CULTURAL RESOURCES STUDY FOR THE TIPPECANOE PROJECT

CITY OF SAN BERNARDINO, SAN BERNARDINO COUNTY, CALIFORNIA

APNs 278-191-02, -17, -25, and -28

Lead Agency:

City of San Bernardino
201 North E Street, 3rd Floor
San Bernardino, California 92401

Preparer:

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

Signature

Project Proponent:

EPD Solutions, Inc.
2355 Main Street, Suite 100
Irvine, California 92614

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Archaeological Database Information

Authors:	Jillian L.H. Conroy and Brian F. Smith
Consulting Firm:	Brian F. Smith and Associates, Inc. 14010 Poway Road, Suite A Poway, California 92064 (858) 679-8218
Client/Project Proponent:	EPD Solutions, Inc. 2355 Main Street, Suite 100 Irvine, California 92614
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Report Title:	Cultural Resources Study for the Tippecanoe Project, City of San Bernardino, San Bernardino County, California (APNs 278-191-02, -17, -25, and -28)
Type of Study:	Phase I Cultural Resources Survey and Historic Structure Evaluation
USGS Quadrangle:	Section 2, Township 1 South, Range 4 West of the USGS *San Bernardino South, California* (7.5 minute) topographic quadrangle map.
Acreage:	14.3 acres
Key Words:	Survey; historic foundation and two concrete pads; Site Temp-1; historic structures not significant; archaeological monitoring recommended.

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request by EPD Solutions, Inc., Brian F. Smith and Associates, Inc. (BFSA) conducted a cultural resources study for the Tippecanoe Project (Assessor's Parcel Numbers [APNs] 278-191-12, -17, -25, and -28). The project is located on the 7.5-minute U.S. Geological Survey (USGS) *San Bernardino South, California* topographic quadrangle map within Section 2, Township 1 South, Range 4 West of the San Bernardino Baseline and Meridian. This property is situated at the southwest corner of the intersection of 9th Street and Tippecanoe Avenue in the city of San Bernardino, San Bernardino County, California. The project proposes to construct a warehouse development on a 14.3-acre site.

The purpose of this investigation was to locate and record any cultural resources present within the project and subsequently evaluate any resources as part of the City of San Bernardino's environmental review process conducted in compliance with the California Environmental Quality Act (CEQA). The archaeological investigation of the project included the review of an archaeological records search performed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project boundaries or in the immediate vicinity. A review of the records search provided by the SCCIC indicated that no previously recorded resources are located within the subject property. BFSA also requested a review of the Sacred Lands File (SLF) search by the Native American Heritage Commission (NAHC), which was returned with positive results for resources within the vicinity of the project.

The cultural resources survey was conducted on December 23, 2021 and resulted in the identification of one previously unrecorded historic site (Site Temp-1). The site consists of the foundation of a 1947 single-family residence and two pre-1953 concrete pads. Based upon the results of the field survey and records searches, Site Temp-1 has been evaluated as not significant under CEQA criteria. No impacts to significant resources are associated with the proposed development of the property. However, based upon the presence of historic structures on the property and the presence of food and water resources utilized by prehistoric Native American inhabitants of this area, archaeological monitoring is recommended for any ground-disturbing activities associated with the Tippecanoe project to identify any historic or prehistoric artifacts, features, or sites that may be exposed by earthwork.

1.0 INTRODUCTION

1.1 Project Description

The archaeological survey program for the Tippecanoe Project was conducted in order to comply with CEQA and City of San Bernardino environmental guidelines. The project may be found at the southwest corner of the intersection of 9th Street and Tippecanoe Avenue in the city of San Bernardino, San Bernardino County, California (Figure 1.1–1). The property, which includes APNs 278-191-12, -17, -25, and -28, is located on the 7.5-minute USGS *San Bernardino South, California* topographic quadrangle map within Section 2, Township 1 South, Range 4 West of the San Bernardino Baseline and Meridian (Figure 1.1–2). The project proposes to construct a warehouse development on a 14.3-acre site (Figure 1.1–3).

The property is currently vacant with low-lying grasses and patches of gravel present throughout the property. While vacant, the entire property has been highly disturbed by agricultural activities since the 1930s. Further, aerial photographs indicate that structures have been constructed and demolished in the southeast corner of the property throughout the twentieth century. The remnant foundation of one historic single-family residence and two concrete pads with associated construction debris and historic refuse were identified in the southeast corner of the property during the cultural resources survey (Site Temp-1).

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. In this particular case, the proximity to Warm Creek and the terrestrial ecosystems surrounding the creek are part of an environmental setting that supported a significant prehistoric population for over 10,000 years.

1.2 Environmental Setting

The Tippecanoe Project is generally located in southwestern San Bernardino County within the city of San Bernardino. The subject property lies within the broad, fault-bounded alluvial valley of the Santa Ana Wash, between the San Bernardino Mountains to the north and the San Timoteo Badlands to the south (Morton and Miller 2006). The project is located just south of the Warm Creek flood control channel, a tributary of the Santa Ana River. The project area overlies sedimentary deposits that are characterized as fine to coarse-grained sands and pebbly sands that coarsen eastward. Active wash deposits of unconsolidated sand and gravel characterize the historic path of Warm Creek (Wirths 2022).

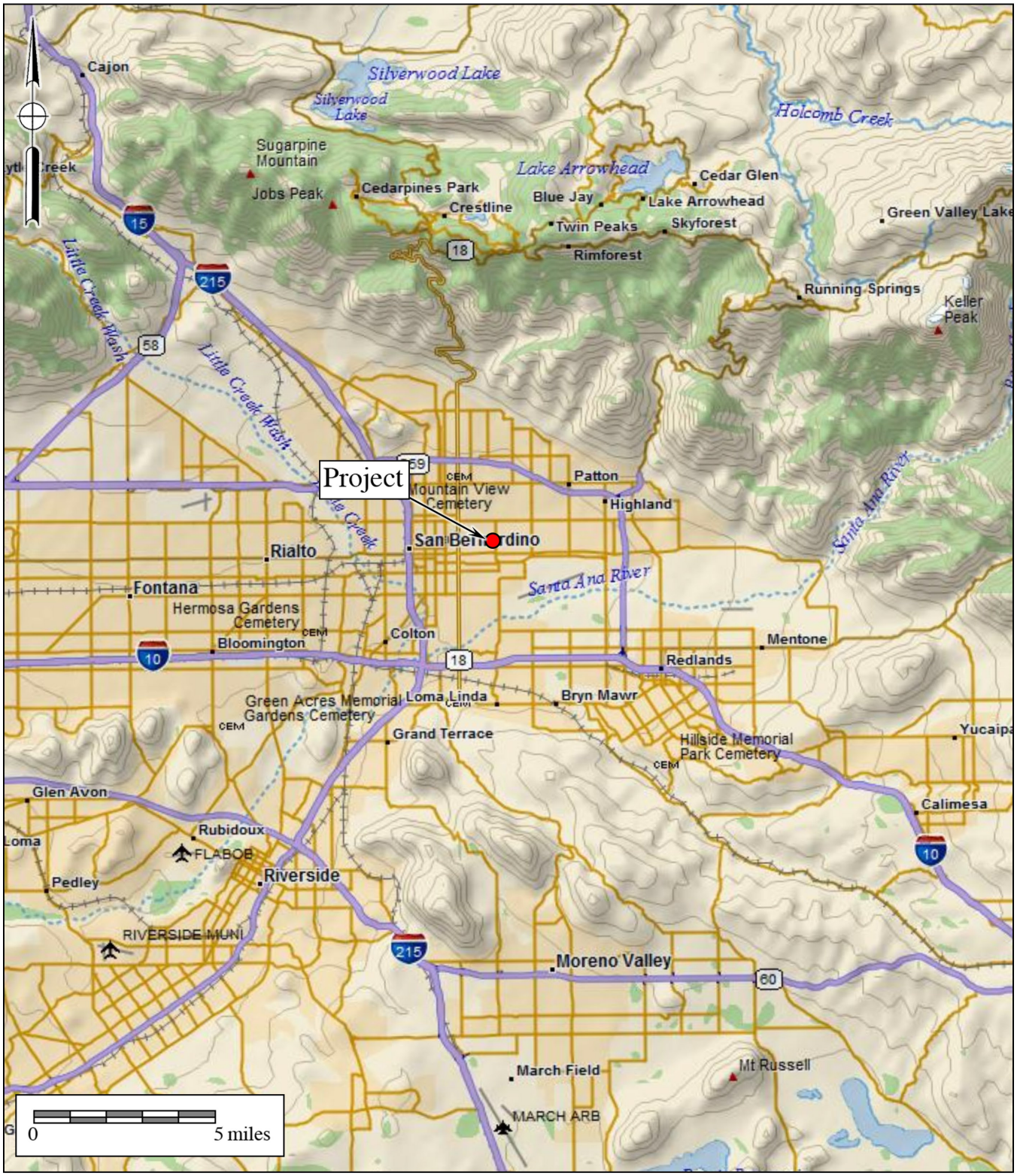

Figure 1.1–1

General Location Map

The Tippecanoe Project

DeLorme (1:250,000)

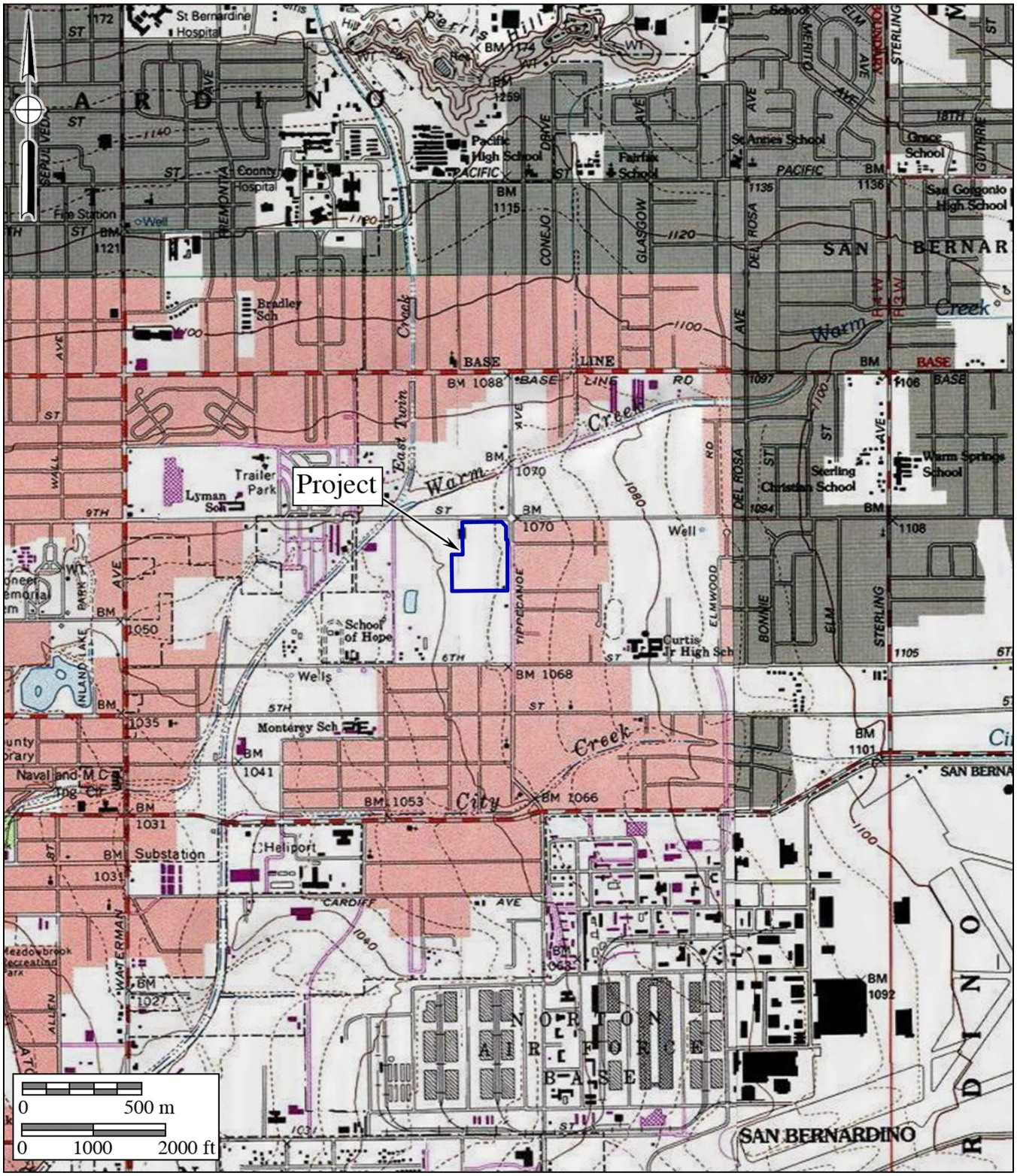

Figure 1.1–2
Project Location Map

The Tippecanoe Project

USGS *San Bernardino South, San Bernardino North, Harrison Mountain, and Redlands* Quadrangles (7.5-minute series)

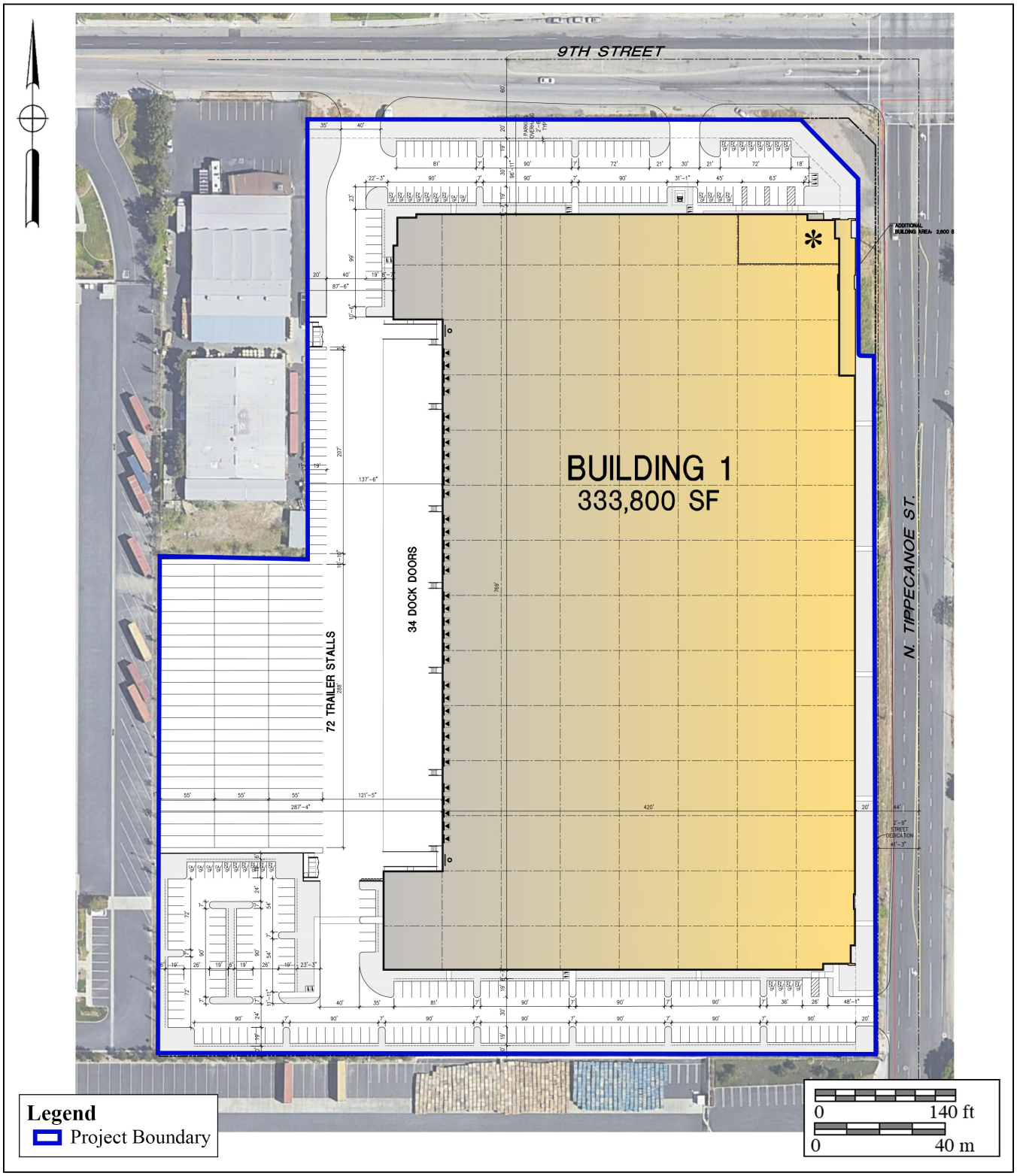

Figure 1.1–3

Project Development Map

The Tippecanoe Project

The general project area is characterized by relatively flat land (with elevations ranging from 1,058 to 1,065 feet above mean sea level) that was previously used as farmland. The property has previously been impacted by cultivation and residential development. While bedrock outcrops, which are often associated with prehistoric sites, are not visible on aerial photographs or maps of the project area, aerial photographs indicate that a seasonal drainage from Warm Creek to the north bisects the property from west to east. As nearby water sources are often markers of prehistoric activity, this seasonal drainage could have been utilized by Native American populations that have inhabited this region. Further, aerial photographs indicate the presence of at least three historic-period structure foundations located in the southeast corner of the property.

1.3 Cultural Setting

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in San Bernardino County. The following discussion of the cultural history of San Bernardino County references the San Dieguito Complex, the Encinitas Tradition, the Milling Stone Horizon, the La Jolla Complex, the Pauma Complex, and the San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component in the southwestern area of San Bernardino County was represented by the Gabrielino and Serrano Indians. According to Kroeber (1976), the Serrano probably owned a stretch of the Sierra Madre from Cucamonga east to above Mentone and halfway up to San Timoteo Canyon, including the San Bernardino Valley and just missing Riverside County. However, Kroeber (1976) also states that this area has been assigned to the Gabrielino, "which would be a more natural division of topography, since it would leave the Serrano pure mountaineers."

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

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

The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused 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).

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

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

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

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

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

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

Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Bernardino County, marking the transition to the Late Prehistoric Period. This period has been characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including the Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far reaching as the Colorado River Basin and cremation of the dead.

Protohistoric Period (Late Holocene: 1790 to Present)

Gabrielino

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

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

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

and Smith 1978a; Kroeber 1976).

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

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

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

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

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

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

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

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety

of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wood paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978a; Kroeber 1976).

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

Serrano

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 [1929] 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.

The Serrano were part of "exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk^{w}utam* (Wildcat) and *wahiʔiam* (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).

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 sweathouses (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 was 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).

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).

Historic Period

The historic background of the project 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). In the late eighteenth century, the San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego County) missions began colonizing southern California, and gradually expanded their use of the interior valley (presently western Riverside County) for raising grain and cattle to support the missions. The San Gabriel Mission claimed lands in what is presently Jurupa, Riverside, San Jacinto, and the San Gorgonio Pass, while the San Luis Rey Mission claimed land in what is presently Lake Elsinore, Temecula, and Murrieta (American Local History Network: Riverside County, California 1998). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1964). 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).

In the mid- to late 1770s, Juan Bautista de Anza passed through much of what is now Riverside County while searching for an overland route from Sonora, Mexico to San Gabriel and Los Angeles, describing fertile valleys, lakes, and sub-desert areas (American Local History Network: Riverside County, California 1998; Riverside County n.d.). Spanish missionaries formed Mission San Gabriel in the San Bernardino Valley in the early nineteenth century. The mission established Rancho San Bernardino in 1819, which included the present-day areas of San Bernardino, Fontana, Rialto, Redlands, and Colton (City of San Bernardino 2015). Since there was no reliable water source in the area, from 1819 to 1820, the missionaries developed a zanja through the use of Native American labor from the Guachama Rancheria (Smallwood 2006). The creation of the zanja was implemented to divert waters from Mill Creek all the way through the city of Redlands, ending near the mission to assist with agricultural enterprises. The new water source allowed nearby ranching districts to develop during the nineteenth century (City of Redlands 2010; Smallwood 2006).

Mexico gained independence in 1822 and desecularized the missions in 1832, signifying the end of the Mission Period (Brigandi 1998; Riverside County n.d.). By this time, the missions owned some of the best and most fertile land in southern California. In order for California to develop, the land would have to be made productive enough to turn a profit (Brigandi 1998). The new government began distributing the vast mission holdings to wealthy and politically connected Mexican citizens. The "grants" were called "ranchos," many of which have lent their

names to modern-day locales (American Local History Network: Riverside County, California 1998).

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

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

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

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, leading to California became a state in 1850. 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.

In 1851, 500 Mormons purchased the western portion of the San Bernardino Rancho from the Lugo family, erecting an over 50-building settlement (Fort San Bernardino) near the present location of the San Bernardino County Courthouse. The following year, the leaders of the Mormon colony, Amasa Lyman and Charles Rich (Plates 1.0–1 and 1.0–2), founded the new settlement: the city of San Bernardino. The town-site was surveyed in 1953 by Henry G. Sherwood and consisted of one-square mile with a grid of wide streets of eight one-acre blocks. The city of San Bernardino became incorporated the following year, and in 1955 San Bernardino County was split from San Diego and Los Angeles counties (City of San Bernardino 2005).

Plate 1.0–1: Amasa Lyman.
Photograph courtesy of the City of San Bernardino.

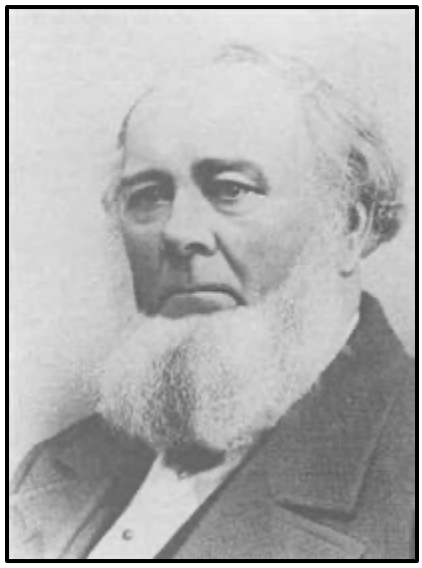

Plate 1.0–2: Charles Rich.
Photograph courtesy of the City of San Bernardino.

The settlement that the Mormons created within the rancho was short-lived, however, in 1857, Brigham Young recalled all Mormons in San Bernardino back to Utah. Approximately 1,400 Mormons returned to Utah, while the remaining 45 percent stayed in San Bernardino, choosing "to forsake the church rather than leave their homes" (Lyman 1989).

The city of San Bernardino grew slowly throughout the 1860s and 1870s. The center of town boasted two churches, two hotels, several large businesses, a stagecoach that ran regularly between San Bernardino and Los Angeles, and mule-draw freight wagons that arrived regularly from Salt Lake City, Utah, and other cities to the east. The stagecoach and freight wagon routes established San Bernardino as an early transportation and freight center, which was further cemented by the connection of southern California to the national railroad network in 1876 (City of San Bernardino 2005):

> The arrival of the railroad provided better and faster access for the farmers to bring crops to market. Packing houses and warehouses were built along the railroad corridors. The railroads also provided access to the county for tourists and immigrants alike. With the completion of rail connections between the desert and Los Angeles in 1887 by the Santa Fe Railroad, San Bernardino soon developed into a railhead boomtown. Commercial enterprises dominated the urban landscape, with emphases upon service and retail establishment, while industrial enterprises supported agricultural development.

> The city's development has been closely linked with that of the Santa Fe Railroad and its important railroad shops and yards. By 1900, more than 85 percent of the city's population was directly employed by the railroad, despite increased industrial and agricultural development in the following decades. (City of San Bernardino 2005)

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 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 (American Local History Network: Riverside County, California 1998; Riverside County n.d.).

The city of San Bernardino continued to grow into the twentieth century. Between 1900 and 1910, the population grew from 6,150 residents to 12,799 residents. By 1910, City Hall, San Bernardino High School, and an Opera House were constructed. By 1930, the city's population had reached approximately 50,000 residents. A department store, the San Bernardino County Courthouse, the Heritage Building, the California Theater, the Ritz Theater, the Casa Ramona School, and San Bernardino College were all constructed in the latter half of the 1920s, reflecting the enormous boom in population of San Bernardino. This was bolstered by the construction of Route 66 through San Bernardino between 1926 and 1937 (City of San Bernardino 2005).

Prior to World War II, one-quarter of the city's residents were employed by the railroad. With the War came the development and expansion of the Army Airfield on the grounds of the San Bernardino Municipal Airport, "replacing the railroad as the city's leading economic contributor" (City of San Bernardino 2005). Following the war, the Airfield became one of three maintenance facilities for jet engines. In 1948, the base was transferred to the US Air Force and named the San Bernardino Air Force Base. The base was subsequently renamed the "Norton Air Force Base" in 1950 (City of San Bernardino 2005).

The city and surrounding areas continued to develop commercially through the 1940s and 1950s, effectively replacing agriculture in San Bernardino County. By the 1960s, the population of the city reached over 100,000 residents. Economic downturn would hit the city of San Bernardino in the 1990s. By 1991, the Santa Fe Railroad moved its offices out of the city, and in 1994, the Norton Air Force Base was closed (City of San Bernardino 2005).

1.3.1 Results of the Archaeological Records Search

The results of the records search (Appendix C) indicate that 48 resources have been recorded within one-half mile of the Tippecanoe Project (Table 1.3−1), none of which are located within the project. These sites include nine historic commercial structures, two historic ancillary buildings, one historic religious building, one historic multiple-family residence, 31 single-family residences, one historic trash pit, two historic bottle isolates, and one multicomponent site consisting of two historic refuse scatters, four prehistoric hearth features, and one lithic scatter. The records search results also indicate that 14 cultural resource studies have been conducted within a one-half mile radius of the project (see Appendix C), none of which included the project.

Table 1.3–1
Archaeological Sites Located Within
One Mile of the Tippecanoe Project

Site(s)	Description
P-36-026660; P-36-026661; P-36-026662; P-36-026672; P-36-026675; P-36-026700; P-36-026702; P-36-026704; and P-36-026706	Historic commercial structure
P-36-026687 and P-36-026690	Historic ancillary building
P-36-026707	Historic religious building
P-36-026701	Historic multiple-family residence
P-36-026663; P-36-026664; P-36-026665; P-36-026666; P-36-026667; P-36-026668; P-36-026669; P-36-026670; P-36-026671; P-36-026673; P-36-026674; P-36-026676; P-36-026678; P-36-026679; P-36-026680; P-36-026681; P-36-026682; P-36-026683; P-36-026688; P-36-026689; P-36-026691; P-36-026693; P-36-026694; P-36-026695; P-36-026696; P-36-026697; P-36-026698; P-36-026699; P-36-026703; P-36-026705; and P-36-026709	Historic single-family residence
P-36-012850	Historic trash pit
P-36-012869 and P-36-012870	Historic bottle isolate
P-36-026592	Two historic trash scatters, four prehistoric hearth features, and two prehistoric lithic scatters

The following historic sources were also reviewed:

- The National Register of Historic Place Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility
- The OHP, Directory of Properties in the Historic Property Data File
- The 1896 and 1942 *San Bernardino* 15-minute series topographic maps; the 1938 and 1943 *Colton* 1:31,680 series topographic maps; the 1955 and 1963 editions of the 1954 *San Bernardino South* 7.5-minute series topographic map; and the 1969 edition of the 1967 *San Bernardino South* 7.5-minute series topographic map (see Section 3.2)
- 1930, 1938, 1953, 1959, 1968, 1979, 1994, 2012, and 2018 aerial photographs of the project area (see Section 3.2)

One additional unrecorded resource that consists of three historic-period structures (Site Temp-1) was identified as a result of the field survey and was researched with the above resources. See Section 3.3 for further description and evaluation.

BFSA also requested a SLF search from the NAHC on October 11, 2021. The NAHC SLF search was returned on February 4, 2022 with positive results for the presence of Native American sacred sites or locations of ceremonial importance within the vicinity of the project. The NAHC specifically recommended contacting the San Manuel Band of Mission Indians for additional information. All correspondence is provided in Appendix D.

The records search and literature review suggest that there is a potential for prehistoric sites to be contained within the boundaries of the property due to the proximity to natural resources (Warm Creek). However, given the extensive nature of past ground disturbances, it is likely that any previously unrecorded prehistoric resources are highly disturbed. Further, the lack of exposed bedrock and the fact that only one prehistoric site has been recorded within one-half mile of the project indicates that the potential for prehistoric sites to be contained within the project area is low. Rather, the records search and literature review suggest that historic buildings associated with agricultural and residential development of the San Bernardino area are the most likely cultural resources to be encountered within the Tippecanoe Project. Therefore, based upon the records search results, there is a high potential for historic resources to be located within the project.

1.4 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of the city of San Bernardino in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA

provide the guidance for making such a determination, as provided below.

1.4.1 California Environmental Quality Act

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

1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] SS5024.1, Title 14 CCR. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in a historical resource survey, meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be 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 (PRC SS5024.1, Title 14, Section 4852) including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    b) Is associated with the lives of persons important in our past;
    c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
    d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), or identified in a historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (Section 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 upon 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 PRC or its identification in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
    c) Demolishes or materially alters in an adverse manner those physical characteristics of 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 upon 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 PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
3. If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.

4. If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project upon those resources shall not be considered a significant effect upon the environment. It shall be sufficient that both the resource and the effect upon it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

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

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

1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
2) The 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 the southwestern portion of San Bernardino County. The scope of work for the cultural resources study conducted for the Tippecanoe Project included the survey of a 14.3-acre area. Given the area involved, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of 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 survey 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:

- Can located cultural resources be associated 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 the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project area occupants. Further, the overall goal of the historic structure assessment is to understand the construction and use of the structures within their associated historic context. Therefore, adequate information on site function, context, and chronology from both an archaeological and historic 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 and historic 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, and the type, style, and method of construction for any structures;
3) To place each cultural resource identified within a regional perspective;
4) To identify persons or events associated with any structures and their construction; and
5) To provide recommendations for the treatment of each cultural and historic resource identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources study of the project consisted of an institutional records search, an intensive cultural resource survey of the entire 14.3-acre project, and the detailed recordation of all identified historic structures. This study was conducted in conformance with City of San Bernardino environmental guidelines, Section 21083.2 of the California PRC, 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 Archival Research

Records relating to the ownership and developmental history of this project were sought to identify any associated historic persons, historic events, or architectural significance. Records research was conducted at the BFSA research library, the SCCIC, the San Bernardino Historical Society, the San Bernardino County Public Library, and the offices of the San Bernardino Assessor/County Recorder/County Clerk.

3.1.2 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately five meters apart and oriented east to west across the property, while visually inspecting the ground surface. All potentially sensitive areas where cultural resources might be located were closely inspected. Photographs documenting survey discoveries and overall survey conditions were taken frequently. All cultural resources were recorded as necessary according to the OHP manual, *Instructions for Recording Historical Resources,* using Department of Parks and Recreation (DPR) forms.

3.2 Results of the Field Survey

Field Archaeologist Charles Callahan conducted the intensive pedestrian survey on December 23, 2021 under the direction of Principal Investigator Brian F. Smith. Ground visibility was generally good. The property was primarily covered in low-lying grasses and weeds, with patches of gravel and cleared areas that contained no vegetation (Plates 3.2–1 through 3.2–3). As a result of the field survey, one single-family residence foundation, two concrete pads, and historic refuse were identified in the southeastern corner of the property (Figure 3.2–1 and 3.2–2). The San Bernardino County Property Information Management System (PIMS) indicates that the single-family residence was constructed in 1947. No other cultural resources were observed during the survey.

Plate 3.2–1: Overview of the project, facing south.

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

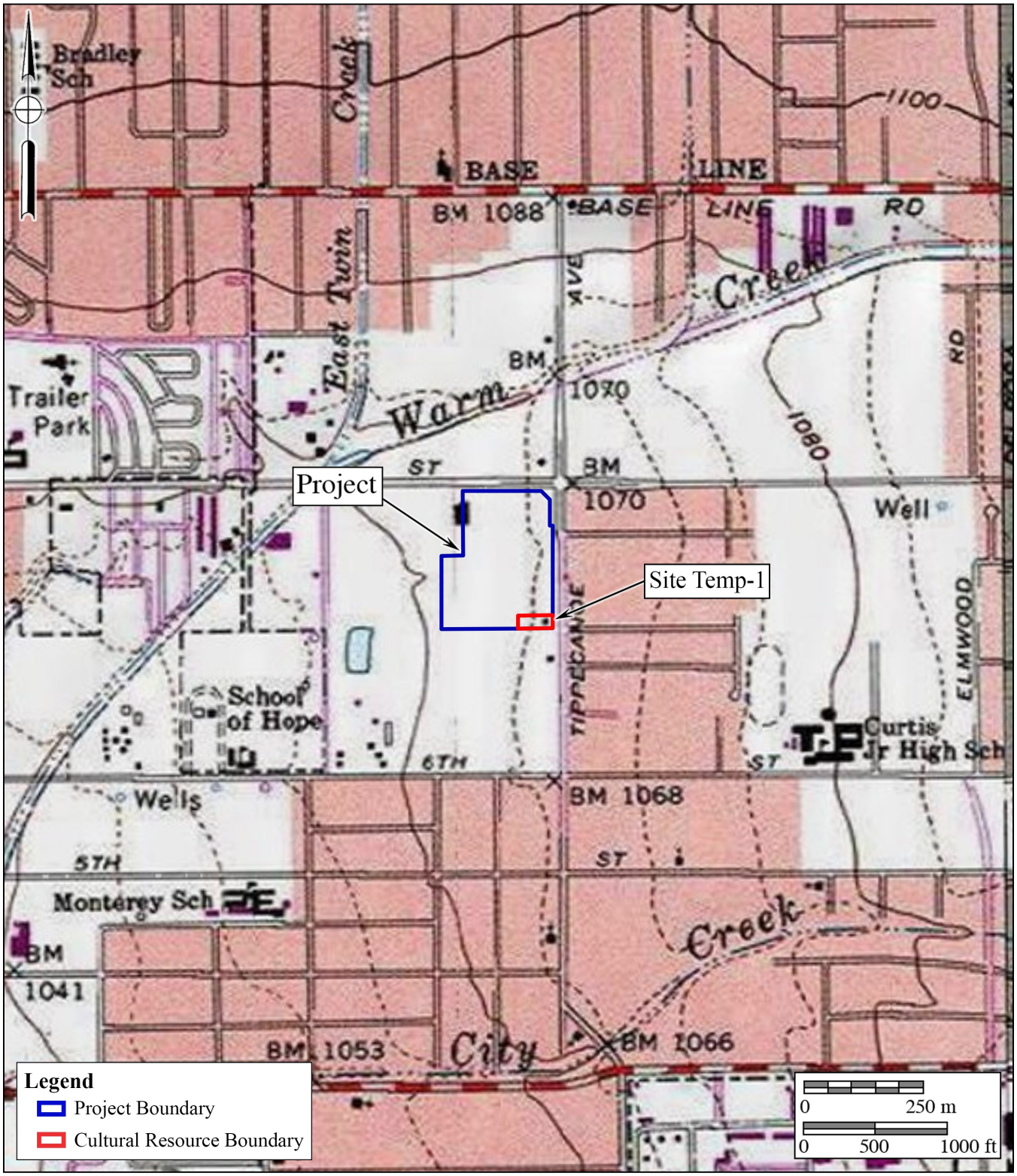

Figure 3.2–1

Cultural Resource Location Map

The Tippecanoe Project

USGS *San Bernardino South* Quadrangle (7.5-minute series)

Figure 3.2–2

Site Temp-1 Shown on Aerial Imagery

The Tippecanoe Project

Plate 3.2–3: Overview of the project, facing east.

History of the Project Area

The subject property is located within the boundaries of the San Bernardino Rancho, which was granted to Diego Sepulveda, Jose Del Carmen Lugo, Jose Maria Lugo, and Vicente Lugo as part of the Spanish/American land grant of 1851 (BLM GLO n.d.). The rancho was subsequently subdivided throughout the next 100 years to various landowners and farmers as the city of San Bernardino grew. The property remained vacant until at least 1930, when three structures were constructed in the southeast corner of the property (Figure 3.2–3 and Plate 3.2–4). While these structures are visible on the 1938 aerial photograph (Plate 3.2–5), they are not depicted on the 1938 and 1943 USGS maps (Figures 3.2–4 and 3.2–5).

The 1953 aerial photograph indicates that two of the three original structures were replaced and that two additional structures were constructed to the north of them (Plate 3.2–6). As indicated by the San Bernardino County PIMS, the southeastern-most structure was constructed in 1947 as a single-family residence (PIMS n.d.). Further, the 1955 USGS map depicts two of the five structures shown on the 1953 aerial photograph (Figure 3.2–6). It is possible that the concrete pads are represented by the southwestern-most structure shown on the 1953 aerial photograph and the white space between the single-family residence and that structure.

Figure 3.2–3

1896 USGS Map

The Tippecanoe Project

USGS *San Bernardino* Quadrangle (15-minute series)

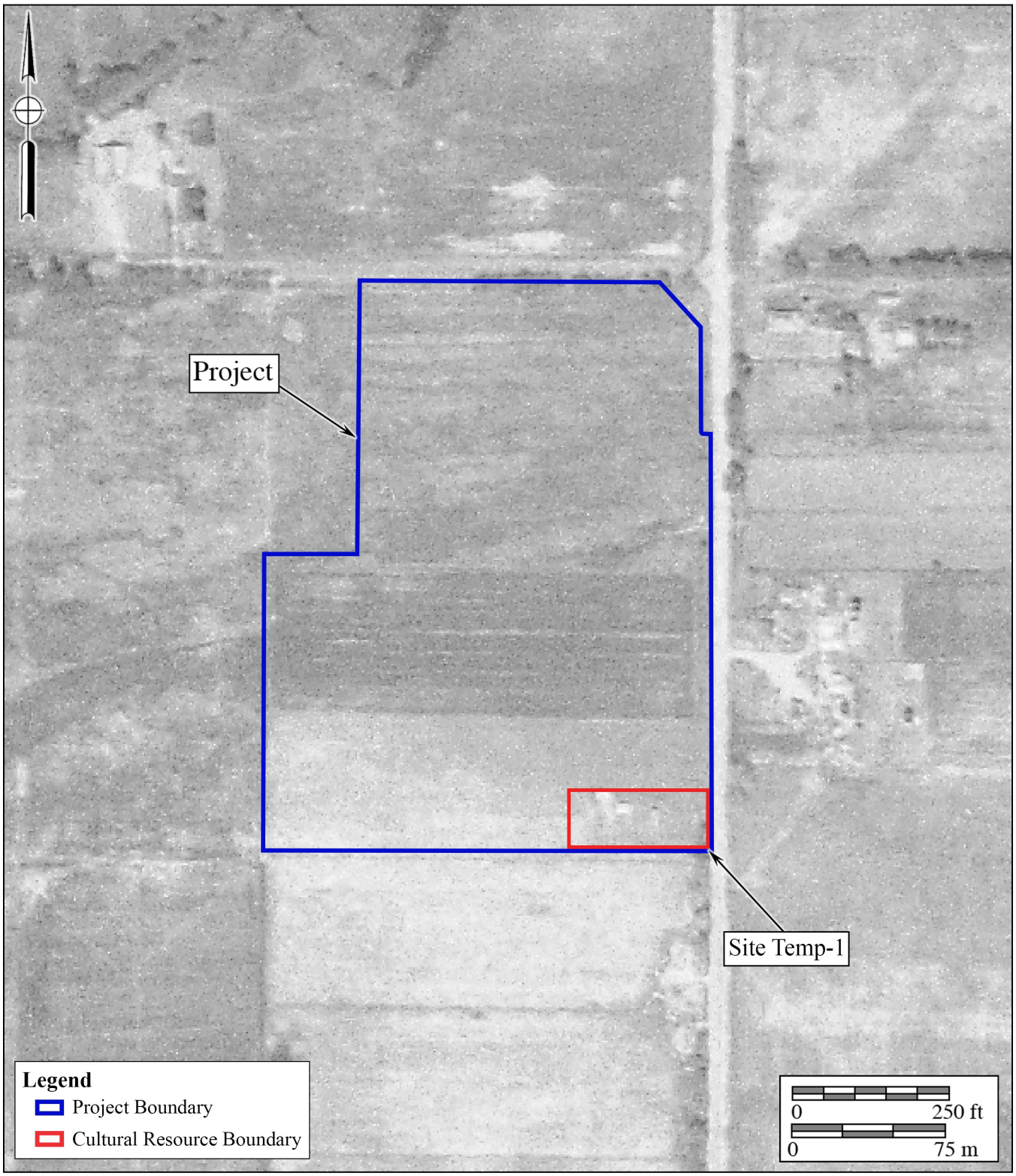

Plate 3.2–4

1930 Aerial Photograph

The Tippecanoe Project

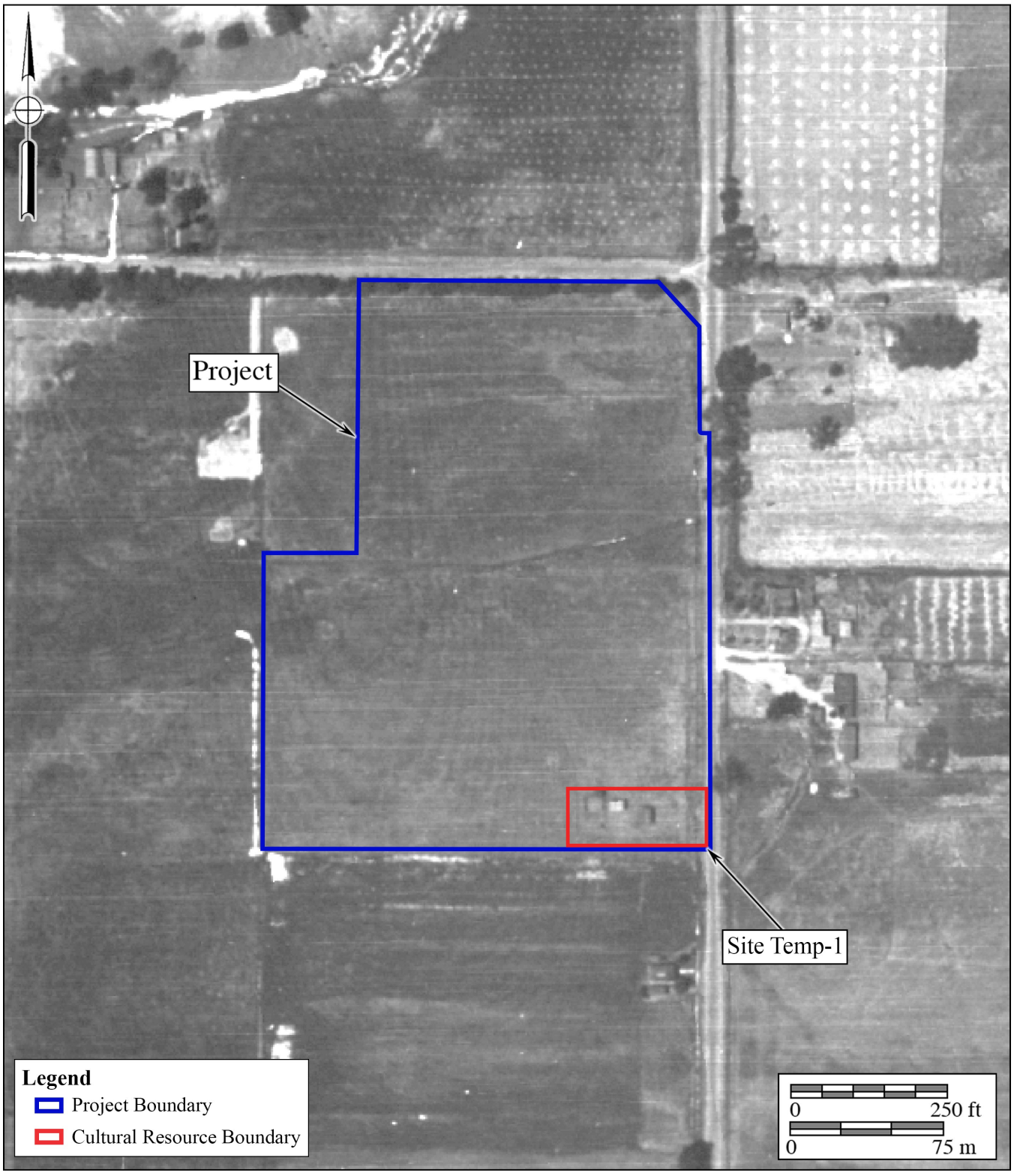

Plate 3.2–5

1938 Aerial Photograph

The Tippecanoe Project

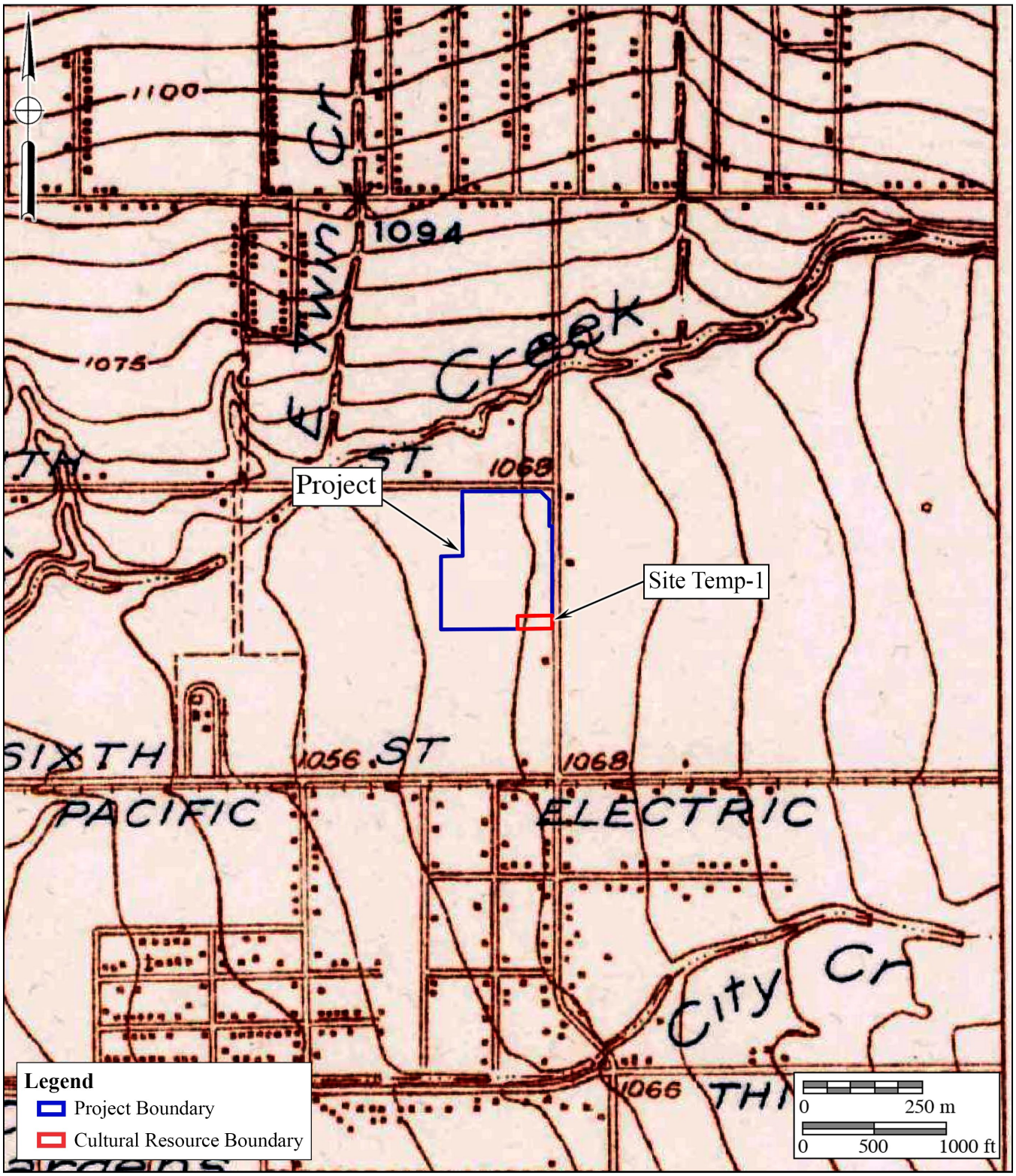

Figure 3.2–4

1938 USGS Map

The Tippecanoe Project

USGS *Colton* Quadrangle (1:31,680 series)

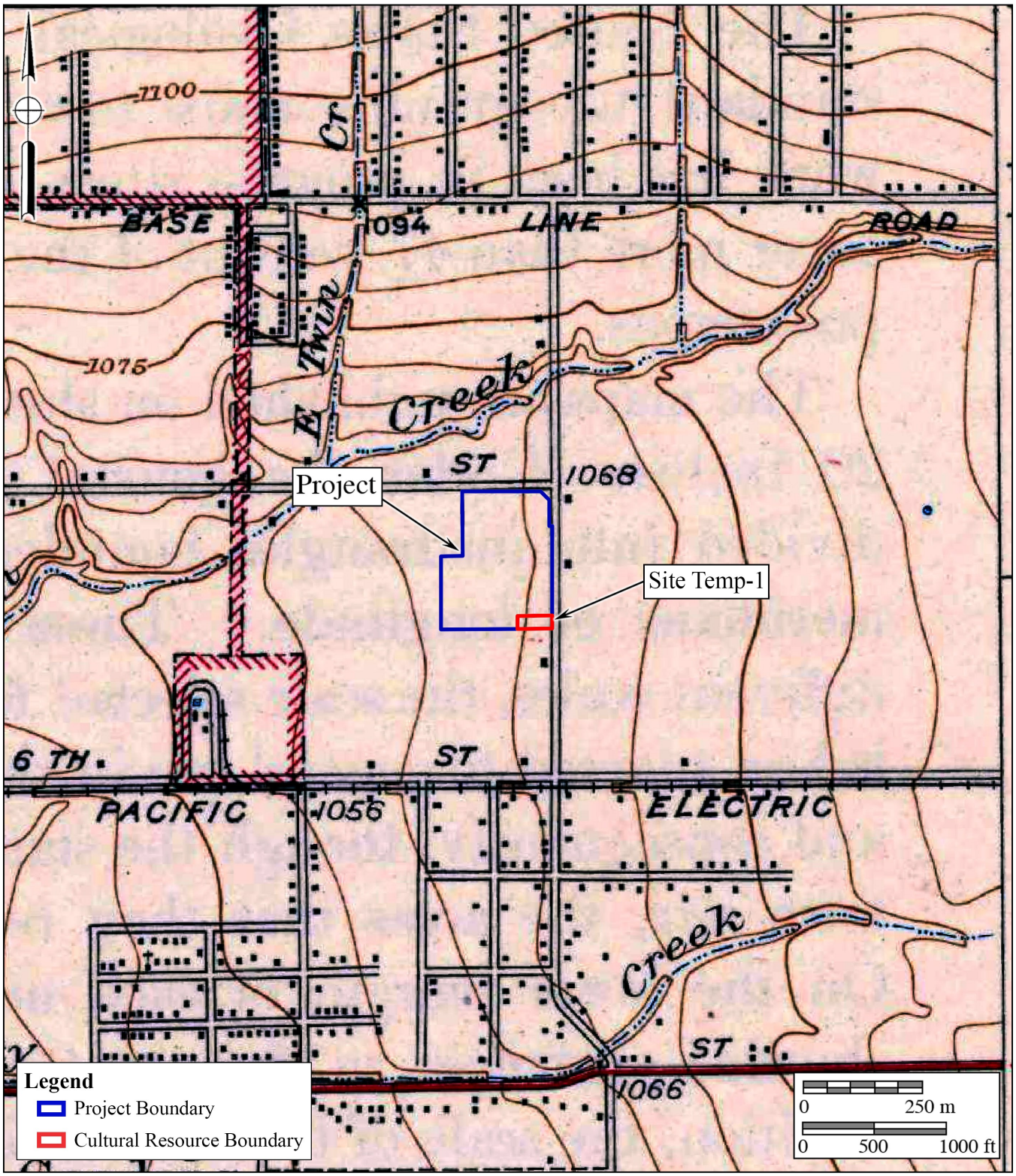

Figure 3.2–5

1943 USGS Map

The Tippecanoe Project

USGS *Colton* Quadrangle (1:31,680 series)

Plate 3.2–6

1953 Aerial Photograph

The Tippecanoe Project

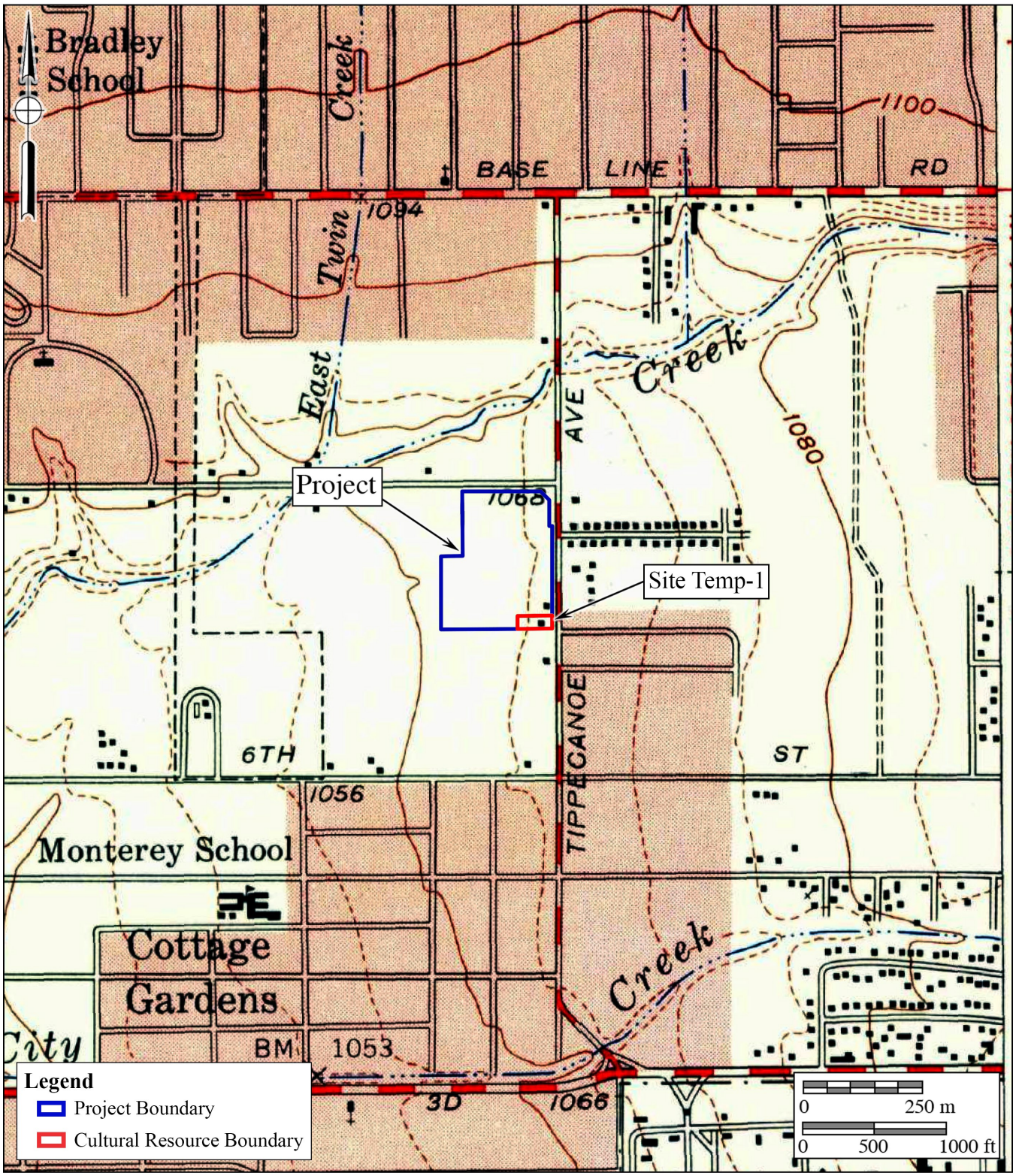

Figure 3.2–6

1955 USGS Map

The Tippecanoe Project

USGS *San Bernardino South* Quadrangle (7.5-minute series)

By 1959, that last original structure was removed from the property (Plate 3.2–7). No changes are indicated on the 1963 USGS map (Figure 3.2–7). By 1968, the two structures to the north of Site Temp-1 were demolished (Plate 3.2–8). The 1969 USGS map depicts one structure in the southeast corner of the project, reflecting the demolition of one of the structures to the north of Temp-1 (Figure 3.2–8). No changes to the property can be seen on the 1979 and 1994 aerial photographs (Plate 3.2–9 and 3.2–10).

The San Bernardino County PIMS indicates that Site Temp-1 was owned by David Robert and Rosetta Lavonne Castellanos by 1973 (PIMS n.d.). Earlier records which could shed light on the original owners of the 1947 single-family residence could not be located. While the Castellanos' owned the property until Rosetta sold it in 2017 to BRS Enterprise LLC (PIMS n.d.), California Voter Records and the U.S. Index to Public Records (Ancestry.com n.d.) indicate that the Castellanos' did not live in the residence. Multiple other residents are listed throughout the latter half of the twentieth century, indicating that they likely rented the property.

By 2002, the westernmost structure located within the boundaries of Temp-1 was removed and replaced with a single-wide trailer. A garage-like structure was constructed at the end of the central concrete pad (Plates 3.2–11 and 3.2–12). The property remained largely unchanged from 2002 until 2018, when all of the structures were demolished (Plates 3.2–13 and 3.2–14).

Description of Surveyed Resources

The single-family residence located within Site Temp-1 was constructed in 1947 as a 684 square-foot, two bedroom, one bath house with a 224 square-foot carport located along the southern elevation of the residence (PIMS n.d.) (Plate 3.2–15). The aerial photographs and the San Bernardino County PIMS indicate that no changes were made to the original structure (PIMS n.d.). At the time of survey, the structure consisted of a concrete block foundation with four concrete steps leading up to a concrete landing located on the west elevation of the home. The base of a bay window remained along the south elevation, as did a concrete driveway (Plates 3.2–16 through 3.2–18).

The concrete pads located to the west of the single-family residence are possibly associated with the white space directly west of the residence and the westernmost structure, as shown on the 1953 aerial photograph (see Plate 5.2–6). As stated previously, the westernmost structure was removed by 2002 and replaced with a single-wide structure (see Plate 5.2–11). A garage-like structure was constructed at the end of the central concrete pad. No remnants of the structures that might have been associated with the concrete pads were identified during the survey (Plate 3.2–19). At the time of the survey, the western-most concrete pad measured 10 feet north to south by 15 feet east to west, and the central concrete pad measured 30 feet north to south by 15 feet east to west. The central concrete pad likely functioned as a driveway and the westernmost concrete pad was likely a portion of a previous concrete pad foundation.

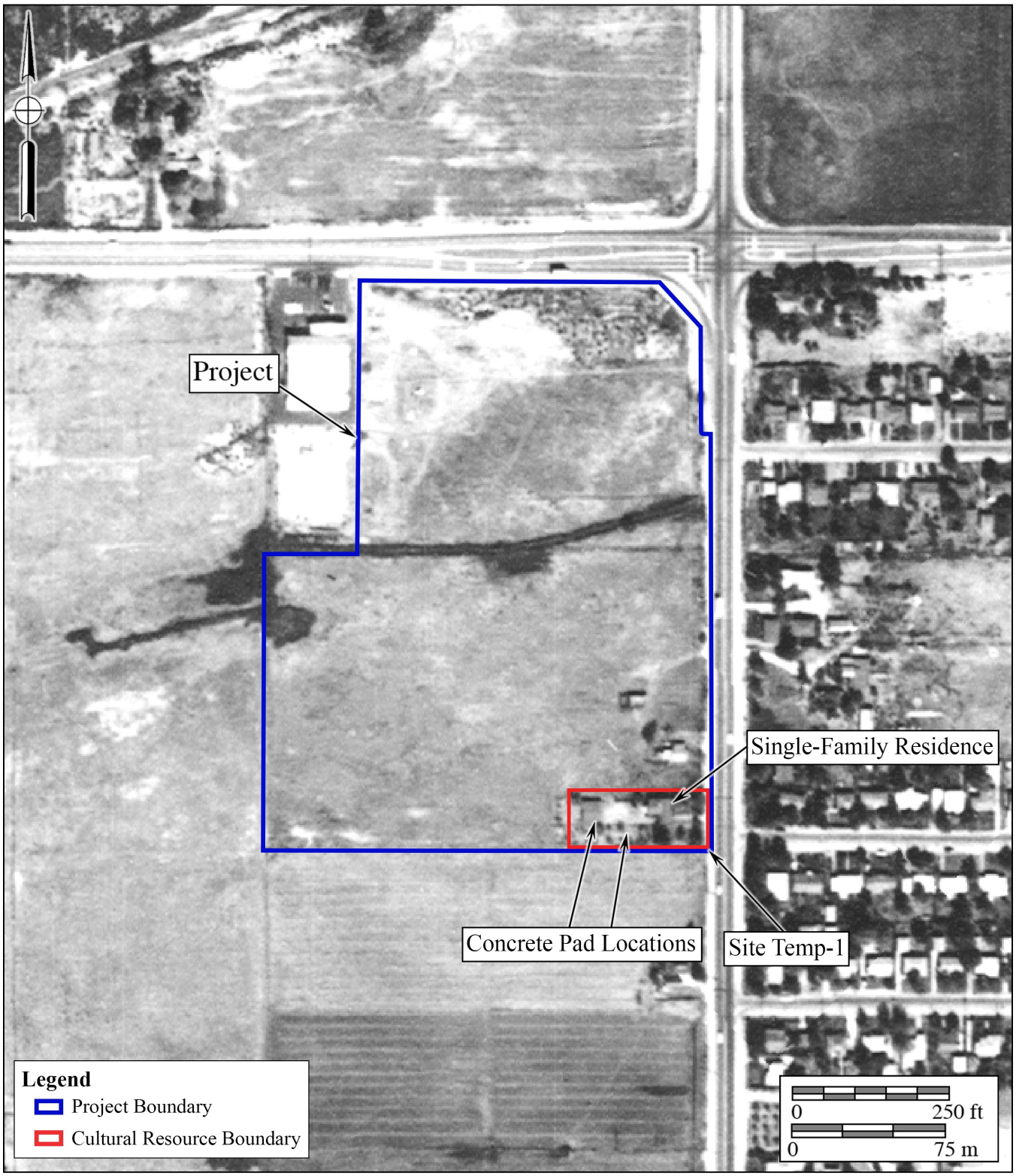

Plate 3.2–7

1959 Aerial Photograph

The Tippecanoe Project

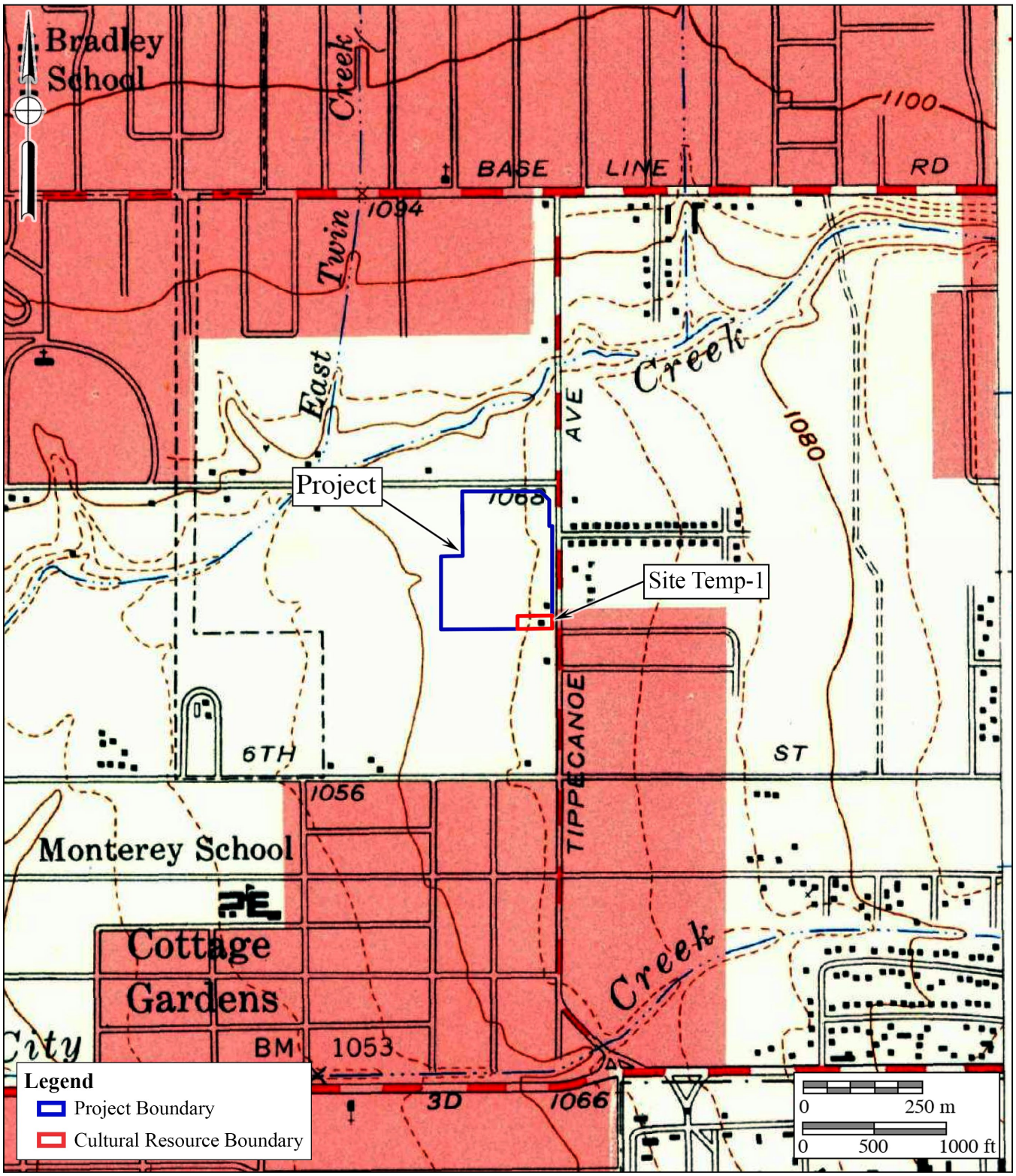

Figure 3.2–7

1963 USGS Map

The Tippecanoe Project

USGS *San Bernardino South* Quadrangle (7.5-minute series)

Plate 3.2–8

1968 Aerial Photograph

The Tippecanoe Project

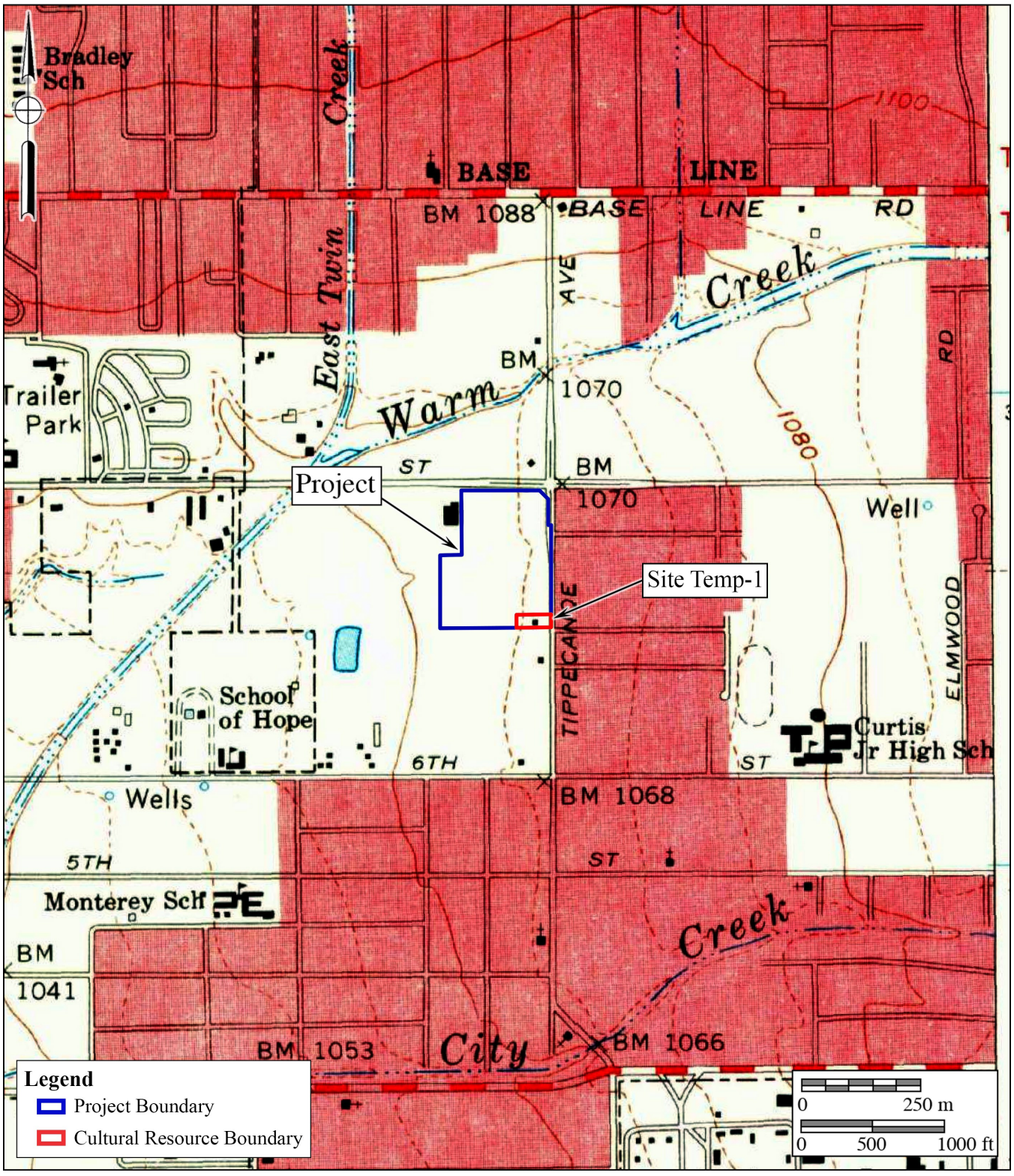

Figure 3.2–8

1969 USGS Map

The Tippecanoe Project

USGS *San Bernardino South* Quadrangle (7.5-minute series)

Plate 3.2–9

1979 Aerial Photograph

The Tippecanoe Project

Plate 3.2–10

1994 Aerial Photograph

The Tippecanoe Project

Plate 3.2–11

2002 Aerial Photograph

The Tippecanoe Project

Plate 3.2–12

2012 Google Street View of Site Temp-1, Facing Southwest

The Tippecanoe Project

Image courtesy of Google Street View

Plate 3.2–13

2018 Aerial Photograph

The Tippecanoe Project

Plate 3.2–14

2021 Google Street View of Site Temp-1, Facing West

The Tippecanoe Project

Image courtesy of Google Street View

Plate 3.2–15

2012 Google Street View of the East Elevation of the 1947 Single-Family Residence Located at Site Temp-1, Facing West

The Tippecanoe Project

Image courtesy of Google Street View

Plate 3.2–16: Overview of the foundation for the single-family residence, facing east.

Plate 3.2–17: Overview of the concrete steps and landing to the single-family residence, facing southeast.

Plate 3.2–18: Overview of the foundation for the single-family residence, showing the bay window, facing northwest.

Plate 3.2–19: Overview of the concrete pads, facing east. The western-most concrete pad is in the foreground and the central concrete pad is in the background, in front of the foundation.

3.3 Discussion/Summary

During the field survey, one structure foundation and two concrete pads were identified within the Tippecanoe Project. The structure foundation was determined to be associated with a single-family residence that was constructed in 1947, and the two concrete pads were likely poured prior to 1953 and used as a driveway (the central concrete pad) and a portion of a structure foundation (the western-most concrete pad). The foundation and the concrete pads were subsequently recorded as archaeological Site Temp-1. Since the foundation and concrete pads do not retain further research integrity, Site Temp-1 has been evaluated as not historically or architecturally significant under CEQA criteria. Furthermore, the individuals associated with the structures are not historically important, nor has any historically significant events occurred on this land.

4.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

4.1 Resource Importance

The cultural resources survey of the Tippecanoe Project identified one historic single-family residence foundation and two historic concrete pads located in the southeast corner of the subject property. The foundation and concrete pads have been recorded as Site Temp-1. The conclusion of the current assessment is that the foundation and concrete pads are not CEQA-significant or eligible for listing on the CRHR. Site Temp-1 has been thoroughly recorded and no additional information can be derived from further analysis.

4.2 Impact Identification

The proposed development of the Tippecanoe Project will include the removal of Site Temp-1. However, the removal of the site as part of the development of the property will not constitute an adverse impact because it has been evaluated as not CEQA-significant and not eligible for listing on the CRHR. While the subject property has been continually disturbed throughout the twentieth century through farming activities and the construction and demolition of various structures, the presence of these structures indicates that there is a potential to encounter historic features or artifacts associated with other aspects of Site Temp-1. Further, the proximity of the project to Warm Creek to the north and the presence of a seasonal drainage that runs west to east through the central portion of the property indicates there is the potential for the discovery of previously unrecorded prehistoric cultural resources. Therefore, archaeological monitoring is recommended.

5.0 MANAGEMENT CONSIDERATIONS – MITIGATION MEASURES AND DESIGN CONSIDERATIONS

The cultural resources study for the Tippecanoe Project was positive for the presence of historic cultural resources. As stated previously, the ground visibility within the subject property was generally good. Aerial photographs indicate that the property has been disturbed by farming and construction activities throughout the twentieth century. Given the presence of historic structures in the southeast corner of the property and its proximity to freshwater resources, there is potential that buried cultural deposits exist within the property boundaries that may be impacted by the project. Therefore, it is recommended that a cultural resources construction monitoring program be implemented during site grading. The cultural resources monitoring program recommended as a condition of approval for this property is presented in Section 5.1.

5.1 Mitigation Measures

The proposed development of the Tippecanoe Project may encounter unrecorded cultural deposits or features. To mitigate for potential impacts to resources that have not been detected, a cultural resources monitoring program is provided below:

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

A. Monitor(s) Shall Be Present During Grading/Excavation/Trenching
   1. The archaeological monitor shall be present for the initial clearing of the property and then periodically as determined by the project archaeologist.
   2. The Principal Investigator (PI) may submit a detailed letter to the City of San Bernardino during earthwork to inform the City of a modification to the monitoring program when field conditions require a change in monitoring status, including suspension of monitoring if it is determined that no further monitoring is needed.

B. Discovery Notification Process
   1. In the event of an archaeological discovery, either historic or prehistoric, the archaeological monitor shall direct the contractor to temporarily divert all soil-disturbing activities, including but not limited to, digging, trenching, excavating, or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources. If the discovered resource is associated with the prehistoric Native American occupation of this area, a Native American representative from a local tribe should be contacted to review and participate in the evolution of the discovered resource.
   2. The monitor shall immediately notify the PI (unless monitor is the PI) of the

discovery, and subsequently the property owner shall be notified of the discovery.

C. Determination of Significance
   1. The PI shall evaluate the significance of the resource. If human remains are involved, follow protocol in Section D, below.

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

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

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

      II. Isolate discovery site
         1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the medical examiner in consultation with the PI concerning the provenance of the remains.
         2. The medical examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.
         3. If a field examination is not warranted, the medical examiner will

determine, with input from the PI, if the remains are or are most likely to be of Native American origin.

III. If human remains **ARE** determined to be Native American

1. The medical examiner will notify the NAHC within 24 hours. By law, **ONLY** the medical examiner can make this call.
2. The NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
3. The MLD will contact the PI within 24 hours or sooner after the medical examiner has completed coordination to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources, and the State Health and Safety Code.
4. The MLD will have 48 hours to make recommendations to the property owner or representative for the treatment or disposition with proper dignity of the human remains and associated grave goods.
5. Disposition of Native American human remains will be determined between the MLD and the PI, and, if:

    a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being notified by the NAHC; OR
    b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94 (k) by the NAHC fails to provide measures acceptable to the landowner; THEN
    c. Upon the discovery of multiple Native American human remains during a ground-disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree upon the appropriate treatment measures, the human remains and grave goods buried with the Native American human remains shall be reinterred with appropriate dignity.

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

1. The PI shall contact the medical examiner and notify them of the historic-era context of the burial.
2. The medical examiner will determine the appropriate course of action with

the PI and lead agency staff (PRC 5097.98).

3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the lead agency. The decision for internment of the human remains shall be made in consultation with the lead agency, the applicant/landowner, and any known descendant group.

Post-Construction

A. Preparation and Submittal of Draft Monitoring Report
   1. The PI shall submit to the City a draft monitoring report (even if negative) prepared in accordance with the agency guidelines, which describes the results, analysis, and conclusions of all phases of the archaeological monitoring program (with appropriate graphics).

      a. For significant archaeological resources encountered during monitoring, the ADRP shall be included in the draft monitoring report.
      b. Recording sites with the State of California DPR shall be the responsibility of the PI, including recording (on the appropriate forms-DPR 523 A/B) any significant or potentially significant resources encountered during the archaeological monitoring program.

   2. The PI shall submit a revised draft monitoring report to the City for approval, including any changes or clarifications requested by the City.

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

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

D. Final Monitoring Report(s)
   1. The PI shall submit the approved final monitoring report to the City and any interested parties.

6.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the Tippecanoe Project was directed by Principal Investigator Brian Smith. The archaeological fieldwork was conducted by Field Archaeologist Charles Callahan. The report text and graphics were prepared by Jillian L.H. Conroy. Technical editing and report production were conducted by Summer Forsman. The SCCIC at CSU Fullerton provided the archaeological records search information. Archival research was conducted at the BFSA research library, the SCCIC, the San Bernardino Historical Society, the San Bernardino County Public Library, and the offices of the San Bernardino Assessor/County Recorder/County Clerk.

7.0 REFERENCES CITED

American Local History Network: Riverside County, California

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

Ancestry.com

N.d. California Voter Records and the U.S. Index to Public Records [database online]. Provo, UT, USA: Ancestry.com Operations, Inc. Original data from the California State Library, Sacramento, California.

Antevs, Ernst

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

Bean, Lowell John and Charles R. Smith

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

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

Benedict, Ruth Fulton

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

Brian F. Smith and Associates, Inc.

Various dates. Research library holdings including Sanborn maps, USGS maps, aerial photographs, city directories, published regional histories, aerial photographs, nd geologic and paleontological references.

Brigandi, Phil

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

Bureau of Land Management/General Land Office (BLM GLO)

N.d. Various dates. Land patent records and plat maps. Electronic document, http://www.glorecords.blm.gov, accessed January 7, 2022.

City of Redlands

2010 City of Redlands General Plan.

City of San Bernardino
2005 San Bernardino General Plan. Electronic document, http://www.ci.san-bernardino.ca.us/pdf/DevSvcs/General%20Plan%20Document.pdf, accessed January 5, 2022.

2015 History of San Bernardino. Electronic document, https://www.ci.san-bernardino.ca.us/about/history/history_of_san_bernardino_(short_version).asp, accessed November 10, 2015.

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

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

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

Erlandson, Jon M. and Roger H. Colten (editors)
1991 An Archaeological Context for Archaeological Sites on the California Coast. In *Hunter-Gatherers of Early Holocene Coastal California*. Perspectives in California Archaeology, Volume 1, Institute of Archaeology, University of California, Los Angeles.

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

Gallegos, Dennis
1985 A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. In *San Diego State University Cultural Resource Management Casual Papers* 2(1).

2002 Southern California in Transition: Late Holocene Occupation of Southern San Diego County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast,* edited by Jon M. Erlandson and Terry Jones. Institute of Archaeology, University of California, Los Angeles.

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

D.C.

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

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

Lyman, Edward Leo
1989 The Rise and Decline of Mormon San Bernardino. *Brigham Young University Studies* 29(4):43-63. Brigham Young University, Provo, Utah.

Martin, P.S.
1967 Prehistoric Overkill. In *Pleistocene Extinctions: The Search for a Cause*, edited by P. Martin and H.E. Wright. Yale University Press: New Haven.

1973 The Discovery of America. *Science* 179(4077): 969-974.

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

1994 Archaeological Investigations at Five Sites on the Lower San Luis Rey River, San Diego County, California, edited by Michael Moratto, pp. A1-A19. Infotec Research, Fresno, California and Gallegos and Associates, Pacific Palisades California.

Miller, J.
1966 *The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons*. Master's thesis on file at the University of California at San Diego, San Diego, California.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, New York.

Morton, D.M. and F.K. Miller
2006 Geologic Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California, v. 1.0. U.S. Geological Survey Open-File Report 2006-1217.

Moss, M.L. and J. Erlandson
1995 Reflections on North American Coast Prehistory. *Journal of World Prehistory* 9(1):1-46.

Office of Historic Preservation
1995 *Instructions for Recording Historical Resources*. Department of Parks and Recreation, Sacramento, California.

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

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

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

Rogers, Malcolm J.
1929 Field Notes, 1929 San Diego-Smithsonian Expedition. Manuscript on file at San Diego Museum of Man.

San Bernardino County Property Information Management System (PIMS)
N.d. San Bernardino County Property Information. Electronic document, https://sbcountyarc.org/services/property-information/, accessed January 7, 2022.

State Historic Preservation Office (SHPO)
1995 *Instructions for Recording Historical Resources*. Office of Historic Preservation, Sacramento.

Smallwood, Josh
2006 Site record form for Site SBR-8092/H. On file at the South Central Coastal Information Center, California State University at Fullerton.

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

Van Devender, T.R. and W.G. Spaulding
1979 Development of Vegetation and Climate in the Southwestern United States. *Science* 204:701-710.

Warren, Claude N. and M.G. Pavesic

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

Wirths, Todd

2022 Paleontological Assessment for the Tippecanoe Project, City of San Bernardino, San Bernardino County, California (APNs 278-191-02, -17, -25, and -28). Brian F. Smith and Associates, Inc. Report in progress.

APPENDIX A

Resumes of Key Personnel

Brian F. Smith, MA

Owner, Principal Investigator

Brian F. Smith and Associates, Inc.
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: bsmith@bfsa-ca.com

Education

Master of Arts, History, University of San Diego, California **1982**

Bachelor of Arts, History, and Anthropology, University of San Diego, California **1975**

Professional Memberships

Society for California Archaeology

Experience

Principal Investigator **1977–Present**
Brian F. Smith and Associates, Inc. **Poway, California**

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

Professional Accomplishments

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

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

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

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

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

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

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).

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).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX B

Site Record Form

(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)