two glass container fragments, nine glass vessel fragments, one glass druggist bottle, 55 fragments of window glass, one metal pull tab beer can, four metal food cans, four metal bullet casings, nine metal nails, two metal screws, and one metal wire fragment. Most of this material (N=82; 90.10 percent) was recovered from the first level (0 to 10 centimeters). Given the fragmented nature of the recovery coupled with the removal of structures in this vicinity, the material recovered in the upper levels of the STPs does not represent an intact deposit. Rather this limited material is a reflection of the impacts to the site as a result of disturbances associated with the demolition and removal of the structures from the property.

Table 3.3-2
Shovel Test Excavation Data for Site Temp-1

Unit No.	Depth (cm)	Soils Encountered	Object Type	Material Type	Cat No.	Quantity						
1	0-10	Loosely compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	Nail	Metal	2	1						
			Window Glass	Glass	1	3						
	10-20		Nail	Metal	4	1						
			5		1							
	20-30		Moderately compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	Window Glass	Glass	3	1					
								30-40	No Recovery			
2	0-10	Loosely compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	Bottle	Glass	8	1						
			Window Glass		7	1						
					6	1						
	10-20		Moderately compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	Nail	Metal	9	1					
								No Recovery				
20-30												
3	0-10	Loosely compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	Bottle	Glass	12	1						
					14	1						
			Vessel		15	1						
					11	9						
			Vial		16	1						
			Window Glass		10	45						
			Container		13	1						
Can	Metal	17	1									

Unit No.	Depth (cm)	Soils Encountered	Object Type	Material Type	Cat No.	Quantity	
		Moderately compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules			21	4	
			Munitions		23	3	
			Nail		18	1	
					19	1	
			Wire		20	1	
	10-20		Container	Glass	25	1	
			Window Glass		24	2	
			Munitions	Metal	28	1	
			Nail		26	1	
			27	1			
	20-30		Moderately compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	No Recovery			
	30-40						
	40-50						
4	0-10	Loosely compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	Nail	Metal	31	1	
			Screw		29	1	
					30	1	
	10-20		Window Glass	Glass	32	2	
	20-30		Moderately compacted light brown and tan (2.5Y 6/4) sandy silt with subangular granules	No Recovery			
Total	-	-	-	-	92		

Discussion

Site Temp-1 consists of a small, sparse scatter of historic artifacts surrounding the remnant cistern associated with structures visible on aerial photographs from 1953 through 1989. Of the 153 artifacts recovered from the surface collection and subsurface excavations (STP) the assemblage is predominantly glass (N=83; 54.20 percent), followed by metal (N=60; 39.20 percent) and ceramic (N=10; 6.50 percent) (Table 3.3–3).

Table 3.3-3
Cultural Materials Recovered from Site Temp-1

Cultural Material	Depth (cm)			Total	Percent
	Surface	0-10	10-20		
Ceramic	10	-		10	6.50
Glass	12	67	4	83	54.20
Metal	40	15	5	60	39.20
Total	62	82	9	153	-
Percent*	40.50	53.60	5.90	-	100.00*

**Rounded totals may not equal 100 percent*

When placed into functional categories the material recovered from Site Temp-1 is predominantly comprised of building materials (N=83; 54.20 percent), followed by consumer items (N=41; 26.8 percent); kitchen items (N=10; 6.50 percent); hardware items (N=7; 4.60 percent); munitions (N=7; 4.60 percent); furniture items (N=2; 1.30 percent); household items (N=2; 1.3 percent); and personal items (N=1; 0.7 percent).

Table 3.3-4
Functional Categories Represented by
Cultural Materials Recovered from Site Temp-1

Functional Category	Depth (cm)			Total	Percent
	Surface	0-10	10-20		
Building Material	19	59	5	83	54.20
Consumer Items	21	19	1	41	26.80
Furniture Items	-	-	2	2	1.30
Hardware Items	7	-	-	7	4.60
Household Items	1	1	-	2	1.30
Kitchen Items	10	-	-	10	6.50
Munitions	3	3	1	7	4.60
Personal Items	1	-	-	1	0.70
Total	62	82	9	153	-
Percent	40.50	53.60	5.90	-	100.00*

**Rounded totals may not equal 100 percent*

In order to more accurately date the surface artifacts recovered from Temp-1, only those items representing expendable consumer products were used in assigning a date range. Consumer

expendables are useful for dating an assemblage because they represent items that are only used for a brief period and are then discarded. Although some recycling behaviors did occur historically, when several items are taken together as a group, a greater level of confidence can be achieved when examining date ranges and periods of occupation. Upon review of the temporally diagnostic artifacts (Table 3.3–5), it was determined that the material primarily represents discarded bottles from the late 1960s and 1970s; however, one bottle with an earlier manufacture date of 1925 to 1939 was identified. Regardless, the recovered material is generally consistent with the date range that structures are visible within this location. Given that the majority of the recovery from the site consists of building materials coupled with the results of the temporally diagnostic artifacts, it can be concluded that the site was created at the time the structures within the property were demolished.

Table 3.3–5

Temporally Diagnostic Consumer Items Recovered from Site Temp-1

Date Range	Object Type	Manufacturer / Company	Cat. No.(s)
1965-1969	Beverage Can	Indeterminate	17
1905-2023	Beverage Bottle	Indeterminate	42
1978-1978	Beverage Bottle	Owens-Illinois Glass Co.	43
1925-1939	Indeterminate Bottle	Latchford-Marble Glass Company	69
1976	Indeterminate Bottle	Owens-Illinois Glass Co.	70
1978	Indeterminate Bottle	Owens-Illinois Glass Co.	87

Site Summary

Site Temp-1 measures 200 feet north-to-south by 220 feet east-to-west. An analysis of the Site Temp-1 assemblage indicates that the resource was likely created when the structures located there were demolished. Subsurface investigations did not reveal any significant intact deposits of historic artifacts. As such, the testing of Temp-1 and recordation of the cistern and associated artifact concentration has exhausted the site’s research potential. Therefore, due to a lack of unique elements at Site Temp-1, the site is evaluated as not eligible for listing on the CRHR, according to the criteria listed in CEQA, Section 15064.5. The level of information already obtained from this site, including documentation of boundaries, collection of a sample of the artifacts present, and dating analysis of the recovered artifacts, has exhausted the research potential of the site. No further archaeological investigations are recommended for Site Temp-1.

3.3.2 Site Temp-2

Site Temp-2 was identified in the southeastern corner of the property just northwest of the intersection of 3rd Street and Sunever Road (Plate 3.3–5). The site contains a historic artifact scatter comprised of historic cans, metal fragments, and glass fragments. Modern trash was also noted at the site. The site measures 175 feet north-to-south by 50 feet east-to-west (See Figure 3.3–2).



Plate 3.3–5: Overview of Site Temp-2, facing northeast.

Surface Recordation

Prior to the initiation of subsurface excavations, the surface expression of the site was mapped and recorded in detail using GPS equipment with sub-meter capability (Figure 3.3–2). A representative sample of the artifact assemblage was collected from five locations across the site consisting of one glass bottle, six metal cans, one canning jar lid, and one terracotta planter fragment (Table 3.3–6).

Subsurface Excavations

In order to determine if any significant archaeological deposits exist at Site Temp-2, two STPs were excavated to depths between 30 and 50 centimeters within the concentration of the artifact scatter (see Figure 3.3–2). The native soil across the site includes a loosely compacted light brown and tan (2.5Y 6/4) sandy silt, which became more compacted the deeper the STP was excavated (Table 3.3–7). One fragment of mirror glass was recovered from the upper level (0 to 10 centimeters) of STP 1; however, no intact archaeological deposits were encountered.

Figure 3.3-2
Excavation Location Map
Site Temp-2

(Deleted for Public Review; Bound Separately)

Table 3.3-6
Surface Collection Data for Site Temp-2

Surface Collection	Object Type	Material Type	Quantity	Cat No.
1	Can	Non-ferrous metal	1	1
2			1	3
	Jar lid		1	2
3	Bottle	Amber glass	1	6
	Can	Non-ferrous metal	1	4
			1	5
	Planter	Terracota	1	7
4	Can	Non-ferrous metal	1	8
5			1	9
Total				
	-	-	9	-

Table 3.3-7
Shovel Test Excavation Data for Site Temp-2

Shovel Test Pit	Depth (cm)	Soils Encountered	Object Type	Material Type	Quantity	Cat No
1	0-10	Loosely compacted light brown and tan (2.5 Y 6/4) silty sand	Mirror	Glass	1	10
	10-20	Moderately compacted light brown and tan (2.5 Y 6/4) silty sand				
	20-30					
2	0-10	Loosely compacted light brown and tan (2.5 Y 6/4) silty sand	No Recovery			
	10-20	Moderately compacted light brown and tan (2.5 Y 6/4) silty sand				
	20-30					
Total						
	-	-	-	-	1	-

Discussion

Site Temp-2 consists of a small, sparse scatter of historic artifacts northwest of the intersection of 3rd Street and Sunever Road. Of the 10 artifacts recovered from the surface collection and subsurface excavations, the assemblage is predominantly metal (N=7; 70.00 percent), followed by glass (N=2; 20.00 percent) and ceramic (N=1; 10.00 percent) (Table 3.3–8). When placed into functional categories, the material recovered from site Temp-2 is predominantly comprised of consumer items (N=7; 70.00 percent), followed by gardening, kitchen, and personal items, each respectively representing 10.00 percent of the assemblage (Table 3.3–9).

Table 3.3–8
Cultural Materials Recovered from Site Temp-2

Material Type	Depth (cm)		Total	Percent
	Surface	0-10		
Ceramic	1	-	1	10.00
Glass	1	1	2	20.00
Metal	7	-	7	70.00
Total	9	1	10	-
Percent	90.00	10.00	-	100.00

Table 3.3–9
Functional Categories Represented by
Cultural Materials Recovered from Site Temp-2

Functional Categories	Depth (cm)		Total	Percent
	Surface	0-10		
Consumer Items	7	-	7	70.00
Gardening Items	1		1	30.00
Kitchen Items	1		1	
Personal Items	-		1	
Total	9	1	10	-
Percent	90.00	10.00	-	100.00

In order to more accurately date the surface artifacts recovered from Temp-2, only those items representing expendable consumer products were used in assigning a date range. Consumer expendables are useful for dating an assemblage because they represent items that are only used for a brief period and are then discarded. Although some recycling behaviors did occur

historically, when several items are taken together as a group, a greater level of confidence can be achieved when examining date ranges and period of occupation. Only three of the seven consumer items could be associated with a manufacture date range. Although limited, upon review of the temporally diagnostic artifacts (Table 3.3–10), it was determined that the material primarily represents discarded cans and bottles from the late 1950s through the late 1960s. Although more modern refuse was also noted throughout the site area, historically, Site Temp-2 is a transient refuse disposal site representing a single dumping episode.

Table 3.3–10

Temporally Diagnostic Consumer Items Recovered from Site Temp-2

Date Range	Object Type	Manufacturer / Company	Cat. No.(s)
1905-1959	Glass Bottle	Indeterminate	3
1962-1966	Metal food can	Indeterminate	1
1967	Metal sanitary can	Indeterminate	5

Site Summary

Site Temp-2 measures 175 feet north-to-south by 50 feet east-to-west. An analysis of the Site Temp-2 assemblage indicates that the site is entirely comprised of consumer items, likely representing a single dumping episode that occurred between the late 1950s and the late 1960s. Based upon the surface data and the lack of subsurface materials, the site does not represent the level of focused historic activity that would correspond to a historic occupation site or multi-episodic refuse deposit. Instead, the site is classified as a transient single-episode refuse disposal site with no subsurface component and limited integrity. As a result of the current collection efforts and site analysis, the site exhibits no research potential. Therefore, due to a lack of unique elements at Site Temp-2, according to the criteria listed in CEQA, Section 15064.5, the site is evaluated as not eligible for listing on the CRHR. The level of information already obtained from this site, including documentation of boundaries, collection of a sample of the artifacts present, and dating analysis of the recovered artifacts, has exhausted the research potential of the site. No further archaeological investigations are recommended for Site Temp-2.

4.0 **RECOMMENDATIONS**

The cultural resources assessment for the Joshua Tree Estates Project resulted in the identification of two previously undocumented historic archaeological sites (Temp-1 and Temp-2). Site Temp-1 consists of the remains of a cistern associated with structures visible on the property between 1953 and 1989, as well as refuse dating between the late 1960s and 1970s. Site Temp-2 contains refuse dating between the late 1960s and late 1970s. Based upon the current project design, the proposed development will impact these sites (Figure 4.0-1). An archaeological testing program was completed by BFSA in order to evaluate the identified archaeological sites and assess the potential impacts of the project development upon the resources.

As a result of the current study, all archaeological sites within the property are evaluated as not significant and ineligible for listing on the CRHR. Therefore, site-specific mitigation measures will not be required. However, based upon constraints resulting from partially limited ground visibility and the previously identified prehistoric and historic resources within the project vicinity, future grading within this property may impact cultural resources that have not been previously identified. Because the potential exists that inadvertent discoveries could be made during grading or earthwork, it is recommended that the project be conditioned with archaeological monitoring during ground disturbing activities tied to the future residential development of the property. However, during grading, the consulting archaeologist shall have the authority to modify and reduce the monitoring program to either periodic spot-checks or suspension of the monitoring program if the potential for cultural resources appears to be less than anticipated. Should human remains be discovered, treatment of these remains shall follow California Public Resources Code 5097.9. Any human remains that are determined to be Native American shall be reported to the San Bernardino County Coroner and subsequently to the NAHC.

Figure 4.0-1
Cultural Resources Shown on the
Joshua Tree Estates Subdivision Map

(Deleted for Public Review; Bound Separately)

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the Joshua Tree Estates Project was directed by Principal Investigator Tracy A. Stropes. The archaeological fieldwork was conducted by Consulting Archaeologist Brian F. Smith with assistance from Kathryn Smith. The report text was prepared by Andrew J. Garrison. Report graphics were provided by Emily T. Soong. Technical editing and report production were conducted by Jacob Tidwell. The archaeological records search was conducted at the SCCIC at CSU Fullerton.

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APPENDIX A

Resumes 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).

Andrew J. Garrison, MA, RPA

Project Archaeologist

BFSA Environmental Services, A Perennial Company

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Education

Master of Arts, Public History, University of California, Riverside	2009
Bachelor of Science, Anthropology, University of California, Riverside	2005
Bachelor of Arts, History, University of California, Riverside	2005

Professional Memberships

Register of Professional Archaeologists	Society of Primitive Technology
Society for California Archaeology	Lithic Studies Society
Society for American Archaeology	California Preservation Foundation
California Council for the Promotion of History	Pacific Coast Archaeological Society

Experience

Project Archaeologist **June 2017–Present**
BFSA Environmental Services, A Perennial Company **Poway, California**

Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

Senior Archaeologist and GIS Specialist **2009–2017**
Scientific Resource Surveys, Inc. **Orange, California**

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

Preservation Researcher **2009**
City of Riverside Modernism Survey **Riverside, California**

Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

Information Officer
Eastern Information Center (EIC), University of California, Riverside

2005, 2008–2009
Riverside, California

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

Reports/Papers

- 2019 A Class III Archaeological Study for the Tuscany Valley (TM 33725) Project National Historic Preservation Act Section 106 Compliance, Lake Elsinore, Riverside County, California. Contributing author. Brian F. Smith and Associates, Inc.
- 2019 A Phase I and II Cultural Resources Assessment for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the 10575 Foothill Boulevard Project, Rancho Cucamonga, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the County Road and East End Avenue Project, City of Chino, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Contributing author. Brian F. Smith and Associates, Inc.
- 2019 A Section 106 (NHPA) Historic Resources Study for the McElwain Project, City of Murrieta, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2018 Cultural Resource Monitoring Report for the Sewer Group 818 Project, City of San Diego. Brian F. Smith and Associates, Inc.
- 2018 Phase I Cultural Resource Survey for the Stone Residence Project, 1525 Buckingham Drive, La Jolla, California 92037. Brian F. Smith and Associates, Inc.
- 2018 A Phase I Cultural Resources Assessment for the Seaton Commerce Center Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Marbella Villa Project, City of Desert Hot Springs, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 Phase I Cultural Resources Survey for TTM 37109, City of Jurupa Valley, County of Riverside. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Winchester Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2016 John Wayne Airport Jet Fuel Pipeline and Tank Farm Archaeological Monitoring Plan. Scientific Resource Surveys, Inc. On file at the County of Orange, California.
- 2016 Historic Resource Assessment for 220 South Batavia Street, Orange, CA 92868 Assessor's Parcel Number 041-064-4. Scientific Resource Surveys, Inc. Submitted to the City of Orange as part of Mills Act application.

- 2015 Historic Resource Report: 807-813 Harvard Boulevard, Los Angeles. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2015 Exploring a Traditional Rock Cairn: Test Excavation at CA-SDI-13/RBLI-26: The Rincon Indian Reservation, San Diego County, California. Scientific Resource Surveys, Inc.
- 2014 Archaeological Monitoring Results: The New Los Angeles Federal Courthouse. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2012 Bolsa Chica Archaeological Project Volume 7, Technological Analysis of Stone Tools, Lithic Technology at Bolsa Chica: Reduction Maintenance and Experimentation. Scientific Resource Surveys, Inc.

Presentations

- 2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.
- 2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.
- 2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.

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

Artifact Catalogs

Joshua Tree Estates
Cultural Resources Assessment
Master Artifact Catalog
Site Temp-1



Cat No.	Unit Type	Unit No.	Depth (cm)	Object Type	Object Subtype	Material Type	Material Subtype	Functional Category	Mold	Finish	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer / Company	Place of Origin	Date (min)	Date (Max)	Condition	Portion	Qty	Wgt (g)
1	STP	1	0-10	Window Glass	Window Glass	Glass	Aqua	Building Material	-	-	-	-	-	-	-	-	Fragment	-	3	4.58
2	STP	1	0-10	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	2.73
3	STP	1	10-20	Window Glass	Window Glass	Glass	Colorless	Building Material	-	-	-	-	-	-	-	-	Fragment	-	1	0.90
4	STP	1	10-20	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	1.03
5	STP	1	10-20	Nail	Indeterminate	Metal	Non-ferrous	Furniture Items	-	-	-	-	-	-	-	-	Complete	-	1	0.99
6	STP	2	0-10	Window Glass	Window Glass	Glass	Aqua	Building Material	-	-	-	-	-	-	-	-	Fragment	-	1	4.85
7	STP	2	0-10	Window Glas	Window Glass	Glass	Colorless	Building Material	-	-	-	-	-	-	-	-	Fragment	-	1	2.18
8	STP	2	0-10	Bottle	Indeterminate	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	Fragment	Body	1	0.29
9	STP	2	0-10	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	2.93
10	STP	3	0-10	Window Glass	Window Glass	Glass	Aqua	Building Material	-	-	-	-	-	-	-	-	Fragment	-	45	73.21
11	STP	3	0-10	Vessel	Indeterminate	Glass	Colorless	Consumer Items	-	-	Possible paper label	-	-	-	-	-	Fragment	-	9	8.58
12	STP	3	0-10	Bottle	Indeterminate	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	Fragment	Body	1	2.49
13	STP	3	0-10	Container	Indeterminate	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	Fragment	-	1	0.69
14	STP	3	0-10	Bottle	Indeterminate	Glass	Amber	Consumer Items	-	-	-	-	-	-	-	-	Fragment	Body	1	2.51
15	STP	3	0-10	Bottle	Indeterminate	Glass	Green	Consumer Items	-	-	-	-	-	-	-	-	Fragment	-	1	0.73
16	STP	3	0-10	Vial	Druggist	Glass	Colorless	Household Items	ABM	Small Mouth External Thread	-	-	-	-	1905	2023	Complete	-	1	21.28
17	STP	3	0-10	Can	Beverage	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	1965	1969	Fragment	Pull-tab	1	0.54
18	STP	3	0-10	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	11.84
19	STP	3	0-10	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	3.34
20	STP	3	0-10	Wire	Indeterminate	Metal	Non-ferrous	Hardware Items	-	-	-	-	-	-	-	-	Fragment	-	1	0.33
21	STP	3	0-10	Can	Food	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Fragment	-	4	1.67
23	STP	3	0-10	Munitions	Bullet Casing	Metal	Non-ferrous	Munitions	-	-	-	-	-	-	-	-	Complete	-	3	1.87
24	STP	3	10-20	Window Glass	Window Glass	Glass	Colorless	Building Material	-	-	-	-	-	-	-	-	Fragment	-	2	1.18
25	STP	3	10-20	Container	Indeterminate	Glass	Colorless	Consumer Items	-	-	-	-	-	-	-	-	Fragment	-	1	0.24
26	STP	3	10-20	Nail	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Fragment	Shaft	1	0.62
27	STP	3	10-20	Nail	Indeterminate	Metal	Non-ferrous	Furniture Items	-	-	-	-	-	-	-	-	Complete	-	1	1.78
28	STP	3	10-20	Munitions	Bullet Casing	Metal	Non-ferrous	Munitions	-	-	"U.S.C. CO.// 32 S. & W. L." EMB on head	-	United States Cartridge Co.	-	1869	1938	Complete	-	1	2.90
29	STP	4	0-10	Screw	Flat-head	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	2.57
30	STP	4	0-10	Screw	Flat-head	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	17.48
31	STP	4	0-10	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	0.40
32	STP	4	0-10	Window Glass	Window Glass	Glass	Aqua	Building Material	-	-	-	-	-	-	-	-	Fragment	-	2	6.29
33	SC	1	Surface	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	7.33
34	SC	1	Surface	Nail	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	14.79
35	SC	1	Surface	Nail	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	1.44
36	SC	1	Surface	Nail	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	1.63
37	SC	1	Surface	Hinge	Door	Metal	Indeterminate	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	114.05
38	SC	1	Surface	Bottle	Closure	Metal	Non-ferrous	Consumer Items	-	Internal Thread	-	-	-	-	-	-	Complete	-	1	4.35

Joshua Tree Estates
 Cultural Resources Assessment
 Master Artifact Catalog
 Site Temp-1



Cat No.	Unit Type	Unit No.	Depth (cm)	Object Type	Object Subtype	Material Type	Material Subtype	Functional Category	Mold	Finish	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer / Company	Place of Origin	Date (min)	Date (Max)	Condition	Portion	Qty	Wgt (g)
39	SC	1	Surface	Tableware	Vessel	Ceramic	Porcelain	Kitchen Items	-	-	Transfer-print, Clear over-glaze, Blue Willow Pattern	-	-	-	-	-	Fragment	Rim	1	3.33
40	SC	1	Surface	Tableware	Vessel	Ceramic	Porcelain	Kitchen Items	-	-	Transfer-print, Clear under-glaze, Blue Willow Pattern	-	-	-	-	-	Fragment	Rim	1	2.73
41	SC	2	Surface	Window Glass	Window Glass	Glass	Aqua	Building Material	-	-	-	-	-	-	-	-	Fragment	-	1	27.73
42	SC	2	Surface	Bottle	Beverage	Glass	Colorless	Consumer Items	ABM	Small Mouth External Thread	-	-	-	-	1905	2023	Fragment	Finish	1	18.44
43	SC	2	Surface	Battery	Beverage	Glass	Colorless	Consumer Items	ABM	-	Stipping around heel	4 (I) 78	Owens-Illinois Glass Co.	Rockport, NY	1978	1978	Fragment	Base	1	37.57
44	SC	2	Surface	Jar	Closure	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	5.96
45	SC	2	Surface	Hardware	Washer	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	9.89
46	SC	2	Surface	Munitions	Bullet Casing	Metal	Non-ferrous	Munitions	-	-	-	XR	-	-	-	-	Complete	-	1	0.76
47	SC	2	Surface	Munitions	Bullet Casing	Metal	Non-ferrous	Munitions	-	-	-	H	-	-	-	-	Complete	-	1	0.50
48	SC	2	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Fragment	-	1	60.94
49	SC	2	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Fragment	-	1	70.10
50	SC	2	Surface	Tableware	Saucer	Ceramic	Stoneware	Kitchen Items	-	-	Clear over-glaze, brown speckled pattern, with brown "*" transfer printed decoration	-	-	-	-	-	Fragment	Rim, body, base	1	15.77
51	SC	2	Surface	Tableware	Vessel	Ceramic	Porcelain	Kitchen Items	-	-	Clear over-glaze	-	-	-	-	-	Fragment	Rim	1	1.84
52	SC	2	Surface	Tableware	Vessel	Ceramic	Earthenware	Kitchen Items	-	-	Forest green under-glaze, clear over-glaze	-	-	-	-	-	Fragment	Rim	1	4.42
53	SC	3	Surface	Nail	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	3	31.94
54	SC	3	Surface	Screw	Square-head	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	2	89.74
55	SC	3	Surface	Screw	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	33.78
56	SC	3	Surface	Nail	Wire-cut	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	2	1.81
57	SC	3	Surface	Screw	Indeterminate	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	2.32
58	SC	3	Surface	Screw	Flat-head	Metal	Non-ferrous	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	0.93
59	SC	3	Surface	Screw	Indeterminate	Metal	Steel	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	12.18
60	SC	3	Surface	Hardware	Upper	Metal	Non-ferrous	Hardware Items	-	-	-	-	-	-	-	-	Fragment	-	1	1.65
61	SC	3	Surface	Hardware	Bracket	Metal	Non-ferrous	Hardware Items	-	-	-	-	-	-	-	-	Fragment	-	2	2.74
62	SC	3	Surface	Hardware	Indeterminate	Metal	Non-ferrous	Hardware Items	-	-	-	-	-	-	-	-	Complete	-	1	9.31
63	SC	3	Surface	Hardware	Hook	Metal	Non-ferrous	Hardware Items	-	-	-	-	-	-	-	-	Complete	-	1	10.57
64	SC	3	Surface	Hinge	Door	Metal	Indeterminate	Building Material	-	-	-	-	-	-	-	-	Complete	-	1	104.60
65	SC	3	Surface	Hardware	Clasp	Metal	Indeterminate	Hardware Items	-	-	-	-	-	-	-	-	Fragment	-	2	59.21
66	SC	4	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	Pull-tab, corrugated	-	-	-	-	-	Fragment	-	1	63.44
67	SC	4	Surface	Bottle	Beverage	Glass	Green	Consumer Items	ABM	-	Ribbed around edge of base	-	-	-	-	-	Fragment	Base	1	30.89
68	SC	4	Surface	Bottle	Beverage	Glass	Green	Consumer Items	ABM	Small Mouth External Thread	-	-	-	-	-	-	Fragment	Finish	1	23.52

Joshua Tree Estates
Cultural Resources Assessment
Master Artifact Catalog
Site Temp-1



Cat No.	Unit Type	Unit No.	Depth (cm)	Object Type	Object Subtype	Material Type	Material Subtype	Functional Category	Mold	Finish	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer / Company	Place of Origin	Date (min)	Date (Max)	Condition	Portion	Qty	Wgt (g)
69	SC	4	Surface	Bottle	Indeterminate	Glass	Colorless	Consumer Items	ABM	-	-	(L)	Latchford-Marble Glass Company	-	1925	1939	Fragment	Base	1	30.73
70	SC	4	Surface	Bottle	Indeterminate	Glass	Colorless	Consumer Items	ABM	-	-	21 (I) 76 / 13	Owens-Illinois Glass Co.	Portland, OR	1976	1976	Fragment	Base	1	11.06
71	SC	5	Surface	Jar	Closure	Metal	Non-ferrous	Consumer Items	-	Internal Thread	-	-	-	-	-	-	Complete	-	1	35.73
72	SC	5	Surface	Jar	Clamp	Metal	Non-ferrous	Consumer Items	-	Internal Thread	-	-	-	-	-	-	Complete	-	1	9.50
73	SC	5	Surface	Bottle	Cap	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	2.15
74	SC	5	Surface	Bottle	Closure	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	7.33
75	SC	5	Surface	Bottle	Closure	Metal, Glass	Non-ferrous, colorless	Consumer Items	-	-	-	-	-	-	-	-	Fragment	Lid, finish	1	19.41
76	SC	5	Surface	Bottle	Wine	Glass	Aqua	Consumer Items	ABM; Valve Ejection Mark	-	-	RIUNITE - VILLA BANFI	Villa Banfi	-	-	-	Fragment	Base	1	133.31
77	SC	5	Surface	Vessel	Ashtray	Glass	Amber	Household Items	-	-	"HOTEL// DOWNTOWN" applied color label along rim	-	-	-	-	-	Fragment	Rim	1	10.47
78	SC	5	Surface	Jar	Cosmetic (Salon Cream)	Glass	Milk	Personal Items	-	Large Mouth External Thread	"SAL//...REAM" Applied Color Label on Body	-	-	-	-	-	Fragment	Rim, body	1	25.08
79	SC	6	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	Church-key opened	-	-	-	-	-	Complete	-	1	100.62
80	SC	6	Surface	Tableware	Plate	Ceramic	Earthenware	Kitchen Items	-	-	Clear over-glaze, Floral motif bordering rim, transfer print	-	-	-	-	-	Fragment	Rim	1	14.18
81	SC	6	Surface	Hotelware	Vessel	Ceramic	Earthenware	Kitchen Items	-	-	clear over-glaze	-	-	-	-	-	Fragment	-	1	5.81
82	SC	7	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	178.94
83	SC	7	Surface	Can	Sardine	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	80.18
84	SC	8	Surface	Vessel	Indeterminate	Ceramic	Earthenware	Kitchen Items	-	-	-	-	-	-	-	-	Fragment	Rim, body	1	98.51
85	SC	8	Surface	Tableware	Tea Cup	Ceramic	Stoneware	Kitchen Items	-	-	Double blue line along rim	-	-	-	-	-	Fragment	Rim	1	14.22
86	SC	8	Surface	Munitions	Bullet Casing	Metal	Non-ferrous	Munitions	-	-	-	.../12// C.U.CO	-	-	-	-	Fragment	-	1	6.63
87	SC	8	Surface	Bottle	Indeterminate	Glass	Aqua	Consumer Items	ABM; Valve Ejection Mark	-	-	(I) 78 / 21	Owens-Illinois Glass Co.	-	1978	1978	Fragment	Base	1	144.13
88	SC	9	Surface	Hotelware	Mug	Ceramic	Porcelain	Kitchen Items	-	-	Clear over glaze	-	-	-	-	-	Fragment	Base, body	1	169.54

Joshua Tree Estates
 Cultural Resources Assessment
 Master Artifact Catalog
 Site Temp-2



Cat No.	Unit Type	Unit No.	Depth (cm)	Object Type	Object Subtype	Material Type	Material Subtype	Functional Category	Mold	Finish	Diagnostic Elements	Maker's Mark / Backstamp	Manufacturer / Company	Place of Origin	Date (min)	Date (Max)	Condition	Portion	Qty	Wgt (g)
1	SC	1	Surface	Can	Food	Metal	Non-ferrous	Consumer Items	-	-	Pull-tab, "VACUM...SEAL / RETURN...IF TAB LIFTED / ... / LIFT UP / PULL UP & BACK"	-	-	-	1962	1966	Fragment	Lid, tab	1	5.81
2	SC	2	Surface	Jar	Lid- Canning	Metal	Non-ferrous	Kitchen Items	-	Internal Thread	-	-	-	-	-	-	Fragment	Lid	1	14.08
3	SC	2	Surface	Can	Lid	Metal	Non-ferrous	Consumer Items	-	-	"OPEN WITH ANY CAN OPENER----- SEAL WITH PLASTIC LID"	-	-	-	-	-	Fragment	Lid	1	21.08
4	SC	3	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	62.48
5	SC	3	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	68.19
6	SC	3	Surface	Bottle	Indeterminate	Glass	Amber	Consumer Items	ABM; Owens Suction Scar	-	-	625 / 9	-	-	1905	1959	Fragment	Base	1	41.91
7	SC	3	Surface	Planter	Indeterminate	Ceramic	Terracotta	Gardening Items	-	-	-	-	-	-	-	-	Fragment	Body	1	32.98
8	SC	4	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	-	-	-	-	-	-	-	Complete	-	1	133.11
9	SC	5	Surface	Can	Sanitary	Metal	Non-ferrous	Consumer Items	-	Church-key	-	-	-	-	1935	1979	Complete	-	1	89.55
10	STP	1	0-10	Mirror	Indeterminate	Glass	Colorless	Personal Items	-	-	-	-	-	-	-	-	Fragment	-	1	1.51

APPENDIX F

Confidential Maps

(Deleted for Public Review; Bound Separately)