

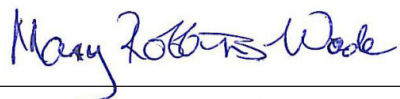
Shady View Residential Project

Cultural Resources Survey and Historical Evaluation

April 2022 | 01194.00002.001

Prepared for:

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Report Title: Cultural Resources Survey for the Shady View Residential Project, Chino Hills, California

Submitted to: City of Chino Hills

Type of Study: Cultural Resources Survey

New Sites: SH-S-002

Updated Sites: None

USGS Quad: Prado Dam 7.5' Quadrangle

Acreage: Approximately 130 acres

Key Words: San Bernardino County; Township 3 South, Range 7 West; Chino Hills; historic (mid-twentieth century) complex

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
AMSL	above mean sea level
APN	Assessor's Parcel Number
BLM	Bureau of Land Management
BP	before present
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
DPR	Department of Parks and Recreation
EIC	Eastern Information Center
GLO	General Land Office
HELIX	HELIX Environmental Planning, Inc.
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PRC	Public Resources Code
SCCIC	South Central Coastal Information Center
TCP	Traditional Cultural Properties
TCR	Tribal Cultural Resources
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey

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EXECUTIVE SUMMARY

The City of Chino Hills contracted HELIX Environmental Planning, Inc. (HELIX) to provide cultural resources services for the Shady View Residential Project (project) in the City of Chino Hills, San Bernardino County, California. The project is a proposed approximately 130-acre single-family residential subdivision. A cultural resources study including a records search, Sacred Lands File search, Native American outreach, a review of historic aerial photographs and maps, literature review and archival research, and a pedestrian survey was conducted for the project area. This report details the methods and results of the cultural resources study and has been prepared to comply with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA), as amended.

Records searches were received from the South Central Coastal Information Center (SCCIC) and Eastern Information Center (EIC) on February 5, 2021 and April 9, 2021, respectively. The results of the record searches indicated that 31 previous cultural resources studies have been conducted within one mile of the project area, one of which intersects within the project site and one of which is adjacent to it. The records search results also indicated that a total of 21 cultural resources have been previously recorded within one mile of the project area; however, no sites have been recorded within the project site prior to this study.

A Native American outreach program was conducted for this study, including a Sacred Lands File search and outreach with Native American representatives and interested parties, as identified by the Native American Heritage Commission (NAHC). The results of the Sacred Lands File search returned negative results on January 4, 2021. However, these results do not indicate the absence of sacred lands or tribal cultural resources. The NAHC provided a list of Native American representatives and interested parties to be contacted. HELIX mailed outreach letters requesting any additional information regarding sacred lands or tribal cultural resources within the project to the 10 contacts identified by the NAHC on January 15, 2021. To date, HELIX has not received any responses.

The field investigations included an intensive pedestrian survey of the project site by HELIX archaeologists and a Native American monitor on July 12 and 13, 2021. The survey did not identify any prehistoric resources within the project site. However, one site, a historic complex dating to the 1950s, was identified during the survey. The historic complex was recorded on the appropriate Department of Parks and Recreation (DPR) forms and assigned a temporary site number, SH-S-002, and was submitted to the SCCIC. At that time, no historic evaluation had been conducted for the site. To comply with CEQA and the NHPA, as well as the City's General Plan Action CN-2.3.5, a historic evaluation was conducted for the historic complex recorded as site SH-S-002 in March 2022. The result of this evaluation is that the site is not a significant resource (historical resource per CEQA or historic property per NHPA). Therefore, no impacts to historic resources are anticipated.

No prehistoric resources were identified within the project site during the record search or the survey. As such, no impacts to prehistoric resources are anticipated. However, the project site was covered by dense vegetation, obscuring the ground surface. Based on this, it is recommended that an archaeological and Native American monitoring program be implemented for ground-disturbing activities, in accordance with the City's General Plan Action CN-2.1.2 and CN-2.1.3.

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1.0 INTRODUCTION

The City of Chino Hills contracted HELIX Environmental Planning, Inc. (HELIX) to provide cultural resources services for the Shady View Residential Project (project) in the City of Chino Hills, San Bernardino County, California. The project is a proposed approximately 130-acre single-family residential subdivision. A cultural resources study including a records search, Sacred Lands File search, Native American outreach, a review of historic aerial photographs and maps, literature review and archival research, and a pedestrian survey was conducted for the project area. This report details the methods and results of the cultural resources study and has been prepared to comply with the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

1.1 PROJECT LOCATION

The project is located in the City of Chino Hills (City) in southwestern San Bernardino County (Figure 1, *Regional Location*). The project is located east of Chino Hills State Park and west of State Route 71 (SR 71) within Section 7 of Township 3 South, Range 7 West, on the U.S. Geological Survey (USGS) 7.5' Prado Dam quadrangle (Figure 2, *USGS Topography*). The approximately 130-acre project site is located at the southern terminus of Shady View Drive within Assessor's Parcel Number (APN) 1057-261-06 (Figure 3, *Aerial Photograph*). The City's corporate boundary and the San Bernardino County/Riverside County boundary are adjacent to the east of the project site.

1.2 PROJECT DESCRIPTION

The project proposes the development of a single-family residential subdivision. The proposed subdivision would consist of 159 single-family residential homes including 53 single-story homes and 106 two-story homes, a community recreation center, private interior streets, debris basins, utility infrastructure, and other associated improvements. Additionally, the project includes approximately 73 acres of homeowners' association-maintained open space. Site work and grading are expected to occur west of the proposed residential development to allow for stabilization of the existing earthquake fault and relocation of an existing battery of three oil and water storage tanks and existing oil transmission lines. The relocated aboveground battery of three oil and water storage tanks is proposed in the northwestern portion of the project site on a 1.36-acre lot, near the western project boundary and west of the proposed residential structures. However, the tank would be separated from the proposed residences by the extension of Via La Cresta, an ascending slope, an access road, and a berm.

The proposed residential lots and recreation center will be developed on approximately 32.2 acres in the northern and eastern portions of the project site, the aboveground battery of three oil and water storage tanks will be relocated to the northwestern portion of the project site, and the project includes approximately 73 acres of open space (Figure 4, *Site Plan Concept*). Project construction activities would consist of demolition of existing oil tanks and associated piping; removal of split wood and beehive uses; site preparation; grading; installation of underground utilities, debris basins, and internal private streets; tank construction; building construction; and architectural coatings.

Construction activities would occur in four phases: (1) clearing and site grading; (2) horizontal building foundation; (3) vertical building construction; and (4) paving and concrete work and landscape installation. Typical construction equipment for the proposed project would include concrete/industrial

saws, dozers, tractors/loaders/backhoes, graders, excavators, cranes, forklifts, welders, cement and mortar mixers, pavers and paving equipment, rollers, and air compressors. Grading would include approximately 2,107,000 cubic yards of cut and approximately 2,114,000 cubic yards of fill; lot and utility spoils would be utilized to balance the site, and no import or export associated with grading is expected to occur. Additionally, it is expected that some soil near the existing oil tanks would be classified as non-hazardous petroleum-impacted soil and would require export off-site.

The community recreation center would be located on an approximately one-acre parcel within the residential area. The community recreation center would include an outdoor 1,500-square-foot, resort-style swimming pool, pool deck, pool building, a play structure, a barbeque area, and a parking lot. The project includes a pocket park in the northeast portion of the development and a bocce ball court and a seating area in the southern portion of the proposed development. The pocket park would be approximately 0.2 acre and would include turf and benches for seating. The project would include six additional landscaped lots with grass areas for recreational use

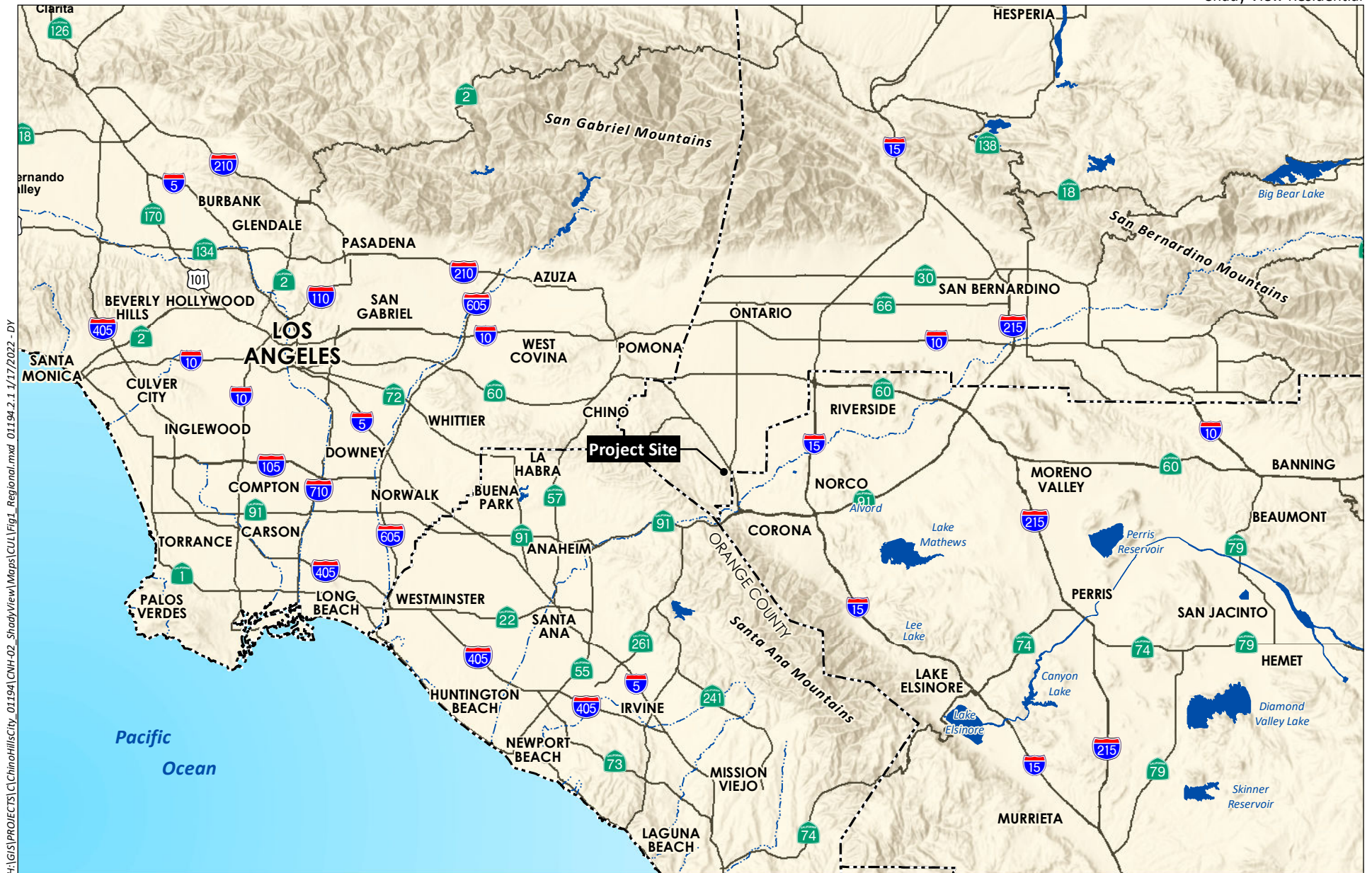
The project includes a total of approximately 73 acres of open space. The 73 acres consist of open space areas within the residential portion of the site, manufactured and restored open space areas, and natural open space. The project would include eight landscaped open space lots, including a pocket park and a bocce ball court, two landscape buffer areas, and two slope access areas within the residential development area, totaling 1.46 acres of open space. Manufactured and restored open space areas would consist of manufactured slopes, two landscape lots with slope access, two landscape buffer areas, and slope access and would cover approximately 21 acres. These manufactured and restored open space areas would be located along the northern and eastern property boundaries, around the proposed tank location, and adjacent to the southwest of the existing fault line in the central portion of the project site. Natural open space areas would be maintained in the southwest portion of the project site, covering approximately 51 acres. This natural open space area would include unimproved walking/hiking trails and would be preserved via an open space easement or deed restriction.

The project would include the extension of Via La Cresta and Shady View Drive from their existing termini in the Butterfield Ranch development to the north. Via La Cresta would be extended in a southeast direction into the project site, and Shady View Drive would extend to the southwest to intersect the extension of Via La Cresta. Via La Cresta and Shady View Drive would provide the two access points into the proposed development. The project includes the construction of 11 internal private streets to provide access throughout the development.

Utility infrastructure would be extended to the site. Currently, there is sewer, water, storm drainage, electric power, natural gas, and telecommunications infrastructure in the Butterfield Ranch development adjacent to the north. Utility infrastructure to the site would be extended from these locations to service the proposed project. Electric power, natural gas, and telecommunications services would be private and would be extended to the project site by the utility service providers, connecting to the existing distribution systems for each utility. Storm drain and sewer facilities would be private and would be maintained by the homeowners' association. Water systems would be public but maintained by the homeowners' association.

1.3 REGULATORY FRAMEWORK

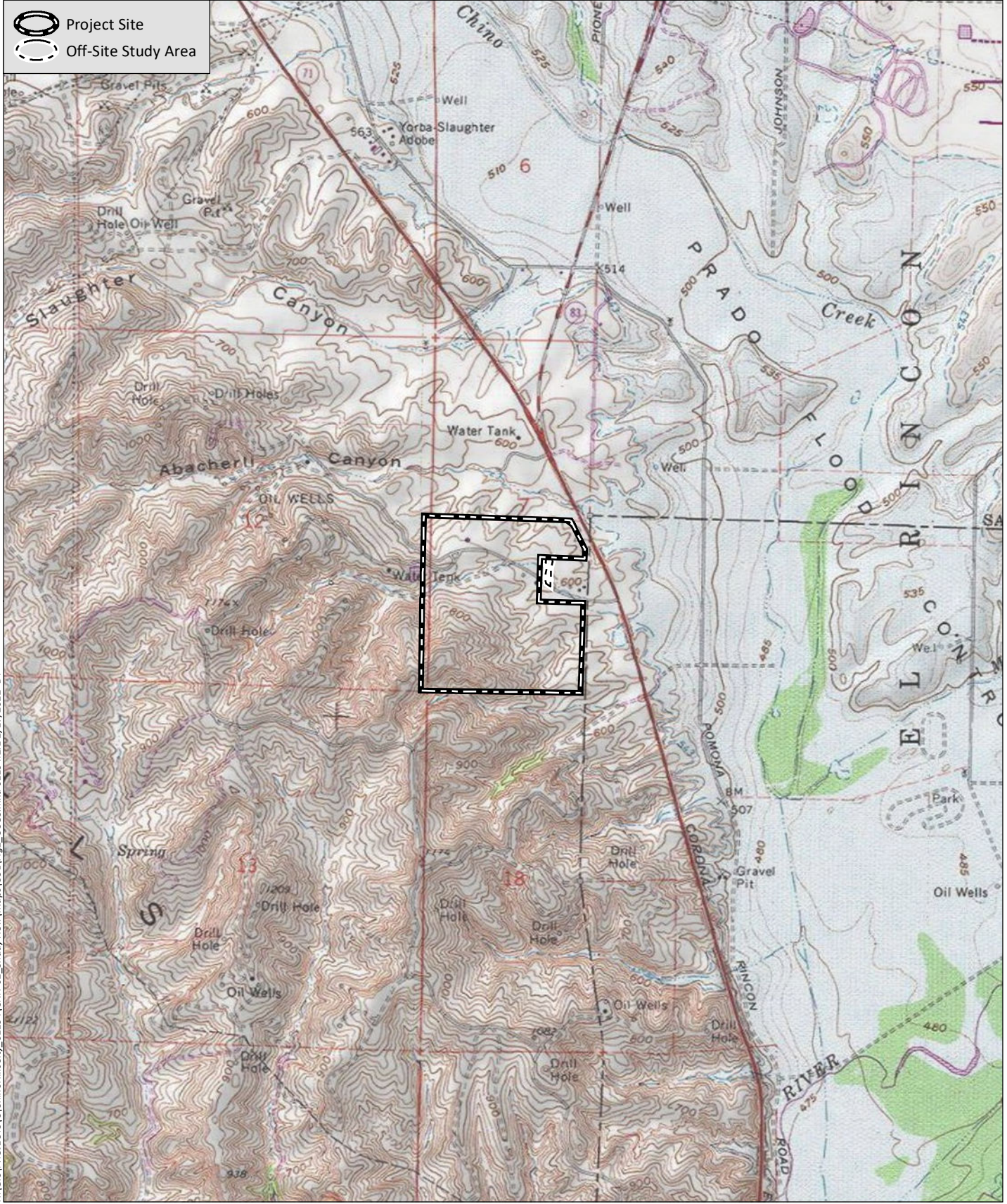
Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, and/or scientific importance. Significant resources are



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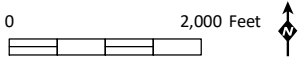
Source: Base Map Layers (ESRI, 2013)



○ Project Site
○ Off-Site Study Area



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Source: Prado Dam 7.5' Quad (USGS)



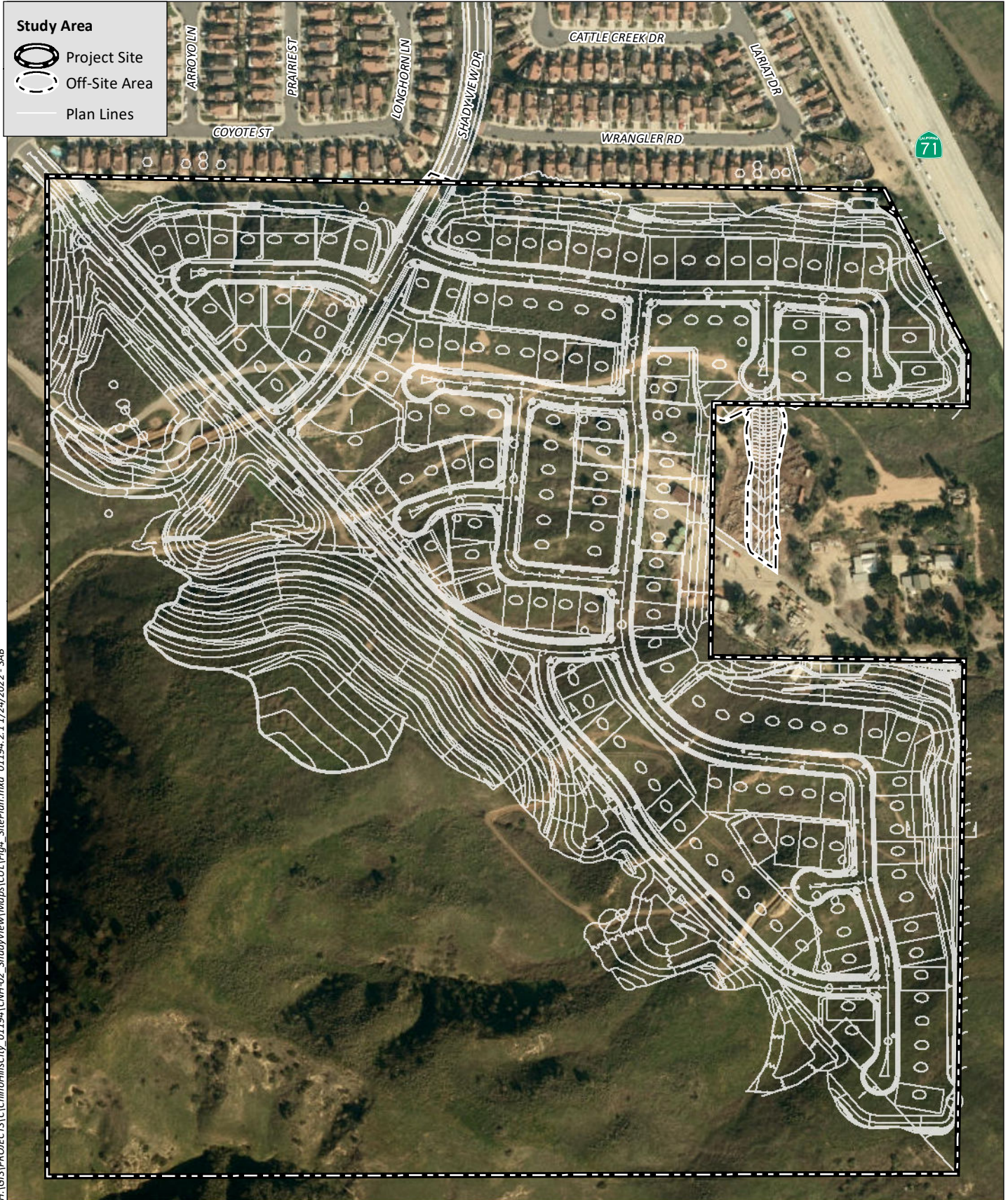
-  Project Site
-  Off-Site Study Area



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Source: Aerial (NAIP, 2018)



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Source: Aerial (County of San Bernardino, 2020)

those resources that have been found eligible to the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP), as applicable.

1.3.1 National Historic Preservation Act

Federal regulations that would be applicable to the project if there is a federal nexus consist of the National Historic Preservation Act and its implementing regulations (16 United States Code 470 et seq., 36 Code of Federal Regulations [CFR] Part 800). Section 106 of the NHPA requires Federal agencies to consider the effects of their undertakings on “historic properties”, that is, properties (either historic or archaeological) that are eligible for the NRHP. To be eligible for the NRHP, a historic property must be significant at the local, state, or national level under one or more of the following four criteria:

- A. associated with events that have made a significant contribution to the broad patterns of our history;
- B. associated with the lives of persons significant in our past;
- C. embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
- D. has yielded, or may be likely to yield, information important in prehistory or history.

1.3.2 California Environmental Quality Act

The California Environmental Quality Act, Public Resources Code (PRC) 21084.1, and California Code of Regulations (CCR) Title 14 Section 15064.5 address determining the significance of impacts to archaeological and historic resources and discuss significant cultural resources as “historical resources,” which are defined as:

- resource(s) listed or determined eligible by the State Historical Resources Commission for listing in the CRHR (14 CCR Section 15064.5[a][1])
- resource(s) either listed in the National Register of Historic Places (NRHP) or in a “local register of historical resources” or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, unless “the preponderance of evidence demonstrates that it is not historically or culturally significant” (14 CCR Section 15064.5[a][2])
- resources determined by the Lead Agency to meet the criteria for listing on the CRHR (14 CCR Section 15064.5[a][3])

For listing in the CRHR, a historical resource must be significant at the local, state, or national level under one or more of the following four criteria:

1. 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 United States;
2. It is associated with the lives of persons important to local, California, or national history;

3. 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; and/or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Under 14 CCR Section 15064.5(a)(4), a resource may also be considered a “historical resource” for the purposes of CEQA at the discretion of the lead agency.

1.3.3 Integrity

Significant resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Resource integrity, which is the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance, is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. In an archaeological deposit, integrity is assessed with reference to the preservation of material constituents and their culturally and historically meaningful spatial relationships. A resource must also be judged with reference to the particular CRHR/NRHP criteria under which it is proposed for eligibility.

Under Section 106 of the NHPA, actions that alter any of the characteristics that qualify a property for eligibility for listing in the NRHP “in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5[a]) constitute an adverse effect to the historic property.

1.3.4 City of Chino Hills

The City of Chino Hills General Plan (2015) contains the following policies that are relevant to cultural resources:

Policy CN-2.1: Protect Chino Hills’ archaeological resources.

Action CN-2.1.1: Require appropriate archaeological surveys as part of the environmental review process where archaeological resources may be present.

Action CN-2.1.2: Require on-site inspections by a qualified archaeologist during grading activities where archaeological resources may be present.

Action CN-2.1.3: Where archaeological resources are found during development activities, require identified archaeological materials to be preserved, restored, cataloged, and/or transmitted to the appropriate repository or as otherwise directed by a qualified professional archaeologist.

Action CN-2.1.4: Consult with local Native American tribes as required to avoid impacts on archaeological resources.

Policy CN-2.3: Protect Chino Hills’ potential historical resources.

Action CN-2.3.1: Prior to a change of land use or other action on the Boys Republic property that could disturb a potential historic resource, require a historic resource survey of the property by a

qualified historic resource consultant, and consider incorporating any recommendations as requirements into subsequent development approval.

Action CN-2.3.2: Prior to a change of land use or other action on the Tres Hermanos property that could disturb a potential historic resource, require a historic resource survey of the property by a qualified historic resource consultant, and consider incorporating any recommendations as requirements into subsequent development approval.

Action CN-2.3.3: Prior to grading on-site of the original clubhouse of the 1925 Los Serranos Country Club, require an appropriate archaeological survey to determine the presence of artifacts associated with the former Bridger/Gird Adobe site and consider incorporating any recommendations as requirements into subsequent development approval.

Action CN-2.3.4: Consider the placement of markers to acknowledge the local importance to Chino Hills' history of the Carbon Canyon and English Road equestrian communities.

Action CN-2.3.5: For structures over 45 years old, review available City building records and make a determination regarding the structure's potential historical significance prior to permitting its demolition or substantial alteration.

1.3.5 Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

Potentially relevant to prehistoric archaeological sites is the category termed Traditional Cultural Properties (TCP) in discussions of cultural resource management performed under federal auspices. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Cultural resources can include TCPs, such as gathering areas, landmarks, and ethnographic locations, in addition to archaeological districts. Generally, a TCP may consist of a single site, or group of associated archaeological sites (district or traditional cultural landscape), or an area of cultural/ethnographic importance.

In California, the Traditional Tribal Cultural Places Bill of 2004 requires local governments to consult with Native American Tribes during the project planning process, specifically before adopting or amending a General Plan or a Specific Plan, or when designating land as open space for the purpose of protecting Native American cultural places. The intent of this legislation is to encourage consultation and assist in the preservation of Native American places of prehistoric, archaeological, cultural, spiritual, and ceremonial importance. State Assembly Bill (AB) 52, effective July 1, 2015, introduced the Tribal Cultural Resource (TCR) as a class of cultural resources and additional considerations relating to Native American consultation into CEQA. As a general concept, a TCR is similar to the federally defined TCP; however, it incorporates consideration of local and state significance and the required mitigation under CEQA. A TCR may be considered significant if included in a local or state register of historical resources; or

determined by the lead agency to be significant pursuant to criteria set forth in PRC §5024.1; or is a geographically defined cultural landscape that meets one or more of these criteria; or is a historical resource described in PRC §21084.1, a unique archaeological resource described in PRC §21083.2; or is a non-unique archaeological resource if it conforms with the above criteria.

1.4 PROJECT PERSONNEL

Mary Robbins-Wade, M.A., RPA served as principal investigator and provided senior technical oversight for this study; Ms. Robbins-Wade meets the qualifications of the Secretary of Interior's Standards and Guidelines for archaeology. Theodore G. Cooley M.A., RPA, James Turner, M.A., RPA, Kassie Sugimoto, M.A., Teri Delcamp, M.A., and Trevor Gittelhough, M.A., RPA served as report contributors. Julie Roy, B.A. led the field survey and served as a report contributor. HELIX archaeologists Kent Smolik, B.A., and Mary Villalobos, B.A. and Christina Conley from Gabrielino Tongva Indians of California participated in the pedestrian survey. Resumes for key project personnel are presented in Appendix A.

2.0 PROJECT SETTING

2.1 NATURAL SETTING

The project area is situated in the Chino Hills along the western edge of the San Bernardino Valley in a western mountain and foothill area of San Bernardino County. The San Gabriel, San Bernardino, and San Jacinto Mountains form the northern, eastern, and southern sides of the valley, respectively, and the Santa Ana Mountains lie immediately to the southwest of the project area. The area is characterized as a hot-summer Mediterranean climate with mild winters and hot, dry summers. The elevation of the project area ranges from approximately 550 to 1,075 feet above mean sea level (AMSL).

The project area is characterized predominantly by open natural hill areas with an immediately adjacent residential development to the north. Areas surrounding the project area include transportation infrastructure and residential, recreational, and commercial development. Chino Creek and the Santa Ana River, and the Prado Dam and flood control basin are located in proximity to the east and south.

Geologically, the project area is underlain mostly by upper Miocene nonmarine, sedimentary rocks variously consisting of sandstone, siltstone, shale, conglomerate, and breccia. Early to middle Pleistocene terrace deposits are present along Chino Creek along the eastern margin of the project area (Rogers 1965). Four soil series are mapped for the project site: Alo clay (30 to 50 percent slopes), Garretson very fine sandy loam (2 to 9 percent slopes), Soper gravelly loam (15 to 30 percent slopes), and Soper gravelly loam (30 to 50 percent slopes) (Natural Resources Conservation Service 2021). The Soper series soils predominate in the project area, with the Soper gravelly loam (15 to 30 percent slopes) present mostly in the northern third of the project area and the Soper gravelly loam (30 to 50 percent slopes) within the south and western portions of the area. The Garretson very fine sandy loam (2 to 9 percent slopes) is present along two small east-west drainage courses through the project area, and the Alo clay is present only in one small area in the southernmost part of the project area.

Prehistorically, the natural vegetation in the project area and vicinity likely would have consisted of the sage scrub and grassland communities with the riparian and freshwater marsh communities present along the adjacent Chino Creek and Santa Ana River drainages. The sage scrub community would have covered most of the hills and minor canyon areas, with interspersed areas of native grasslands.

Chaparral would have been present in the upper elevations of the nearby Santa Ana Mountains to the south. Plants of the sage scrub community include California sagebrush (*Artemisia californica*), white sage (*Salvia apiana*), flat-top buckwheat (*Eriogonum fasciculatum*), broom baccharis (*Baccharis sarothroides*), wild onion (*Allium haematochiton*), laurel sumac (*Malosma laurina*), San Diego sunflower (*Bahiopsis laciniata*), golden-yarrow (*Eriophyllum confertiflorum*), sawtooth goldenbush (*Hazardia squarrosa*), yucca (*Yucca schidigera*, *Hesperoyucca whipplei*), prickly pear cactus (*Opuntia* sp.), and scrub oak (*Quercus dumosa*). Native grassland plants include *Stipa*, *Elymus*, *Poa*, and *Muhlenbergia*. Riparian vegetation includes plants such as western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), coast live oak (*Quercus agrifolia*), and willow (*Salix* sp.). Plants common to freshwater marsh include reed grass (*Phragmites australis*), marsh mallow (*Kosteletzkya virginica*), soft rush (*Juncus effusus*), pickerelweed (*Pontederia cordata*), narrow-leaved cattail (*Typha angustifolia*), and button bush (*Cephalanthus occidentalis*) (Hall 2007; Munz 1974).

Major wildlife species found in these environments prehistorically include mammals such as coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), grizzly bear (*Ursus arctos*), mountain lion (*Puma concolor*), desert cottontail (*Sylvilagus audubonii*), and jackrabbit (*Lepus californicus*); reptiles such as western pond turtle (*Actinemys marmorata*), Southern Pacific diamondback rattlesnake (*Crotalus oreganus helleri*), gopher snake (*Pituophis melanoleucus catenifer*), and several lizard species; and various rodents, the most notable of which are the valley pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), and dusky footed woodrat (*Neotoma fuscipes*) (Burt and Grossenheider 1976; Stebbins 1966). Desert cottontails, jackrabbits, and rodents were very important to the prehistoric diet; deer were somewhat less significant for food, but were an important source of leather, bone, and antler. Many of the plant and animal species naturally occurring in the project vicinity are known to have been used by native populations for food, medicine, tools, ceremonial, and other uses (Bean and Saubel 1972; Bean and Smith 1978; Hedges and Beresford 1986; Johnston 1962). Chino Creek and the Santa Ana River, as well as Abacherli Canyon, would likely have made fresh water easily accessible to native populations living in the area.

2.2 CULTURAL SETTING

2.2.1 Prehistoric Period

The study area is located in the Chino Hills along lower Chino Creek near the confluence with the Santa Ana River in western San Bernardino County. Moratto (1984) has previously defined eight archaeological regions and 16 subregions for California. The location of the project in western San Bernardino County places it within the boundary of the San Diego subregion of the Southern Coast Region, but it is also located adjacent to the boundary with the Colorado River subregion of the Desert Region (Moratto 1984: 148, Figure 4.13). The following culture history outlines and briefly describes the known prehistoric cultural Traditions and chronology of archaeological sites in the vicinity of the project. The approximately 12,000 years of documented prehistory of the region has often been divided into three periods: Early Prehistoric Period (San Dieguito Tradition/complex), Archaic Period (Milling Stone Horizon, Encinitas Tradition, La Jolla, and Pauma complexes), and Late Prehistoric Period (San Luis Rey complex).

2.2.1.1 Early Prehistoric Period

The Early Prehistoric Period represents the time of the entrance of the first known human inhabitants into California. In some areas of California, it is referred to as the Paleo-Indian period and is associated

with the Big-Game-Hunting activities of the peoples of the last Ice Age occurring during the Terminal Pleistocene (pre-10,000 years ago) and the Early Holocene (beginning circa 10,000 years ago) (Erlandson 1994, 1997; Erlandson et al. 2007). In the western United States, the most substantial evidence for the Paleo-Indian or Big-Game-Hunting peoples derives from finds of large, fluted spear and projectile points (Fluted Point Tradition) at sites in places such as Clovis and Folsom in the Great Basin and the Desert Southwest (Moratto 1984:79–88). In California, most of the evidence for the Fluted Point Tradition derives principally from areas along the western margins of the Great Basin, including the eastern Sierras and the Mojave Desert, and in the southern Central Valley (Dillon 2002; Rondeau et al. 2007). Despite a few isolated occurrences of fluted points in the San Diego subregion (Dillion 2002; Kline and Kline 2007; Rondeau et al. 2007), including one in nearby Orange County (Fitzgerald and Rondeau 2012), and in Baja California (Des Lauriers 2008; Hyland and Gutierrez 1995), none have been found, to date, in the western Riverside or San Bernardino counties area of the subregion (Dillon 2002; Rondeau et al. 2007).

The earliest archeological sites in the San Diego subregion, documented to be over 10,000 years old, belong not to Fluted Point Tradition, but to the San Dieguito Tradition (Warren et al. 1998; Warren and Ore 2011). The San Dieguito Tradition is defined by an artifact assemblage suggestive of a focus on hunting but lacking the distinctive fluted points associated with the Fluted Point Tradition. While the tradition has so far been documented principally in the coastal and near coastal areas in San Diego County (Carrico et al. 1993; Rogers 1966; True and Bouey 1990; Warren 1966; Warren and True 1961), as well as in the southeastern California deserts (Rogers 1939, 1966; Warren 1967), some evidence for it has been recently discovered in the eastern mountains of San Diego County (Pignoli 2005) and at a site in a coastal area to the north in Los Angeles County (Sutton and Grenda 2012). The content of the earliest component of the C.W. Harris Site (CA-SDI-149), located along the San Dieguito River in San Diego County, approximately 66 miles to the south of the project area, formed the original basis upon which Warren and others (Rogers 1966; Warren 1966, 1967; Warren and True 1961) identified the “San Dieguito complex,” which Warren later reclassified as the San Dieguito Tradition (1968). This tradition is characterized by an artifact inventory consisting almost entirely of hunting-associated flaked stone biface and scraping tools, including elongated bifacial knives, leaf-shaped projectile points, domed scrapers, crescentics, and, in the desert, Silver Lake and Lake Mojave projectile points (Knell and Becker 2017; Rogers 1939; Vaughan 1982; Warren 1967). The abundance of hunting-associated tools and the paucity of ground stone tools in the San Dieguito assemblage has led to a characterization of the Tradition/complex, by some researchers, as having a primarily, but perhaps not exclusively, hunting subsistence orientation, that was distinct from the more gathering-oriented complexes of traits that were to follow in the Archaic Period (Warren 1968; Warren et al. 1998). Other researchers see the San Dieguito subsistence system as a developmental stage for the predominantly gathering-oriented Encinitas Tradition, denoted in the San Diego area as the “La Jolla/Pauma complex” in the subsequent Archaic Period (cf. Bull 1983, 1987; Ezell 1987; Gallegos 1985, 1987, 1991; Koerper et al. 1991). As with the Fluted Point Tradition, however, despite occurrences in adjacent areas, no definite evidence of the San Dieguito Tradition has been documented, to date, in the western Riverside or San Bernardino counties area.

2.2.1.2 Archaic Period

In contrast to the traditions of the previous Early Prehistoric Period, during the subsequent Archaic Period, artifact assemblages of the Milling Stone Horizon/Encinitas Tradition occur at a range of coastal and adjacent inland sites and are relatively common in the study area region (Grenda 1997; Sutton and Gardner 2010). Warren has proposed that, during the Archaic Period in the south coastal region, the

Encinitas Tradition began circa 8,500 years ago and extended essentially unchanged until circa 1,500 years ago, indicating that a relatively stable, sedentary, predominantly gathering complex, possibly associated with one people, was present in the coastal and immediately inland areas of southern California, extending from the beginning of the Archaic Period for more than 7,000 years (Warren 1968).

While Warren originally characterized the Encinitas Tradition spanning the time of the Archaic Period as being a relatively stable time of sedentary settlement with subsistence based predominantly on gathering activities, and possibly associated with one people, it has also been noted by Warren and others that during the latter part of the Archaic Period, in the coastal region, beginning somewhere north of San Diego and extending to Santa Barbara, evidence of a cultural assemblage distinctive from this settlement and subsistence pattern could also be discerned. This assemblage and time period has been variously designated as the Intermediate Horizon (Wallace 1955) or Campbell Tradition (Warren 1968) and has been delineated as following the Milling Stone Horizon/Encinitas Tradition during the period in some southern California coastal areas. The assemblage is distinguished from earlier Archaic Period assemblages by the presence of large projectile points and milling tools such as the mortar and pestle, indicating the occurrence of new subsistence practices. The time period of this assemblage is viewed as beginning circa 4,800 years ago and continuing to as late as 1,300 years ago (Warren 1968). While still a matter of some debate, in the southernmost coastal region, Warren and others (1998) have subsequently termed this time period, encompassing the extent of the Intermediate/Campbell cultural assemblage, as the Final Archaic Period.

In the western San Bernardino County area, Sutton and Gardner have identified early Archaic Period assemblages at sites near Yucaipa and Fontana, and in Prado Basin, which is adjacent to the project area (2010:26). Site CA-SBR-5096, in the Prado Basin area, has produced “manos and metates, a pinto point and an unknown number of coggled stones and discoidals” (Sutton and Gardner 2010:26). To the south of the study area, in the western Riverside County area, early archaeological investigations conducted at several archaeological sites in Perris Valley for the Perris Reservoir project produced only a single radiocarbon date of circa 2200 years before present (BP) and a few diagnostic artifacts as the only evidence for a late Archaic Period occupation in the western Riverside County region (Bettinger 1974:159-162). Investigations at another site, CA-RIV-1806, in the mountains northwest of Temecula, also produced a radiocarbon date for the Late Archaic Period of circa 2775 BP (McCarthy 1986:73). More recently, large-scale archaeological investigations were conducted at the Lake Elsinore site 26 miles to the south of the project area (Grenda 1997:3). Archaeological investigations conducted at CA-RIV-2798, located along the old lake shoreline, indicated occupation as early as 8,500 years ago (Grenda 1997). Also, a recent archaeological investigation conducted in the San Jacinto Valley at site CA-RIV-6069 has produced an early Archaic Period assemblage and occupation as early as 9,400 years ago (Horne and McDougall 2008:91).

Another relatively recent archaeological investigation conducted in the general vicinity of the project area has also produced evidence for prehistoric occupation in the western Riverside County area during the earliest part of the Archaic Period. The Eastside Reservoir (Diamond Valley Lake) Project, located approximately 26 miles southeast of the study area, involved construction, within the adjacent Domenigoni and Diamond valleys, of the Diamond Valley Lake reservoir and the associated Eastside Reservoir Project (Goldberg 2001; Robinson 2001). Based on the results from this project, the researchers developed a local chronology specific to the Domenigoni and Diamond valleys based on projectile point style changes and associated radiocarbon dates (Robinson 2001). The terminology in this chronology resembles that already presented above, with the period from 9,500 to 7,000 years ago

designated as the Early Archaic period, the period from 7,000 to 4,000 years ago as the Middle Archaic, and the period from 4,000 to 1,500 years ago as the Late Archaic. In the Eastside Reservoir Project, only two components could be firmly dated to the Early Archaic, but sparse evidence of Early Archaic activity was noted in six other localities. One site, however, produced two radiocarbon dates of 9190±50 and 9310±60 BP (McDougall 2001). For the Middle Archaic, firm evidence was documented in 14 locations, with other traces at four other sites. During the Late Archaic, a profusion of activity and occupation was evident, with 23 firmly dated site components and sparse evidence at eight other localities (Goldberg 2001:524).

Thus, prehistoric occupation during the Archaic Period in the study area vicinity is documented to have occurred possibly as early as 9,300 years ago, and remained present to the end of the period, approximately 1,500 years ago. While this temporal extent correlates with Warren's original proposed extent of the Encinitas Tradition, refinement of his characterization of the Tradition as being a relatively stable, sedentary, predominantly gathering complex, possibly associated with one people, and with an extent mostly restricted to the San Diego County area, may now, based on new information available from western San Bernardino and Riverside counties, be subject to some revision (cf. Sutton and Gardner 2010).

2.2.1.3 Late Prehistoric Period

Some of the early archaeological investigations conducted in the vicinity of the project area to the south in the western Riverside area produced considerable evidence of occupation in the area during the Late Prehistoric Period. One of the few early studies to occur in this area was conducted near Temecula in the early 1950s at a site identified as the ethnohistoric village of Temeku (McCown 1955). The investigation produced a substantial, primarily Late Prehistoric Period, artifact assemblage. Another study consisted of investigations at several sites in the 1970s for the construction of the Perris Reservoir (O'Connell et al. 1974, eds). The results, which included several radiocarbon dates, indicated a predominance of occupation at the sites during the Late Prehistoric Period, after AD 1500 (Bettinger 1974:159-162).

The beginning of the Late Prehistoric Period in the southern coastal region, circa 1,500 years ago, is seen as marked by a number of rather abrupt changes. The magnitude of these changes and the short period of time within which they took place are reflected in significant alteration of previous subsistence practices and the adoption of significant new technologies. As discussed further below, some of this change may have been a result of significant variations in the climatic conditions. Subsistence and technological changes that occurred include a shift from hunting using atlatl and dart to the bow and arrow; a de-emphasizing of shellfish gathering along some areas of the coast (possibly due to silting-in of the coastal lagoons); and an increase in the storage of crops, such as acorns and pinyon nuts. Other new traits introduced during the Late Prehistoric Period include the production of pottery and cremation of the dead, and, locally, in the western Riverside and western San Bernardino counties area, a shift in settlement pattern is apparent (cf. Wilke 1974).

This shift in settlement is first noted during the early part of the period from 1,500 to 750 years ago and is evidenced, locally, in the results from the Eastside Reservoir Project by a rather sudden decline in occupation in the local area during the initial part of the period. This 750-year period was termed by the Eastside Reservoir researchers as the Saratoga Springs Period, following Warren's (1984) desert terminology. This period can also be seen to partially coincide with a warm and arid period known as the Medieval Warm Period, documented to have occurred between approximately 1,100 and 600 years ago

(Jones et al. 1999; Kennett and Kennett 2000; Stine 1994). During this period, at least two episodes of severe drought have also been demonstrated, the first calibrated to between 1060 and 840 BP and the second between 740 and 650 BP (Goldberg 2001; Stine 1994). While sites dating to this period are not absent in western Riverside County (e.g., Goldberg 2001; Keller and McCarthy 1989; McCarthy 1987:34), Goldberg hypothesized that the Medieval Warm Period could account for the decline in sites occurring in the Eastside Reservoir Project area during the Saratoga Springs Period (1500 to 750 BP), claiming that desert and inland areas of western Riverside County, such as where the Eastside Reservoir Project is located, would no longer be suitable to support residential bases. Goldberg (2001) further hypothesized that settlements would possibly be clustered at more suitable water sources during this time, such as at the coast, Lake Cahuilla, or Lake Elsinore (cf. Wilke 1974). While a decline was noted during the initial part of the Saratoga Springs Period, subsequently, during the latter part of the period, during the time of the Medieval Warm Period, a reoccupation began to occur (Goldberg 2001:578). According to Goldberg, “When components dating to the Medieval Warm segment of the Saratoga Springs Period are segregated and combined with Medieval Warm components from the Late Prehistoric Period, it shows that the frequency of refuse deposits and artifact and toolstone caches during the Medieval Warm is slightly higher than during the Late Archaic and much higher than during the later portion of the Late Prehistoric Period” (2001:578).

In the Eastside Reservoir Project, the Late Prehistoric Period was defined as extending from the end of the Saratoga Springs Period (750 BP) to 410 BP. A subsequent Protohistoric Period was also defined as extending from 410 to 150 BP. The Late Prehistoric Period (750 to 410 BP) was characterized by the presence of Cottonwood points, although research indicated that Cottonwood points had actually begun to appear in the Eastside Reservoir Project study area as early as 950 BP. Ceramics and abundant obsidian began to appear around the time of the Cabrillo exploration in AD 1542, and so this date (i.e., circa 410 BP), until the establishment of the mission system in the late 1700s, was defined as the Protohistoric Period (Robinson 2001). It should also be noted that the end of the Saratoga Springs Period and the beginning of the Late Prehistoric Period, 750 BP, also coincides with the onset of the Little Ice Age, generally dated from 750 to 150 BP (Goldberg 2001; Sutton et al. 2007). During this period, the climate was cooler and moister, and the sites identified within the Eastside Reservoir Project study area reflected a substantial increase in number and diversity, longer occupation periods, and more sedentary land use. Similar intensification of land use also occurred during this time in neighboring San Geronimo Pass (Bean et al. 1991) and Perris Valley (Wilke 1974).

2.2.2 Ethnohistory

The project area lies within the southern extent of the territory commonly ascribed to the Gabrielino (also written as Gabrieleno or Gabrieleño) Native American peoples (Bean and Smith 1978; Johnston 1962; Kroeber 1925:Plate 57). Aliso Creek in Orange County is considered as the southern boundary of the Gabrielino (Tongva) territory, bordering with their neighbors immediately to the south, the Juaneño (Acjachemen) and those to the southeast, the Luiseño. Their neighbors to the east were the Serrano, and to the north, the Fernandeño (Kroeber 1925). With the exception of the Serrano, an inland people, the names for these groups are based on their associations, post-European contact, with either Mission San Gabriel, Mission San Juan Capistrano, Mission San Luis Rey, or Mission San Fernando, while “Serrano” in Spanish equates to mountain people. All of these groups are Uto-Aztecan, Takic language speakers. The Juaneño were closely related to the Luiseño, so closely, in fact, that some researchers have seen little distinction between them (Bean and Shipek 1978; White 1963). Likewise, the Gabrielino and Fernandeño are also closely related, with some researchers also seeing little to distinguish them from each other (Bean and Smith 1978:538; Johnston 1962:6).

At the time of European contact, the Gabrielino, together with the closely related Fernandefño, occupied a large territory that included the entire Los Angeles Basin and beyond. This territory stretched along the Pacific coast from Aliso Creek in Orange County to Malibu and included parts of the Santa Monica Mountains, the San Fernando Valley, the San Gabriel Valley, the San Bernardino Valley, a northern portion of the Santa Ana Mountains, much of the middle to lower Santa Ana River basin as well as the islands of Santa Catalina, San Clemente, and San Nicolas (Bean and Smith 1978; Kroeber 1925). The Luiseño/Juaneño extended from the southern Orange County area, south into northern San Diego County and east into Riverside County, while Serrano occupied the San Bernardino Mountain areas of San Bernardino and Riverside counties.

Prior to contact, the Gabrielino and their neighbors subsisted by hunting and gathering practices, using resources available in the natural environment. Due to a dearth of ethnographic information on Gabrielino social structure (Bean and Smith 1978:543), the better-described social structure of the related Luiseño/Juaneño is frequently used (e.g., White 1963) to infer the social structure of the Gabrielino (Hudson 1971:70). Studies of the Luiseño/Juaneño indicate that within their territory, the village territorial units were fairly small, on the order of 30 square miles (78 square kilometers [km²]) according to White (1963). Based on the distribution of known villages along the San Luis Rey River in northern San Diego County, however, Oxendine (1983) suggests that rancheria (village) territories may have been as small as four square miles (10 km²) but notes that lineages or bands may have held gathering tracts in discontinuous areas. Within the larger territory occupied by the Gabrielino were more than 50 residential communities, with populations ranging from 50 to 150 individuals (Bean and Smith 1978). Prehistorically, the distribution of such village units generally correlated with available water sources such as drainages and springs (Koerper et al. 2002:64; True 1990). Kroeber (1925:Plate 57) and Johnston (1962) identify a Gabrielino village in possible proximity to the project area, east of Chino Creek. Kroeber (1925:621, Plate 57) identifies the village as Pasino or *Pashina*; Johnston identifies it as *Pasinongna* and describes it as being located on the Rancho del Chino (1962:138).

2.2.3 Historical Background

2.2.3.1 Spanish Period

The first documented Spanish contact in what is now Riverside County was by Spanish military captain Juan Bautista de Anza, who led expeditions in 1774 and 1775 from Sonora to Monterey (Bolton 1930). Anza embarked on the initial expedition to explore a land route northward through California from Sonora, with the second expedition bringing settlers across the land route to strengthen the colonization of San Francisco (Rolle 1963). Anza's route led from the San Jacinto Mountains northwest through the San Jacinto Valley, which was named "San José" by Anza. Little documentation exists of Anza's route being used after the two expeditions, although it was likely used to bring Spanish supplies into the newly colonized Alta California (Lech 2004). In 1781, the Spanish government closed the route due to uprisings by the Yuman Indians. However, by that time, the missions were established and self-sufficient; thus, the need for Spanish supplies from Sonora had begun to diminish.

In the 1810s, ranchos and mission outposts called *asistencias* were established, increasing the amount of Spanish contact in the region. An *asistencia* was established in Pala in 1818 and in San Bernardino in 1819. Additionally, Rancho San Jacinto was established for cattle grazing in the San Jacinto Valley (Bean and Vane 1980; Brigandi 1999). The area surrounding the project was used extensively for grazing by mission cattle. In 1820, Father Payeras, a senior mission official, promoted the idea that the San Bernardino and Pala *asistencias* be developed into full missions in order to establish an inland mission

system (Lech 2004). However, Mexico won its independence from Spain in 1821, bringing an end to the Spanish Period in California.

2.2.3.2 Mexican Period

Although Mexico gained its independence from Spain in 1821, Spanish patterns of culture and influence remained for a time. The missions continued to operate as they had in the past, and laws governing the distribution of land were also retained in the 1820s. Following the secularization of the missions in 1834, large ranchos were granted to prominent and well-connected individuals, ushering in the Rancho Era, with the society transitioning from one dominated by the church and the military to a more civilian population, with people living on ranchos or in pueblos. With the numerous new ranchos in private hands, cattle ranching expanded and prevailed over agricultural activities.

Rancho El Rincon was located immediately to the east of the project area. Given to Juan Bandini in 1839 by Governor Juan Alvarado, the rancho was bounded on the east by Rancho Jurupa and on the south by the Santa Ana River (Ogden 1862). Bandini built an adobe home in the rancho in the early 1840s, though a few years later, he sold it and the rancho to Bernardo Yorba, who gave it to his daughter Bernarda (Rensch 1966).

North of the project area lies Rancho Santa Ana del Chino, which was granted to Antonio Maria Lugo in 1841 by Governor Alvarado (Ogden 1862). In 1843, Lugo deeded half of the rancho to his son-in-law Colonel Isaac Williams (Rensch 1966). Williams soon built an adobe mansion and planted orchards and vineyards in the land surrounding the structure. In 1851, Lugo deeded the remaining portion of the rancho to Williams (Rensch 1966).

The Battle of Chino occurred on September 26-27, 1846 during the Mexican-American war. Benjamin Wilson and a group of roughly 20 Americans assembled at the Williams' adobe rancho (Bancroft 1884; Rensch 1966). A group of 50 to 70 Californians surrounded the adobe; during the skirmish that followed, one Californian was killed, and several Americans were wounded. The Californians set fire to the roof of the adobe, and the Americans surrendered (Rensch 1966).

2.2.3.3 American Period

American governance began in 1848, when Mexico signed the Treaty of Guadalupe Hidalgo, ceding California to the United States at the conclusion of the Mexican-American War.

California's acquisition by the United States substantially increased the growth of the population in California. The California gold rush, the end of the Civil War, and the passage of the Homestead Act implementing the United States' perceived manifest destiny to occupy and exploit the North American continent brought many people to California after 1848. While the American system required that the newly acquired land be surveyed prior to settlement, the Treaty of Guadalupe Hidalgo bound the United States to honor the land claims of Mexican citizens who were granted ownership of ranchos by the Mexican government (Lech 2004). The Land Act of 1851 established a board of commissioners to review land grant claims, and land patents for the land grants were issued from 1876 to 1893.

As required by the Land Act of 1851, a claim for Rancho El Rincon was filed in 1853 with the Public Land Commission, and the grant was patented to Bernardo Yorba in 1879 (Ogden 1862; United States District Court 1852; Willey 1886).

A claim for Rancho Santa Ana del Chino was filed in 1853, and the rancho, along with an additional 13,366 acres, was patented to Isaac Williams' daughter, Maria Merced Williams de Rains in 1869 (Ogden 1862; United States District Court 1852; Willey 1886).

Initially, southern California was divided into only two counties: Los Angeles and San Diego. In 1853, San Bernardino County was added, placing what is now Riverside County primarily within San Diego County and partially within San Bernardino County. Orange County was divided from Los Angeles County in 1889, and Riverside County was formed in 1893.

The area containing the Rancho Santa Ana del Chino was purchased in 1881 by Richard Gird, a miner from Tombstone, Arizona (Lewis Publishing Company 1890). Initially using the land to raise livestock, Gird later subdivided a portion of the land into small ranches and the nearby townsite of Chino.

The project area lies in the southern outskirts of the city of Chino Hills. Through the mid-twentieth century, the area containing the project area was primarily used for cattle grazing. However, as time went on, other land uses were introduced, such as mining for petroleum, gravel, and clay. While most of San Bernardino County was converted into residential tracts, the hilly topography of Chino Hills prevented cheap subdivisions from being built. In 1979, the County initiated the preparation of the Chino Hills Specific Plan, and the residents of Chino Hills soon began exploring the pros and cons of cityhood (City of Chino Hills 2015). By early 1991, Chino Hills became a city.

2.2.3.4 History of Oil in California

Oil exploration, discovery and production in California did not get its start until after the Gold Rush. With the relatively declining economy amid the end of surficial placer mining, the state legislature and promoters looked to another industry to improve the state's economy. Several individuals in California conducted surveys between 1849 and 1854, noting the presence of bitumen. These findings were published between 1851 and 1857. Then in 1859, the discovery of oil in Pennsylvania spurred an interest in replacing camphene oil for lamps with kerosene oil produced from petroleum since it was cleaner and cheaper than camphene. However, even prior to that in 1857, a small oil refinery that distilled liquid bitumen and asphaltum on the Ojai Ranch was the first successful commercial petroleum refinery in the state. Then in 1861, the first well for the purpose of producing oil was drilled in Humboldt County. With the 1864 arrival in California of the optimistic Yale Professor Benjamin Silliman, Jr., from the Pennsylvania Rock Oil Company, the state experienced its first but short-lived oil boom in 1865-1866. The California Geological Survey (CGS) had been formed in 1860, run by two former students of Silliman who did not share his interest or optimism in California's oil prospects. Acrimony ensued between the CGS and Silliman along with William P. Blake who had been the geologist with the Pacific Railroad Survey. Silliman and Blake persisted in their optimism about oil prospects in the state, which proved to be the correct course for California's future. The year 1865 saw the first well that actually produced oil in the state, and approximately 65 oil companies were in operation that year from Humboldt to Ventura counties. In 1866, Josiah Stanford was the first to establish commercial petroleum production (Testa 2001).

Following the high pitch of the first oil boom, the state entered a ten-year period of declining exploration and production. This period primarily resulted from the fact that California's oil was heavy, and the state could not produce the kind of high-grade crude oil it needed to compete with the cheaper oil arriving in San Francisco from Pennsylvania. (Silliman prophetically maintained that California's heavy oil would provide needed fuel in the future.) Moreover, the CGS continued in its strident opposition to

Silliman and Blake's optimistic outlook. In fact, the head of the CGS, Josiah Whitney, responded to Silliman's favorable 1867 report that "there is absolutely no evidence of existence of petroleum in Southern California. . ." However, Silliman, promoters, and others continued in their optimism, and the CGS was disbanded in 1874 (Testa 2001).

By 1875, interest in oil began to revive in California, helped along by the drilling of wells in Pico Canyon near Saugus in 1875, completion of the Southern Pacific Railroad in 1876, and the use of steam machinery in 1877. The invention of the oil burner in 1880 spurred many industries to turn from coal to oil for fuel. The advent of improved drilling techniques, rigs, derricks, and associated equipment in the 1880s also spurred more oil exploration and drilling. It was not until 1880 that oil was discovered in the Los Angeles basin. By 1900, several oil fields had been discovered and developed in Fresno, Los Angeles, and Santa Barbara counties; the Los Angeles area alone had about 1,100 wells drilled within a relatively tiny area of less than a square mile. Compared to 1888 when California contributed less than three percent of the total US production of petroleum, by 1903 California led the nation, producing more than 24 million barrels a year. By 1907, Standard Oil's Richmond refinery produced nearly 1.6 million barrels alone and the value of petroleum exceeded that of gold (Testa 2001).

Oil production has continued to be a significant economic driver in California through the twentieth century and into the twenty-first. The project area is located within the Los Angeles Basin oil region. By 1920, the Los Angeles area was the largest region in the world to export oil, peaking at 133 million barrels a year in 1969. The Basin produced 28 million barrels of oil annually as of 2010, and 12 million of those were from seven offshore locations. Approximately 5,000 oil wells continue to produce oil in the Basin. The project area lies in the extreme easterly portion of the Los Angeles Basin, referred to as the Eastern and Inland area of the Basin. This portion of the Basin extends east of downtown Los Angeles to the Riverside County boundary, and from Boyle Heights to Long Beach north to south. Within this area of the Basin are 30 oil fields of the total 41 oil fields in the Basin. The Mahala and Chino-Soquel oil fields in the Chino area are two of the 30 oil fields and continue to produce relatively small yields of petroleum to this day, totaling about 2,700 barrels per year. To put this in perspective, all 30 oil fields in this portion of the Los Angeles basin produce 3.5 million barrels per year. The larger and more productive of the oil fields produce in the range of 100,000 to 600,000 to one million barrels per year. Several of those oil fields were discovered in the early 1900s, and the one that pumped 1.1 million barrels of oil in 2008 (Brea-Olinda) was the first discovered in Los Angeles in 1880. In comparison, the Chino Hills area oil fields are relatively recent discoveries and do not contribute significant quantities of oil production (The Center for Land Use Interpretation 2010).

2.2.3.5 Abacherli Ranch

The project site is located on what became known as the Abacherli Ranch (Ranch) in the early 1900s. Louis Abacherli emigrated from Switzerland to the Chino Hills area, purchasing approximately 1,000 acres of grazing land in 1919, which encompasses the project site. He later purchased the 1,187-acre McAllister Ranch in 1929 (The Daily Sun 1959; Carbon Canyon Chronicle 2016). Louis Abacherli originally ran the Ranch with two brothers, Arnold and John Abacherli. The ranch's operation then passed to his son Louis, and later to his grandson Louis Jr. The property was primarily a cattle ranch although family members recall that Arnold had gotten the family into the dairy business from the earliest days of the Ranch. This main dairy operation originally based in Chino was later relocated to Anaheim, and then to Menifee in 1981 (The Daily Sun 1956; Spoon 2014).

During the 1950s, a drastic change was on the horizon for the property. Oil was discovered on the Abacherli Ranch as part of the Mahala oil field, which in total comprised three pools within 1,200 acres. Oil had been discovered in the Chino Hills area in the late 1800s. However, the main pool of the Mahala oil field was not discovered until 1921 by the Mahala Oil and Gas Company. In 1955, the second pool was discovered mainly on the Ranch property by geologist James Michelin. In 1969, the third pool was discovered on the Ranch by M.J. Castro (The Daily Sun 1956, 1959; Napoles 2015).

According to a report by Michelin, the original Mahala Oil Company well No. 1 was the first producing well in the Chino Hills area in 1921. Two additional wells were drilled in 1931 and 1936 on the Ranch: Western Gulf Oil Company well Abacherli No. 1 and Melbourne Oil Company well Abacherli No. 1, respectively. All three wells were later abandoned since oil production was initially small and then declined. The area of the abandoned Western Gulf Oil well was later re-studied in 1955 disclosing the presence of a second pool nearby. As a result, the James Michelin Company well Abacherli No. 1 was drilled. Starting in 1956, petroleum companies purchased or leased the oil field acreage from the Abacherli family. In that same year, James Michelin Co. drilled four more wells, which resulted in the Ranch having five of the total 12 producing oil wells in Chino Hills at that time. The Michelin wells were located on 940-acres of the Ranch leased from the Abacherli family, and Louis Abacherli Jr. worked as the field superintendent. By 1957, 11 more wells were completed on the property (The Daily Sun 1956, 1959; Michelin 1958).

General Petroleum purchased the Mahala oil field in 1958 and asked Louis Abacherli Jr. to help operate it since he already had experience as field superintendent under the Michelin Company's lease. Local reports referred to Louis Jr. as a "rancher-cowboy-oilman." By 1959, the cattle ranch had been completely converted to a dairy ranch with 50 dairy heifers. Dairy ranches require less acreage than the extensive grazing lands needed for cattle, allowing for large areas of land to be taken up by oil production infrastructure. General Petroleum was also surveying at that time to locate two more wells on the property (The Daily Sun 1959).

In 1969, the discovery of the third pool of the Mahala oil field on the Ranch was hailed as a major discovery for San Bernardino County. Manuel Castro, the geologist who discovered the oil pool, was the general partner of the Fleet Oil Company based in Los Angeles, with Fleet White Sr. serving as president and principal associate. This pool was reported at that time to yield 400 barrels per day (Chino Champion 1969).

As recently as 2015, reports were that minor oil production continues to occur in the Chino-Soquel oil field and the Mahala oil field (Napoles 2015). Oil production, transmission and storage continue to occur on areas of the original Ranch property, including the subject property. The project will relocate a battery of three oil and water storage tanks and oil transmission lines to the west portion of the subject property.

3.0 METHODS

HELIX obtained a records search of the project site and a one-mile radius from the South Central Coastal Information Center (SCCIC) at the California State University, Fullerton, on February 5, 2021, following a request submitted on December 16, 2020. The records search covered a one-mile radius around the project area and included the identification of previously recorded cultural resources and locations and citations for previous cultural resources studies. The eastern boundary of the project site abuts Riverside County. As such, a record search was obtained on June 9, 2021, from the Eastern Information Center

(EIC) for the portion of the search radius within Riverside County, following a request submitted on April 9, 2021. The records search maps are included as Confidential Appendix B to this report. Historic maps and aerial photographs were reviewed to assess the potential for historic archaeological resources to be present.

The Native American Heritage Commission (NAHC) was contacted on December 16, 2020 for a Sacred Lands File search and list of Native American contacts, which were received on January 4, 2021. Letters were sent on January 15, 2021 to the contacts listed by the NAHC. Native American correspondence is included as Confidential Appendix C to this report.

A pedestrian field survey of the project site was conducted by HELIX archaeologists Julie Roy, Kent Smolik, and Mary Villalobos, accompanied by Cristina Conley of the Gabrielino Tongva Indians of California, on July 12 and 13, 2021. To the extent feasible, the project area was surveyed in parallel transects, spaced approximately 10 meters apart. Reconnaissance survey techniques were used in areas where it was unsafe to survey with traditional methods, such as the lower portions of steep slopes and dense drainages.

A literature review and archival research were conducted by HELIX architectural historian Teri Delcamp. No building permits or Sanborn Fire Insurance maps are on record for the subject property, so research and review included available background studies and reports, newspaper and other articles, historic aerial photographs, topographic maps, and other materials to characterize the history and context of the identified historic complex.

4.0 RESULTS

4.1 RECORDS SEARCH

HELIX staff obtained a record search of the California Historical Resources Information System (CHRIS) from the SCCIC on February 5, 2021 for the portion of the search radius within San Bernardino County and from the EIC on June 9, 2021 for the portion of the search radius within Riverside County. The records search covered a one-mile radius around the project area and included the identification of previously recorded cultural resources and locations and citations for previous cultural resources studies. A review of the California Historical Resources and the state Office of Historic Preservation (OHP) historic properties directories and Local Register was also conducted. The records search summary and maps are included as Appendix B (Confidential Appendices, bound separately).

4.1.1 Previous Surveys

The records search results identified 31 previous cultural resource studies within the record search limits. One study, SB-04755 (Bonner 2005), intersected with the proposed project site, and a second study, SB-07083 (Gust and Valasik 2011), was adjacent to the project site. Seventeen of the studies were cultural resource inventories, record searches, or site visits; the remaining studies include an archaeological impact report, an archaeological evaluation, a historical evaluation, a historic property survey, and a general plan amendment. Nine of the studies, including an archaeological impact report (Simpson and Suss 1975), a field survey (Whitney-Desautels and Langenwalter 1987), a site visit (Greenwood, et al. 1988), a historic evaluation (Greenwood and Foster 1990), two archaeological investigations (Foster et. al 1995 and Ciolek and Swope 2013), a study for a general plan amendment

(Chace 1995), a historic property survey (Hammond 1986), and a survey report (Jordan and Wilson 2006), identified resources within the search radius.

Table 1
PREVIOUS STUDIES WITHIN ONE MILE OF THE PROJECT AREA

Report Number (SB-)	Year	Author	Report Title
RI-00060	1975	N. Nelson Leonard, III and Matthew C. Hall	Santa Ana River Project Description and Evaluation of Cultural Resources
RI-00061	1985	Paul E. Langenwaller II and James Brock	Phase II Archaeological Studies Prado Basin and The Lower Santa Ana River
RI-00062	1977	Ronalad C. Tobey, Terry D. Suss, and Larry Burgess	Historical Resource Survey of The Prado Flood Control Basin
RI-01666	1983	WIRTH Associates	Devers-Serrano- Villa Park Transmission System Second Supplement to the Cultural Resources Technical Report- Links CCK, PBP, CHH
RI-01817	1983	Roberta S Greenwood, Jay D. Frierman, and John M. Foster	The Bandini-Cota Adobe, Prado Dam, Riverside County, California
RI-01954	1981	E. Jane Rosenthal and Steven J. Schwarz	A Cultural Resource Survey of the Proposed Santa Ana River Hiking/Biking Trail in the Prado Flood Control Basin
RI-02148	1987	Roberta Greenwood, J.M. Foster, A.Q. Duffield, and J.F. Elliot	Historical and Archaeological Evaluation: Rincon Townsite and Environs
RI-02878	1988	Susan Goldberg and Jeanne Arnold	Prehistoric Sites in The Prado Basin, California: Regional Context and Significance Evaluation
RI-02881	1990	Roberta Greenwood and J.M. Foster	Context Evaluation of Historical Sites in The Prado Basin
RI-02882	2000	Matthew A. Sterner and Joshua M. Protas	National Register of Historic Places Eligibility Testing at Four Historical-Period Sites in The Prado Basin
RI-03904	1984	Clement W. Meighan	Archaeological Survey Report (Location: 07-LA-71-RO.62/4.79, 08-SBd-71-0.00/8.42, 08-Riv-72-0.00/R3.03, 0880-263700)
RI-03954	1995	Jeanette A. McKenna	A Phase I Cultural Resources Investigation of Proposed Fill Sites for State Route 71/Prado Basin Borrow Project, San Bernardino and Riverside Counties, California
RI-05437	2005	Stacey C. Jordan and Stacie L. Wilson	Archaeological Survey Report for The Southern California Edison Company Removal of Idle Facility, Butterfield 12kV Circuit, Prado Flood Control Basin, Riverside and San Bernardino Counties, California
RI-06855	2006	Katherine H. Pollock	Deteriorated Pole Replacement Project: Archaeological Survey of One Pole Location on the Butterfield 12kV Transmission Line, Army Corps of Engineers Prado Dam, Riverside County, California

Report Number (SB-)	Year	Author	Report Title
RI-06918	2006	Stacey C. Jordan and Stacie L. Wilson	Archaeological Survey Report for the Southern California Edison Company Removal of Poles on the Butterfield 12kV Circuit and Proposed Line Extension of the Kropp 12kV Circuit Prado Flood Control Basin, Riverside and San Bernardino Counties, California
RI-09116	1997	Donn R. Grenda and Deborah W. Gray	Hunting The Hunters: Archaeological Testing at CA-RIV-653 and CA-RIV-1098, Riverside County, California
SB-00271	1975	Ruth Simpson and Terry Suss	Archaeological Impact Report - Archaeological Survey Prado Regional Park
SB-01687	1987	Nancy Whitney-Desautels and Paul Langenwalter II	Archival Research and Remote Sensing Investigations Concerning Reported Cemeteries and Isolated Graves in The Santa Ana River Project Area
SB-01794	1988	Roberta Greenwood, John Foster, and Anne Duffield	Historical and Archaeological Study of The Yorba-Slaughter Adobe, San Bernardino County
SB-02058	1990	Roberta Greenwood and John Foster	Context and Evaluation of Historic Sites in The Prado Basin
SB-03014	1995	John Foster, A. G. Toren, B.R. Cross, and J.A. Rasson	Archaeological and Historical Investigations of Seven Sites in The Prado Basin
SB-03073	1995	Paul Chace	Cultural Resources & Restraints, General Plan Considerations for the City of Chino, Sphere of Influence, Sub-area 1, San Bernardino County, California
SB-03694	1986	Stephen Hammond	Historic Property Survey Report for Proposed Improvements to SR 71 Between I-10 & SR 91-07/08 La, SBD, Riv-71-Various. 89 pp
SB-04755*	2005	Wayne Bonner	Cultural Resource Records Search Results for Cingular Telecommunications Facility Candidate ES-0016-02 (Abacherli Silo), 17954 Euclid Avenue, Chino Hills, San Bernardino County, California
SB-05285	2006	Stacy Jordan and Stacie Wilson	Archaeological Survey Report for the Southern California Edison Company Removal of Poles on the Butterfield 12 kV Circuit And Proposed Line Extension on the Kropp 12 kV Circuit and Prado Flood Control Basin Riverside And San Bernardino Counties, California
SB-06070	2005	Stacey Jordan and Stacie Wilson	Archaeological Survey Report for the Southern California Edison Company Removal of Idle Facility Butterfield 12 kV Circuit Prado Flood Control Basin Riverside and San Bernardino Counties, California
SB-06559	2010	Robert Wlodarski	AT&T Wireless Telecommunications Site ES0066 (Euclid Hwy 83) Located at Hwy 83 S/S,1000 feet E/O Shady View Drive, Chino, California 91710

Report Number (SB-)	Year	Author	Report Title
SB-06734	2010	Jay Sander	Archaeological Survey Report for Southern California Edison's Pole Replacement Project: Chino Hills, San Bernardino County, California, WO 6034-4800, 0-4887.
SB-07014	2009	Jennifer Howard and Evelyn Chandler	Cultural Resources Inventory of Two Proposed Pole Replacements in the Prado Basin Area near Chino Hills, San Bernardino County, California.
SB-07083*	2011	Sherri Gust and Molly Valasik	Paleontological and Cultural Resources of Chino Hills for the General Plan Update, City of Chino Hills, California.
SB-07444	2013	Richard Ciolek-Torello and Karen Swope	Rancho Life in Alta California: Archaeological Investigations at the Yorba and Slaughter Families Adobe

* Overlaps or adjacent to project area

RI- Reports accessed from the EIC

SB- Reports accessed from the SCCIC

4.1.2 Previously Recorded Resources

The SCCIC has a record of 13 previously recorded cultural resources within a one-mile radius of the project, and the EIC has a record of 8, for a total of 21 previously recorded resources within the search radius. None have been recorded within the project site (Table 2, *Previously Recorded Resources within One Mile of the Project Area*). In general, the sites recorded within the one-mile search radius consist of historic resources, mainly structural remains and residential, farm, and ranching materials associated with historic ranching and farming of the area. Two prehistoric sites are recorded within the search radius: one is described as a large artifact scatter with a complex subsurface midden element; the other is described as consisting of 17 projectile points, a boulder mortar, and a pestle. Two prehistoric isolates were also recorded: a mano and a metate fragment. Two multi-component sites include a prehistoric site with ground stone and flaked stone artifacts, faunal remains, and a hearth at the site of the Bandini-Cota Adobe, as well as a site comprised of prehistoric ground stone artifacts and historic refuse associated with the location of the original Pioneer School site. Historic sites documented within the record search limits include the locations of the Pioneer School, the Yorba-Slaughter Adobe, historic trash dumps, two historic roads, a historic quarry, and the locations/remnants of historic ranches and farms, including the Cavanagh Ranch, the Greenfield Ranch, and the Hartshorn farm.

Table 2
PREVIOUSLY RECORDED RESOURCES WITHIN ONE MILE OF THE PROJECT AREA

Primary Number	Trinomial	Age	Description	Recorder, Date
P-33-000653	CA-RIV-000653	Multi-component	Bandini-Cota Adobe site with ruins of the adobe and associated historic artifacts; Point of Historic Interest. Prehistoric site with ground stone (including a cogged stone), flaked stone, shell and animal bone, hearth	Wood, 1969; McCoy, 1972; Wood, 1973; Brock and Langenwalter, 1983; Hogan, 1998

Primary Number	Trinomial	Age	Description	Recorder, Date
P-33-002203	CA-RIV-002203	Historic	Historic structural foundation with glass and porcelain fragments. Site of Fear Ranch (1899); Leonardo Cota and his family at the site in the mid-1890s	Schwartz, 1981; Meighan, 1984
P-33-002797	CA-RIV-002797	Prehistoric	Prehistoric lithic scatter with 17 points, boulder mortar, and pestle	Brock and Langenwaller, 1984
P-33-003508	CA-RIV-003508	Historic	Historic farmhouse site with associated structural remains and trash	Panek, 1978
P-33-004760	CA-RIV-004760	Historic	Historic farm property (Strong, 1914) with feature of unknown function; no structures or structural remains observed	Hampson and Kaptain, 1992
P-33-004761	CA-RIV-004761	Historic	Historic structural foundation; West Ranch (1899)	Hampson, 1992
P-33-013543		Prehistoric	Prehistoric isolate – mano	Langenwaller and Brock, 1983
P-33-013544		Prehistoric	Prehistoric isolate – metate fragment	Langenwaller and Brock, 1983
P-36-001543	CA-SBR-001543	Prehistoric	Large surface scatter of prehistoric lithic tools with a stratigraphically complex midden sub-surface	Hall and Leonard, 1975; Langenwaller and Brock, 1983
P-36-001571	CA-SBR-001571/H	Multi-component	Prehistoric rock feature and ground stone tools and a historic refuse scatter associated with the original location of the Pioneer School	Hall, 1975; Langenwaller and Brock, 1983
P-36-006024	CA-SBR-006024H	Historic	Historic building remains, including foundations, associated with Joseph Slaughter	Toren, 1987; Schwartz, 1988
P-36-006576	CA-SBR-006576H	Historic	Historic trash dump of domestic and household artifacts associated with the Yorba-Slaughter Adobe	Solheid, 1989; Alexandrowicz, 1991
P-36-006577	CA-SBR-006577H	Historic	Historic trash dump containing ceramics, glass, metal, wood, and other historic materials.	Farnsworth 1989; Alexandrowicz, 1991
P-36-006817	CA-SBR-006817H	Historic	The historic Pomona-Rincon Road	McKenna et. al, 1991; McGinnis, 2017

Primary Number	Trinomial	Age	Description	Recorder, Date
P-36-007009	CA-SBR-007009H	Historic	Historic gravel and sand quarry associated with Mrs. Fuqua's occupation of the Yorba-Slaughter Adobe	Alexandrowicz, 1991
P-36-007010	CA-SBR-007010H	Historic	Unnamed historic road	Alexandrowicz, 1991
P-36-007136	CA-SBR-007136H	Historic	Large historic refuse scatter comprised of residential and household materials associated with the historic Hartshorn Farm	Hampson and Kaptain, 1992
P-36-007137	CA-SBR-007137H	Historic	Building foundations associated with the historic Greenfield Ranch	Hampson and Kaptain, 1992
P-36-033052	CA-SBR-033052H	Historic	Concrete slab foundation associated with the Pioneer School	Hampson, 1992
P-36-033053	CA-SBR-033053H	Historic	Historic refuse scatter of glass and ceramics at the location of the historic Cavanagh Ranch. Subsurface deposits are possible but have not been identified	Hampson, 1992
P-36-033054	CA-SBR-033054H	Historic	Historic location of a structure that may have subsurface deposits but have not been identified	Hampson, 1992

P-33 Primary numbers with the prefix "P-33" were accessed through the EIC

P-36 Primary numbers with the prefix "P-36" were accessed through the SCCIC

4.2 OTHER ARCHIVAL RESEARCH

Various archival sources were also consulted, including historic topographic maps, aerial imagery (NETR Online 2021), and the Bureau of Land Management (BLM) General Land Office (GLO) Records. These include historic aerials from 1938, 1946, 1948, 1959, 1966, 1980, and 1994 (NETR Online 2021) and several historic USGS topographic maps, including the 1902 Corona (1:125,000), the 1942 Corona (1:62,500), and the 1949, 1950, 1967, 1973, and 1981 Prado Dam (1:24,000) topographic maps. The purpose of this research was to identify historic structures and land use in the area.

No buildings appear in the project area on the 1902 Corona 30' quadrangle (1:125,000), though the development in the El Rincon land grant to the east and the Santa Ana del Chino land grant to the north is visible in the form of street grids. The 1942 Corona (1:62,500) map and the 1949 and 1950 Prado Dam (1:24,000) topographic maps do not show any buildings or structures within the project area, but they do show the county line to the east, as well as State Route 71. These maps also depict the structure seen east of the project. By the 1967 Prado Dam (1:24,000) map, there is a tank and a few structures shown within the project site, as well as additional structures in the cutout parcel to the east. The 1973 and 1981 Prado Dam (1:24,000) maps show an additional tank in the northern portion of the project area.

The 1938 aerial photograph shows only a pair of dirt roads running east-west in the northern portion of the project area—the northern road is visible until the 1994 aerial photograph, while the southern exists today (NETR Online 2021). The structure east of the project area seems to have been built sometime between the 1938 and 1946 photographs—the property appears to have expanded before the 1959 photograph was taken. State Route 71 first appears in this photograph, having been constructed sometime after 1946. A water tank is visible in the northern portion of the project in the 1980 aerial, and the residential development immediately north of the project area is visible on the 1994 aerial photograph (NETR Online 2021).

The Phase I environmental site assessment report noted that, “Current use of Property includes a small-diameter production-oil pipeline, a scrapyard, three ASTs [aboveground oil and water storage tanks], and two debris trenches. A concrete slab with beehives is located on the northwestern portion of the Property. The southern portion of the Property is undeveloped land” (Lundberg and Adams 2019:3). That report also noted that a previous study from 2014 indicated, “The developed areas consist of a paved garage, a residential mobile home, and a paved storage tank area for crude oil” (Lundberg and Adams 2019:6). Review of historical records showed that the existing ASTs dated to at least 1959.

4.3 NATIVE AMERICAN CONTACT PROGRAM

HELIX contacted the Native American Heritage Commission (NAHC) on December 16, 2020, for a Sacred Lands File search and a list of Native American contacts for the project area. The NAHC indicated in a response dated January 4, 2021, that the results of the search were negative, though “the absence of specific site information in the [Sacred Lands File] does not indicate the absence of cultural resources in any project area.” Letters were sent on January 15, 2021, to Native American representatives and interested parties identified by the NAHC. However, no responses have been received to date. If any additional responses are received, they will be forwarded to City staff. Native American correspondence is included as Appendix C (Confidential Appendices, bound separately).

The City initiated tribal outreach and consultation under AB 52 on May 28, 2021 with the two tribes, the Soboba Band of Luiseño Indians (Soboba) and the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation), that previously submitted a written request to receive formal notice of and information on proposed projects for which the City serves as the lead agency pursuant to CEQA. The City mailed project notification letters to the tribes on May 28, 2021 via certified mail. Soboba and Kizh Nation received the notification letters on June 1, 2021. Of the two tribes, Kizh Nation was the sole responder to the City’s notification letter. As such, consultation between the City and Kizh Nation was conducted via email on September 28, 2021. During consultation, Kizh Nation requested the project implement three mitigation measures requiring the developer to retain a Native American monitor to observe ground-disturbing activities prior to the commencement of the project and to implement Kizh Nation’s protocols in the event tribal cultural resources, grave goods, or human remains are discovered during project-related activities. The City agreed to the mitigation measures provided by Kizh Nation in a letter to the tribe dated December 2, 2021. As such, consultation between the City and Kizh Nation was completed on December 2, 2021. The City’s consultation records are provided in the confidential Appendix C.

4.4 SURVEY RESULTS

The project site exists within a landscape comprised of numerous rolling hills, northwest to southeast traversing drainages, and a tall foothill in the southwest portion of the project site. Furthermore, the

project site is bisected by several roads, including asphalt, gravel, and dirt two-tracks. Visibility was poor for the majority of the project area due to vegetation, consisting of non-native plants such as mustard grass, foxtails, pepper trees, and Indian tobacco, along with native plants including buckwheat, chaparral, elderberry, and toyon trees (Plates 1 and 2). The slopes of the hills were covered with dense weeds and sparse brush and trees. No bedrock was observed on the property; however, it appears that large rocks may have been previously removed or may be buried below colluvial soils from the slopes of the foothills located to the west. While visibility on the ridgelines of the lower hills was approximately 50 percent, it decreased to approximately 10 percent along the upper portion of the slopes on either side. This decreased to zero percent on lower slopes away from the tops of the hills.

One historic archaeological site (temporary designation SH-S-002) was observed during the survey (Figure 5, *Survey Results*, provided in Appendix D, *Survey Results and DPR Forms [Confidential, Bound Separately]*), consisting of a complex of features and a background scatter of historic artifacts that covers northern portion of the project site. These features and artifacts indicate a historic complex constructed and used beginning in the mid-twentieth century, based on historic maps and aerial imagery. The numerous components included cast iron pipelines (Feature 1a–1j), refuse deposits (Feature 2 and Feature 8), possible cattle troughs (Feature 3 and Feature 5), cattle guard (Feature 4), several concrete foundation pads (Features 6, 7, and 9), a standing wooden structure (Feature 10), a gas scrubber (Feature 11), and various pipe valves and hook-ups (Features 12, 13, 14, and 15). While some of the features appear related to ranching, the historic land uses addressed in the environmental site assessments prepared by ENGEO (Lundberg and Munger 2021) are all related to oil and gas production. Plate 3 illustrates one of the features of the site.

No other prehistoric or historic resources were identified during the survey.



Plate 1. Overview of the western project boundary from Via La Cresta. View to the south.



Plate 2. View of northern portion of the project site, illustrating dense vegetation and northern flowing drainage.



Plate 3. Concrete slab and debris-filled trough at SH-S-002. View to the west.

4.5 DOCUMENTATION

One archaeological site was documented within the project site, as described below. The historic site was recorded on appropriate Department of Parks and Recreation (DPR) 523 forms, which are provided in Appendix D. All completed DPR site forms were submitted to the SCCIC.

4.6 SITE DESCRIPTION: SH-S-002

Site SH-S-002 is a historic site consisting of a complex comprised of pipes and related features (for water conveyance or oil and gas), a historic-aged building and associated ancillary structures, concrete pads, troughs, historic dump site, and a background scatter of historic artifacts across the site. These features and artifacts indicate a historic complex constructed and used beginning in the mid-twentieth century.

There are numerous features that include an extensive complex of metal pipes, of varying sizes, that were likely used to transport water and gas. These pipes are broken into 10 segments (a-j) which, at one time, connected to segment 1a near Feature 10, the remains of a standing wooden structure with a corrugated roof. The metal pipes are made of cast iron with diameters of 3.5, 1.25, and 2.5 inches, with between one and three pipes running the length of each segment. Cast iron pipe hook ups and “T” connections are connected to the pipes at various locations, recorded as four separate features (Features 11, 12, 13, and 14).

Feature 2 is comprised of a small trash deposit located in a drainage in the northeast portion of the recorded historic site, along the western boundary of the project site. The trash deposit is comprised exclusively of construction materials consisting of concrete, metal, and wood.

Feature 3 consists of the remains of an ancillary structure, comprised of a 35 by 25-foot concrete foundation that is flush with the ground and a 15 by 5 by 2.5-foot trough that is centered on the foundation. Feature 3 is located in the northwestern portion of the proposed project site, located south of the paved road that bisects the project site, approximately 215 feet east of the metal cattle guard (Feature 4).

Feature 4 consists of a metal cattle guard set in the paved road, located at the western end of the historic site near the western boundary of the proposed project. The cattle guard is constructed of 11 pipes that measure 4.5 feet in diameter and are 15 feet long.

Feature 5 relates to a metal trough constructed from a corrugated metal, that measures 74.2 inches in diameter and 3 feet high. It is located near the center of the historic site, approximately 14 feet west of the southern end of Feature 1i.

Feature 6 is a structural concrete foundation pad located in the eastern corner of the historic site. The boundaries of the foundation pad have not been established because the portions of the pad are covered in dirt. As such, further components of this feature may exist and extend its size beyond what is visible from the ground surface. The visible portion of the concrete foundation pad measures approximately 25 by 18 feet, with an attached 5 by 3-foot entrance pad. The foundation pad is located just northwest of Features 7 and 8.

Feature 7 is another concrete pad, measuring 12 by 12 feet, located within the southern portion of the historic site boundaries. This pad, however, has a metal arch that connects to the eastern and western boundaries of the pad. The metal arch is constructed out of cast iron pipe segments and joints.

Feature 8 contains a historic can dump located in the southern portion of the historic site boundaries. The deposit is comprised of over 35 multi-serving sanitary cans, all of which contain rotary openings. The cans are approximately 7 inches tall by 6.5 inches in diameter. The cans are most likely associated with the activities that occurred at the standing wooden structure (Feature 10) or the structures that were likely built on the concrete pads (Features 6, 7, and 9).

Feature 9 is a concrete pad inlaid in the ground; the boundaries of the concrete pad likely go beyond what is visible from the surface because most of the pad is obscured by dirt. The visible portion of the pad measures 9 by 6 feet. Feature 9 is located in between Features 8 and 10, within the southern corner of the historic site boundary. However, Feature 9 appears to be the foundations of another smaller ancillary structure.

Feature 10 is the remains of a standing wooden structure with a corrugated roof. At the time of the survey, the standing structure contained the remains of machinery, equipment, and appliances. The structure is constructed in an open frame style using 2 by 4, 2 by 8, and 4 by 4-inch lumber. The frame is built flush upon the concrete foundation pad that is 28 by 16 feet. Construction, materials, and the equipment inside the structure indicate a mid-century date no earlier than the 1950s and no later than the 1960s. Feature 10 is located within the eastern portion of the historic site boundaries, positioned northwest of a gas scrubber (Feature 11).

Feature 11 contains a gas scrubber located in the southern portion of the historic site boundaries. The gas scrubber is stamped with a 1952 date mark.

Features 12 through 15 are all connected to segments of Feature 1. Feature 12 is a “T” connection along the length of Feature 1b that has a standing cast iron pipe hook up and attached valve that is 22 feet tall and constructed of 8.25-inch diameter pipe. Feature 13 is a steel valve, located at the beginning of Feature 1a. Feature 14 is cast iron and steel pipe with a valve, which is located at the end of Feature 1i, approximately 15 feet east northeast of Feature 5. Feature 15 is a standing pipe hook up, constructed of a 1.25-inch-thick pipe that is approximately 10 feet high. The pipe hook is encased in 12-inch concrete that forms a 6.5 by 3.5-inch rectangle.

Feature 16 consists of the three extant ASTs, and Feature 17 is a large shed in the area identified in the Phase II environmental site assessment as a scrapyards (Lundberg and Munger 2021; Figure 2).

5.0 HISTORICAL EVALUATION

This section includes a historical significance evaluation for the site SH-S-002 under the NRHP, CRHR, and the City of Chino Hills Historic Designation criteria.

NRHP/CRHR

Resources that are found to be significant under one or more of the NRHP and/or CRHR significance criteria must also be evaluated for integrity. If a resource is not found to be historically significant under any of the criteria, then an integrity evaluation is not applicable. The following NRHP/CRHR evaluation

adheres to the NPS guidelines for evaluation as provided in National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (NPS 2002).

City of Chino Hills Criteria

The City of Chino Hills General Plan contains Action CN-2.3.5: “For structures over 45 years old, review available City building records and make a determination regarding the structure’s potential historical significance prior to permitting its demolition or substantial alteration.” The City’s Municipal Code contains a definition of a historic structure in Title 15, Article II of the Buildings and Construction Code, which references those structure determined eligible or listed as a historic resource in the NRHP, the CRHR or a certified local designation program. There are no designation criteria specific to the City. Therefore, evaluation under the NRHP/CRHR Criteria suffice for the evaluation of historical significance under CEQA and Section 106.

5.1 Significance Criteria A/1

NRHP Criterion A: Is associated with events that have made a significant contribution to the broad patterns of our history

Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage

The subject property **does not appear eligible** under Criteria A/1. The Abacherli family were early immigrants to the Chino area, and what would become Chino Hills. The hilly Chino Hills area was comprised of large ranchos later divided into smaller ranches in the nineteenth and early twentieth centuries. Like other similar families in the area, the Abacherli family purchased acreage and developed a ranch. Although oil was later discovered on the Abacherli Ranch, the oil production was not so significant that it could not co-exist with other activities on the Ranch. The historical research does not indicate that the Abacherli Ranch made a significant contribution to Chino Hills, San Bernardino County, or Los Angeles Basin oil region’s history of oil production or other broad historical patterns, or a significant contribution to the broad pattern of California’s oil production history.

Therefore, the subject property **does not appear eligible** under Criteria A/1.

5.2 Significance Criteria B/2

NRHP Criterion B: Is associated with the lives of persons significant in our past

Criterion 2: It is associated with the lives of persons important in our past

The subject property **does not appear eligible** under Criteria B/2. Research conducted for this study did not suggest that the subject property is significant for an association with important individuals who made significant contributions at the local, state, or national level. The Abacherli family came to the area in 1919 and had purchased over 2,000 acres of land by 1929 to establish a ranch for dairy and grazing cattle. Oil was discovered in the area beginning in the late 1800s continuing well into the twentieth century. Two pools of the Mahala oil field were discovered within the larger Abacherli Ranch in the 1950s through the 1960s. The Abacherli family as cattle and dairy ranchers were fortunate to have the capacity to serve as site superintendents and help operate the oil wells for the oil companies. However,

there is nothing in the historical research to indicate that the activities of Abacherli family members made significant contributions at the local, state, or national level.

Therefore, the subject property **does not appear eligible** under Criteria B/2.

5.3 Significance Criteria C/3

NRHP Criterion C: Embodies the distinctive characteristics of a type, period, or method of installation, or represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction

Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

The subject property **does not appear eligible** under Criteria C/3. The features and remnants of features scattered over the project site are typical of ranch and oil production infrastructure. Taken together, they at best form what could be considered an isolate of the much larger Abacherli Ranch that comprised over 2,000 acres by 1929 and included oil production with numerous wells beginning in the 1950s. The project site is only 130 acres of the original Ranch, with an existing battery of oil and water storage tanks and associated oil transmission lines that will be relocated as part of the project. The rest of what remains of the original Ranch's oil production infrastructure is located outside the project site. The features associated with site SH-S-002 are not readily identifiable in their physical setting in relation to the site and area's historical context, and so do not embody distinctive characteristics of a type, period, region, or method of installation or construction. They do not represent the work of a master or important creative individual, and do not possess high artistic values. The features lack individual distinction, and collectively they do not represent a significant and distinguishable entity.

Therefore, the subject property **does not appear eligible** under Criteria C/3.

5.4 Significance Criteria D/4

NRHP Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history

Criterion 4: It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation

The subject property **does not appear eligible** under Criteria D/4. The features associated with site SH-S-002 have not and are not likely to yield information important to in prehistory or history of the local area, California, or the nation. There is nothing in the historical research to indicate that the project site would contribute important information about ranching or oil production. The pedestrian survey did not identify any prehistoric resources, and no information has been received to date regarding tribal cultural resources on the project site. The history of ranching in the area state is well documented, and there are much more significant sites and areas that pertain to the state's oil production history.

Therefore, the subject property **does not appear eligible** under Criteria D/4.

5.5 Conclusion

As a result of this reconnaissance-level evaluation, site SH-S-002 **does not appear eligible for federal, state, or local listing**. In addition, it is not included on a federal, state, or City register of designated properties; it is also not a contributor to any designated historic district. Therefore, the property **does not qualify as a historical resource under CEQA**.

6.0 SUMMARY AND MANAGEMENT RECOMMENDATIONS

A cultural resources study was undertaken to identify whether historic, prehistoric, and/or tribal resources are present in the proposed Shady View Residential Project site. The study included a records search conducted through the EIC and SCCIC, a Sacred Lands File search, Native American outreach, a review of historic aerial photographs and maps, literature review and archival research, and a pedestrian survey. The record search results did not identify resources within the proposed project site. However, several prehistoric and historic resources were identified within one mile of the project site. The prehistoric resources identified within the area indicate the project site may be sensitive for lithic production sites, rock features, or lithic isolates. Furthermore, several historic sites pertaining to farming, ranching, and quarrying are located near the proposed project site.

HELIX conducted a Native American outreach program to identify any known sacred lands or tribal cultural resources within the proposed project site. A Sacred Lands File search was requested through the NAHC; the results indicated that the project site does not contain any registered Sacred Lands or tribal cultural resources. However, the NAHC recommended contacting Native American tribes and representatives, identified by the NAHC, to scope for additional information regarding tribal cultural resources sensitivity. As such, HELIX sent letters on January 15, 2021, to the Native American representatives and interested parties identified by the NAHC. No responses have been received to date. The City is undertaking tribal outreach and consultation under AB 52.

While the project area remained relatively undeveloped until the present, the vicinity has been used for ranching and agricultural activities, oil and gas production, utility installations, and road formation from the early 1800s to the present. The project site within a larger contextual area began to be used for grazing and dairy cattle in 1919, and development within the project site appears to have been initiated between 1938 and 1946. Roads to access the proposed project site were present as early as 1938. The existing structures east of the proposed project site, outside of the development footprint, were built prior to 1946 and were subsequently expanded prior to 1959. Oil was discovered within the project site and larger Ranch area in the 1950s through the 1960s, and associated oil production and infrastructure were developed. Development within the proposed development footprint has been limited. However, the project site contains several existing structures, foundations, and related features (SH-S-002) that date between the 1950s and 1960s and appear to relate to ranching and oil production. Of all of the oil wells and infrastructure that were historically associated with the Abacherli Ranch, only an existing battery of three oil and water storage tanks and associated oil transmission lines is affected by the development of the project. These improvements will be relocated to the northwestern portion of the project site on a 1.36-acre lot, near the western project boundary, in order to retain their operational function associated with other existing oil production infrastructure located outside the project site boundary.

The cultural resources survey did not identify any prehistoric resources. However, ground visibility was very poor. As such, the project site may contain buried prehistoric resources or resources that could not be seen, due to the poor ground visibility. One large historic site that extends across the northern portion of the proposed project site was identified and recorded (SH-S-002) during the pedestrian survey. The historic site consists of a complex of pipes and other features. Although many of these features are visible from the ground surface, some of the features, such as the concrete building pads, are partially buried. The historic evaluation completed for the site, recorded as SH-S-002, determined that the site is not historically or archaeologically significant. However, due to the potential for buried cultural resources or resources that could not be identified due to poor ground visibility, this study recommends archaeological and Native American monitoring during construction.

6.1 MANAGEMENT RECOMMENDATIONS

In accordance with the City's General Plan Action CN-2.1.2 and CN-2.1.3, this study recommends an archaeological and Native American monitoring program be implemented, to include monitoring of grading and other ground-disturbing activities within native soils. The monitoring program would include attendance by the archaeologist and Native American monitor at a pre-construction meeting with the grading contractor. Archaeological and Native American monitors should be present during ground-disturbing activities for the project, including brushing/grubbing, excavation, grading, trenching, etc. in soils with a potential for cultural material (e.g., not formation material). Both archaeological and Native American monitors would have the authority to temporarily halt or redirect grading and other ground-disturbing activity in the event that cultural resources are encountered. If significant cultural material is encountered, the project archaeologist will coordinate with the applicant, representatives of the Consulting Tribe(s), and City staff to develop and implement appropriate avoidance, preservation, or mitigation measures.

In the event that human remains are discovered, the County Coroner shall be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code §7050.5 and PRC §5097.98 shall be followed.

Should the project limits change to incorporate new areas of proposed disturbance, an archaeological survey and potentially a historic evaluation of these areas will be required.

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Appendix A

Resumes

Summary of Qualifications

Ms. Robbins-Wade has 41 years of extensive experience in both archaeological research and general environmental studies. She oversees the management of all archaeological, historic, and interpretive projects; prepares and administers budgets and contracts; designs research programs; supervises personnel; and writes reports. Ms. Robbins-Wade has managed or participated in hundreds of projects under the California Environmental Quality Act (CEQA), as well as numerous archaeological studies under various federal jurisdictions, addressing Section 106 compliance and National Environmental Policy Act (NEPA) issues. She has excellent relationships with local Native American communities and the Native American Heritage Commission (NAHC), as well as has supported a number of local agency clients with Native American consultation under State Bill 18 and assistance with notification and Native American outreach for Assembly Bill 52 consultation. Ms. Robbins-Wade is a Registered Professional Archaeologist (RPA) and meets the U.S. Secretary of the Interior's Professional Qualifications for prehistoric and historic archaeology.

Selected Project Experience

12 Oaks Winery Resort (2015 - 2018). Project Manager/ Principal Investigator for a cultural resources survey of approximately 650 acres for a proposed project in the County of Riverside. Oversaw background research, field survey, site record updates, Native American coordination, and report preparation. Met with Pechanga Cultural Resources staff to discuss Native American concerns. Worked with applicant and Pechanga to design the project to avoid impacts to cultural resources. Work performed for Standard Portfolio Temecula, LLC.

28th Street between Island Avenue and Clay Avenue Utilities Undergrounding Archaeological Monitoring (2014 - 2018). Project Manager/Principal Investigator for a utilities undergrounding project in a historic neighborhood of East San Diego. Responsible for project management; coordination of archaeological and Native American monitors; coordination with forensic anthropologist, Native American representative/Most Likely Descendent, and City staff regarding treatment of possible human remains; oversaw identification of artifacts and cultural features, report preparation, and resource documentation. Work performed for the City of San Diego.

Archaeological Testing for the F11 (2015 - 2017). Project Manager for a cultural resources study for a proposed mixed-use commercial and residential tower in downtown San Diego. Initial work included an archaeological records search and a historic study, including assessment of the potential for historic archaeological resources. Subsequent work included development and implementation of an archaeological testing plan, as well as construction monitoring and the assessment of historic archaeological resources encountered. Work performed for the Richman Group of Companies.

Education

Master of Arts,
Anthropology, San
Diego State
University, California,
1990

Bachelor of Arts,
Anthropology,
University of
California, Santa
Barbara, 1981

Registrations/ Certifications

Caltrans,
Professionally
Qualified Staff-
Equivalent Principal
Investigator for
prehistoric
archaeology,
, Bureau of Land
Management
Statewide Cultural
Resource Use Permit
(California), permit
#CA-18-35,
, Register of
Professional
Archaeologists
#10294, 1991
County of San Diego,
Approved CEQA
Consultant for
Archaeological
Resources, 2007
, Orange County
Approved
Archaeologist 2016

Mary Robbins-Wade, RPA

Cultural Resources Group Manager

Blended Reverse Osmosis (RO) Line Project (2018 - 2019). Project Manager/ Principal Investigator for cultural resources monitoring during construction of a 24-inch recycled water pipeline in the City of Escondido. Oversaw monitoring program, including Worker Environmental Awareness Training; responsible for Native American outreach/coordination, coordination with City staff and construction crews, and general project management. Work performed for the City of Escondido.

Borrego Springs Community Library IS/MND (2015 - 2016). Cultural Resources Task Manager/ Principal Investigator for a cultural resources survey for a proposed development consisting of a public library, park, and police substation for the County of San Diego. The project is proposed on a 20.5-acre site on undeveloped land in the Borrego Springs community.

Buckman Springs Road Bridge Widening Technical Studies (2017 - 2020). Senior archaeologist for a cultural resources survey in support of the proposed Buckman Springs Road Bridge Widening Project, entails the rehabilitation and widening of the existing bridge crossing of Buckman Springs Road over Cottonwood Creek (Bridge No. 57C-0270). The project proponent is the County of San Diego Department of Public Works (DPW), with local assistance funding from the Federal Highway Administration. Provided senior technical oversight and quality assurance/quality control on deliverables.

Buena Sanitation District Green Oak Sewer Replacement Project (2016 - 2017). Project Manager/Principal Investigator for a cultural resources testing program in conjunction with a proposed sewer replacement project for the City of Vista. Oversaw background research, fieldwork, site record update, Native American coordination, and report preparation. Work performed for Harris & Associates, Inc., with the City of Vista as the lead agency.

Cactus II Feeder Transmission Pipeline IS/MND (2017 - 2018). Cultural Resources Task Lead for this project in the City of Moreno Valley. Eastern Municipal Water District proposed to construct approximately five miles of new 30-inch to 42 inch-diameter pipeline; the project would address existing system deficiencies within the City and provide supply for developing areas. Oversaw background research, field survey, and report preparation. Responsible for Native American outreach for cultural resources survey. Assisted District with Native American outreach and consultation under AB 52. Work performed under an as-needed contract for Eastern Municipal Water District.

Dale 2199C Pressure Zone Looping Pipeline Project (2019 - 2019). Cultural Resources Task Lead for this project in Moreno Valley. Eastern Municipal Water District proposed construction of a new pipeline to connect two existing pipelines in the District's 2199C Pressure Zone. The pipeline would consist of an 18-inch-diameter pipeline between Kitching Street and Alta Vista Drive that would connect to an existing 12-inch-diameter pipeline in the northern end of Kitching Street and to an existing 18-inch-diameter pipeline at the eastern end of Alta Vista Drive. The project will improve reliability and boost the Dale Pressure Zone's baseline pressure and fire flow availabilities. Four potential alignments were under consideration; three of these bisect undeveloped land to varying degrees, while the other is entirely situated within developed roadways. Oversaw background research and field survey. Responsible for Native American outreach for cultural resources survey and co-authored technical report. Work performed under an as-needed contract for Eastern Municipal Water District.

Mary Robbins-Wade, RPA

Cultural Resources Group Manager

Downtown Riverside Metrolink Station Track & Platform Project (2019 -). Cultural Resources Task Lead for this project involving changes to and expansion of the Downtown Riverside Metrolink Station. Overseeing records search and background information, archaeological survey, and report preparation. Responsible for coordination with Native American Heritage Commission, Riverside County Transportation Commission (RCTC), and Federal Transportation Authority (FTA) on Native American outreach. Work performed for Riverside County Transportation Commission as a subconsultant to HNTB Corporation.

Emergency Storage Pond Project (2018 - 2018). Project Manager/Principal Investigator for a cultural resources testing program in conjunction with the Escondido Recycled Water Distribution System - Phase 1. Two cultural resources sites that could not be avoided through project design were evaluated to assess site significance and significance of project impacts. Work included documentation of bedrock milling features, mapping of features and surface artifacts, excavation of a series of shovel test pits at each site, cataloging and analysis of cultural material recovered, and report preparation. The project is located in an area that is sensitive to both the Kumeyaay and Luiseño people, requiring close coordination with Native American monitors from both groups. Work performed for the City of Escondido.

Escondido Brine Line Project (2018 - 2019). Project Manager/Principal Investigator for cultural resources monitoring during construction of approximately 2.3 miles of a 15-inch brine return pipeline in the City of Escondido. The project, which is part of the City's Agricultural Recycled Water and Potable Reuse Program, enables discharge of brine recovered from a reverse osmosis facility that is treating recycled water; it is one part of the larger proposed expansion of Escondido's recycled water distribution to serve eastern and northern agricultural land. The project is located in an area that is sensitive to both the Kumeyaay and Luiseño people, requiring close coordination with Native American monitors from both groups. Oversaw monitoring program, including Worker Environmental Awareness Training; responsible for Native American outreach/coordination, coordination with City staff and construction crews, and general project management. Work performed for the City of Escondido.

Fox Tank Monitoring (2018 - 2019). Principal Investigator and Project Manager for the cultural resources monitoring program during construction of the Fox Tank Project. Oversaw the cultural resources monitoring program, including coordination with the District and the Native American tribal cultural monitors regarding cultural resources encountered during monitoring and their ultimate disposition. Work performed under an as-needed contract for Eastern Municipal Water District.

Hacienda del Mar EIR (2016 - 2020). Senior Archaeologist for a proposed commercial development project for a senior care facility in Del Mar. Assisted in the preparation of associated permit applications and an EIR. Oversaw background research, updated records search and Sacred Lands File search, monitoring of geotechnical testing, coordination with City staff on cultural resources issues, and preparation of updated report. Prior to coming to HELIX, served as Cultural Resources Task Lead for the cultural resources survey for the project, conducted as a subcontractor to HELIX. Work performed for Milan Capital Management, with the City of San Diego as the lead agency.

Mary Robbins-Wade, RPA

Cultural Resources Group Manager

Haymar Easement Protection Project (2020 -). Cultural Resources Task Lead/Principal Investigator for an emergency repair project to protect a trunk sewer and associated access path badly damaged by erosion. Overseeing cultural resources monitoring during construction in this highly culturally sensitive area, including coordination with Luiseño tribal monitors and City staff.

Judson Potable Water Storage Tank and Transmission Pipeline IS/MND (2016 - 2019). Cultural Resources Task Lead for this project in the City of Moreno Valley. Eastern Municipal Water District is proposing the construction and operation of a steel, 2.2-million-gallon (MG) potable water storage tank, approximately 2,300 linear feet of 18-inch-diameter transmission pipeline, a paved access road, a detention basin, and other appurtenances to support tank operations. Oversaw background research and field survey. Responsible for Native American outreach for cultural resources survey and co-authored technical report. Assisted District with Native American outreach and consultation under AB 52. Work performed under an as-needed contract for Eastern Municipal Water District.

Lilac Hills Ranch (2014 - 2017). Project Manager/Principal Investigator of a cultural resources survey and testing program for an approximately 608-acre mixed-use development in the Valley Center area. Oversaw background research, field survey, testing, recording of archaeological sites and historic structures, and report preparation. Responsible for development of the research design and data recovery program, preparation of the preservation plan, and Native American outreach and coordination. The project also included recording historic structures, development of a research design and data recovery program for a significant archaeological site, and coordination with the Native American community and the client to develop a preservation plan for a significant cultural resource. The project changed over time, so additional survey areas were included, and a variety of off-site improvement alternatives were addressed. Work performed for Accretive Investments, Inc. with County of San Diego as the lead agency.

Moulton Niguel Water District Regional Lift Force Main Replacement (2017 - 2018). Cultural Resources Task Lead/Principal Investigator for the replacement of a regional lift station force main operated by Moulton Niguel Water District (MNWD). The project comprises an approximately 9,200 linear foot alignment within Laguna Niguel Regional Park in Orange County, in an area that is quite sensitive in terms of cultural resources. HELIX is supporting Tetra Tech throughout the preliminary design, environmental review (CEQA), and final design, including permitting with applicable state and federal regulatory agencies. The cultural resources survey will inform project design, in order to avoid or minimize potential impacts to cultural resources. Oversaw background research and constraints analysis, Native American coordination, cultural resources survey, coordination with MNWD and Tetra Tech, and report preparation. Work performed for MNWD, as a subconsultant to Tetra Tech.

Murrieta Hot Springs Road Improvements Project (2018 - 2020). Principal Investigator/Cultural Resources Task Lead for cultural resources survey in support of an Initial Study/Mitigated Negative Declaration (IS/MND) for the widening of Murrieta Hot Springs Road in the City of Murrieta. The project would widen or restripe Murrieta Hot Springs Road between Winchester Road and Margarita Road from a 4-lane roadway to a six-lane roadway to improve traffic flow, as well as provide bike lanes in both directions along this segment. A new raised median, light poles, signage, stormwater catch basins, retaining walls, and sidewalks would also be provided on both sides of the roadway, where appropriate.

Mary Robbins-Wade, RPA

Cultural Resources Group Manager

The project area is in a location that is culturally sensitive to the Native American community. The cultural resources study included tribal outreach and coordination to address this cultural sensitivity.

Oceanside Water Utilities Dept On-Call Environmental Consulting Services, 2017-2022 (2018 - 2020). Cultural Resources Task Lead/Principal Investigator for three consecutive on-call contracts with the City of Oceanside Water Utilities Department. Oversees the preparation of cultural resource reports, coordinates with Native American tribes, and directs construction monitoring teams for projects as part of this contract. Project types include reservoirs, pump stations, lift stations, pipelines, and treatment plants.

Park Circle - Cultural Resources (2014 - 2019). Project Manager/Principal Investigator of a cultural resources survey and testing program for a proposed 65-acre residential development in the Valley Center area of San Diego County. The project is located along Moosa Creek, in an area that is culturally sensitive to the Luiseño people. Oversaw background research, historic study, field survey, testing, recording archaeological sites and historic structures, and report preparation. Responsible for Native American outreach and coordination. The cultural resources study included survey of the project area, testing of several archaeological sites, and outreach and coordination with the Native American community, as well as a historic study that addressed a mid-20th century dairy barn and a late 19th century vernacular farmhouse. Work performed for Touchstone Communities.

Peacock Hill Cultural Resources (2014 - 2017). Project Manager/Principal Investigator of a cultural resources study update for a residential development in Lakeside. Oversaw updated research, fieldwork, lab work, analysis by forensic anthropologists, report preparation, and Native American coordination. In the course of outreach and coordination with the Native American (Kumeyaay) community, possible human remains were identified, prompting additional fieldwork, as well as coordination with the Native American community and forensic anthropologists. Work performed for Peacock Hill, Inc.

Sky Canyon Sewer Environmental Consulting (2018 - 2019). Cultural Resources Task Lead for this project adjacent to the City of Murrieta in southwestern Riverside County. Eastern Municipal Water District (District) proposed to implement the Sky Canyon Sewer Main Extension Project to construct approximately 6,700 linear feet of new gravity-fed 36-inch-diameter sewer main to provide additional sewer capacity for planned development. The proposed 36-inch-diameter sewer main would extend the existing 36-inch-diameter French Valley Sewer at Winchester Road further downstream to Murrieta Hot Springs Road. Oversaw background research and field survey. Responsible for Native American outreach for cultural resources survey and co-authored technical report. Assisted District with Native American outreach and consultation under AB 52. Work performed under an as-needed contract for Eastern Municipal Water District.

Summary of Qualifications

Mr. Cooley has over 45 years of experience in archaeological resource management. He has directed test and data recovery investigations, monitoring programs, and archaeological site surveys of large and small tracts, and has prepared reports for various cultural resource management projects. He is well-versed in National Historic Preservation Act, National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) regulations and processes. Mr. Cooley's experience also includes Native American consultation for monitoring of archaeological field projects, including some with human remains and reburial-related compliance issues.

Selected Project Experience

8016 Broadway Self Storage Project (2019 - Present). Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program of the Lemon Grove Self-Storage project located in the City of Lemon Grove, San Diego County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the Summit Environmental Group, Inc.

Briggs Road Walton Development Project (Assessor's Parcel Number 461-170-001) (2019 - Present). Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program of the Briggs Road Residential project located in Riverside County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the Walton International Group, LLC.

Brown Field and Montgomery Field Airport Master Plans (2019 - Present). Senior Archaeologist for Phase I cultural resource inventory and pedestrian survey programs at the Brown Field Municipal Airport and the Montgomery-Gibbs Executive Airport, in the City of San Diego, in support of updating of the Airport Master Plan and its Programmatic Environmental Impact Report. Involvement included participation in the analysis of the results from the survey programs and co-authorship of the technical reports. Work performed as a subconsultant to C&S Companies, with the City of San Diego as the lead agency.

Cubic Redevelopment Environmental Consulting (2019 - Present). Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory and assessment program in support of a 20-acre redevelopment project, located in the community of Kearny Mesa, City of San Diego. Involvement included participation in the analysis of the results from the survey program and preparation of the technical report. Work performed for Cubic Redevelopment Environmental Consulting, with the City of San Diego as lead agency.

Education

Master of Arts,
Anthropology,
California State
University, Los
Angeles, 1982

Bachelor of Arts,
Anthropology,
California State
College, Long Beach,
1970

Registrations/ Certifications

Register of Professional
Archaeologists #10621,
2019

City of San Diego,
Certified Principal
Investigator for
Monitoring Projects

County of Riverside,
Certified Cultural
Resources Consultant
Principal Investigator

County of Orange,
Certified Cultural
Resources Consultant
Principal Investigator

County of San Diego,
Approved Consultant
for Archaeological
Resources

Los Angeles, Ventura,
San Luis Obispo, and
Santa Barbara
Approved Consultant

Theodore G. Cooley, RPA

Senior Archaeologist

French Valley 303 Project (2019 - Present). Senior Archaeologist for an archaeological construction monitoring program for the French Valley 303 Site residential development project, located in the French Valley area of unincorporated Riverside County. Involvement included participation in the analysis of the results from the monitoring program and co-authorship of the technical report. Work performed for Pulte Home Co., LLC.

Hiser Property Project (2019 - Present). Senior Archaeologist for a due diligence study prepared to summarize potential cultural resources constraints to the 9.2-acre Hiser Property development project, located in the Mission Gorge area of the City of Santee, San Diego County. The study consisted of background research including a record search and limited archival study, a field survey, and a review of the Sacred Lands File from the Native American Heritage Commission (NAHC). Involvement included participation in the analysis of the results and preparation of a summary letter report of the potential cultural resources-related constraints to the planned development. Work performed for KB Home.

Ponto Hotel Technical Studies (2019 - Present). Senior Archaeologist for a cultural resources assessment study for the Ponto Hotel development project in the City of Carlsbad, San Diego County, California. Involvement included participation in the analysis of the results from the assessment program and preparation of the technical report. Work performed for Kam Sang Company, with the City of Carlsbad as the lead agency.

R.M. Levy Water Treatment Plant Sewer Replacement (2019 - Present). Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory and assessment program in support of a water treatment plant, sewer pipeline, replacement project, located in the community of Lakeside, San Diego County. Involvement included participation in the analysis of the results from the survey program and preparation of the technical report. Work performed for HELIX Water District.

Salt Bay District Specific Plan EIR (2019 - Present). Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program in support of the 46.6-acre Salt Bay Design District Specific Plan mixed-use wholesale/retail shopping and light industrial development project, in the cities of San Diego and Chula Vista. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for M. & A. Gabae, with the City of San Diego as lead agency.

San Jacinto Property Project (2019 - Present). Senior Archaeologist for a Phase I pedestrian survey and cultural resource inventory program of the 214 residential project located in Riverside County. Involvement included participation in the analysis

Theodore G. Cooley, RPA

Senior Archaeologist

of the results from the survey program and co-authorship of the technical report. Work performed for the Walton International Group, LLC.

San Elijo Joint Powers Authority Roadway and Trail Addendum and Permitting (2019 - Present). Senior Archaeologist for Phase I cultural resource inventory, pedestrian survey, and resource testing at the San Elijo Water Reclamation Facility adjacent to San Elijo lagoon, in San Diego County, in support of the preparation by the San Elijo Joint Powers Authority of a Roadway and Trail Addendum for upgrades to the facility requiring verification of Nationwide Permit authorization from the U.S. Army Corps of Engineers (USACE). Involvement included participation in the analysis of the results from the survey and testing program and co-authorship of the technical report. Work performed as a subconsultant to Kimley-Horn & Associates, with the San Elijo Joint Powers Authority as lead agency.

Sycamore & Watson Project (2019 - Present). Senior Archaeologist for an archaeological construction monitoring program for the Sycamore & Watson residential development project, located in City of Vista, San Diego County. Involvement included participation in the analysis of the results from the monitoring program and preparation of the technical report. Work performed for Meritage Homes.

Sycamore Canyon/Goodan Ranch Public Access Plan IS/MND (2019 - 2019). Senior Archaeologist for Phase I pedestrian survey and cultural resource inventory in support of the preparation by the County of San Diego County Parks Department of a Public Access Plan for the Sycamore Canyon/Goodan Ranch Preserve located in coastal foothills of unincorporated west-central San Diego County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the County of San Diego.

Sycuan/Sloane Canyon Trail IS/MND (2019). Senior Archaeologist for Phase I pedestrian survey and cultural resource inventory in support of the preparation by the County of San Diego County Department of a Parks and Recreation for the Sycuan/Sloane Canyon Trail project located in the coastal foothills of unincorporated southwestern San Diego County. Involvement included participation in the analysis of the results from the survey program and co-authorship of the technical report. Work performed for the County of San Diego.

The Enclave at Delpy's Corner Project (2019 - Present). Senior Archaeologist for a cultural resources monitoring and data recovery program in support of a proposed 124-unit townhome development project, in the City of Vista, San Diego County. Involvement included participation in the analysis of the prehistoric lithic artifacts and preparation of technical report sections containing the results of these analyses. Work performed for CalAtlantic Homes.

Summary of Qualifications

Ms. Delcamp is a qualified historian/architectural historian who meets the Secretary of the Interior's standards for her profession. Ms. Delcamp has more than 20 years of professional experience in preparing history and architectural history studies in California. She has served as Principal Planner for the City of Carlsbad, Senior Planner (Historic Preservation) for the City of Riverside, Historic Preservation Manager for the City of San Juan Capistrano, Senior Planner for the cities of San Diego, Oceanside, and San Clemente. Ms. Delcamp's experience includes a wide range of study types, from the preparation of historic context studies to historic built environment evaluations.

Selected Project Experience

Coachella Canal Midline Storage Project, Niland, California (2021 - Present).

Architectural Historian for the Mid-Canal Reservoir Storage Project, proposed as an inline reservoir on the Coachella Canal that will be formed by removing the existing embankment between the existing lined canal with the original earthen canal section to form a single wide trapezoidal section. Responsible for reviewing extant data on the historicity of the National Register of Historic Places (NRHP)-eligible Canal, surveying the project, and completing an impacts/effects analysis utilizing the data from the survey and the literature review. Work performed as a subconsultant to Harvey Consulting Group, with Coachella Valley Water District and Bureau of Reclamation as the lead agencies.

Previous Experience

Principal Planner, City of Carlsbad, Carlsbad CA (2015-2020). Manage the current planning and customer service sections supervising 11 employees, including senior planners, associate planners and planning technicians. Review the most complex development projects ranging across the full spectrum of land uses and entitlements. Make CEQA determinations for both sections; provide cultural resource CEQA significance determinations for section development projects and provide internal peer review of cultural resource studies. Conduct CEQA analyses including preparation of initial studies and mitigated negative declarations. Implement and administer a variety of local land use regulations including Tribal, Cultural & Paleontological Resources Guidelines; Local Coastal Program; Habitat Management Plan and Airport Land Use Compatibility Plan. Prepare and present reports to Commissions and Council. Respond to inquiries and meet with community members to provide information and discuss land use-related concerns.

Carlsbad Tribal, Cultural and Paleontological Resources Guidelines, Carlsbad, California (2015-2020). Senior Planner for the update to cultural resources guidelines

Education

Master of Arts,
History, California
State University San
Marcos

Bachelor of Arts,
Liberal Studies
(History focus),
California State
University Long
Beach

Professional Affiliations

American Planning
Association

National Trust for
Historic Preservation

California
Preservation
Foundation

Awards

Association of
Environmental
Professionals, Merit
Award, Carlsbad
Tribal, Cultural and
Paleontological
Resources
Guidelines, 2018
American Institute of
Architects San
Diego Chapter,
Divine Detail Award,
Montanez Adobe,
San Juan
Capistrano, CA,
2010

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Architectural Historian

for the City of Carlsbad. Oversaw consultant contract, oversaw tribal consultation, collaborated and edited draft and final document, and achieved City Council adoption. Work conducted for City of Carlsbad.

City of Carlsbad Cultural Resource CEQA Determinations for Development Projects, Carlsbad, California (2015-2020). Senior Planner for determining the need for cultural resources/historical reports for numerous projects including single family homes, historic theater, historic school campus buildings, churches, commercial and institutional sites. Work conducted for City of Carlsbad.

City of Carlsbad Tribal Consultation Projects, Carlsbad, California (2015-2020). Senior Planner for leading or assisting City colleagues conducting AB 52 and SB 18 tribal consultations for numerous development projects, General Plan Amendments and Specific Plan Amendments. Work conducted for City of Carlsbad.

Historic Preservation Senior Planner, City of Riverside, Riverside, CA (2011-2015). Manage and oversee day-to-day operation of historic preservation section within the Neighborhood Engagement Division. Detailed analysis and presentation of planning cases to decision-makers. Manage projects and consultant contracts for various surveys and CEQA documents. Acting Historic Preservation Officer for Administrative Certificates of Appropriateness. Prepare and secure grants and prepare progress reports and annual reports in conjunction with the Certified Local Government program. Write and review cultural resource reports submitted in support of designation, historical significance evaluations and/or in accordance with the California Environmental Quality Act. Supervise Associate Planner and Assistant Planner. Partner with community preservation organizations and other departments to achieve preservation goals. Provide customer service via public counter, telephone and email regarding land uses, development standards and historic preservation.

City of Riverside Consultant Contract Management, Riverside, California (2011-2015). Senior Planner focused on Historic Preservation in the City of Riverside. Prepared Requests for Proposals and managed professional consultant contracts for preparation of Environmental Impact Report and Mitigated Negative Declaration for historic resource demolition and area-wide Utility Department infrastructure improvements, respectively. Prepared Requests for Proposals and managed professional consultant contracts for preparation of historic surveys for grant funded work and Specific Plan updates. Work performed for the City of Riverside.

City of Riverside Historic Preservation Ambassador Training Program, Riverside, California (2011-2015). Prepared Request for Proposals and managed consultant for new training manual and workshop series to create cohort of community preservation leaders to assist city in preservation education and advocacy. Work performed for the City of Riverside.

Relocation of the Cooper House, Riverside, California (2011-2015). As Senior Planner, prepared a Cultural Resources Report and Evaluation of Impacts for the Cooper House in Riverside. Work performed for the City of Riverside.

4135 Market Street, Structure of Merit Designation, Riverside, California (2011-2015). Senior Planner for the preparation of a Historic Evaluation & DPR Form for a significant structure located at 4135 Market Street in Riverside.

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Historic Evaluation & DPR Form Recordation for the James & Jessie Shaw Residence, Riverside, CA (2011-2015). Senior Planner for preparation of a historic evaluation and landmark designation for a private residence at 8410 Cleveland Avenue. Work performed for City of Riverside.

Historic Evaluation & DPR Form Recordation for the Frank and Katherine Wells-Patsy O'Toole House, Riverside, CA (2011-2015). Senior Planner for the preparation of a historic evaluation, DPR form and landmark designation for a private residence at 1945 Arroyo Drive. Work performed for the City of Riverside.

Historic Evaluation & DPR Form Recordation for the Mackey House, Riverside, CA (2011-2015). Senior Planner for the preparation of a historic evaluation, DPR form and landmark designation for a private residence at 6140 Tiburon Drive. Work performed for the City of Riverside.

Cultural Resources Report and Evaluation of Impacts, Demolition of 11134 and 11144 Pierce Street, Riverside, CA (2011-2015). Senior Planner for the preparation of a cultural resources report prior to the demolition of properties located at 11134 and 11144 Pierce Street. Work performed for the City of Riverside

Riverside Mid-Century Modern Building Survey Certified Local Government Grant, Riverside, CA (2011-2015). Grant writer and contract and project manager for a survey and inventory of mid-century modern buildings in Riverside. Work performed for the City of Riverside.

Riverside Mid-Century Modern Subdivision Oral Histories Certified Local Government Grant, Riverside, CA (2011-2015). Grant writer and contract and project manager for preparation of oral histories surrounding mid-century modern buildings in Riverside. Work performed for the City of Riverside.

American Recovery and Reinvestment Act (ARRA) Surveys, Riverside, CA (2011-2015). Senior Planner for the completion of historical contexts and preparation of a multiple property DPR form. Work performed for the City of Riverside.

Management of Certificates of Appropriateness, Riverside, CA (2011-2015). Senior Planner for the analysis, preparation for Board and Council consideration, and supervision or approval of numerous planning applications for master plans, additions, adaptive re-use, relocation and/or restoration of historic commercial, industrial, educational and residential landmarks and district contributors, including commercial offices/stores, train depots, packing houses, individual homes and college campus landmarks, etc. Work performed for the City of Riverside.

Historic Preservation Fund Grant Program, Riverside, CA (2011-2015). Senior Planner for the management of bi-annual General Fund competitive grant program for historic preservation projects including staff to Council-created committee for award of grants. Work performed for the City of Riverside.

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Historic Preservation Manager, City of San Juan Capistrano, San Juan Capistrano, CA (2005-2011). Solely responsible for management and administration of the City's historic preservation program. Staffed City's Cultural Heritage Commission. Reviewed complex development projects affecting designated historic sites. Managed planning, design, bid and construction phases of 7-year Capital Improvement Program for City-owned historic sites (approximate budget \$1.3 million). Developed and administered Historic Preservation section's annual budget and coordinated annual historic building maintenance budget and priorities with Public Works. Wrote and presented reports to Commissions, Council, community organizations and public. Coordinated with other departments and state and federal agencies on historic preservation issues and projects. Prepared, supervised and/or reviewed National Register, California Register and local nominations. Conducted historic preservation public outreach including events and workshops.

Forster Mansion Exclusive Events Conditional Use Permit, San Juan Capistrano, CA (2005-2011). Historic Preservation Manager for controversial, complex case for outdoor special events within mixed use residential and commercial area. Work performed for City of San Juan Capistrano

Zoomars on Los Rios Conditional Use Permit San Juan Capistrano, CA (2005-2011). Historic Preservation Manager for the management of a complex expansion of non-conforming use case for petting zoo in residential historic district. Work performed for City of San Juan Capistrano

Montanez Adobe Restoration and Seismic Repair San Juan Capistrano, CA (2005-2011). Historic Preservation Manager for the preparation of RFPs and managed contracts; managed design, bid and construction. Montanez Adobe project received state award 2012. Work performed for City of San Juan Capistrano

7-Year Capital Improvement Program for City-Owned Historic Structures, San Juan Capistrano, CA (2005-2011). Contract & Project Manager for bid and construction projects including Harrison House Repair & Restoration, Roger Williams/Swanner House Historic Paint Restoration, Roger Williams /Swanner House and Water Tower Foundation Repairs, Roger Williams/Swanner House Interior Repairs Joel Congdon House Repairs, and Blas Aguilar Adobe Repairs. Work performed for City of San Juan Capistrano

7-Year Capital Improvement Program for City-Owned Historic Structures, San Juan Capistrano, CA (2005-2011). Contract & Project Manager for Design RFP, Bid & Construction, including Montanez Adobe Restoration & Seismic Repair, Joel Congdon House ADA Improvements, Joel Congdon House Water Tower Restoration, Parra Adobe Seismic Repair and Restoration Historic Structure Report. Work performed for City of San Juan Capistrano

7-Year Capital Improvement Program for City-Owned Historic Structures, San Juan Capistrano, CA (2005-2011). Contract & Project Manager for RFP for Historic Structure Report and Rehabilitation Plans, including Parra Adobe Save America's Treasures Grant, The Ecology Center at the Congdon House, Blas Aguilar Adobe Repair and Native Education Facility, Mission San Juan Capistrano: Rectory Garden; Entry Restoration and Gift Shop projects, Historic Evaluation Report, Nick's Café, 26755 Verdugo Street, SB18 Tribal Consultation for General Plan and Specific Plan projects, and management of Historic Preservation Week 2006, 2007, 2008, 2009. Work performed for the City of San Juan Capistrano

Senior Planner, City of Oceanside, Oceanside, CA (2004-2005). Under direction of City Planner, supervised the current planning and customer service section. Supervised Associate Planners and Assistant Planners, including completion of performance evaluations. Reviewed complex development projects ranging across the full spectrum of land uses and entitlements, including CEQA initial studies

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Architectural Historian

and documents. Implemented Local Coastal Program. Wrote and presented reports to Commission and Council. Work performed for the City of Oceanside.

Senior Planner, Historic Preservation, City of San Diego, San Diego, CA (2002-2004). Staffed Old Town Community group and Design Review Board; evaluated and presented planning cases to both. Managed and administered City's historic preservation program and supervised staff including Administrative Interns, Secretary and Senior Planners on team. Conducted detailed review of historic resource reports and surveys for designation. Oversaw and participated in historic resource surveys. Reviewed projects for consistency with Secretary of the Interior's Standards. Staffed Historical Resources Board. Participated in Section 106 consultation and managed MOU and PA compliance, coordinating with Port Authority, Navy Region Southwest and various historic preservation organizations, etc. Fulfilled Certified Local Government duties. Wrote and presented reports to Board, Commissions, Council, community organizations and public. Conducted historic preservation public outreach including events, training and workshops. Individual assignments included:

Naval Training Center Historic District Plancheck Drawings, City of San Diego, CA (2002-2004). Senior Planner for an evaluation of the Liberty Station Re-Use plans for consistency with Secretary of the Interior's Standards. Work performed for the City of San Diego

Secretary of the Interior's Standards Consistency Determinations, San Diego, CA (2002-2004). Senior Planner for the San Diego Zoo/Balboa Park expansion; Salk Institute Expansion; SDG&E Station A adaptive re-use; Santa Fe Depot/Museum of Contemporary Art; Coronado Belt Line bike trail; Hard Rock Hotel/Depot re-use; various rehabilitation and re-use projects in Gaslamp Historic District, Old Town San Diego, etc. Work performed for the City of San Diego

US Navy, US Marine Corps and San Diego Airport Authority Section 106 Programmatic Agreement (PA) Compliance, San Diego, CA (2002-2004) Senior Planner to review proposals for consistency with the PA. Met with agency representatives and property owners.

La Jolla Intensive Historic District Survey, San Diego, CA (2002-2004). Senior Planner on a survey team for the La Jolla Historic District. Work performed for the City of San Diego.

Burlingame and Islenair Historic Districts, San Diego, CA (2002-2004). Senior Planner for the supervision of the preparation of historic contexts and historic district nominations. Work performed for the City of San Diego

East Village, Warehouse, and African American Historic District Surveys, San Diego, CA (2002-2004). Outreach team member for inventories of historic districts in the East Village, Warehouse District, and the historic African American district of San Diego. Work performed for the City of San Diego

Individual Historic Designations and Mills Act Program, San Diego, CA (2002-2004). Reviewed all historic designation requests and referrals, prepared staff reports, supervised staff and managed Mills Act contract program comprising 80-100 property evaluations per year; worked with Deputy Director, community, preservation stakeholders and Land Use Committee to develop methodology for implementing new fees for designations and Mills Act contracts.

Senior Planner, City of San Clemente, CA (1990-2002). As Senior Planner, supervised the current planning and customer service section. Supervised Associate Planners and Assistant Planners, including completion of performance evaluations. Reviewed complex development projects ranging across the full spectrum of land uses and entitlements, including CEQA initial studies and documents. Supervised

Teri Delcamp, MA

Architectural Historian

consultant contracts on various projects including General Plan amendments, Specific Plans and implementing entitlements, grants and CEQA documents. Served as Air Quality Planner and LOSSAN rail corridor technical advisory committee member. Managed and administered Planning Commissions and Design Review Subcommittee. Fulfilled Certified Local Government duties. Wrote and presented reports to Commissions, Council, community organizations and public. Established and implemented Mills Act incentive program. Conducted public outreach including community workshops and training.

Marblehead Coastal Project, San Clemente, CA (1990-2002). Managed mid-1990s re-activation of 117 acre, 400+ dwelling unit and 61 acre regional commercial project; supervised and coordinated consultants for General Plan Amendment, Specific Plan and EIR; managed all associated entitlements including tentative tract, site plan review, conditional use permits, design review; coordinated weekly meetings with developer team, and meetings and reviews with other agencies including Coastal Commission and Department of Fish and Game; coordinated all revised project documentation and reports through numerous public hearings; processed project through to approval by Planning Commission and City Council.

Metrolink Station, San Clemente, CA (1990-2002). Managed city portion of award-winning project adjacent to National Register community building; liaised with OCTA consultant; supervised separate design consultant for ancillary “depot” building; coordinated staff and community meetings; developed ancillary building budget and design priorities; completed shared parking analysis, coordinated Coastal Commission’s acceptance of methodology, and conducted required monitoring.

Certified Local Government, San Clemente, CA (1990-2002). Assisted in preparation of application, program, ordinance, etc., to obtain CLG status; prepared grant application; managed OHP and consultant contracts for grant; conducted research, outreach, workshops and public hearings to adopt updated survey; conducted workshops with CLG grant consultant; planned, prepared and obtained approval for City’s first Mills Act Contract program.

Downtown/Business Park Economic Development Achievements and Housing Balance, San Clemente, CA (1990-2002). Managed numerous retail, office and industrial from discretionary entitlements through plancheck to permit issuance for 200,000+ square feet in new projects including DeNaults Hardware; Sav-On; Rip-Curl; Rancho San Clemente Plaza Pacifica; Rancho San Clemente Industrial Park; Talega Business Park; Rancho San Clemente Business Park; as well as residential subdivisions for 500+ dwelling units throughout Forster Ranch and Rancho San Clemente Specific Plan areas, Cross Hill, and numerous individual home developments.

Advanced Planning, San Clemente, CA (1990-2002). Prepared SCAQMD AQMP baseline analysis for City as representative to Orange County Air Quality Technical Advisory Committee; wrote Zoning Code for amended site plan review process and historic preservation incentives; member of staff advisory committee for Citywide General Plan and comprehensive Zoning Code updates, and new Urban Design Guidelines; represented City on LOSSAN rail corridor technical advisory committee which resulted in new Metrolink Station; prepared grant applications for transportation enhancement projects.

Summary of Qualifications

Ms. Roy has over 20 years of experience as an archaeologist, field lead, and supervisor on more than 130 projects throughout California, Nevada, Arizona, and Guam. Conducted archaeological studies for a wide variety of development and resource management projects including work on military installations, energy and transmission projects, commercial and residential developments, historic archaeology projects, and water projects. Competent in all areas of archaeology and efficient in report preparation for a range of cultural resource studies including monitoring projects and archaeological Phase I, II and III studies. Ms. Roy is proficient in laboratory activities including artifact preparation, cataloging, identification, and illustration. Accomplished in the initiation, coordination and completion of field assignments including survey, site testing, dry and wet screening, and data recovery projects. She is also knowledgeable in the preparation of proposals and report writing and research, client, contractor and subcontractor correspondence, laboratory, computer software including Microsoft, Adobe, Geographic Information System (GIS)/ArcView, Computer-Aided Design and Drafting (CADD), Global Positioning System (GPS) and total-station operations, as well as in the illustration of archaeological features, artifacts, and burials. Ms. Roy is established as a qualified archaeological monitor for the City and the County of San Diego. Her experience includes working closely with representatives of San Diego County Parks and Recreation for the past 10 years and she has received accolades from numerous county representatives for her work at park facilities. For the past 4 four years, she has served as the monitoring coordinator for the San Diego Gas & Electric Company (SDG&E) Fire Resource Mitigation Initiative (FiRM) project, where she regularly provided effective communication between field monitors, construction managers/foremen, and Principal Investigators for construction projects and assisted in scheduling and tracking of project progress.

Selected Project Experience

Blythe to Eagle Mountain TLRR Survey (2017). Field Director on this Southern California Edison (SCE) Survey project, which included supervising two crews during a period of two weeks. Conducted survey, mapping, recording new cultural resources and updating previously recorded sites along the transmission line corridor. Other responsibilities included report writing and completion of site records for distribution to SCE and the South Coastal Information Center (SCIC).

On-call Archaeological Services (Present). Archaeologist and Field Lead for SDG&E infrastructure operations and transmission line maintenance activities for over 12 years. Projects include survey, testing, excavations, and data recovery of both historic and prehistoric resources including Native American burial sites. Approved to monitor for City projects throughout San Diego and Imperial counties. Other duties include records search, survey, archaeological documentation and investigations, and

Education

Master of Arts,
Archaeology,
University of
Leicester, England,
In progress

Bachelor of Arts,
Anthropological
Archaeology,
University of
California San Diego,
2002

Associate of Arts,
Psychology, San
Diego City College,
2000

Registrations/ Certifications

OSHA 30-hour
Construction Safety
Training Certification

Competent Person
Certification

Professional Affiliations

Society for California
Archaeology

Society for American
Archaeology

Association of
Environmental
Professionals

Julie A. Roy

Archaeologist

preparation of reports under California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) guidelines.

Fire Resource Cultural Resources Mitigation (Present). Monitoring Coordinator and Lead Archaeologist on this FIRM project for SDG&E. Monitoring Coordinator duties consist of close communication with SDG&E supervisors and staff, liaisons, and contractors in conjunction with the coordination of FIRM project activities associated with cultural and Native American archaeological and monitoring efforts throughout San Diego and Imperial Counties. Archaeological Supervisor duties consists of record search, survey, archaeological site documentation, testing, excavations, and data recovery projects, and preparing reports following CEQA and NEPA guidelines.

Archaeological Monitoring, Bird Rock Avenue Utility Undergrounding Project (2005).

Archaeological Monitor for the undergrounding of residential utilities in the Bird Rock community of La Jolla. The project was conducted under CEQA and the City of San Diego guidelines while working closely with San Diego Gas and Electric Company and the construction contractor. No cultural resources were identified during this project.

Archaeological Monitoring and Data Recovery, Princess Street Utility Undergrounding Project (2005 - 2006).

Archaeological Monitor/Crew Chief for utility undergrounding project, which included trenching through a major prehistoric and ethnohistoric Indian village site (the Spindrift Site/CA-SDI-39) in La Jolla. Crewmembers worked closely with Native American representatives during the recovery of human remains. A concurrent data recovery program incorporated all cultural material recovered from the trenching activities. This project was conducted pursuant to CEQA and City of San Diego guidelines while working closely with San Diego Gas & Electric Company and the construction contractor.

Environmental Impact Statement, Southern Nevada Supplemental Airport (2007 - 2009).

Archaeologist on this project that included survey and recordation of the northern portion of Ivanpah Valley from the California state line to Henderson, Clarke County, Nevada. Cultural sites located within the project area included a section of the pacific railroad, historic roads, camps, railroad and construction debris, transmission lines, trash scatters and prehistoric sites and features. The project was surveyed and recorded in compliance with the Nevada State Historic Preservation Office (SHPO) and Bureau of Land Management (BLM) guidelines.

Monitoring, Genesis Solar Power Project (2011 - 2012). Supervisor-in-Charge of over 20 cultural monitors on this solar power project located in Blythe, California. Responsible for conducting safety meetings and coordinating cultural monitors to all areas of the project site, as well as leading test excavations of discovered resources during construction activities. Also responsible for representing firm during onsite meetings with Nextera officials, Bureau of Veritas, BLM, and safety liaisons for the project. Communicated directly with Native American supervisors and monitors on a daily basis. Recorded and collected artifacts located during construction activities with the use of Global Positioning Satellite technology. Completed daily field notes and collection logs for all collected artifacts, and reviewed all staff monitoring logs prior to daily submission to the California Energy Commission (CEC). Work performed for Nextera.

Survey and Monitoring, Palen Solar Power Project (2009 - 2010). Archaeologist for survey and cultural monitoring in Desert Center, California. Monitored contract and personnel activities during traveling to and from proposed project sites, including trenching and testing within the proposed project areas. Work performed for Solar Millennium.

Julie A. Roy

Archaeologist

Ridgecrest Solar Power Project (2009 - 2010). Archaeologist for surveys of the project area undertaken to determine if cultural resources are present and if there would be any project effects on these resources. Monitored contractor activities during the testing phase of the project to ensure that sites were not impacted during work activities. The project was located in Ridgecrest and work was performed for Solar Millennium.

On-Call Archaeological Services (Present). Archaeologist and Field Lead for County Parks infrastructure and maintenance activities for San Diego County Department of Parks and Recreation. Responsible for communication with County supervisors and contractors, and the coordination of project activities with cultural and Native American monitors for projects throughout San Diego and Imperial Counties. Other duties include records search, field survey, archaeological documentation and investigations including testing, excavations and data recovery projects and preparation of reports following CEQA and NEPA guidelines.

Pacifica Street Utility Undergrounding Project (2006). Archaeological Monitor/Crew Chief for residential utility undergrounding project in the community of Pacific Beach in San Diego. Trenches and cultural materials were documented in conjunction with a concurrent data recovery program. The project included working with Native American representatives and the discovery of human remains. The project was conducted under CEQA and City of San Diego guidelines while working closely with the construction contractor.

Archaeological Monitoring, 20A Julian Conversion Project (2006). Archaeological Monitor for undergrounding of utilities in the City of Julian. The project was conducted under the County of San Diego guidelines while working closely with the construction contractor.

Data Recovery, Hill Street Utility Undergrounding Project (2006). Archaeological Monitor participated in the data recovery for this residential utility undergrounding project in the community of Point Loma in San Diego. The project was conducted under CEQA and City of San Diego guidelines while working closely with the construction contractor.

Archaeological Monitoring, 30th Street Utility Undergrounding Project (2006). Archaeological Monitor for residential utility undergrounding project in the community of South Park in San Diego. The project was conducted under CEQA and City of San Diego guidelines while working closely with the construction contractor.

Summary of Qualifications

Mr. Turner is a Registered Professional Archaeologist (RPA) with a Master's degree in Anthropology and field and college-level teaching experience in archaeology. He is experienced in Section 106, the Native American Graves Protection and Repatriation Act (NAGPRA), and writing detailed reports. Mr. Turner has archaeological research and fieldwork expertise throughout southern California. He has also received training in identifying and analyzing animal remains in archaeological contexts, historic artifact identification, and technical writing. Mr. Turner's experience meets the Secretary of the Interior's Professional Qualification Standards for archaeology.

Selected Project Experience

eTS 43472 "Gold Mine" Monitoring (2020). Archaeologist for an erosion control and repair project in the community of Julian. Conducted cultural resource monitoring and report preparation. Work performed for San Diego Gas & Electric.

Aliso Creek Canyon Restoration Project (2020). Archaeologist for an erosion repair project in Lake Forest. Conducted a field survey of the project area, performed background research, and produced a cultural resources report. Work performed for the Orange County Department of Public Works.

Broadway Channel Improvements - Phase A (2020 -). Archaeologist for an earthen channel improvement project in the city of El Cajon. Performed background research and prepared cultural resource survey report. Work performed for City of El Cajon.

Clairemont Community Plan Update EIR Ph1 (2020). Archaeologist for the Clairemont Community Plan Update. Performed background research and assisted with preparing the Community Plan Update cultural resources section. Work performed for the City of San Diego.

Cordial Road Pipeline (2020). Archaeologist for a pipeline replacement project in the unincorporated portion of the City of El Cajon. Performed background research and field survey. Other responsibilities included the production of a letter report detailing the methods and results of the survey, as well as the completion of a site record update to submit to the South Coastal Information Center. Work performed for the Padre Dam Municipal Water District.

Carmel Mountain Road Life Sciences Project (2020). Archaeologist for a proposed commercial development project in the Torrey Hills Community Plan area.

Education

Master of Arts,
Anthropology, San
Diego State
University, 2018
Bachelor of Arts,
Biology and
Anthropology, San
Diego State
University, 2015

Registrations/ Certifications

Registered
Professional
Archaeologist #17338

Professional Affiliations

Society for Historical
Archaeology
Society for California
Archaeology

James Turner, RPA

Staff Archaeologist

Responsibilities included performing background and archival research and producing an archaeological resources report. Work performed for Allen Matkins Leck Gabme Mallory & Natsis, LLP.

Draft EIS/Overseas EIS - Disposal of Decommissioned, Defueled Ex-Enterprise (CVN 65) & Associated Naval Reactor Plants (2020 -). Archaeologist for the Draft EIS for the disposal of the Navy ex-Enterprise. Responsible for background research and citation management and assisted with document preparation. Work performed for the United States Navy as a subconsultant to ManTech.

Eastlake Village Park (2020). Archaeologist for a telecommunication project in the community of Eastlake in the City of Chula Vista. Conducted cultural resource monitoring for the drilling of a cassion hole. Work performed for Terracon.

General Coatings (2020). Archaeologist for a due diligence project for the possible future expansion of the General Coatings property. Conducted background research, which included analyzing a records search and viewing historic maps and aerial photographs of the project area. Additional responsibilities included performing a field survey of the project area and producing a cultural resources due diligence report. Work performed for General Coatings.

Lake Rancho Viejo Environmental Consulting (2020). Archaeologist for a cultural resources survey for a proposed housing development in the community of Fallbrook in northern San Diego County. Conducted background research and report preparation. Work performed for Q Technology Direct LLC with County of San Diego as the lead agency.

Mtn View Connector Pipeline - Cultural (2020). Archaeologist for a waterline replacement project in the community of Alpine. Conducted cultural resource monitoring and prepared the final monitoring report. Work performed for Padre Dam Municipal Water District.

Salt Bay Design District Specific Plan EIR (2020). Archaeologist for a mixed-use development project, which proposes to include wholesale/retail shopping and light industrial uses. Participated in an archaeological testing program and produced artifact tables for report. Work performed for M & A Gabae.

Santa Ysabel Trail (2020 -). Staff Archaeologist for a proposed 3 mile hiking trail in the unincorporated community of Julian. Performed background research, participated in the cultural resource survey, and contributed to the cultural resources survey report. Work performed for the County of San Diego Parks and Recreation Department.

Summary of Qualifications

Ms. Sugimoto has 10 years of professional experience in archaeology. She has worked in Southern California archaeology for 6 years, including work in historic archaeology, prehistoric archaeology, human osteology, and close coordination with Native American tribes. She has directed test and data recovery investigations, monitoring programs, and archaeological site surveys, and has prepared reports for various cultural resource management projects. She is well-versed in National Historic Preservation Act, National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) regulations and processes.

Selected Project Experience

Darco Project (TTM 31589) (2021). Archaeologist for cultural services provided in support of the Darco Residential Development Project, located in the City of Moreno Valley (City), Riverside County, California. HELIX was contracted by D.R. Horton to provide a Phase I archaeological study to meet the requirements of the City. The study included a records search from the Eastern Information Center; a Sacred Lands File search through the NAHC; tribal outreach with the local Native American community, as identified by the NAHC; review historic maps and aerial photographs of the project area; a field survey of approximately 36 acres; and preparation of a cultural resources survey report detailing the methods and results of the study, as well as recommendations.

Morningstar Village (2021). Archaeologist for cultural services provided in support of the Morningstar Village Project located in the community of French Valley, unincorporated Riverside County, California. HELIX was contracted by Morningstar Village LLC to provide a cultural resource study in support of a 404 Pre-Construction Notification application for a Nationwide Permits; the report addressed both CEQA and Section 106 of the National Historic Preservation Act to support agency permitting. The study included a records search from the Eastern Information Center; a Sacred Lands File search through the NAHC; tribal outreach with the local Native American community, as identified by the NAHC; review historic maps and aerial photographs of the project area; a field survey of the United States Army Corp of Engineers (USACE) permit area; and preparation of a cultural resources report detailing the methods and results of the study, as well as recommendations. An additional letter report was prepared for the USACE to summarize the cultural resources within the USACE permitting area, and additional tribal outreach was conducted at the request of USACE.

Education

Master of Arts,
Anthropology, North
Carolina State
University, Raleigh,
2015

Bachelor of Arts,
Archaeology, California
State University
Dominguez Hills, 2013

Professional Affiliations

Member, Project
Management Institute
(PMI), 2019-Present

Member, Society for
American Archaeology,
2013-Present

Kassie Sugimoto, M.A.

Cultural Resources Project Manager I

Oak Valley Town Center (2021). Archaeologist for cultural services provided in support of the Oak Valley Town Center Project located in the City of Calimesa (City), Riverside County (County), California. HELIX was contracted by Oak Valley Development Company to provide a Phase 1 cultural resources study to the standards of the City of Calimesa; the report will address both CEQA and Section 106 of the National Historic Preservation Act, to support agency permitting. The study included a records search from the Eastern Information Center; a Sacred Lands File search through the NAHC; tribal outreach with the local Native American community, as identified by the NAHC; review historic maps and aerial photographs of the project area; conduct a field survey of approximately 244 acres; and prepare a cultural resources report detailing the methods and results of the study, as well as recommendations.

Sandalwood Commercial Development Project (2021). Archaeologist for cultural services provided in support of the Sandalwood Commercial Development Project, located in the City of Calimesa (City), Riverside County, California. HELIX was contracted by J&T Investments to provide a Phase I archaeological study to meet the requirements of the City. The study included a records search from the Eastern Information Center; a Sacred Lands File search through the NAHC; tribal outreach with the local Native American community, as identified by the NAHC; review historic maps and aerial photographs of the project area; conduct a field survey of approximately 10 acres; and prepare a cultural resources survey report detailing the methods and results of the study, as well as recommendations.

Sky Canyon Sewer Main Extension (2021). Archaeologist for cultural services provided in support of the Sky Canyon Sewer Main Extension Project located in the city of Murrieta, Riverside County, California. A Cultural Resources Monitoring Plan (CRMP) was developed in consultation with the consulting Tribe for the construction of approximately 6,700 linear feet of new gravity-fed 36 inch diameter sewer main proposed by the lead agency, the Eastern Municipal Water District. HELIX provided cultural services, including Native American Outreach and Coordination, development of a CRMP, Cultural Resources Monitoring, and a letter report upon completion of the archaeological monitoring program.

McCanna Hills Addendum to an Environmental Impact Report, Riverside County, California. Archaeologist for preparation of an addendum to EIR319 previously prepared for the McCanna Ranch Specific Plan near Lake Perris in western Riverside County.

Archaeological Studies for a Riverside County Parcel (APN 436-360-009), Riverside County, California. Project Manager and Project Archaeologist for execution and management of the project contract with the client, conducted field and archival research, prepared technical documents for the City of San Jacinto. Work performed for Panorama Properties, Inc.

Lincoln Van Buren Project, Riverside, California. Archaeologist for Phase I studies for the development of a gas station. Field archaeologist for archaeological survey. Work performed for Psomas.

University of California Riverside (UCR), Riverside, California. Archaeologist for Phase I studies for as needed contract. Field archaeologist for archaeological and historic surveys. Work performed for Psomas.

Cultural Resources Studies for the City of San Jacinto, San Jacinto, California. Project Manager and Project Archaeologist. Executed and managed the project's contract with the client, conducted field and archival research, prepared technical documents for the City for Assessor Parcel Numbers 439-112-032, 033, 034, 036, 003, 004, 007, 008, and 009. Work performed for Mark Development.

Summary of Qualifications

Trevor H. Gittelhough is an archaeological assistant project manager, specializing in underwater cultural resources, with over a decade of experience in archaeology, including both cultural resources management and academic projects. This experience includes site monitoring; surveys and excavations; laboratory sorting, cataloging, and analysis; and conservation. He has conducted environmental, paleontological, and cultural resources work throughout California, Nevada, Oregon, and Florida in support of compliance with California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA) for public and private sector clients including a range of local, state, and federal agencies such as Southern California Edison, the United States Navy and Air Force, Caltrans, and FEMA.

He has experience in team management in the terrestrial and underwater archaeological management sectors, with expertise in implementation of mitigation and monitoring projects, report production, and coordination with Indigenous groups. Underwater and Indigenous archaeology are Mr. Gittelhough's specialties, which are enhanced by his skill and experience in sailing, diving, and prehistoric technology construction. His research interests include maritime technologies and practices, settlement patterns, trade and exchange, colonial interactions, prehistoric technologies, and anthropological/archaeological theory. In addition, he has expertise in illustration of artifacts, stratigraphic and excavation unit profiles, site maps, GIS, remote sensing, and underwater excavation and mapping techniques.

Mr. Gittelhough's technical skills include terrestrial and submerged archaeological survey, excavation, and site testing. He has authored numerous site records and technical reports detailing the results of cultural resources work, as well as academic articles. He has also had thorough training in artifact analysis and specializes in lithic analysis and maritime conservation. His academic background includes advanced training in conservation and underwater archaeology. He has extensive training at the graduate level and earned his M.A. from East Carolina University. Mr. Gittelhough is Registered Professional Archaeologist, a member of the Society for American Archaeology (SAA), a member of the Society for Historical Archaeology (SHA), and a member of the Society for California Archaeology (SCA).

Selected Project Experience

Bouquet Canyon Road Project, Los Angeles County, CA (2021). Cultural Resource Specialist serving as lead archaeological monitor and technical report writer for this project in the City of Santa Clarita. This work included monitoring all ground-disturbing

Education

Master of Arts, Maritime Studies, East Carolina University, 2019

Bachelor of Arts, Archaeology, University of California, Santa Barbara, 2011

Registrations/ Certifications

Register of Professional Archaeologists, 2018

HAZWOPER Certification; 2018 – 2021

ESRI GIS Certification
AAUS Scientific Diver
Red Cross First AID
Red Cross CPR DAN
Divers First Aid

Professional Affiliations

Society for American Archaeology
Society for Historical Archaeology
Society for California Archaeology

Trevor Gittelhough, RPA

Cultural Resources Assistant Project Manager

activities associated with geotechnical studies, such as drilling and trenching. Monitoring was also undertaken during ground penetrating radar studies of portions of the project area.

California Crossings, Attisha Trust Parcel, San Diego County, CA (2021). Cultural Resource Specialist for a cultural resources study in support of biological mitigation measures (burrowing owl habitat creation) for the proposed Project in the County of San Diego. Prepared an archaeological resources assessment in compliance with state and federal regulations. Scope included a cultural resources records search, review of historic maps and aerials, and preparation of a technical report.

Enchanted Hills Park Project, Perris, Riverside County, CA (2021). Cultural Resource Specialist for a monitoring program during initial sitework for this project in the City of Perris, in Riverside County. Prepared monitoring letter report.

Mission Basin Groundwater Purification Facility Well Expansion and Brine Minimization Project, Oceanside, San Diego County, CA (2021). Cultural Resource Specialist for a cultural resources study in support of the proposed Project in the City of Oceanside, in northern San Diego County. Prepared a monitoring results memo for monitoring of geotechnical investigations and assisted with preparation of the cultural resources technical report in compliance with state and federal regulations. Scope included a cultural resources records search, preparation of a letter report/memo, and assistance with the technical report.

Oak Shores/Lake Morena Views MWC Consolidation Project, San Diego County, CA (2021). Cultural Resource Specialist for a cultural resources study in support of the proposed Project in eastern San Diego County. Assisted with preparation of a cultural resources technical report in compliance with state and federal regulations, as well as State Water Resources Control Board. Scope included a cultural resources records search, review of historic maps and aerials, and assistance with preparation of a technical report.

Archaeological Monitoring for the P-586 Missile Assembly Building - San Nicolas Island, Ventura County, CA (2021). Cultural Resource Specialist serving as archaeological monitor and technical report writer. This work included monitoring all ground-disturbing activities, including grubbing, grading, and trenching. Monitoring included close involvement with United States Navy personal and Tribal Members and Observers.

Shady View Residential Project Environmental Impact Report, Chino Hills, San Bernardino County, CA (2021). Cultural Resource Specialist for a cultural resources study in support of the proposed Project in the City of Chino Hills in San Bernardino County. Assisted in the preparation of the technical report in compliance with state and federal regulations. Project scope included a cultural resources records search, review of historic maps and aerials, field survey, and preparation of a technical report.

Trevor Gittelhough, RPA

Cultural Resources Assistant Project Manager

Previous Project Experience

Los Angeles County Natural History Museum Center for History and Cultural Project, Los Angeles County, CA. Assistant Project Manager for a cultural resources study in support of the proposed Project in the downtown area of the City Los Angeles. Prepared an archaeological and tribal cultural resources assessment in compliance with CEQA, specifically Assembly Bill 52. Scope included a cultural resources records search, review of historic maps and aerials, and preparation of a technical study for submittal to the Department of City Planning.

Environmental Services Support for the Villages at The Alhambra Project, Los Angeles County, CA. Assistant Project Manager for a cultural resources study in support of the proposed Project in the downtown area of the City Los Angeles. Prepared an archaeological and tribal cultural resources assessment in compliance with CEQA, specifically Assembly Bill 52. Scope included a cultural resources records search, review of historic maps and aerials, and preparation of a technical study for submittal to the Department of City Planning.

Tierra Crossing Tribal Cultural Resource and Archaeological Assessment, Los Angeles, CA. Assistant Project Manager for a cultural resources study in support of the proposed Project in the downtown area of the City Los Angeles. Prepared an archaeological and tribal cultural resources assessment in compliance with CEQA, specifically Assembly Bill 52. Scope included a cultural resources records search, review of historic maps and aerials, and preparation of a technical study for submittal to the Department of City Planning.

Tribal Cultural Resources Assessment for the 17346 Sunset Project, Los Angeles, CA. Assistant Project Manager for a cultural resources study in support of the proposed Project in the downtown area of the City Los Angeles. Prepared a tribal cultural resources assessment in compliance with CEQA, specifically Assembly Bill 52. Scope included a cultural resources records search, review of historic maps and aerials, and preparation of a technical study for submittal to the Department of City Planning.