Cultural Resources Inventory and Evaluation

Zanja Trail Project - 7th Street to Church Street in the City of Redlands

San Bernardino County, California

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ECORP Consulting, Inc. has assisted public and private land owners with environmental regulation compliance since 1987. We offer full service capability, from initial baseline environmental studies through environmental planning review, permitting negotiation, liaison to obtain legal agreements, mitigation design, and construction monitoring and reporting.
 MANAGEMENT SUMMARY

A cultural resources investigation was conducted for the Zanja Trail Project - 7th Street to Church Street, a 3.49-acre project in the City of Redlands, San Bernardino County, California. This investigation was conducted at the request of the Redlands Conservancy in support of a proposed pedestrian trail along the banks of the Mill Creek Zanja. The study was completed by ECORP Consulting, Inc. (ECORP) in compliance with the California Environmental Quality Act (CEQA).

In March 2018, a cultural resources records search was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, and a search of the Sacred Lands File was requested from the Native American Heritage Commission (NAHC). The records search results indicated that two cultural resources were documented within the Project area: the Mill Creek Zanja itself (CA-SBR-8092H/P36-008092), a section of which is listed on the National Register of Historic Places (NRHP), and the San Bernardino Motor Line of the Southern Pacific Railroad (CA-SBR-31266H/P36-031266), which was recommended eligible for the California Register of Historical Resources (CRHR). An additional 673 resources have been documented within one-mile radius of the Project area. The records search indicated that the Project area had been previously surveyed in 1937, 1985 and 1988, and 36 additional cultural resources investigations were conducted within the one-mile records search radius between 1937 and 2016. The results of the search of the Sacred Lands File by the NAHC indicated the presence of a Native American cultural resource within one mile of the Project area. This resource was later identified by the San Manuel Band of Mission Indians as the Mill Creek Zanja (CA-SBR-8092H/P36-008092). In addition to the search of the Sacred Lands File, the NAHC identified 20 Native American groups and individuals with historical and traditional ties to the Project area.

As a result of the field survey, three historic-period isolated finds (ZJ-001-I, ZJ-002-I and ZJ-003-I) were documented, and sections of two previously recorded resources, the Mill Creek Zanja and the San Bernardino Motor Line of the Southern Pacific Railroad, were field checked and evaluated using California Register of Historical Resources eligibility criteria. The segment of the San Bernardino Motor Line in the Project Area lacks integrity (the tracks have been removed) and therefore is not a Historical Resource. An evaluation using CRHR eligibility criteria was carried out for isolated finds ZJ-001-I, ZJ-002-I, and ZJ-003-I. Isolated finds are not eligible for inclusion in the CRHR, and are therefore not Historical Resources as defined by CEQA.

The Zanja Trail Project would not have any significant direct impacts on the Mill Creek Zanja, but has the potential to result in indirect impacts to the Mill Creek Zanja. However, these impacts would not be significant. Should the design of the project be altered, an additional impact analysis may be necessary to assess potential impacts to Historical Resources.

The archaeological sensitivity of the Project area is believed to be high. There may be subsurface artifacts or features within the Project area related to CA-SBR-8092H and CA-SRB-31266H. ECORP recommends archaeological monitoring of all ground-disturbing activities that occur during the construction of the project. If new artifacts or features are encountered, recordation and evaluation of the resource(s) would be required. If found to be CRHR-eligible and significant impacts to the resource(s) cannot be avoided, additional mitigation measures would be required. If human remains of any kind are found during
construction, the requirements of CEQA Guidelines Section 15064.5(e) and Assembly Bill (AB) 2641 shall be followed.
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LIST OF ACRONYMS AND ABBREVIATIONS

AB Assembly Bill
AMSL Above Mean Sea Level
BP Before present
CCR California Code of Regulations
CEQA California Environmental Quality Act
CHRIS California Historical Resources Information System
CRHR California Register of Historical Resources
DPR Department of Parks and Recreation
MLD Most Likely Descendant
NAHC Native American Heritage Commission
NHPA National Historic Preservation Act
NPS National Park Service
NRHP National Register of Historic Places
OHP Office of Historic Preservation’s
PRC Public Resources Code
Project Zanja Trail Project - 7th Street to Church Street
RPA Registered Professional Archaeologist
SB Senate Bill
SCCIC South Central Coastal Information Center
USGS U.S. Geological Survey
1.0 INTRODUCTION

In February 2018, ECORP Consulting, Inc. (ECORP) conducted a cultural resources investigation of a 3.49-acre Project area in the City of Redlands, San Bernardino County, California (Figure 1). The study was conducted at the request of the Redlands Conservancy in support of a proposed pedestrian trail along the banks of the Mill Creek Zanja. The purpose of the study was to identify cultural resources that could be impacted by the proposed project, pursuant to the terms of the California Environmental Quality Act (CEQA). This study included a cultural resources records search, a Native American Heritage Commission (NAHC) Sacred Lands File search, a field survey, an update and impact assessment to segments of two previously recorded resources that are eligible or recommended as eligible for the California Register of Historical Resources (CRHR), and an eligibility discussion for three newly recorded isolated finds.

This report presents the methods and results of the cultural resources records search, Sacred Lands File Search, field survey, and CRHR evaluations that were conducted for the project, along with management recommendations. This project was completed in compliance with CEQA.

1.1 Project Location

The Project area is located between 7th Street and Church Street in the City of Redlands (Figure 1). The Project area is in a commercial district with residential development abutting the southern boundary of the eastern two-thirds of the Project area. The majority of the Project area parallels a segment of the Mill Creek Zanja (irrigation ditch) channel between 9th Street and Church Street. The Mill Creek Zanja goes underground west of 9th Street as it passes out of the Project area. The 7th to 9th Street segment of the Project area is paved with asphalt. The Mill Creek Zanja is a California Historic Landmark, and a segment of the Zanja located east of the Project area is listed on the National Register of Historic Places (NRHP). However, the section located within the Project area is not part of the NRHP listed segment of this resource and has not been previously evaluated for inclusion in the CRHR. The Zanja is the oldest civil engineering infrastructure project remaining in southern California and was fundamental to the founding and settlement of Redlands. The Zanja is depicted on the earliest USGS topographic maps of the area. As shown on the U. S. Geological Survey (USGS) 7.5-minute Redlands, California topographic quadrangle map (1996), the Project area is located in an unsectioned area of the Rancho San Bernardino Land Grant in Township 1 South, Range 3 West, of the San Bernardino Base and Meridian (Figure 2).

The elevation of the Project area ranges from 1,377 feet above mean sea level (AMSL) to 1,406 feet AMSL. It is located approximately 1.9 miles (3,057 meters) south of the Santa Ana River Wash that emanates from the San Bernardino Mountains 4.9 miles (7,882 meters) to the northeast. Sediments in the area consists of Holocene alluvial sediments of the Santa Ana River flood plain, made up of coarse granitic sand and gravel. Vegetation within the Project area consists primarily of non-native grasses and weeds. Surface sediments in the western one-third of the Project area (from 7th Street to 9th Street) are highly disturbed due to construction of an asphalt parking lot. Sediments in the eastern two-thirds of the Project area (from 9th Street to Church Street) are highly disturbed due to the creation of the Zanja and modern improvements to the channel. The banks of the Zanja have been graded to provide a flat maintenance access to the channel that also serves as an informal pedestrian walkway. At the time of the cultural resources field survey, ground visibility was overall very good (approximately 95% visibility).
Figure 1. Project Vicinity

Project Location

NOTE: This map is set up in NAD 1983 StatePlane California V FIPS 0405 Feet.
Please Change to Define Your Local State Plane or UTM Coordinate System.
San Bernardino County, California
Unsectioned Portion of
Rancho San Bernardino Landgrant, SBBM
Latitude:  34° 3' 29" N
Longitude:  117° 10' 34" W
Watershed: Santa Ana 18070203

CA 7.5-minute Topographic Quadrangle
US Geological Survey

Map Date: 3/9/2018

Figure 2. Project Location
2018-022 Zanja Trail Project
1.2  Project Description

The proposed project includes an approximately 1,600-foot long segment of pedestrian trail that travels from the east side of 7th Street to the west side of Church Street along the historic-age Mill Creek Zanja. The undertaking will complete the westernmost portion of the larger Zanja Trail and Greenway Park Project that will establish a natural surface trail along the Zanja between 7th Street in Downtown Redlands and Wabash Avenue to the east. This project will be completed to enhance the City of Redlands’ public trails system and to implement a component of the City’s General Plan Open Space Element.

1.3  Regulatory Context

To meet the regulatory requirements of this Project, this cultural resources investigation was conducted pursuant to the provisions for the treatment of cultural resources contained in CEQA (Public Resources Code [PRC] § 21000 et seq.) The goal of CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible. CEQA pertains to all proposed projects that require state or local government agency approval, including the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of development project maps.

CEQA (Title 14, California Code of Regulations [CCR], Article 5, § 15064.5) applies to cultural resources of the historical and prehistoric periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on the CRHR (PRC § 5024.1, Title 14 CCR, § 4852). Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

1.4  Report Organization

The following report documents the study and its findings and was prepared in conformance with the California Office of Historic Preservation’s (OHP) Archaeological Resource Management Reports: Recommended Contents and Format. Attachment A contains documentation of a search of the Sacred Lands File and Native American outreach. Confidential Attachment B presents a site location map, and Attachment C contains confidential cultural resource site locations and site records.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code § 6250 et seq.) and California’s open meeting laws (The Brown Act, Government Code § 54950 et seq.) protect the confidentiality of Native American cultural place information. Under Exemption 3 of the federal Freedom of Information Act (5 U.S. Code 5 [USC]), because the disclosure of cultural resources location information is prohibited by the Archaeological Resources Protection Act of 1979 (16 USC 470hh) and Section 304 of the National Historic Preservation Act (NHPA), it is also exempted from disclosure under the Freedom of Information Act. Likewise, the Information Centers of the California Historical Resources Information System (CHRIS) maintained by the OHP prohibit public dissemination of records search information. In compliance with these requirements, the results of
this cultural resource investigation were prepared as a confidential document, which is not intended for public distribution in either paper or electronic format.

2.0 CULTURAL CONTEXT

2.1 Regional Prehistory

2.1.1 Paleo-Indian Period/Terminal Pleistocene (12,000 to 10,000 BP)

The first inhabitants of southern California were big game hunters and gatherers exploiting extinct species of Pleistocene megafauna (e.g., mammoth and other Rancholabrean fauna). Local "fluted point" assemblages comprised of large spear points or knives are stylistically and technologically similar to the Clovis Paleo-Indian cultural tradition dated to this period elsewhere in North America (Moratto 1984). Archaeological evidence for this period in southern California is limited to a few small temporary camps with fluted points found around late Pleistocene lake margins in the Mojave Desert and around Tulare Lake in the southern San Joaquin Valley. Single points are reported from Ocotillo Wells and Cuyamaca Pass in eastern San Diego County and from the Yuha Desert in Imperial County (Rondeau, Cassidy, and Jones 2007).

2.1.2 Early Archaic Period/Early Holocene (10,000 to 8,500 BP)

Approximately 10,000 years ago, at the beginning of the Holocene, warming temperatures, and the extinction of the megafauna resulted in changing subsistence strategies with an emphasis hunting smaller game and increasing reliance on plant gathering. Previously, Early Holocene sites were represented by only a few sites and isolates from the Lake Mojave and San Dieguito complexes found along former lakebeds and grasslands of the Mojave Desert and in inland San Diego County. More recently, southern California Early Holocene sites have been found along the Santa Barbara Channel (Erlandson 1994), in western Riverside County (Goldberg 2001; Grenda 1997), and along the San Diego County coast (Gallegos 1991; Koerper, et al. 1991; Warren 1967).

The San Dieguito Complex was defined based on material found at the Harris site (CA-SDI-149) on the San Dieguito River near Lake Hodges in San Diego County. San Dieguito artifacts include large leaf-shaped points; leaf-shaped knives; large ovoid, domed, and rectangular end and side scrapers; engraving tools; and crescentics (Koerper, et al. 1991). The San Dieguito Complex at the Harris site dates to 9,000 to 7,500 BP (Gallegos 1991:Figure 3.9). However, sites from this time period in coastal San Diego County have yielded artifacts and subsistence remains characteristic of the succeeding Encinitas Tradition, including manos, metates, core-cobble tools, and marine shell (Gallegos 1991; Koerper, et al. 1991).

2.1.3 Encinitas Tradition or Milling Stone Period/Middle Holocene (8,500 to 3,500 BP)

The Encinitas Tradition (Warren 1968) and the Milling Stone Period (Wallace 1955) refer to a long period of time during which small mobile bands of people who spoke an early Hokan language (possibly proto-Yuman) foraged for a wide variety of resources including hard seeds, berries, and roots/tubers (yucca in inland areas), rabbits and other small animals, and shellfish and fish in coastal areas. Sites from the
Encinitas Tradition consist of residential bases and resource acquisition locations with no evidence of overnight stays. Residential bases have hearths and fire-affected rock indicating overnight stays and food preparation. Residential bases along the coast have large amounts of shell and are often termed shell middens.

The Encinitas Tradition as originally defined (Warren 1968) applied to all of the non-desert areas of southern California. Recently, two patterns within the Encinitas Tradition have been proposed that apply to different regions of southern California (Sutton, et al. 2010). The Topanga Pattern includes archaeological material from the Los Angeles Basin and Orange County. The Greven Knoll Pattern pertains to southwestern San Bernardino County and western Riverside County (Sutton and Gardner 2010). Each of the patterns is divided into temporal phases. The Topanga I phase extends from 8,500 to 5,000 BP and Topanga II runs from 5,000 to 3,500 BP. The Topanga Pattern ended about 3,500 BP with the arrival of Takic speakers, except in the Santa Monica Mountains, where the Topanga III phase lasted until about 2,000 BP.

The Encinitas Tradition in inland areas east of the Topanga Pattern (southwestern San Bernardino County and western Riverside County) is the Greven Knoll Pattern (Sutton and Gardner 2010). Greven Knoll I (9,400-4,000 BP) has abundant manos and metates. Projectile points are few and are mostly Pinto points. Greven Knoll II (4,000-3,000 BP) has abundant manos and metates and core tools. Projectile points are mostly Elko points. The Elsinore site on the east shore of Lake Elsinore was occupied during Greven Knoll I and Greven Knoll II. During Greven Knoll I faunal processing (butchering) took place at the lakeshore and floral processing (seed grinding), cooking, and eating took place farther from the shore. The primary foods were rabbit meat and seeds from grasses, sage, and ragweed. A few deer, waterfowl, and reptiles were consumed. The recovered archaeological material suggests that a highly mobile population visited the site at a specific time each year. It is possible that their seasonal round included the ocean coast at other times of the year. These people had an unspecialized technology as exemplified by the numerous crescents, a multi-purpose tool. The few projectile points suggest that most of the small game was trapped using nets and snares (Grenda 1997:279). During Greven Knoll II, which included a warmer drier climatic episode known as the Altithermal, it is thought that populations in interior southern California concentrated at “oases” and that Lake Elsinore was one of these oases. The Elsinore site (CA-RIV-2798) is one of five known Middle Holocene residential sites around Lake Elsinore. Tools were mostly manos, metates, and hammerstones. Scraper planes were absent. Flaked stone tools consisted mostly of utilized flakes used as scrapers. The Elsinore site during the Middle Holocene was a “recurrent extended encampment” which could have been occupied during much of the year.

The Encinitas Tradition lasted longer in inland areas because Takic speakers did not move east into these areas until circa 1,000 BP Greven Knoll III (3,000-1,000 BP) is present at the Liberty Grove site in Cucamonga (Salls 1983) and at sites in Cajon Pass that were defined as part of the Sayles Complex (Kowta 1969). Greven Knoll III sites have a large proportion of manos and metates and core tools as well as scraper planes. Kowta (1969) suggested the scraper planes may have been used to process yucca and agave. The faunal assemblage consists of large quantities of lagomorphs (rabbits and hares) and lesser quantities of deer, rodents, birds, carnivores, and reptiles.
2.1.4 Palomar Tradition (1,250 – 150 BP)

The native people of southern California (north of a line from Agua Hedionda to Lake Henshaw in San Diego County) spoke Takic languages which form a branch or subfamily of the Uto-Aztecan language family. The Takic languages are divided into the Gabrielino-Fernandeño language, the Serrano-Kitanemuk group (the Serrano [includes the Vanyume dialect] and Kitanemuk languages), the Tataviam language, and the Cupan group (the Luiseño-Juaneño language, the Cahuilla Language, and the Cupeño language) (Golla 2011). According to Sutton (2009), Takic speakers occupied the southern San Joaquin Valley before 3,500 BP. Perhaps as a result of the arrival of Yokutsan speakers (a language in the Penutian language family) from the north, Takic speakers moved southeast. The ancestors of the Kitanemuk moved into the Tehachapi Mountains and the ancestors of the Tataviam moved into the upper Santa Clara River drainage. The ancestors of the Gabrielino (Tongva) moved into the Los Angeles Basin about 3,500 B.P replacing the native proto-Yuman (Hokan) speakers. Speakers of proto-Gabrielino reached the southern Channel Islands by 3,200 BP (Sutton 2009) and moved as far south as Aliso Creek in Orange County by 3,000 BP.

Takic people moved south into southern Orange County after 1,250 B. P. and became the ancestors of the Juaneño. Takic people moved inland from southern Orange County about 1,000 BP, becoming the ancestors of the Luiseño, Cupeño, and Cahuilla. At the same time, Takic people from the Kitanemuk area moved east along the northern slopes of the San Gabriel Mountains and spread into the San Bernardino Mountains and along the Mojave River becoming the ancestors of the Serrano and the Vanyume. Although Sutton (2011) believes that Yuman speakers living in these inland areas adopted Takic languages and that Takic speakers did not physically replace the Yuman speakers, this is unlikely because settlement and subsistence systems in inland areas were the same as those characteristic of the Takic peoples of the coast.

The material culture of the inland areas where Takic languages were spoken at the time of Spanish contact is part of the Palomar Tradition (Sutton 2011). San Luis Rey I Phase (1,000 – 500 BP) and San Luis Rey II Phase (500 – 150 BP) pertain to the area occupied by the Luiseño at the time of Spanish contact. The Peninsular I (1,000 – 750 BP), II (750 – 300 BP), and III (300 – 150 BP) Phases are used in the areas occupied by the Cahuilla and Serrano (Sutton 2011).

San Luis Rey I is characterized by Cottonwood Triangular arrow points, use of bedrock mortars, stone pendants, shell beads, quartz crystals, and bone tools. San Luis Rey II sees the addition of ceramics, including ceramic cremation urns, red pictographs on boulders in village sites, and steatite arrow straighteners. San Luis Rey II represents the archaeological manifestation of the antecedents of the historically known Luiseño (Goldberg 2001: I-43). During San Luis Rey I there were a series of small permanent residential bases at water sources, each occupied by a kin group (probably a lineage). During San Luis Rey II people from several related residential bases moved into a large village located at the most reliable water source (Waugh 1986). Each village had a territory that included acorn harvesting camps at higher elevations. Villages have numerous bedrock mortars, large dense midden areas with a full range of flaked and ground stone tools, rock art, and a cemetery.
2.2 Ethnohistory

The Project area is located within the territory known to have been occupied by the Serrano group of Native Americans at the time of contact with Europeans, around AD 1769. The Serrano occupied an area in and around the San Bernardino Mountains and northward into the Mojave Desert. Their territory also extended west along the north slope of the San Gabriel Mountains, east as far as Twentynine Palms, north into the Victorville and Lucerne Valley areas, and south to the Yucaipa Valley and San Jacinto Valley (Cultural Systems Research 2005). The Serrano speakers in the Mojave Desert who lived along the Mojave River were known as Vanyume. Serrano is a language within the Takic family of the Uto-Aztecan language stock.

The Serrano were mainly hunters and gatherers who occasionally fished. Game that was hunted included mountain sheep, deer, antelope, rabbits, small rodents, and various birds, particularly quail. Vegetable staples consisted of acorns, pinyon nuts, bulbs and tubers, shoots and roots, juniper berries, mesquite, barrel cacti, and Joshua tree (Bean and Smith 1978).

A variety of materials were used for hunting, gathering, and processing food, as well as for shelter, clothing, and luxury items. Shells, wood, bone, stone, plant materials, and animal skins and feathers were used for making baskets, pottery, blankets, mats, nets, bags and pouches, cordage, awls, bows, arrows, drills, stone pipes, musical instruments, and clothing (Bean and Smith 1978).

Settlement locations were determined by water availability, and most Serranos lived in villages near water sources. Houses and ramadas were round and constructed of poles covered with bark and tule mats (Kroeber 1925). Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978).

Serrano social and political units were clans, patrilineal exogamous territorial groups. Each clan was led by a chief who had both political and ceremonial roles. The chief lived in a principal village within the clan’s territory. The clans were part of a moiety system such that each clan was either a wildcat or coyote clan and marriages could only occur between members of opposite moieties (Earle 2004). On the north side of the San Bernardino Mountains, clan villages were located along the desert-mountain interface on Deep Creek, on the upper Mojave River, in Summit Valley, and in Cajon Pass. The principal plant food available near these villages was juniper berries. These villages also had access to mountain resources, such as acorns and pinyon nuts.

Vanyume villages were located along the Mojave River from south of Victorville to Soda Lake. These river villages had populations of 40 to 80 people. Marriage ties between the Serrano foothill villages and Vanyume desert villages facilitated access to mountain resources, such as acorns and pinyon nuts, by the desert villages. The principal desert resources were mesquite beans, screw beans, tule reed roots, and carrizo grass sugar (produced by aphids that lived on the Carrizo grass). Animal resources were rabbits, jackrabbits, desert bighorn sheep, pronghorn, and desert tortoise (Earle 2005:10). The Vanyume also collected salt from Soda Lake and from the Barstow-Daggett area to exchange for acorns and other resources from the mountains (Earle 2005:11).
Partly due to their mountainous and desert inland territory, contact between Serrano and European-
Americans was minimal prior to the early 1800s. In 1819, an asistencia (mission outpost) was established
near present-day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However,
small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to
preserve some of their native culture. Today, most Serrano live either on the Morongo or San Manuel
reservations (Bean and Smith 1978).

2.3 History

The first European to visit Alta California (the area north of Baja California) was Spanish maritime explorer
Juan Rodriguez Cabrillo, in 1542. Sent north by the Viceroy of New Spain (Mexico) to look for the
Northwest Passage, Cabrillo visited San Diego Bay, Catalina Island, San Pedro Bay, and the northern
Channel Islands. In 1579, the English adventurer Francis Drake visited the Miwok Native American group
at Drake’s Bay or Bodega Bay. Sebastian Vizcaíno explored the coast as far north as Monterey in 1602. He
reported that Monterey was an excellent location for a port (Castillo 1978). Vizcaíno also named San
Diego Bay to commemorate Saint Didacus. The name began to appear on European maps of the New
World by 1624 (Gudde 1998).

Colonization of Alta California began with a land expedition led by Spanish army captain Gaspar de
Portolá. In 1769, Portolá and Father Junipero Serra, a Franciscan missionary, explored the California coast
from San Diego to the Monterrey Bay area. As a result of this expedition, Spanish missions to convert the
native population to Catholicism, presidios (forts), and pueblos (towns) were established. The Franciscan
missionary friars built 21 missions in Alta California, beginning with Mission San Diego in 1769 and ending
with the missions in San Rafael and Sonoma, founded in 1823. Mission San Diego was established to
convert the Native Americans that lived in the area, known as the Kumeyaay or Diegueño. Mission San
Gabriel Archangel began in 1771, east of what is now Los Angeles, to convert the Tongva or Gabrieleno.
Mission San Fernando, also in Tongva/Gabrielino territory, was built in 1797. Mission San Juan Capistrano
was established in 1776 on San Juan Creek (in what is now southern Orange County) to convert the
Agjachemem or Juaneño. Mission San Luis Rey began in 1798 on the San Luis Rey River (in what is now
northern San Diego County) to convert the Luiseño (Castillo 1978).

Some missions later established outposts in inland areas. An asistencia (mission outpost) of Mission San
Luis Rey, known as San Antonio de Pala, was built in Luiseño territory along the upper San Luis Rey River
near Mount Palomar in 1810 (Pourade 1961). A chapel administered by Mission San Gabriel Archangel
was established in the San Bernardino area in 1819 (Bean and Smith 1978). The present asistencia within
the western outskirts of present-day Redlands was built circa 1830 (Haenszel and Reynolds 1975). The
missions sustained themselves through cattle ranching and traded hides and tallow for supplies brought
by ship. Large cattle ranches were established by Mission San Luis Rey at Temecula and San Jacinto
(Gunther 1984). The Spanish also constructed presidios, or forts, at San Diego and Santa Barbara, and a
pueblo, or town, was established at Los Angeles.

The Spanish period, which had begun in 1769 with the Portolá expedition, ended in 1821 with Mexican
independence. After Mexico became independent from Spain, what is now California became the Mexican
province of Alta California. The Mexican government secularized the missions in the 1830s and former
mission lands were granted to retired soldiers and other Mexican citizens for use as cattle ranches. Much of the land along the coast and in the interior valleys became part of Mexican land grants, or ranchos (Robinson 1948). Rancho owners sometimes lived in one of the towns, such as San Diego (near the presidio), San Juan Capistrano (around the mission), or Los Angeles, but often resided in an adobe house on their own land.

The Mexican Period, which began with independence from Spain in 1821, continued until the Mexican-American War of 1846-1848. The American period began when the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States in 1848. As a result of the treaty, Alta California became part of the United States as the Territory of California. Rapid population increase occasioned by the Gold Rush of 1849 led to statehood in 1850. Most Mexican land grants were confirmed to the grantees by U.S. courts, but usually with more restricted boundaries which were surveyed by the U.S. Surveyor General’s office. Floods and drought in the 1860s greatly reduced the cattle herds on the ranchos, making it difficult for their owners to pay the new American taxes on their thousands of acres. Many Mexican-American cattle ranchers borrowed money at usurious rates from newly arrived Anglo-Americans. Foreclosures and land sales eventually resulted in the transfer of most of the land grants into the hands of Anglo-Americans (Cleland 1941).

In 1842, several years after the secularization of the missions by Mexico, California Governor Juan Bautista Alvarado, representing the Mexican government, made a large land grant to Don Antonio Maria Lugo and his three sons. The Lugo family’s Rancho San Bernardino encompassed land in both the San Bernardino and Yucaipa valleys, extending from present-day Colton to Calimesa. In the spring of 1851, 437 Mormon settlers, who had come in wagons from Salt Lake City, settled in the San Bernardino Valley. Two apostles, Amasa Lyman and Charles C. Rich, acting as representatives of the Latter Day Saints, bought a large portion of Rancho San Bernardino from the Lugos and established what is today the city of San Bernardino.

Several wealthy ranchers purchased Rancho San Bernardino land in what was known as the Mission District because of the presence of the old outpost of Mission San Gabriel Archangel (the San Bernardino Asistencia in present-day Redlands). Among these new residents were Dr. Benjamin Barton (for whom Barton Road was later named), Anson Van Leuven, and J. W. Curtis.

Less than two miles east of the Mission District, the Redlands Colony was formed in 1881 by Frank E. Brown, a civil engineer from Connecticut, and Edward G. Judson, a businessman from New York. The original settlement comprised 160 acres centered on what is now the intersection of Center Street and Cypress Avenue. The San Bernardino & Redlands Railroad Company built a spur from the Southern Pacific Railroad (SPRR) main line (which ran from Colton through San Timoteo Canyon to Banning) to Redlands, with an extension to Crafton, in 1888. This rail spur was known as the Redlands & San Bernardino Motor Line (USGS 1901). It was leased to the SPRR in 1892 and sold to the SPRR in 1916. The California Central Railway Company, a subsidiary of the AT&SF Railroad, built a rail line from its main line in San Bernardino to Redlands in 1888. A loop was formed when this line was continued through Mentone, Highland, and back to San Bernardino in 1892. This loop line was purchased by the AT&SF in 1906 (Robertson 1998). Soon after the railroads arrived, the business center of Redlands became established at its present location, near the AT&SF and SP stations. Redlands soon grew to encompass several thousand acres. The
City of Redlands was incorporated on November 26, 1888 (Burgess 1981; Hinckley 1956; Kupfer 1979; F. Moore 1987; W. Moore 1983; Richards 1966).

Judson and Brown had purchased the land on which they laid out the streets of Redlands primarily from the Southern Pacific Railroad and Dr. Barton. Brown, the engineer, surveyed a six-mile-long canal from the Santa Ana River to a large uncovered reservoir southeast of the new town site. Citrus farming in San Bernardino Valley soon became centered in the growing community of Redlands. In 1883, Brown, always looking for a better source of water, and Hiram Barton, Dr. Barton’s son and a prominent Redlands grower and rancher, set out on a camping trip up the Santa Ana River Canyon to assess Bear Valley as a site for a dam and reservoir for Redlands’ increasing irrigation needs. Brown returned to Redlands in a fever of excitement over the possibilities he and Barton had seen. He immediately bought a 20-day option on the valley from its two principal owners, Los Angeles banker J. S. Slauson and the Southern Pacific Railroad. Within those 20 days, Brown managed to raise $360,000 from investors and incorporate the Bear Valley Land and Water Company to purchase the valley’s land, as well as its water rights (Robinson 1989). By November of 1884, a 240-foot-long, 52-foot-high dam had been completed, at a cost of $75,000. By the following spring, a 1,500-acre, 45-foot-deep reservoir had formed—the beginnings of Big Bear Lake. Irrigation water from the lake reached Redlands for the first time on July 10, 1885 (Hinckley 1956; Richards 1966; Robinson 1989).

With the arrival of a nearly unlimited supply of irrigation water, Redlands grew rapidly. The railroad rate competition of the late 1880s brought even more people to the prospering town. The new city of Redlands was subdivided from the beginning in anticipation of a quickly growing population, but the economic depression of the 1890s resulted in most residential development being restricted to the area south of present-day Redlands Boulevard. In the Lugonia and Crafton districts, development was sporadic, with residential lots interspersed with large parcels of agricultural fields (Hinckley 1956; Mermilliod 2002). In the main part of town, however, development continued at a rapid pace.

The 1890s saw the beginnings of paved streets, a streetcar line, and the construction of hundreds of houses and dozens of substantial brick commercial and industrial buildings in Redlands. Civic improvement projects, such as street tree planting, were initiated. The Smiley brothers (Albert K. and Alfred K.), prominent Redlands residents, contributed much of their wealth to the beautification of the town, and in 1898 financed the construction of the A. K. Smiley Public Library, a monumental brick Mission Revival-style building that still serves the community today. The Smileys also developed the 200-acre Canyon Crest Park (also called Smiley Heights), a botanical garden that drew tourists from around the world between 1890 and 1930 (Burgess and Gonzales 2004; Hinckley 1956).

By the early twentieth century, Redlands had a population of more than 5,000, and had gained the reputation of being the navel orange capital of the world, with over 15,000 acres planted in citrus and more than two dozen packing houses. The greatest disaster in the city’s early decades came in 1913, when a three-day freeze destroyed most of the citrus crop and killed thousands of orange trees. Many farmers were left bankrupt, but the community worked together and slowly recovered. New trees were planted, and Redlands regained its leadership as a navel orange center. The citrus industry continued to thrive until after World War II, when land values began to make it more financially worthwhile to sell to developers than to continue to farm (Burgess and Gonzales 2004). Since the 1950s, many thousands of acres of
orange trees have given way to residential and commercial development. As its citrus agriculture gradually fades into history, Redlands continues to prosper while maintaining its downtown core and surrounding neighborhoods reminiscent of a small early twentieth century city. The current population of Redlands is approximately 70,000 (City-Data.com 2012).

3.0 METHODS

3.1 Personnel Qualifications

All phases of the cultural resources investigation were conducted or supervised by Registered Professional Archaeologist (RPA) Dr. Roger Mason, who meets the Secretary of the Interior’s Professional Qualifications Standards for prehistoric and historical archaeologist. Fieldwork was conducted by Staff Archaeologist and Field Director Robert Cunningham. This report was prepared by Staff Archaeologist Robert Cunningham and Senior Archaeologist Wendy Blumel, RPA.

Dr. Mason has been professionally involved with cultural resources management in California since 1983. Dr. Mason is the author of more than 200 reports dealing with cultural resource surveys, evaluations, and mitigation programs in California. He has extensive project experience with the cultural resources requirements of CEQA and Section 106 of the NHPA.

Ms. Blumel is a Registered Professional Archaeologist with 10 years of experience in cultural resource management. She meets the Secretary of the Interior’s Professional Qualifications Standards for prehistoric and historical archaeologist and is experienced in the organization and execution of field projects in compliance with Section 106 of the National Historic Preservation Act (NHPA) and CEQA. She has contributed to and authored numerous cultural resources technical reports, research designs, and cultural resource management plans, and has contributed to a variety of environmental compliance documents.

Mr. Cunningham is a Staff Archaeologist for ECORP and has more than 10 years of experience in cultural resources management, primarily in Southern California. He holds a BA degree in Anthropology and has participated in and supervised numerous survey, testing, and data recovery excavations for both prehistoric and historical sites, and has cataloged, identified, and curated thousands of artifacts. He has conducted evaluations of cultural resources for eligibility for the NRHP and CRHR.

3.2 Records Search Methods

A cultural resources records search was conducted in March 2018 at the SCCIC, located at California State University, Fullerton. The purpose of the records search was to determine the extent of previous cultural resources investigations and the presence of previously-recorded archaeological sites or historic-period (i.e., over 50 years in age) resources within a one-mile (1600-meter) radius of the Project area. Materials reviewed included reports of previous cultural resources investigations, archaeological site records, historical maps, and listings of resources on the NRHP, CRHR, California Points of Historical Interest, California Landmarks, and National Historic Landmarks.
Historic maps reviewed include:

- 1899 USGS Redlands, California (15-minute scale)
- 1901 USGS Redlands, California (15-minute scale)
- 1954 USGS Redlands, California (7.5-minute scale)
- 1963 USGS Redlands, California (7.5-minute scale)
- 1967 USGS Redlands, California (7.5-minute scale)
- 1969 USGS Redlands, California (7.5-minute scale)
- 1973 USGS Redlands, California (7.5-minute scale)
- 1979 USGS Redlands, California (7.5-minute scale)
- 1980 USGS Redlands, California (7.5-minute scale)

Historic aerial photos taken in 1938, 1959, 1966, 1968, 1980, and 1995 to present were also reviewed for any indications of property usage and built environment (Nationwide Environmental Research 2018).

### 3.3 Sacred Lands File Coordination Methods

A search of the Sacred Lands File by the NAHC in Sacramento, California, was requested by ECORP in February 2018. This search was requested to determine whether there are sensitive or sacred Native American resources in the vicinity of the Project area that could be affected by the proposed Project. The NAHC was also asked to provide a list of Native American groups that have historic or traditional ties to the Project area who may have knowledge about the Project area. It should be noted that this does not constitute consultation in compliance with Senate Bill (SB) 18 or Assembly Bill (AB) 52. A copy of all correspondence between ECORP and the NAHC is attached (Attachment A).

### 3.4 Field Methods

Archaeological field work was conducted by an ECORP archaeologist on February 20, 2018 and consisted of an intensive systematic pedestrian survey. The Project area was examined for the presence of cultural artifacts and features by walking the proposed approximately 1,600-foot pathway, and, where possible, conducting parallel east-west transects in 15-meter intervals. Notes and photographs were taken on the environmental setting and disturbances within the Project area.

Newly-discovered cultural resources were assigned a unique temporary number based on the project name and the order in which they were found (i.e. ZJ-001-1). As appropriate, the site boundary, features, and artifacts were mapped using Collector for ArcGIS, a cloud-based geospatial software with two to five-meter accuracy, with data later post-processed for submeter accuracy. Digital photographs were taken of select artifacts and features as well as general site overviews showing the general environment and the presence, if any, of human or naturally-occurring impacts. Following fieldwork, Department of Parks and Recreation (DPR) 523 records were prepared for each of the resources identified and location and sketch
maps were created using data collected with the Collector ArcGIS application used in the field. All DPR site record forms and maps prepared by ECORP are located in confidential Attachment C.

Previously recorded cultural resources located within the Project area were revisited to assess any changes including man-made or naturally occurring disturbance and/or damage. Digital photographs were taken and features were mapped using Collector for ArcGIS. Previously recorded sites were updated to note any changes since the site had been originally recorded using DPR 523 Continuation Sheets (see Attachment C).

4.0 RESULTS

4.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the SCCIC for previously recorded resources, historical aerial photographs, and maps of the vicinity.

4.1.1 Previous Research

The records search indicated that the Project area had been previously surveyed on three occasions, in 1937 as part of a documentation and compilation of the history of the Zanja, in 1985 as part of a cultural resources survey for the Mission Zanja Creek Flood Control Project, and in 1988 as part of a cultural resources study for the Seven Oaks Dam Project. Thirty-six additional cultural resources investigations were conducted within the one-mile records search radius between 1937 and 2016. Details of all 39 investigations are presented below in Table 1.

<table>
<thead>
<tr>
<th>Report Number</th>
<th>Author(s)</th>
<th>Report Title</th>
<th>Year</th>
<th>Includes Portion of the APE?</th>
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<tbody>
<tr>
<td>00006</td>
<td>Rumble, Josephine R.</td>
<td>History: The Mill Creek Zanja</td>
<td>1937</td>
<td>Yes</td>
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<tr>
<td>01521</td>
<td>Brock, James</td>
<td>Archaeological Field Reconnaissance of the Proposed Lugonia Postal Station Site in Redlands, California</td>
<td>1985</td>
<td>No</td>
</tr>
<tr>
<td>01668</td>
<td>Brock, James, and John F. Elliott</td>
<td>Preliminary Archaeological Monitoring Report for the Lafarge Project, Redlands, California</td>
<td>1987</td>
<td>No</td>
</tr>
<tr>
<td>01782</td>
<td>Brock, James</td>
<td>Redlands Chinatown and the Mission Zanja Creek Flood Control Project</td>
<td>1988</td>
<td>No</td>
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<tr>
<td>01783</td>
<td>Hornbeck, David, and Howard Botts</td>
<td>Seven Oaks Dam Project: Water Systems</td>
<td>1988</td>
<td>Yes</td>
</tr>
<tr>
<td>01810</td>
<td>Lester, A. Ross</td>
<td>Archaeological Monitoring of the Glaze Auto Center Project Site at the Southeast Corner of Oriental and Texas Streets, Redlands, San Bernardino County, California</td>
<td>1988</td>
<td>No</td>
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</tbody>
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# Inventory and Evaluation Report for the Zanja Trail Project - 7th Street to Church Street

## Table 1. Previous Cultural Studies In or Within One Mile of the Project Area

<table>
<thead>
<tr>
<th>Report Number</th>
<th>Author(s)</th>
<th>Report Title</th>
<th>Year</th>
<th>Includes Portion of the APE?</th>
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<tbody>
<tr>
<td>01838</td>
<td>Brock, James, William A. Sawyer, and Paul W. Wormser</td>
<td>Artifacts from Lafarge Site, Redlands, California</td>
<td>1988</td>
<td>No</td>
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<tr>
<td>02258</td>
<td>Swanson, Mark T.</td>
<td>Cultural Resources Survey of Proposed Playground/Parking Lot for Sacred Heart Church, a 1-Acre Tract Containing 241/243, 245, 247/249/251, and 253 Eureka Street, and 242, 246, and 248 Fourth Street, Redlands, San Bernardino County, Calif.</td>
<td>1991</td>
<td>No</td>
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<tr>
<td>02634</td>
<td>Swope, Karen K.</td>
<td>Archaeological Monitoring at the Site of Seven Historical Structures (a 1-Acre Tract Containing 241/243, 245, 247/249/251, &amp; 253 Eureka St. &amp; 242, 246 &amp; 248 Fourth St.) Sacred Heart Church, Redlands, San Bernardino County, California</td>
<td>1992</td>
<td>No</td>
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<tr>
<td>03137</td>
<td>Grenda, Donn R., and Deborah W. Gray</td>
<td>Historic Resources Field Survey of a Parcel on the Southwest Corner of Orange &amp; Pearl Streets in Redlands, CA</td>
<td>1996</td>
<td>No</td>
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<tr>
<td>03734</td>
<td>Duke, Curt</td>
<td>Cultural Resources assessment for the AT&amp;T Fixed Wireless Services Facility #BC_458A, County of San Bernardino, CA</td>
<td>2001</td>
<td>No</td>
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<tr>
<td>03738</td>
<td>Duke, Curt</td>
<td>Cingular Wireless Facility #222-01, San Bernardino County, CA</td>
<td>2002</td>
<td>No</td>
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<td>04052</td>
<td>Goodwin, Riordan</td>
<td>Cultural Resource Assessment: Control Temp Parcel, City of Redlands, San Bernardino County, CA</td>
<td>2003</td>
<td>No</td>
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<td>04053</td>
<td>McLean, Deborah K.B.</td>
<td>Archaeological Assessment: Redlands I &amp;II, Former Manufactured Gas Plant Sites, City of Redlands, San Bernardino County, CA</td>
<td>2002</td>
<td>No</td>
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<tr>
<td>04057</td>
<td>White, Laurie S.</td>
<td>Cultural Resource Assessment for Sprint PCS Facility SB54XC418E (Service &amp; Supply Center) City of Redlands, San Bernardo County, CA</td>
<td>2002</td>
<td>No</td>
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<tr>
<td>04067</td>
<td>Tang, Bai Tom</td>
<td>APN: 297-021-04, -05 &amp; the Southern Portion of 097-021-12, Due Diligence/Feasibility Investigation, City of Highland, San Bernardino County, CA</td>
<td>2004</td>
<td>No</td>
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<tr>
<td>04822</td>
<td>Hansen, Janet, and Tanya Sorrell</td>
<td>Cultural Resources Assessment Redlands Y Alliance, City of Redlands, San Bernardino County, California</td>
<td>2006</td>
<td>No</td>
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<tr>
<td>04823</td>
<td>Sander, Jay K.</td>
<td>Cultural Resources Survey of an 8.90-Acre Parcel at Park Avenue and Alabama Street, Redlands, San Bernardino County California</td>
<td>2006</td>
<td>No</td>
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<td>Report Number</td>
<td>Author(s)</td>
<td>Report Title</td>
<td>Year</td>
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<td>05163</td>
<td>Tang, Bai, Michael Hogan, Matthew Wetherbee, and Daniel Jacqueman</td>
<td>Historical/Archaeological Resources Survey Report Krikorian Theatre Expansion and Retail Addition Project, Eureka Street and Stuart Avenue, City of Redlands, San Bernardino County California</td>
<td>2005</td>
<td>No</td>
</tr>
<tr>
<td>05807</td>
<td>Tang, Bai &quot;Tom&quot;, Terri Jacquemain, and Josh Smallwood</td>
<td>Historic Building Evaluation: Former Redlands Mutual Orange Company Packinghouse, 330 North Third Street, City of Redlands, San Bernardino County, California</td>
<td>2007</td>
<td>No</td>
</tr>
<tr>
<td>05858</td>
<td>Tang, Bai &quot;Tom&quot;, Terri Jacquemain, and Josh Smallwood</td>
<td>Historical/Archaeological Survey Report: A Center for the Arts, University of Redlands, City of Redlands, San Bernardino County, California</td>
<td>2007</td>
<td>No</td>
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<tr>
<td>06024</td>
<td>Sander, Jay K.</td>
<td>Cultural Resources Inventory of 200 West Redlands Boulevard, Redlands, San Bernardino County, California</td>
<td>2008</td>
<td>No</td>
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<tr>
<td>06026</td>
<td>Bonner</td>
<td>Cultural Resource Records Search Results and Site Visit for Royal Street Communications California, LLC Candidate LA0767D (Redlands Presbyterian Church), 100 Cajon Street, Redlands, San Bernardino County, California</td>
<td>2008</td>
<td>No</td>
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<tr>
<td>06029</td>
<td>Hogan</td>
<td>Archaeological Monitoring of Earth-Moving Operations, &quot;A Center for the Arts&quot; Project, University of Redlands, City of Redlands, San Bernardino County, California</td>
<td>2008</td>
<td>No</td>
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<tr>
<td>06191</td>
<td>Jordan, Stacey C</td>
<td>Archaeological Survey Report for Southern California Edison Company Deteriorated Pole Replacement Project for a Total of Ten Poles on IDA 12kV (#4579978E &amp; #4744631E), Oak Glen 12kV (#4744626E), Bryn Mawr 12kV (#4744645E), Stewart 4kV (#4760030E), Boulder 12kV (#4714250E), Lapins 12kV (#4759904E), Mesa Grande 12kV (#4759915E), Conine 12kV (#4759921E) and Preston 12kV (#4759658E) Circuits and Removal of One Pole on Bench 12kV (#782504H) Circuit on Private Lands in Riverside and San Bernardino Counties, California.</td>
<td>2008</td>
<td>No</td>
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<td>06435</td>
<td>Tang, Bai &quot;Tom&quot;, Terri Jacquemain, and Josh Smallwood</td>
<td>Historic Building Adaptive Use Study: The Historic Redlands AT&amp;SF Railway Station, 351 Orange Street, City of Redlands, San Bernardino County, California</td>
<td>2009</td>
<td>No</td>
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<td>06637</td>
<td>Hogan, Michael</td>
<td>Final Report on Archaeological Monitoring of Earth-Moving Operations &quot;A Center for the Arts&quot; Project, University of Redlands, City of Redlands, San Bernardino County, California, CRM Tech Contract #2200</td>
<td>2009</td>
<td>No</td>
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<tr>
<td>07453</td>
<td>Tang, Bai &quot;Tom&quot;</td>
<td>Historic Building Evaluation: 1113 East Central Avenue, Assessor's Parcel No. 0170- 201-33, City of Redlands, San Bernardino County, California</td>
<td>2013</td>
<td>No</td>
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<tr>
<td>07454</td>
<td>Glover, Amy and Sherri Gust</td>
<td>Cultural Resources Phase I Study Redlands Park Once Transit Center Project, City of Redlands, San Bernardino County, California</td>
<td>2012</td>
<td>No</td>
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<tr>
<td>07455</td>
<td>Mason, Roger D.</td>
<td>Extended Phase I Report for P-36-023343, CA-SBR-14744H, Redlands Park Once Transit Center Project, Redlands, San Bernardino County, California</td>
<td>2012</td>
<td>No</td>
</tr>
</tbody>
</table>
The records search also determined that 673 previously recorded historic-era cultural resources are located within one mile of the Project area. These are comprised of 670 historic-period buildings or structures, the NRHP-eligible Mill Creek Zanja, one monument, and one historic-period campsite. The Mill Creek Zanja (CA-SBR-8092H/P36-008092) was evaluated and recommended as eligible for the NRHP/CRHR in 1977 (Smallwood 2006, Swope 1996, Schmidt 1995, Toren 1994, Van Boven 1976). A portion of the Zanja, to the east of the Project area, is currently listed on the NRHP (NRHP-L-77-329) and is on the list of California Historical Landmarks (No. 43).

Two national/state historic districts are located within one mile of the Project area. These are the Smiley Park, and the Redlands Santa Fe Depot Districts. There are also six local historic districts located within one mile of the Project area. These are the Eureka Street and Normandie Court Historic Districts; the Redlands Railroad, the East Fern Avenue, the La Verne Street, and the Smiley Park Historic and Scenic Districts. These two national/state historic districts and six local historic districts encompass the majority of the 670 historic buildings identified during the records search. None of these districts are located within or adjacent to the Project area.

A review of the historic-period maps and historic aerial photographs indicates that a majority of the Project area was a railroad and irrigation corridor (Mill Creek Zanja) within an agricultural and residential area from the 1890s to 1970s (NETRonline 2018). The earliest USGS 15-minute Redlands Quadrangle maps show that there were few dwellings located along the Zanja and in the Project area in the early twentieth Century. Most of the development in the area is depicted west of the Project area.

On early 20th Century maps, the Mill Creek Zanja is depicted within the Project area, as well as a set of railroad tracks identified as the Redlands & San Bernardino Motor Line. A second set of tracks is depicted north of the Project area and is identified as the Highlands Division of the Southern California Railroad. East of the Project area, the two tracks converge and run parallel as they continue eastward (USGS 1899, 1901). The 1954 USGS 7.5-minute Redlands Quadrangle map shows increased development in areas adjacent to the Project area, with the nearest agricultural plots shown well east of the Project area. The railroad tracks depicted passing through the Project area are now identified as the Southern Pacific Railroad, and the tracks north of the Project area are identified as the Atchison, Topeka, and Santa Fe Railroads.

<table>
<thead>
<tr>
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<tr>
<td>07658</td>
<td>Lev-Tov, Justin E.</td>
<td>Archaeological Monitoring at the 424 West Stuart Ave., Redlands, California</td>
<td>2013</td>
<td>No</td>
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<td>07659</td>
<td>Stanton, Patrick B.</td>
<td>Archaeological Monitoring at the 6007 West Stuart Ave., Redlands, California.</td>
<td>2014</td>
<td>No</td>
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<td>07929</td>
<td>McKenna, Jeanette A.</td>
<td>A Preliminary Assessment of the Existing Improvements at 219 Cajon Street, Redlands, San Bernardino County, California</td>
<td>2016</td>
<td>No</td>
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<tr>
<td>08041</td>
<td>Widell, Cherilyn</td>
<td>Rehabilitation of 123 Lugonia St., Redlands (AN) and 402 Alder St., San Bernardino (AS)</td>
<td>1997</td>
<td>No</td>
</tr>
</tbody>
</table>
Railroad. USGS quadrangle maps from the 1960s and 1970s show development increasing steadily at these locations (USGS 1963, 1969, 1973, 1979). By the 1980s housing developments had taken over most of the agricultural areas that surround the Project area.

On historic aerial photographs from 1938 to 1968, the Redlands & San Bernardino Motor Line/Southern Pacific Railroad tracks are visible and the portion of the Mill Creek Zanja within the Project area is obscured by dense vegetation growing around, and possibly within, the Zanja. The Mill Creek Zanja is clearly visible as it passes out of the Project area, extending southwest from 7th street. In aerial photographs from 1980, vegetation in and around the Mill Creek Zanja has been removed, and the Redlands & San Bernardino Motor Line/Southern Pacific Railroad tracks are no longer visible. By 1995, the western end of the Project area near 7th Street had been paved over for a parking lot. By 2002, the portion of the Mill Creek Zanja from 7th Street to Redlands Boulevard had been covered, now running underneath a paved automobile dealership lot (NETRonline 2018).

4.2 Sacred Lands File Results

The results of the search of the Sacred Lands File by the NAHC indicated the presence of a Native American Sacred Land within the Project area. As advised by the NAHC response, ECORP contacted the San Manuel Band of Mission Indians (SMBMI) by phone on March 1, 2018 to obtain further information regarding the resource located within the Project area. SMBMI Cultural Analyst Jessica Mauck responded to ECORP on March 5, 2018 by email and identified the Tribal Cultural Resource as the Mill Creek Zanja. Jessica Mauck stated that the SMBMI is involved in on-going consultation with the Redlands Conservancy and the City of Redlands for the Zanja Trail and Greenway Project. She further stated that SMBMI is not solely interested in the Zanja itself, but also sites associated with the Zanja located across the broader landscape. The NAHC also provided a list of 20 Native American groups that have historic or traditional ties to the Project area who may have knowledge about the Project area. It should be noted that this does not constitute consultation in compliance with SB 18 or AB 52. A copy of all correspondence between ECORP and the NAHC is provided as Attachment A.

4.3 Field Visit Results

The majority of the Project area appeared highly disturbed at the time of the survey. The banks of the Zanja, and proposed trail pathway have been graded for regular maintenance and ease of access to the channel. Ground visibility for the majority of the Project area is fair (approximately 95%); however, the majority of the western one-third of the Project area has been paved over. The majority of the Project area also contains a moderate amount of modern refuse including plastics, bottle glass, and non-diagnostic metal fragments.

As a result of the field survey, three historic-period isolated finds (ZJ-001-I, ZJ-003-I and ZJ-003-I) were recorded. In addition, a section of the San Bernardino Motor Line of the Southern Pacific Railroad (CA-SBR-31266H/P36-031266) and a section of the Mill Creek Zanja (CA-SBR-8092H/P36-008092) were field checked and updated. DPR 523 records for all five resources can be found in Attachment C.
4.3.1 Newly Identified Resources

ZJ-001-I is an isolated find consisting of one shard of sun-colored amethyst (SCA) glass and one railroad spike. Both artifacts were found embedded within the southern bank of the Mill Creek Zanja. In general, SCA glass dates between 1880 to the start of World War I (Lockhart 2006).

ZJ-002-I is a single shard of SCA glass found embedded in the surface near the north bank of the Mill Creek Zanja.

ZJ-003-I is an isolated find consisting of 24 shards of SCA glass. The shards appear to originate from a single bottle. The shards were found partially embedded in the surface, approximately five feet south of an east to west fence line.

4.3.2 Previously Recorded Resources

CA-SBR-8092H/P36-008092 - Mill Creek Zanja

The Mill Creek Zanja (CA-SBR-8092H, NRHP-L-77-329, CHL-43) was designed and begun in 1819 under the supervision of Franciscans from Mission San Gabriel Archangel. Its purpose was to provide irrigation water from Mill Creek to Guachama, a Native American village that was located about 3.44 miles (5.54 kilometers) west of the Project area. The engineer for the project was Pedro Alvarez, and excavation of the ditch was carried out by Native Americans from Guachama. The Zanja, which was completed in 1820, made agriculture possible for the village, as well as for European settlers in the vicinity. During the early years of Redlands, it served as the sole water supply for the town, and its flowing water also propelled a generator that provided Redlands with its first electricity.

The Zanja is one of the earliest remaining civil engineering infrastructure project in southern California, and is still in use as a flood control channel. In 1936, the Zanja was diverted into the Mission Storm Drain, which empties into the Santa Ana River and the old channel that turned southwest at Texas Street was buried (A.K. Smiley Public Library 2000). In 1965, the Zanja was designated California Historic Landmark Number 43. In 1977, a six-mile-long segment between its diversion point from Mill Creek in Mentone on the east and Division Street (Sylvan Park) in Redlands on the west was listed in the NRHP (Hinckley 1951; Scott 1976; Van Boven 1976).

The Project area includes a 1,016-foot long section of the Mill Creek Zanja. A six-mile segment of the Zanja located east of the Project area is listed on the NRHP. The NRHP-listed segment stretches from the intake at Mill Creek and ends just west of Sylvan Park. The section of the Mill Creek Zanja within the Project area, located between 9th Street and Church Street, is not included in the NRHP-listed segment of this resource. As part of the current project, this portion of the Mill Creek Zanja was updated and evaluated for inclusion in the CRHR. At 9th Street the Zanja exits the Project area to the southwest and goes underground as it enters the Redlands Business District. The Zanja continues underground until it passes beyond the Redlands Business District to the west.

The 9th to Church Street segment of the Zanja is an earthen ditch characterized by steeply sloped sides and a flat-bottomed bed containing large cobbles and boulders. The watercourse runs roughly east to west at this location. The ditch varies in width between 35 to 45 feet (10.7 to 13.7 meters) wide, and has
an approximate depth of five to six feet (1.5 to 1.8 meters). Though the banks of the Zanja are largely earthen, many large cobbles and boulders are present within the bed of the Zanja, along with chunks of concrete and some embedded modern refuse.

This segment of the Mill Creek Zanja appears to be maintained regularly as the banks of the Zanja have been graded to provide flat maintenance access to the channel. The graded banks also serve as an informal pedestrian walkway. The western end of this segment of the Zanja contains a modern culvert improvement located east of 9th Street. A historic-period cobble and brick culvert with cobble and concrete wing walls is located at the east end of this segment, east of Church Street. Several yucca plants are growing in the bed of the Zanja near the Church Street culvert. Although the Zanja was dry at the time of survey, this portion of the resource is continuously maintained and remains an active part of the perennial drainage system.

**CA-SBR-31266H/P36-031266-San Bernardino Motor Line of the Southern Pacific Railroad**

In 1888, the San Bernardino & Redlands Railroad Company completed a spur from the Southern Pacific Railroad (SPRR) mainline, extending from the SPRR junction in Bryn Mawr and connecting the communities of Redlands, Crafton, and Craftonville. This spur was known as the Redlands & San Bernardino Motor Line by 1899. It was leased to the SPRR beginning in 1892 and sold to the SPRR in 1916 (Robertson 1998, USGS 1895). This line primarily served the area citrus packinghouses. The line was gradually cut back beginning in the 1960s, and was abandoned by the mid-1980s (Harrison 2016).

A portion of this historic-period resource was previously recorded in March 2016 during cultural resources investigations t of the Zanja Trail Project segment from Lincoln Street to Wabash Avenue in Redlands. The segment recorded in 2016 consists of the remnants of a railroad truss bridge and railroad tracks. The resource was evaluated at that time, and was recommended as eligible for inclusion in the CRHR based on its association with the development of the citrus industry in Redlands (Hicok and Blumel 2016).

Historic maps indicate that the San Bernardino Motor Line of the SPRR passed through the current 7th Street to Church Street Project area. The railroad tracks are indicated on USGS maps from 1899 to the present. The tracks are clearly visible in historic-aerial photographs from 1938, 1959, 1966, and 1968. Aerial photographs from 1980 show that the tracks within this segment of the SPRR San Bernardino Motor Line had been removed. During the survey it was confirmed that all features associated with this resource have been removed from the Project area.

**5.0 EVALUATION OF ELIGIBILITY**

**5.1 State Evaluation Criteria**

Under state law (CEQA) cultural resources are evaluated using CRHR eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to historical resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied.

A Historical Resource is a resource that:
1. is listed in or has been determined eligible for listing in the CRHR by the State Historical Resources Commission;

2. is included in a local register of historical resources, as defined in PRC 5020.1(k);

3. has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g); or

4. is determined to be historically significant by the CEQA lead agency [CCR Title 14, § 15064.5(a)].

In making this determination, the CEQA lead agency usually applies the CRHR eligibility criteria.

For this Project, only the fourth definition of a historical resource is applicable because there are no resources previously determined eligible or listed on the CRHR, there are no resources included in a local register of historical resources, and no resources identified as significant in a qualified historical resources survey.

The eligibility criteria for the CRHR are as follows [CCR Title 14, § 4852(b)]:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.;
- It is associated with the lives of persons important to local, California, or national history.
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association [CCR Title 14, § 4852(c)].

Historical buildings, structures, and objects are usually eligible under Criteria 1, 2, and 3 based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion 4, the potential to yield information important in prehistory or history. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. The CEQA lead agency makes the determination of eligibility based on the results of the test program. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

Impacts to a historical resource (as defined by CEQA) are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired [CCR Title 14, § 15064.5(a)].
5.2 Evaluation

CA-SBR-8092H/P36-008092 -Mill Creek Zanja

The Mill Creek Zanja is a California Historical Landmark; a segment of the resource, located east of the Project area, is listed on the NRHP (and is therefore eligible for the CRHR); and the entire length of the resource is considered a Sacred Land by local Native American communities. The section of the Mill Creek Zanja within the Project area, located between 9th Street and Church Street in the City of Redlands, is not included in the NRHP-listed segment of this resource and has not been previously evaluated for inclusion in the CRHR. The NRHP Nomination Form ends the listed section at the western border of Sylvan Park arguing that west of Division Street the Zanja goes underground and no longer acts as a natural stream course. However, the portion of the Zanja within the current Project area is still east of the area where the Zanja goes underground and retains a fair amount of integrity. Because of this, the portion of the Zanja within the Project area was evaluated for eligibility for the CRHR.

The Zanja was constructed to provide irrigation water to the village of Guachama, and is among the earliest civil engineering projects in Southern California. In the latter part of the 19th century, settlement and development in the area occurred along the banks of the Zanja, as it was the only stable water source. Due to it being among the earliest civil engineering projects in the region, and its considerable impact on the development and settlement patterns of the area, the resource is evaluated as eligible for the CRHR under Criterion 1.

As stated in the NRHP Nomination Form, construction of the ditch was accomplished by Native Americans from the village of Guachama under their chief, Solano. Due to the association of the resource with the Native American residents of Guachama and their chief Solano, the resource is evaluated as eligible for the CRHR under Criterion 2.

This segment of the Zanja consists of a v-shaped ditch with earthen banks with steeply sloped sides and a flat-bottomed bed containing large cobbles and boulders. This segment of the Zanja is of utilitarian design and was not constructed to exhibit high aesthetic values. It is a typical example of an irrigation ditch with no unique architectural or engineering design characteristics. The feature does not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master or possesses high artistic values. Therefore, the resource is evaluated as not eligible for the CRHR under Criterion 3.

Given the nature of the resource, it does not possess the potential to yield any additional information regarding the historical significance, construction, or design of the Mill Creek Zanja that is not already represented in the archival record. Therefore, the resource does not have the potential to yield information important in history and is not eligible for the CRHR under Criterion 4.

A study of maps and historic aerial photographs reveals that this section of the Zanja follows the original alignment and course of the resource and it still functions as a water conveyance feature. This segment of the Zanja has received minor alterations since the time of its original construction, but such alterations do not compromise the integrity or detract from the significance of the Zanja. This segment of the Zanja retains integrity of location, design, setting, materials, workmanship, feeling, and association.
The segment of the Mill Creek Zanja from Church Street to 9th Street is eligible for listing under Criterion 1, for its impact on settlement of the area, and Criterion 2, for its association with Guachama chief Solano. This portion of the Mill Creek Zanja retains integrity and is recommended as eligible for inclusion in the CRHR. Therefore, it is considered a Historical Resource under CEQA.

**CA-SBR-31266H/P36-031266-San Bernardino Motor Line of the Southern Pacific Railroad**

The San Bernardino Motor Line of the Southern Pacific Railroad was evaluated for CRHR eligibility in 2016. The resource was recommended as eligible for inclusion in the CRHR under Criterion 1 for its association with significant events or trends in local history, in this case, the growth of the citrus industry. Although the overall alignment is eligible for its historical associations, the segment within the project area (between 7th Street and Church Street) lacks integrity due to the removal of the tracks and all associated features. The segment within the Project area no longer retains integrity of design, materials, workmanship, feeling, and association with the resource as originally constructed. This segment does not retain enough integrity to be considered eligible for the CRHR. Consequently, this segment does not contribute to the eligibility of the resource and although the overall resource is eligible, this segment of the San Bernardino Motor Line is not a Historical Resource under CEQA.

**Isolated Finds**

ZJ-001-I, ZJ-002-I, and ZJ-003-I are isolated finds. Isolates are artifacts that are not associated with other artifacts or features and are not connected with the human activity that produced them. Isolates do not individually contribute to the broad patterns of history because they cannot be connected to a particular historical event (CRHR Criterion 1). Isolates are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites, and generally no information exists in the archival record to associate isolates with important individuals in history (CRHR Criterion 2). Isolates do not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (CRHR Criterion 3). Finally, isolates in general do not provide important information in history or prehistory (Criterion 4). Therefore, these isolated finds do not meet the eligibility criteria for inclusion in the CRHR and are not considered Historical Resources under CEQA.

**6.0 IMPACT ASSESSMENT FOR CRHR-ELIGIBLE RESOURCES**

As a result of the field survey and evaluation, the portion of the Mill Creek Zanja (CA-SBR-8092H) within the project area is considered a Historical Resource under CEQA. As the proposed project design for the Zanja Trail Project currently stands, the installation of a walking path would avoid the Mill Creek Zanja (CA-SBR-8092H). Therefore, the project would not have any significant direct impacts on the Mill Creek Zanja (CA-SBR-8092H). However, the proposed project has the potential to result in indirect impacts to the Mill Creek Zanja. Indirect impacts could include increased dust during trail installation, increased foot traffic and attention to the resource by the general public, and a change in the visual landscape/setting in the immediate vicinity of the resource. Potential indirect impacts are discussed below.

The Mill Creek Zanja (CA-SBR-8092H/P36-008092), is listed on the NRHP and eligible for the CRHR for its association with the missions, the Mexican era, early development of inland southern California, and its
status as the oldest surviving civil engineering infrastructure project in California. This portion of the Zanja is an earthen drainage ditch. A temporary increase in dust is not likely to have a significant impact on the resource. The proposed foot trail may increase foot traffic and allow the public more accessibility to the resource; however, the area immediately surrounding the resource contains suburban developments and an informal walking path already exists alongside this portion of the Zanja. The small increase in pedestrian traffic would not likely create a significant impact on the resource. The project would not result in a substantial change to the visual landscape or setting of the resource. The proposed Project will not alter the features of the resource that make it eligible for the CRHR, its association with historical events. As such, although the proposed Project may result in indirect impacts to the resource, these impacts would not be significant.

7.0 SUMMARY AND RECOMMENDATIONS

A cultural resources investigation was conducted for the Zanja Trail Project - 7th Street to Church Street, a 3.49-acre project in the City of Redlands, San Bernardino County, California. Two previously recorded resources, the Mill Creek Zanja (CA-SBR-8092/H/P36-008092), and the San Bernardino Motor Line of the Southern Pacific Railroad (CA-SBR-31266/H/P36-031266), are located within the Project area. The Mill Creek Zanja is listed on the NRHP and is eligible for the CRHR. The segment of the San Bernardino Motor Line in the Project Area lacks integrity and is not a Historical Resource for the purposes of CEQA. During the field survey, three additional historic-period resources, an isolated find consisting of a glass fragment and railroad spike (ZJ-001-I), and two isolated finds consisting of glass shards (ZJ-002-I and ZJ-003-I), were identified and documented within the Project area. ZJ-001-I, ZJ-002-I and ZT-003-I are isolated finds that are not eligible for inclusion in the CRHR, and therefore, are not Historical Resources under CEQA.

The Zanja Trail Project would not have any significant direct impacts on the Mill Creek Zanja. However, the proposed project has the potential to result in indirect impacts to the Mill Creek Zanja (CA-SBR-8092/H/P36-008092). Indirect impacts could include increased dust during trail installation, increased foot traffic and attention to the resource by the general public, and a change in the visual landscape/setting in the immediate vicinity of the resource. As the design currently stands, the proposed Project will not alter the features of the resource that make it eligible for the CRHR. Although the proposed Project may result in indirect impacts to the resource, these impacts would not be significant. Should the design of the project be altered, an additional impact analysis may be necessary to assess potential impacts to Historical Resources.

The proposed Project will be constructed along the banks of the Mill Creek Zanja an NRHP-listed resource considered Sacred Land by local Native American communities. Sediments within the Project area are composed of Holocene alluvial sediments concurrent with human occupation of the region, which have the potential to hold archaeological cultural deposits. The surface of the Project area has been partially paved and partially graded with no evidence of prehistoric material present. However, there always exists the potential for the Project area to contain buried prehistoric material where surface-level manifestations are no longer present. Because of the presence within the Project area of the Mill Creek Zanja, coupled with the presence of Holocene sediments, the potential for the Project area to contain buried resources is considered high. ECORP recommends archaeological monitoring of all ground-disturbing activities that occur during the construction of the project. If new artifacts or features are encountered, recordation and
evaluation of the resource(s) would be required. If found to be CRHR-eligible and significant impacts to the resource(s) cannot be avoided, additional mitigation measures would be required.

If human remains of any kind are found during construction, the requirements of CEQA Guidelines Section 15064.5(e) and AB 2641 shall be followed. According to these requirements, all construction activities must cease immediately and the San Bernardino County Coroner and a qualified archaeologist must be notified. The Coroner will examine the remains and determine the next appropriate action based on his or her findings. If the coroner determines the remains to be of Native American origin, he or she will notify the NAHC. The NAHC will then identify the most likely descendants (MLD) to be consulted regarding treatment and/or reburial of the remains. If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after gaining access to the remains, the property owner shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
8.0 REFERENCES CITED

A.K. Smiley Public Library

2000 "Map Showing Original and Current Routes of the Mill Creek Zanja and the Morey Arroyo". On file at the Heritage Room of the A.K. Smiley Public Library, Redlands, California.

Bean, Lowell J. and Charles R. Smith


Burgess, Larry E.


Burgess, Larry E., and Nathan D. Gonzales


Castillo, Edward D.


City-Data.com


Cleland, Robert G.

1941 The Cattle on a Thousand Hills: Southern California, 1850-1870. Huntington Library, San Marino, California.

Cultural Systems Research


Earle, David D.

Erlandson, J. M.


Gallegos, Dennis


Goldberg, Susan (Editor)

2001 *Eastside Reservoir Project: Final Report Of Archaeological Investigations (Five Volumes).* Applied Earthworks, Inc.

Golla, Victor

2011 *California Indian Languages.* University Of California Press, Berkeley, California.

Grenda, Don R.


Gudde, E. G.


Gunther, Jane D.

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

Haenszel, Arda M., and Jennifer Reynolds


Hicok, Hanna, and Wendy Blumel

2016 *Cultural Resources Investigation of the Zanja Trail Project, City of Redlands, San Bernardino County, California.* ECORP Consulting, Inc.

Hinckley, Edith Parker


Koerper, Henry C., Paul Langenwalter II And Adella Schroth


Kowta, Makoto


Kroeber, A.L.


Kupfer, Irene Hinckley


Lockhart, B.


Mermilliod, Jennifer A.


Moore, Frank E.


Moore, William G.


Moratto, M. J.


NETR Online

Pourade, Richard


Richards, Elizabeth W.

1966 *Guideposts to History: Concerning Origins of Place and Street Names in San Bernardino County*. Santa Fe Federal Savings and Loan Association, San Bernardino, California.

Robertson, Donald B.


Robinson, John W.


Robinson, W. W.


Rondeau, Michael F., Jim Cassidy And Terry L. Jones


Salls, Roy A.

1983 *The Liberty Grove Site: Archaeological Interpretation Of A Late Milling Stone Horizon Site on The Cucamonga Plain*. Masters thesis, Department Of Anthropology, University Of California, Los Angeles, Los Angeles, California.

Schmidt, J.J.

1995 *Archaeological Site Record for CA-SBR-8092H*. On file at the South Central Coastal Information Center, California State University, Fullerton.

Scott, M.B.

Smallwood

2006 Archaeological Site Record Updated for CA-SBR-8092H. On file at the South Central Coastal Information Center, California State University, Fullerton.

Sutton, Mark Q.


Sutton, Mark Q. And Jill K. Gardner


Swope, Karen K.

1996 Archaeological Site Record for CA-SBR-8092H. On file at the South Central Coastal Information Center, California State University, Fullerton.

Toren, George

1994 Archaeological Site Record Updated for CA-SBR-8092H. On file at the South Central Coastal Information Center, California State University, Fullerton.

U.S. Geological Survey (USGS)


Van Boven, Alice

1976  National Register of Historic Places Nomination Form for NRHP-L-77-329, the Mill Creek Zanja. On file at the San Bernardino Archaeological Information Center, San Bernardino County Museum, Redlands, California.

Wallace, William J.


Warren, Claude N.


Waugh, Georgie

LIST OF ATTACHMENTS

Attachment A – Sacred Lands File Coordination
Attachment B – Confidential Site Location Map
Attachment C – Confidential Cultural Resource Site Locations and Site Records
Sacred Lands File Coordination
Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Zanja Trails Project 7th to Church Street

County: San Bernardino County

USGS Quadrangle Name: Redlands (1988)

Township: 1S Range: 3W Section(s): Unsectioned portion of the San Bernardino Land Grant

Company/Firm/Agency: ECORP Consulting, Inc.

Street Address: 215 North Fifth Street

City: Redlands Zip: 92374

Phone: (909) 307-0046

Fax: (909) 307-0056

Email: wblumel@ecorpconsulting.com

Project Description: The Redlands Conservancy has requested that ECORP conduct a cultural resources study for an approximately 0.3-mile stretch of the Zanja Trails project located between 7th Street and Church Street in the City of Redlands. This project proposes to develop a pedestrian and bike path adjacent to the National Register of Historic Places-listed Mill Creek Zanja (a historic-age water conveyance feature). The study will be used to support an Initial Study for the project.
Records Search Map

2018-022 Zanja Trail Project 7th to Church

San Bernardino County, California
Unsectioned Portion of
Rancho San Bernardino Landgrant, SBBM
Latitude: 34° 3' 29" N
Longitude: 117° 10' 34" W
Watershed: Santa Ana 18070203

CA 7.5-minute Topographic Quadrangle
US Geological Survey
February 22, 2018

Wendy Blumel
ECORP Consulting, Inc.

Sent by E-mail: wblumel@ecorpconsulting.com

RE: Proposed Zanja Trails 7th to Church Street Project, City of Redlands; Redlands USGS Quadrangle, San Bernardino County, California

Dear Ms. Blumel:

Attached is a list of tribes that have cultural and traditional affiliation to the areas of potential project effect (APE) referenced above. I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult, as may be required under particular state statutes. If a response has not been received within two weeks of notification, the Native American Heritage Commission (NAHC) requests that you follow-up with a telephone call to ensure that the project information has been received.

THIS INFORMATION IS CONFIDENTIAL! PLEASE DO NOT INCLUDE IN PUBLIC DOCUMENTS.
A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the area of potential project effect (APE) for the above referenced project. Sites have been located within the APE you provided that may be impacted by the project. Please immediately contact the San Manuel Band of Mission Indians at (909) 864-8933 for more information about these sites.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance, we are able to assure that our lists contain current information. If you have any questions, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst
(916) 373-3714

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**Native American Heritage Commission**  
**Native American Contact List**  
**San Bernardino County**  
**2/22/2018**

**Agua Caliente Band of Cahuilla Indians**  
Jeff Grubbe, Chairperson  
5401 Dinah Shore Drive  
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**Los Coyotes Band of Mission Indians**  
John Perada, Environmental Director  
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**Agua Caliente Band of Cahuilla Indians**  
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**Augustine Band of Cahuilla Mission Indians**  
Amanda Vance, Chairperson  
P. O. Box 846  
Coachella, CA, 92236  
Phone: (760) 398 - 4722  
Fax: (760) 369-7161

**Morongo Band of Mission Indians**  
Robert Martin, Chairperson  
12700 Pumarr Road  
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Phone: (951) 849 - 8807  
Fax: (951) 922-8146

**Cabazon Band of Mission Indians**  
Doug Welmas, Chairperson  
84-245 Indio Springs Parkway  
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Phone: (760) 342 - 2593  
Fax: (760) 347-7880

**Morongo Band of Mission Indians**  
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12700 Pumarr Road  
Banning, CA, 92220  
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Fax: (951) 922-8146  
dtorres@morongo-nsn.gov

**Cahuilla Band of Indians**  
Daniel Salgado, Chairperson  
52701 U.S. Highway 371  
Anza, CA, 92539  
Phone: (951) 763 - 5549  
Fax: (951) 763-2808  
Chairman@cahuilla.net

**Pauma Band of Luiseño Indians**  
- Pauma & Yuima Reservation  
Tensel Aguilar, Chairperson  
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Pauma Valley, CA, 92061  
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Fax: (760) 742-3422

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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.96 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Zenja Trails Project, San Bernardino County.
Ramona Band of Cahuilla
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Serrano Nation of Mission Indians
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Soboba Band of Luiseno Indians
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This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.96 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Zanja Trails Project, San Bernardino County.
Hi Jessica,

Thank you for the input. I will incorporate this information into our Phase I study. As a long-time Redlands resident, I appreciate the sensitivity of this resource to the SMBMI and look forward to seeing the results of your consultation with the City in the IS/MND.

Thanks,

Wendy (Jones) Blumel
Assistant Cultural Group Manager
ECORP Consulting, Inc.

Hi Wendy,

Thank you for the below project information. SMBMI has been involved in on-going consultation efforts with Redlands Conservancy and the City for the Zanja Tail and Greeenway Park Project – there is a great deal of interpretive signage that will accompany the trail. I recently entered into consultation for the Orange Blossom Trail with the City and they are currently working to determine the level of impact in certain areas of the project – it is undecided whether or not we will suggest interpretive panels for that trail. However, this trail segment runs along the Zanja and SMBMI will likely be interested in the same thing. With regards to physical impacts, your description does give me an understanding of what to expect.

I do want to point out that the Tribe is concerned with more than just the Zanja itself, as there have been many work camps, burials, etc. found across the broader landscape that are associated with the Zanja. In addition, we are working with the City on minimal levels of effort for the field within their jurisdiction, to include subsurface testing, so that we have a better understanding of any subsurface materials that may be present, and work toward avoidance if feasible.

I greatly appreciate the information you have provided. This landscape has undergone a lot of recent change and SMBMI has a strong interest in all projects that come through the area.

Regards,

Jessica Mauck
CULTURAL RESOURCES ANALYST
O: (909) 864-8933 x3249
Hi Jessica,

Thank you for the response. I have attached a project location map above and pasted a draft version of the project description below. To my knowledge, although the project will include the installation of a walking path along the Zanja, it will not include any alterations to the Zanja itself. The Zanja goes underground in the western portion of the project area and is an exposed channel in the eastern portion. The impacts should be similar to those associated with the Zanja Trails project near Wabash Avenue that was constructed last year. I look forward to receiving your input on this project.

1.1 Project Background

The information in the Project Background is taken from the *Zanja Trail and Greenway Park Project Master Plan* (Redlands Conservancy 2015). This Master Plan was accepted by the Redlands City Council on December 15, 2015 as the guiding document for development of the Zanja Trail.

The City of Redlands Park and Open Space Plan, adopted in 1987, calls for eight major features, one of which is the creation of “a strip park and related trails following the Zanja from Crafton through the downtown area to the westerly city limits.” Much of this 1987 plan was incorporated into the City’s Open Space and Conservation Element of the General Plan. The General Plan specifically refers to the Zanja as one of the five trail corridors and as an example of a Primary Community Trail. The Zanja Trail is planned to be part of a regional trail network which also includes the Orange Blossom Trail and Santa Ana River Trail.

The Redlands Conservancy has prepared a Master Plan, which identifies the route, potential amenities, and opportunities and constraints of the full Zanja trail alignment, which originally extended from Wabash Avenue to 9th Street/Redlands Boulevard and has since been revised to extend to 7th Street, approximately 2.3 miles. This Initial Study focuses only on the 7th Street to Church Street portion of the trail.

1.2 Project Characteristics

The Proposed Project would begin at 7th Street and end at Church Street. The Proposed Project includes two elements, a Zanja Trail Gateway Monument at its westernmost end at 7th Street, and a 0.4-mile trail from 7th Street to Church Street. The trail is characterized as a pedestrian trail from 7th street to 9th street and a multipurpose trail from 9th street to Church Street.

7th Street to 9th Street Trail Segment

This trail segment would be approximately 600 feet long, within a 54 to 60-foot-wide alignment from the western curb of 7th Street to the western curb of 9th Street. In this area the Zanja channel has been placed underground. This space is currently used as a surface parking for a religious facility located north of the Hatfield Buick dealership.

The trail would begin at the western curb of 7th Street, north of Redlands Boulevard, where an enhanced paving crosswalk would be installed. On the eastern side of 7th Street a Zanja Trail Gateway Monument would be installed. A 6-foot-wide natural surface pedestrian trail would be built within a 12 to 18 foot wide strip of landscaping north of the Hatfield Buick dealership. Landscaping would include native trees and shrubs to provide shade and help shield pedestrians from vehicles using the parking lot. Interpretive way-finding and mile-marking signs would also be installed along the route and at the northwest corner of Redlands Boulevard and 7th Street. The area north of the trail would include a 40 space parking lot with a two-way drive aisle. Existing fencing on both the north and south side of the existing parking lot would remain.
9th Street to Church Street Trail Segment

This trail segment would be approximately 1,050 feet long and extend from the western curb of 9th Street to the western curb of Church Street. This segment of the trail alignment would be constructed within an area owned by City of Redland’s Successor Agency and within right of way owned by the San Bernardino County Flood Control District.

Improvements would include an enhanced pavement street crossing at 9th Street. The proposed trail alignment would consist of a 6-foot-wide natural surface pedestrian trail and a 12-foot-wide Class I bicycle lane, which would be part of the Orange Blossom Trail alignment. Along this segment, both the pedestrian trail and the Class I bicycle lane would be located north of the Zanja channel with a soft fence consisting of a 30-inch-high post and rail wood fence separating the path from the channel. Additionally, along the north side of the Orange Blossom Trail bicycle path a 6-foot-high rubberized chain link fence would be installed. Along the route, interpretive way-finding and mile-marking signs would be installed. Removable lockable bollards would be installed at the trail entrances at 9th Street and Church Street to deter motorized vehicles from entering the trail. If necessary, the Orange Blossom Trail bicycle path would also serve as an access road for San Bernardino Flood Control District vehicles. Trash receptacles and dog waste removal units would be installed at road crossings. Native plantings and shade trees would be planted along the route.

Proposed site improvements would avoid work in the Zanja channel or the portions of its banks that have been designated as under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board and/or California Department of Fish and Wildlife.

Wendy (Jones) Blumel
Assistant Cultural Group Manager
ECORP Consulting, Inc.

From: Jessica Mauck [mailto:JMauck@sanmanuel-nsn.gov]
Sent: Monday, March 05, 2018 11:36 AM
To: Wendy Blumel
Subject: Zanja - 7th St and Church

Hi Wendy,

Thank you for reaching out to the San Manuel Band of Mission Indians (SMBMI) regarding the above referenced project, as evidenced by the voicemail you left for Director Clauss on 1 march 2018. The positive Sacred Lands File (SLF) concerns the Mill Creek Zanja, the Asistencia, Guachama (Guaaschna), and resources within the surrounding landscape. It is a TCR that has been often misunderstood by Agencies and CRM firms alike with regards to its heightened level of sensitivity to the Serrano people (as well as the nearby Gabrieleno, Cahuilla, and Luiseno groups). As a result, SMBMI had the landscape placed on the SLF so that I, as their representative, could work directly with the CRM firms prior to consultation on constructing a culturally appropriate narrative for nearby projects. If you would please provide a project location map, as well as any details regarding the depth of proposed disturbance for the project, I can get back to you with information for the cultural study within 24 hours.

Regards,

Jessica Mauck
Attachment C – Confidential Cultural Resource Site Locations and Site Records