CULTURAL RESOURCE SURVEY OF THE SAN DIEGO FREEDOM RANCH MAJOR USE PERMIT MODIFICATION, CAMPO, SAN DIEGO COUNTY, CALIFORNIA (Major Use Permit Modification PDS2012-3301-74-011-07 [MUP74-011W^2])

San Diego Freedom Ranch
Major Use Permit Modification P74-011W**;** KIVA: 3992 10-018

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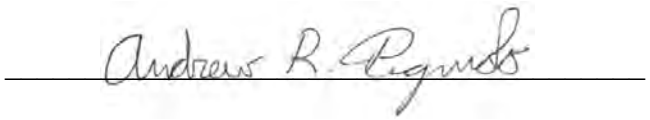

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January 2014

NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

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Client/Project Proponent:	Mr. Glen Webber
Report Date:	January 2014
Report Title:	Cultural Resource Survey of the San Diego Freedom Ranch Major Use Permit Modification, Campo, San Diego County, California
Type of Study:	Cultural Resource Survey
New Sites:	CA-SDI-20236 (FRAS-S-1), CA-SDI-20237 (FRAS-S-2), CA-SDI-20238 (FRAS-S-3), P-37-031968 (FRAS-I-1), P-37-031969 (FRAS-I-2)
Updated Sites:	CA-SDI-17845 (FR-S-1), CA-SDI-17846 (FR-S-2), P-37-027278 (FR-I-1), P-37-027279 (FR-I-2), P-37-027280 (FR-I-3)
USGS Quadrangle:	Cameron Corners Quadrangle 7.5'
Acreage:	112.6-Acres
Permit Numbers:	Major Use Permit Modification P74-011W**;** KIVA: 3992 10-018
Key Words:	County of San Diego, Campo, positive survey, sites, isolates, lithics, bedrock milling, historic refuse deposits, cans, glass, CA-SDI-17845, CA-SDI-17846, P-37-027278, P-37-027279, P-37-027280, CA-SDI-20236, CA-SDI-20237, CA-SDI-20238, P-37-031968, P-37-031969

TABLE OF CONTENTS

Section **Page**

TABLE OF CONTENTS
(Continued)

Section **Page**

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS AND ABBREVIATIONS

APE (Area of Potential Effects)
ARMR (Archaeological Resource Management Report)
CA (California)
California Register (California Register of Historic Resources)
CEQA (California Environmental Quality Act)
cm (centimeter)
CRM (Cultural Resource Management)
EIR (Environmental Impact Report)
ft. (feet)
Laguna Mountain (Laguna Mountain Environmental, Inc.)
Local Register (San Diego County Local Register of Historic Resources)
m (meter)
MOU (Memorandum of Understanding)
MUP (Major Use Permit)
NEPA (National Environmental Policy Act)
NHPA (National Historic Preservation Act)
RPO (Resource Protection Ordinance)
SCIC (South Coastal Information Center)
SDI (San Diego County; site number prefix)
SDM (San Diego Museum of Man; site number prefix)

EXECUTIVE SUMMARY

Laguna Mountain Environmental, Inc. (Laguna Mountain) conducted an archaeological survey of 112.6 acres of the Freedom Ranch Property for a proposed Major Use Permit (MUP) Project. The project is located in the Campo area of San Diego County and includes expansion and construction of facilities on a portion of the project. Archaeological and historical research included a records search, literature review, examination of historic maps and previous studies, archival research, and archaeological field survey of the property.

Cultural resource work was conducted in accordance with the California Environmental Quality Act (CEQA), the County Resource Protection Ordinance (RPO), and the County of San Diego guidelines. The County of San Diego served as lead agency for the project and CEQA compliance.

Records searches at the South Coastal Information Center and the San Diego Museum of Man indicated that a portion of the area has been previously surveyed (Pigniolo and Kwiatkowski 2006). Fifteen documented archaeological investigations have taken place in the vicinity of the project, and 28 archaeological resources have been identified through previous research within a one-mile radius of the project. Sites CA-SDI-17845 and CA-SDI-17846 along with isolates P-37-027278, P-37-027279, P-37-027280 have been previously recorded within the project area.

The survey of the project area was conducted on February 22 and 23, 2011 by Mr. Andrew R. Pigniolo, RPA, Mr. Nathanial Yerka, and Mr. Matthew Sivba. Ms. Tonya Largo served as Native American monitors during the survey. Although brush covered approximately 70 percent of the project area it was possible to survey the entire area in 10 to 15 m transect intervals. Surface visibility averaged approximately 50 percent throughout the project area. Special attention was paid to rock outcrops and knoll tops and open chaparral understory. The cultural resources survey of the project adequately served to identify cultural resources.

In addition to relocating the previously recorded sites CA-SDI-17845 and CA-SDI-17846, the survey identified three previously unrecorded historic resources CA-SDI-20236 (FRAS-S-1), CA-SDI-20237 (FRAS-S-2), and CA-SDI-20238 (FRAS-S-3) and two isolated historic artifacts, P-37-031968 (FRAS-I-1) and P-37-031969 (FRAS-I-2), within the project area. The three new sites are all small historic refuse scatters alongside the same dirt road. P-37-031968 is an isolated metal can. Isolate P-37-031969 is a single glass bottle. Both isolates were located more than 50 m downslope from sites CA-SDI-20237 and CA-SDI-20238 and were possibly displaced from these deposits by erosional forces.

Photographs and project records for this inventory will be temporarily curated at Laguna Mountain until final curation arrangements can be made at the San Diego Archaeological Center or another appropriate regional repository.

Sites CA-SDI-17845, CA-SDI-17846, CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238 have not been previously evaluated for nomination to the California Register of Historical Resources (California Register) or for significance under the County RPO. In the absence of testing, sites CA-SDI-17845, CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238 qualify as significant under County of San Diego Guidelines, CEQA and the County's RPO. As a series of relocated artifacts without context and integrity, site CA-SDI-17846 does not qualify for nomination to the California Register or as significant under the County RPO. As isolated prehistoric and historic artifacts, isolates P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969 do not qualify for nomination to the California Register or as significant under the County RPO.

The current Phase 1 through Phase 4 development plans indicate that none of the cultural resources are in areas proposed for direct impacts. CA-SDI-17845 is located outside, but adjacent to the Phase 1 area of direct impacts. An approximately 30 foot buffer is between the site boundary and the proposed impacts. Site CA-SDI-17846 is near, but outside grading impacts proposed for Phase 4 of the project. CA-SDI-20236, CA-SDI-20237, CA-SDI-20238, and P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969 are located outside areas proposed for development and will not be impacted. CA-SDI-17845 represents a significant cultural resource under County Guidelines and will be placed in an open space easement, fenced, and avoided during project construction. CA-SDI-17846 and isolate P-37-027278 do not qualify as significant cultural resources and no further treatment is necessary. No artifacts were collected during the survey and curation is not necessary.

The majority of the western portion of the project is in Holocene-age alluvium that retains some potential for cultural resources, although cuts and excavated areas within the project did not indicate the presence of any cultural material. Archaeological and Native American construction monitoring is recommended during all earthmoving activities.

1.0 INTRODUCTION

1.1 Project Description

1.1.1 Project Summary

The proposed project is located just north of the community of Cameron Corners and slightly west of the Tecate Divide (Figure 1). The project area is located at 1777 Buckman Springs Road, north of the junction of Lake Morena Road, near the northwest corner of the Campo Indian Reservation. It is located in Section 33, Township 17 South, Range 5 East (APN #607-110-10, -11, -36, -52, 607-120-68 and Parcel "B" of Boundary Adjustment B/C 10-0034). The project is limited to the 112.6-acre proposed project area and no off-site improvements are proposed. The project area is shown on the Cameron Corners USGS 7.5' Quadrangle (Figure 2).

The proposed project is a Major Use Permit (MUP) for an approximately 112.6-acre area of the San Diego Freedom Ranch. The project consists of incorporating additional roads, buildings and facilities into the existing rehabilitation facility. As part of the project, development including building pads, access roads, septic systems, and utilities would be graded and excavated (Figure 3).

The cultural resource survey was conducted pursuant to the California Environmental Quality Act (CEQA), the County Resource Protection Ordinance (RPO), and County of San Diego guidelines. The County of San Diego served as lead agency for CEQA compliance. The cultural resource survey was conducted to determine if any cultural resources eligible for inclusion in the California Register of Historic Resources (California Register) could be affected by this project.

1.1.2 Project Personnel

The cultural resource inventory has been conducted by Laguna Mountain Environmental, Inc. (Laguna Mountain), whose cultural resources staff meets state and local requirements. Mr. Andrew R. Pigniolo served as Principal Investigator for the project. Mr. Pigniolo is a member of the Register of Professional Archaeologists (RPA; previously called SOPA) and meets the Secretary of the Interior's standards for qualified archaeologists. He is also on the County of San Diego's list of qualified archaeologists. Mr. Pigniolo has an MA in Anthropology from San Diego State University and has more than 30 years of experience in the San Diego region. The resume of the Principal Investigator is included in Appendix A.

Mr. Nathanial D. Yerka served as Associate Archaeologist for the project, assisting during the field survey and with report preparation. Mr. Yerka has a BA in Anthropology with a concentration in archaeology from the University of California, San Diego. He has more than eight years of archaeological field experience, seven of which are in southern California.

Mr. Matthew Sivba also served as Associate Archaeologist for the project, assisting in the survey and site recordation. Mr. Sivba has a BA in Archaeology from the University of San Diego and has 10 years of southern California archaeological field experience.

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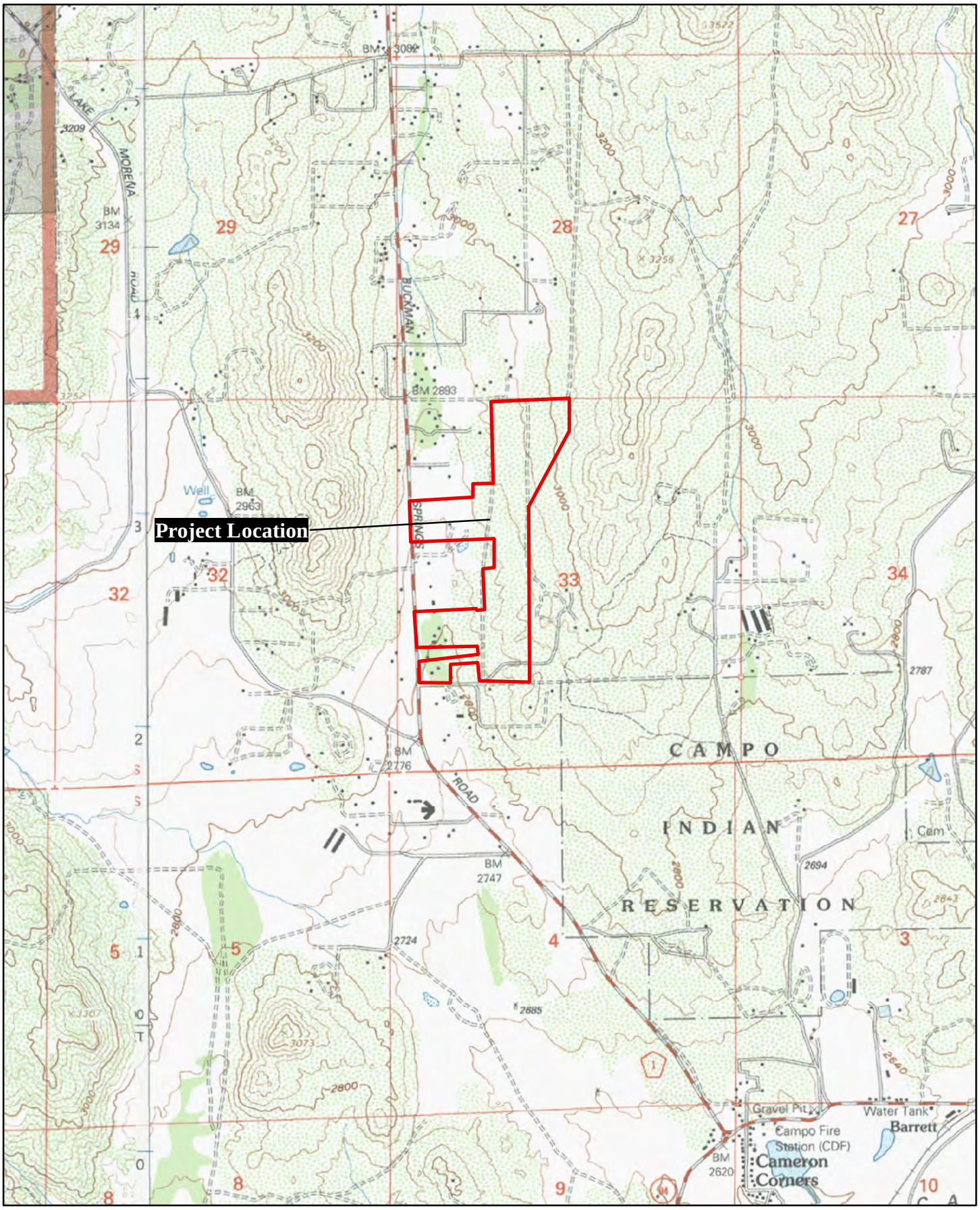
M I L E S

Figure 1
Regional Location Map

Laguna Mountain Environmental, Inc.



Source: USGS 7.5' Cameron Corners and Morena Reservoir Quadrangles

0 1,000 2,000 Feet

Figure 2
Project Location

Laguna Mountain Environmental, Inc.

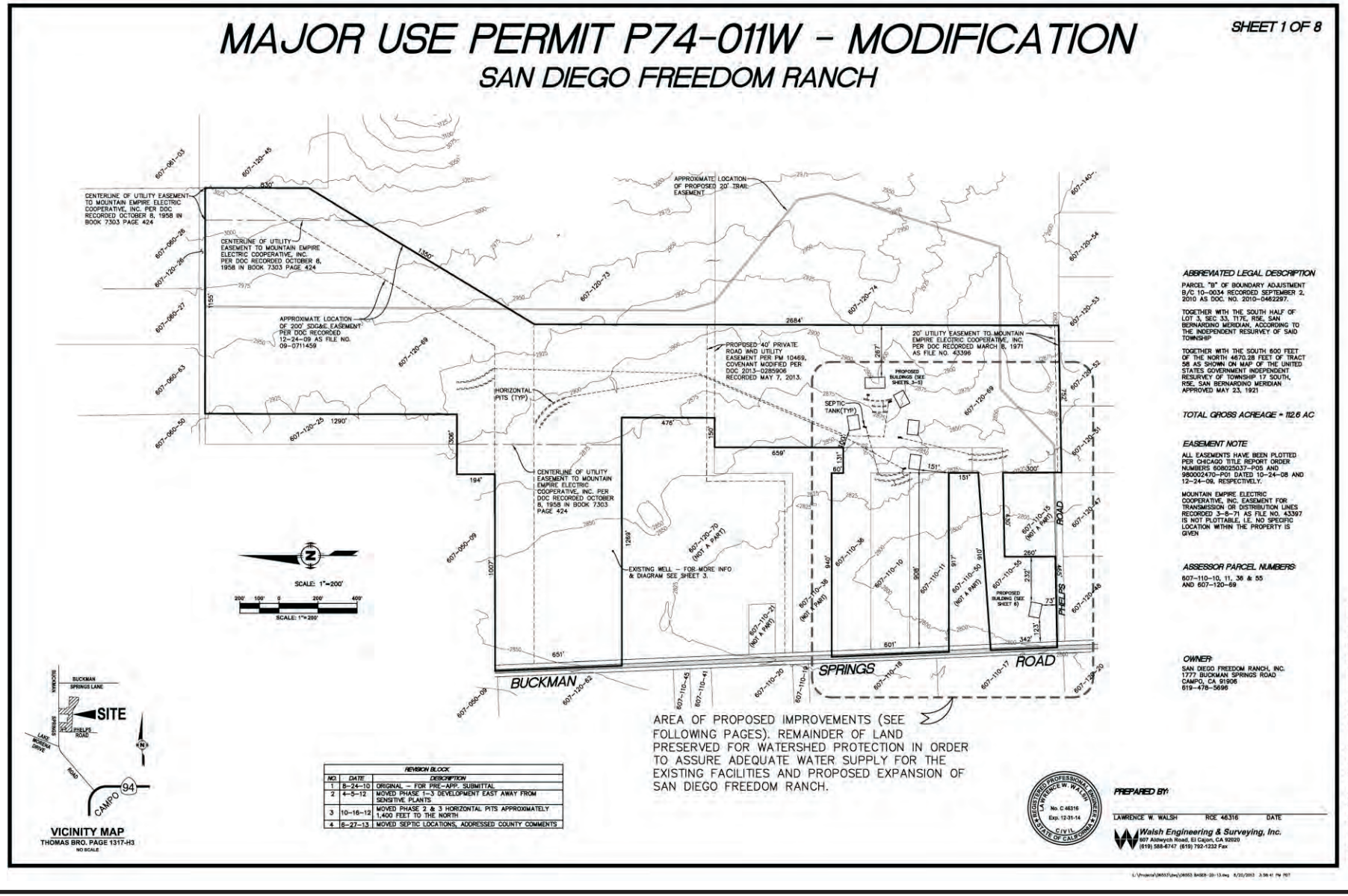


Figure 3
Project Plan

Ms. Carol Serr served as Associate Archaeologist for the project assisting with artifact assessment and age determination as well as site form preparation and report editing.

Ms. Tonya Largo, from the Campo Indian Reservation, served as Native American monitor for the project. Ms. Tonya Largo has previous experience in local archaeological monitoring.

1.1.3 Structure of the Report

This report follows the County of San Diego Report Format and Content Requirements for cultural resources, which is a modified version of the Archaeological Resource Management Report (ARMR) Guidelines. The report introduction provides a description of the project and background on the project area, as well as any previous research. Section 2 describes the guidelines for determining archaeological significance. Section 3 describes the research design, while Section 4 describes the survey methods and inventory results including a description of the historic structure and the isolated discovery. Section 5 provides the interpretation of any identified resources and impacts to those resources, and Section 6 includes a discussion of mitigation measures and recommendations for the project.

1.2 Existing Conditions

The following environmental and cultural background provides a context for the cultural resource inventory.

1.2.1 Environmental Setting

The project is located in the southeastern portion of San Diego County just west of the Tecate Divide. The project area is generally sloped, encompassing low ridges and drainages with granitic outcrops on the east side of the property. The west side of the project area is a relatively flat valley floor. It is located north of a large open drainage that gently slopes to the southeast towards the northwestern side of Campo Valley. Elevations onsite range from approximately 2,800 to 3,025 ft. above mean sea level.

Current land use in the western portion of the project consists of residential facilities, training/meeting facilities, and agricultural areas. Most of the existing structures and roads are recent in age. Both dirt and pave driveways access the existing structures. Most of the area has been disturbed by past development and agriculture. Brushing related to mandated fire clearing has occurred along the eastern side of the developed area.

The eastern portion of the project area is generally undeveloped. It includes dirt roads and paths as well as a portion of an area disturbed by past agriculture. The dirt roads and paths primarily serve as utility access easements and secondarily serve as leisure and exercise paths for Freedom Ranch use. On the eastern side of the property there is a recently brushed and graded section associated with construction of the SDG&E Sunrise Power Link.

The geomorphology of the project area is largely a product of the region's geologic history. During the Jurassic and late Cretaceous (>100 million years ago) a series of volcanic islands paralleled the current coastline in the San Diego region. This island arc of volcanos spewed out vast layers of tuff (volcanic ash) and breccia that have since been metamorphosed into hard rock of the Santiago Peak Volcanic formation. These fine-grained rocks provided a regionally important resource for Native American flaked stone tools.

At about the same time, a granitic and gabbroic batholith was being formed under and east of these volcanoes. This batholith was uplifted and forms the granitic rocks and outcrops of the Peninsular Range and the foothills to the west. The project area is part of this batholith and is underlain by these granitic rocks (Strand 1962). Outcrops of granodiorite, as well as granite, were present throughout the project area. In San Diego County the large and varied crystals of these granitic rocks provided particularly good abrasive surfaces for Native American seed processing. These outcrops were frequently used for bedrock milling of seeds. The batholith contains numerous pegmatite dikes. This was a good source of quartz, a material used by Native Americans for flaked stone tools and ceremonial purposes.

As the Peninsular Batholith rose, it warped and metamorphosed the overlying sediments, forming the Julian Schist (Remeika and Lindsay 1992). This formation contains quartzite, a material also used for Native American flaked stone tools. Its relatively poor flaking qualities made this quartzite less popular for tool making than the quartz and Santiago Peak materials. Additional volcanic activity in the Jacumba area later left behind the Table Mountain Volcanic Formation and an additional source of high quality volcanic rock for use in the manufacture of stone tools.

The project area is on the margin of an alluvial valley and partially covered by Holocene age alluvium (Strand 1962). The three soil type series that occur throughout the project area include the Mottsville series soils, La Posta series soils, and the Calpine series soils (Bowman 1973). Mottsville series consists of excessively drained, very deep, loamy coarse sands that in some areas formed in sandy sediments transported from granitic rock. This soil occurs in valleys and on alluvial fans. Mottsville loamy course sand with 2 to 9 percent slopes covers the western half of the property. The representative profile includes a grayish-brown surface layer, slightly acidic loamy coarse sand about 6 inches thick. The next layer is brown, slightly acid loamy coarse sand and extends to a depth of more than 60 inches (Bowman 1973).

The La Posta series consists of somewhat excessively drained loamy coarse sands that formed in material weathered from granodiorite. La Posta rocky loamy coarse sand with 5 to 30 percent slopes (eroded) occurs in the eastern half of the property. Within this soil type, rock outcrops that cover 5 to 10 percent of the surface are present. The representative profile includes a surface layer that is grayish-brown and brown, slightly acidic and neutral loamy coarse sand that grades to deeply weathered grandiorite at a depth of about 29 inches (Bowman 1973).

The Calpine series consists of well drained, very deep coarse sandy loams that formed in granitic alluvium. Rocky coarse sandy loam with 5 to 9 percent slopes occur in the far northeast portion of project area. The representative profile includes a dark greyish-brown, neutral and medium acid coarse sandy loam about 12 inches thick. The subsoil is brown, slightly acid, coarse sandy

loam about 22 inches thick. The substratum is brown, neutral, stratified fine gravelly sandy loam to fine gravelly loamy coarse sand, extending to a depth of more than 60 inches (Bowman 1973).

A small seasonal creek is located approximately 1 mile to the southwest in a large open drainage that gently slopes to the southeast towards the northwestern side of Campo Valley. This water source includes a variety of riparian plants and habitats and therefore could have provided a seasonal water source for Native Americans using the area. The project area itself includes a very small seasonal drainage that may retain seasonal water for short periods after rains.

The climate of the region can generally be described as Mediterranean, with cool wet winters and hot dry summers. Rainfall limits vegetation growth. Two vegetation communities adapted to the dry conditions of the area occur in the project area. These include chamise chaparral and southern coast live oak woodland. Components of these communities provided important resources to Native Americans in the region. Sage seed, yucca, buckwheat, acorns, and native grasses formed important food resources to Late Prehistoric Native Americans.

Animal resources in the region include deer, fox, raccoon, skunk, bobcats, coyotes, rabbits, and various rodent, reptile, and bird species. Small game, dominated by rabbits, is relatively abundant.

1.2.2 Cultural Setting

Prehistoric Period

Paleoindian Period

The earliest well documented prehistoric sites in southern California are identified as belonging to the Paleoindian period, which has locally been termed the San Dieguito complex/tradition. The Paleoindian period is thought to have occurred between 9,000 years ago, or earlier, and 8,000 years ago in this region. Although varying from the well-defined fluted point complexes such as clovis, the San Dieguito complex is still seen as a hunting focused economy with limited use of seed grinding technology. The economy is generally seen to focus on highly ranked resources such as large mammals and relatively high mobility which may be related to following large game. Archaeological evidence associated with this period has been found around inland dry lakes, on old terrace deposits of the California desert, and also near the coast where it was first documented at the Harris Site.

Archaic Period

Native Americans during the Archaic period had a generalized economy that focused on hunting and gathering. In many parts of North America, Native Americans chose to replace this economy with types based on horticulture and agriculture. Coastal southern California economies remained largely based on wild resource use until European contact (Willey and Phillips 1958). Changes in hunting technology and other important elements of material culture have created two distinct subdivisions within the Archaic period in southern California.

The Early Archaic period is differentiated from the earlier Paleoindian period by a shift to a more generalized economy and an increased focus on the use of grinding and seed processing technology. At sites dated between approximately 8,000 and 1,500 years before present, the increased use of groundstone artifacts and atlatl dart points, along with a mixed core-based tool assemblage, identify a range of adaptations to a more diversified set of plant and animal resources. Variations of the Pinto and Elko series projectile points, large bifaces, manos and portable metates, core tools, and heavy use of marine invertebrates in coastal areas are characteristic of this period, but many coastal sites show limited use of diagnostic atlatl points. Major changes in technology within this relatively long chronological unit appear limited. Several scientists have considered changes in projectile point styles and artifact frequencies within the Early Archaic period to be indicative of population movements or units of cultural change (Moratto 1984), but these units are poorly defined locally due to poor site preservation.

Late Archaic or Late Prehistoric Period

Around 2,000 B.P., Yuman-speaking people from the eastern Colorado River region began migrating into southern California, representing what is called the Late Prehistoric Period. The Late Prehistoric Period in San Diego County is recognized archaeologically by smaller projectile points, the replacement of flexed inhumations with cremation, the introduction of ceramics, and an emphasis on inland plant food collection and processing, especially acorns (True 1966). Inland semi-sedentary villages were established along major water courses, and montane areas were seasonally occupied to exploit acorns and piñon nuts, resulting in permanent milling features on bedrock outcrops. Mortars for acorn processing increased in frequency relative to seed grinding basins. This period is known archaeologically in southern San Diego County as the Yuman (Rogers 1945) or the Cuyamaca Complex (True 1970).

The Kumeyaay (formerly referred to as Diegueño) who inhabited the southern region of San Diego County, western and central Imperial County, and northern Baja California (Almstedt 1982; Gifford 1931; Hedges 1975; Luomala 1976; Shipek 1982; Spier 1923) are the direct descendants of the early Yuman hunter-gatherers. Kumeyaay territory encompassed a large and diverse environment which included marine, foothill, mountain, and desert resource zones. Their language is a dialect of the Yuman language which is related to the large Hokan super family.

There seems to have been considerable variability in the level of social organization and settlement variance. The Kumeyaay were organized by patrilineal, patrilocal lineages that claimed prescribed territories, but did not own the resources except for some minor plants and eagle aeries (Luomala 1976; Spier 1923). Some lineages occupied procurement ranges that required considerable residential mobility, such as those in the deserts (Hicks 1963). In the mountains, some of the larger groups occupied a few large residential bases that would be occupied biannually, such as those occupied in Cuyamaca in the summer and fall, and in Guatay or Descanso during the rest of the year (Almstedt 1982; Rensch 1975). According to Spier (1923), many Eastern Kumeyaay spent the period of time from spring through autumn in larger residential bases in the upland procurement ranges, and wintered in mixed groups in residential bases along the eastern foothills on the edge of the desert (i.e., Jacumba and Mountain Springs). This variability in settlement mobility and organization reflects the great range of environments in the territory.

Acorns were the single most important food source used by the Kumeyaay. Their villages were usually located near water, which was necessary for leaching acorn meal. Other storable resources such as mesquite or agave were equally valuable to groups inhabiting desert areas, at least during certain seasons (Hicks 1963; Shackley 1984). Seeds from grasses, manzanita, sage, sunflowers, lemonadeberry, chia and other plants were also used along with various wild greens and fruits. Deer, small game and birds were hunted and fish and marine foods were eaten. Houses were arranged in the village without apparent pattern. The houses in primary villages were conical structures covered with tule bundles, having excavated floors and central hearths. Houses constructed at the mountain camps generally lacked any excavation, probably due to the summer occupation. Other structures included sweathouses, ceremonial enclosures, ramadas and acorn granaries. The material culture included ceramic cooking and storage vessels, baskets, flaked lithic and ground stone tools, arrow shaft straighteners, stone, bone, and shell ornaments.

Hunting implements included the bow and arrow, curved throwing sticks, nets and snares. Shell and bone fishhooks, as well as nets, were used for fishing. Lithic materials including quartz and metavolcanics were commonly available throughout much of the Kumeyaay territory. Other lithic resources, such as obsidian, chert, chalcedony and steatite, occur in more localized areas and were acquired through direct procurement or exchange. Projectile points including the Cottonwood Series points and Desert Side-notched points were commonly produced.

Kumeyaay culture and society remained stable until the advent of missionization and displacement by Hispanic populations during the eighteenth century. The effects of missionization, along with the introduction of European diseases, greatly reduced the native population of southern California. By the early 1820s, California was under Mexico's rule. The establishment of ranchos under the Mexican land grant program further disrupted the way of life of the native inhabitants.

Ethnohistoric Period

The Ethnohistoric period refers to a brief period when Native American culture was initially being affected by Euroamerican culture and historical records on Native American activities were limited. When the Spanish colonists began to settle California, the project area was within the territory of a loosely integrated cultural group historically known as the Kumeyaay or Northern and Southern Diegueño because of their association with the San Diego Mission. The Kumeyaay as a whole speak a Yuman language which differentiates them from the Luiseño to the north, who speak a Takic language (Kroeber 1925). Both of these groups were hunter-gatherers with highly developed social systems. European contact introduced diseases that dramatically reduced the Native American population and helped to break down cultural institutions. The transition to a largely Euroamerican lifestyle occurred relatively rapidly in the nineteenth century.

Historic Period

Cultural activities within San Diego County between the late 1700s and the present provide a record of Native American, Spanish, Mexican, and American control, occupation, and land use. An abbreviated history of San Diego County is presented for the purpose of providing a background on the presence, chronological significance, and historical relationship of cultural resources within the county.

Native American control of the southern California region ended in the political views of western nations with Spanish colonization of the area beginning in 1769. De facto Native American control of the majority of the population of California did not end until several decades later. In southern California, Euroamerican control was firmly established by the end of the Garra uprising in the early 1850s (Phillips 1975).

Spanish

The Spanish Period (1769-1821) represents a period of Euroamerican exploration and settlement. Dual military and religious contingents established the San Diego Presidio and the San Diego and San Luis Rey Missions. The Mission system used Native Americans to build a footing for greater European settlement. The Mission system also introduced horses, cattle, other agricultural goods and implements; and provided construction methods and new architectural styles. The cultural and institutional systems established by the Spanish continued beyond the year 1821, when California came under Mexican rule.

Mexican

The Mexican Period (1821-1848) includes the retention of many Spanish institutions and laws. The mission system was secularized in 1834, which dispossessed many Native Americans and increased Mexican settlement. After secularization, large tracts of land were granted to individuals and families and the rancho system was established. Cattle ranching dominated other agricultural activities and the development of the hide and tallow trade with the United States increased during the early part of this period. The Pueblo of San Diego was established during this period and Native American influence and control greatly declined. The Mexican Period ended when Mexico ceded California to the United States after the Mexican-American War of 1846-48.

American

Soon after American control was established (1848-present), gold was discovered in California. The tremendous influx of American and Europeans that resulted quickly drowned out much of the Spanish and Mexican cultural influences and eliminated the last vestiges of de facto Native American control. Few Mexican ranchos remained intact because of land claim disputes and the homestead system increased American settlement beyond the coastal plain.

1.2.3 Record Search Results

The archaeological inventory includes archival and other background studies in addition to Laguna Mountain's field survey of the project area. The archival research consisted of literature and record searches at local archaeological repositories, in addition to an examination of historic maps, and historic site inventories. This information was used to identify previously recorded resources and determine the types of resources that might occur in the survey area. The methods and results of the archival research are described below.

The records and literature search for the project was conducted at the South Coastal Information Center at San Diego State University and the San Diego Museum of Man. The records search included a one-mile radius of the project area (excluding portions of the Campo Indian Reservation) to provide background on the types of sites that would be expected in the region (Appendix B). Copies of historic maps were provided by the South Coastal Information Center.

Sixteen archaeological investigations have been previously documented in the vicinity of the project. These studies indicate there was a moderate amount of prehistoric activity in the area. Table 1 summarizes the investigations within the one-mile radius. The property area was not previously surveyed prior to 2006, but the adjacent property to the north and east was surveyed by American Pacific Environmental Consultants (APEC) in 1979 recording several archaeological sites to the east. These included a lithic scatter (CA-SDI-6746), a bedrock milling feature (CA-SDI-6747), and a lithic/ceramic scatter (CA-SDI-6748).

Table 1. Archaeological Investigations within a One-Mile Radius of the Project Area

Author	Report Title	Year
APEC	Morena Lake Development TPM 15326 EAD Log #78-21-19	1979
Case	Phase I Cultural Resources Survey of the Proposed Children's Village Project Near Cameron Corners	2004
Crouthamel	An Archaeological Survey of the Campo Indian Reservation of Rental and Mutual Help Housing Projects.	1995
Cupples	An Archaeological Survey of Sanitation Facilities Project Sites on Pala, Manzanita, Campo, and Old Campo Indian Reservation	1975
Garcia-Herbst, Iversen, Laylander, and Williams	Final Inventory Report of the Cultural Resources within the Approved San Diego Gas & Electric Sunrise Powerlink Final Environmentally Superior Southern Route, San Diego and Imperial Counties, California.	2010
Garcia-Herbst, Laylander, Potter, and Williams	Class III Inventory of the Cultural Resources along San Diego Gas & Electric Tie Line 629 on Bureau of Land Management Property for the Wood to Steel Pole Replacement Project, San Diego County, California	2009
Gardener	Cultural Resources Survey for the SDG &E 4-pole Replacement Project, Campo, San Diego County, California.	2009
Glenn	Volume 1 - Final: Phase 1 Historic Properties Identification Study within the Proposed 168- acres Bartlett Subdivision (TPM 20754), San Diego County, California (Log No. 03-20-003).	2004
Hall and Thomas	Archaeological Survey for the Proposed Old Campo Wildland-urban Interface Hazardous Fuels Reduction - San Diego County, California.	2008
McGinnis	Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California	2005
McGinnis	Cultural Resources Survey Report for the Old Campo Water System Upgrade Project Located on Campo Indian Reservation San Diego County, California.	2009
McGinnis and Baksh	Cultural Resources Survey Report for Five Homes Located on Campo Indian Reservation San Diego County, California.	2006
Pierson and Clifford	Cultural Resources Study for the St. Vincent De Paul Children's Village Project, San Diego County, California.	2005
Pigniolo & Kwiatkowski	Cultural Resource Survey of the Freedom Ranch Project, Campo, California	2006
SWCA	Final Cultural Resources Survey for Alternatives for the Sunrise Powerlink Project in Imperial, Orange, Riverside, and San Diego Counties, California	2008
Taylor	Campo Indian Reservation-Cultural Resource Inventory	1982

Twenty-eight archaeological resources, 16 sites and 12 isolates, have been identified through previous research within a one-mile radius of the project area. The majority of the sites are located more than ½-mile to the east and west of the project area. The most recently recorded resources were identified during the 2006 survey of the southern portion of the property (Pigniolo and Kwiatkowski 2006). The previously recorded sites in the region provide an idea of the types of cultural resources that might be expected within the project area itself. The cultural resources within a one-mile radius are summarized on Table 2. As indicated in Table 2, site types in the region are predominantly temporary camps, bedrock milling features, lithic scatters, and ceramic scatters.

Table 2. Recorded Cultural Resources within a One-Mile Radius of the Project Area

Site Number	Site Type	Recorder
CA-SDI-6746	Lithic Scatter	Cook and Christenson
CA-SDI-6747	Bedrock Milling Feature with Associated Artifact Scatter	Cook and Christenson
CA-SDI-6748	Artifact Scatter (Lithics, Ceramics, Groundstone)	Cook and Christenson
CA-SDI-11024	Bedrock Milling Feature with Associated Lithic Scatter	Pigniolo and Kyle
CA-SDI-11025	Prehistoric Village/Temporary Camp; Historic Adobe	Pigniolo and Kyle
CA-SDI-16773	Bedrock Milling Feature with Associated Artifact Scatter	Glenn
CA-SDI-16774	Bedrock Milling Feature	Glenn
CA-SDI-16777	Bedrock Milling Feature with Associated Artifact Scatter	Glenn
CA-SDI-16778	Bedrock Milling Feature with Associated Artifact Scatter	Glenn
CA-SDI-17092	Bedrock Milling Feature with Associated Lithic Scatter	Craft and Kwiatkowski
CA-SDI-17093	Bedrock Milling Feature; Historic Water Tower	Craft and Kwiatkowski
CA-SDI-17094	Bedrock Milling Feature with Associated Lithic Scatter	Craft and Kwiatkowski
CA-SDI-17095	Bedrock Milling Feature	Craft and Kwiatkowski
CA-SDI-17096	Unknown (Site Record Missing)	Unknown
CA-SDI-17845	Bedrock Milling Feature with Associated Lithic Scatter	Pigniolo
CA-SDI-17846	Relocated Non-native groundstone tools	Pigniolo
P-37-025289	Isolate Lithic Flake	Glenn
P-37-025290	Isolate Lithic Hammerstone	Glenn
P-37-025291	Isolate Lithic Flake	Glenn
P-37-025292	Isolate Groundstone Metate	Glenn
P-37-025293	Isolate Groundstone Metate	Glenn
P-37-025294	Isolate Groundstone Mano	Glenn
P-37-025295	Isolate Lithic Hammerstone	Glenn
P-37-025296	Isolate Pottery	Glenn
P-37-025297	Isolate Lithic Flake	Glenn
P-37-027278	Isolate Lithic Flake	Pigniolo
P-37-027279	Isolate Lithic Flake	Pigniolo
P-37-027280	Isolate Lithic Flake	Pigniolo

Historic research included an examination of a variety of resources. The current listings of the National Register of Historic Places were checked through the National Register of Historic Places website. The California Inventory of Historic Resources (State of California 1976) and the California Historical Landmarks (State of California 1992) were also checked for historic resources. Historic map research indicated the presence of three historic structures located within the project's boundaries on the Campo 7.5' USGS Quadrangle made in 1959. These structures do not appear on the 1920 aerial photograph of the area. No other historic resources were located within the project area itself.

1.3 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structure, and objects that possess exceptional value or qualify illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA land the San Diego County Local Register provide the guidance for making such a determination. The following sections(s) details the criteria that a resource must meet in order to be determined important.

1.3.1 California Environmental Quality Act (CEQA)

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

(1) A resource listed in, or determine to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR. Section 4850 et seq.).

(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of section 5024.1(g) of the Public Resources Code, shall be presumed to be historically of culturally significant. Public agencies must treat any such resources as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Tile 14, Section 4852) including the following:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with the lives of person important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or individual, or possesses high artistic value; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined eligible for listing the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in sections 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

(1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

(2) The significance of an historical resource is materially impaired when a project:
   (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
   (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historical or culturally significant; or
   (C) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).

(2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.a of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

(3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities to determine whether the project location contains unique archaeological resources.

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

Section 1564.5 (d) & (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an initial study identifies the existence of, or the probably likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code SS5097398. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

(1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
(2) The requirement of CEQA and the Coastal Act.

1.3.2 San Diego County Local Register of Historical Resources (Local Register)

The County requires that resource importance be assessed not only at the State level as required by CEQA, but at the local level as well. If a resource meets any one of the following criteria as outlined in the Local Register, it will be considered an important resource.

(1) Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
(2) Is associated with the lives of persons important to the history of San Diego County or its communities;
(3) Embodies the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
(4) Has yielded, or may be likely to yield, information important in prehistory or history.

1.3.3 San Diego County Resource Protection Ordinance (RPO)

The County of San Diego's RPO protects significant cultural resource. The RPO defines "Significant Prehistoric or Historic Sites" as follows:

> Sites that provide information regarding important scientific research questions about prehistoric or historic activities that have scientific, religious, or other ethnic value of local, regional, State, or Federal importance.

Such locations shall include, but not be limited to:

(1) Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:

   (aa) Formally determined eligible or listed in the National Register of Historic Placed by the Keeper of the National Register; or

   (bb) To which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or

(2) One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and

(3) Any location of past or current sacred religious or ceremonial observances which is either:

   (aa) Protected under Public Law 95-341, the American Indian Religious Freedom Act or Public Resources Code Section 5097.9, such as burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures or,

   (bb) Other formally designated and recognized sites which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

The RPO does not allow non-exempt activities or uses damaging to significant prehistoric or historic lands on properties under County jurisdiction. This includes development, trenching, grading, clearing and grubbing, or any other activity or use damaging to significant prehistoric or historic lands. The only exempt activity is scientific investigation with an approved research design prepared by an archaeologist certified by the Society of Professional Archaeologists. All discretionary projects are required to be in conformance with applicable County Standards related to cultural resources, including the noted RPO criteria on prehistoric and historic sites. Non-compliance would result in a project that is inconsistent with County standards.

2.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

Determining resource importance is a two-step process. First, the cultural environment must be defined. Then the criteria for determining importance must be applied to the resource. The following subchapters provide guidance on this process and detail the cultural environment and criteria that is typically used in evaluating resources.

2.1 Defining the Cultural Environment

San Diego County has more than 23,000 recorded sites as of April 2011 and this number continues to grow. The cultural environment consists of the remains of prehistoric and historic human behaviors. When cultural resources have been identified, the cultural environment has been defined and the baseline condition set. Cultural resources include archaeological and historic sites, structures, and objects, as well as traditional cultural properties. The following is a list of components that can make up the cultural environment.

2.1.1 Building

A building is a resource, such as a house, barn, church, factory, hotel, or similar structure created principally to shelter or assist in carrying out any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn. The Somers-Linden Farmstead (Victorian), the McRae/Albright Ranch House (Victorian), the Holmgren House (Moderne), and the County Administration Center (Spanish Colonial Revival) are examples of buildings in the County of San Diego.

Special consideration should be given to moved buildings, structures, or objects, cultural resources achieving significance within the past fifty (50) years, and reconstructed buildings. Context, time, and original form are integral to historic preservation. However, it is important to recognize resources outside of the required characteristics for the history that they embody.

Moved buildings, structures, or objects

The retention of historical resources on site should be encouraged and the non-historic grouping of historic buildings into parks or districts would be discouraged. However, it is recognized that moving an historic building, structure, or object is sometimes necessary to prevent its destruction, and is appropriate in some instances. An historical resource should retain its historic features and compatibility in orientation, setting, and general environment.

Cultural resources achieving significance within the past fifty (50) years

In order to understand the historical importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than fifty (50) years old may be considered if it can be determined that sufficient time has passed to understand its historical importance.

Reconstructed Buildings

A reconstructed building less than fifty (50) years old may be eligible if it embodies traditional building methods and techniques that play an important role in a community's historically rooted beliefs, customs, and practices. An example of a reconstructed building is an American Indian sweat lodge.

2.1.2 Site

A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possessed historical, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric or historic event, and if no buildings, structures, or objects marked it at that time. Examples of such sites are trails, designed and traditional landscapes, battlefields (San Pasqual Battlefield), homestead sites, habitation sites (Village of Pamo), American Indian ceremonial areas (Gregory Mountain), petroglyphs, pictographs, and traditional cultural places.

2.1.3 Structure

The term "structure" is used to describe a construction made for a functional purpose rather than creating human shelter. Examples of structures include mines, flumes, roads, bridges, dams, and tunnels.

2.1.4 Object

The term "object" is used to describe those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed, as opposed to a building or structure. Although it may be moveable by nature or design, an object is associated with a specific setting or environment. Objects should be in a setting appropriate to their significant historic use, role, or character. Objects that are relocated to a museum are not eligible for listing in the Local Register. Examples of objects include fountains, monuments, maritime resources, sculptures, and boundary markers.

2.1.5 Landscapes and Traditional Cultural Properties

"Landscapes" vary in size from small gardens to national parks. In character, they range from designed to vernacular, rural to urban, and agricultural to industrial. A cultural landscape is a geographic area which, because of a unique and integral relationship between the natural and cultural environments, has been used by people; shaped or modified by human activity, occupation or invention; or is infused with significant value in the belief system of a culture or society. Estate gardens, cemeteries, farms, quarries, mills, nuclear test sites, suburbs, and abandoned settlements, and prehistoric complexes, all may be considered under the broad category of cultural landscapes. Landscapes provide a distinct sense of time and place. Traditional cultural landscapes (Traditional Cultural Properties) can also consist of related archaeological and ethnographic features and places (see below for definition of a prehistoric district).

2.1.6 Prehistoric and Historic Districts

Districts are united geographic entities that contain a concentration of historic buildings, structures, objects, and/or sites united historically, culturally, or architecturally. Districts are defined by precise geographic boundaries; therefore, districts with unusual boundaries require a description of what lies immediately outside the area, in order to define the edge of the district and to explain the exclusion of adjoining areas. Camp Lockett in Campo is an example of a historic district. The Village of Pamo is an example of a prehistoric Indian rancheria that represents a traditional cultural landscape that could be a district, consisting of the places used and inhabited by a traditional culture. A traditional cultural landscape defined as a district could include a village site, related milling features, stone quarries and lithic tool process areas, ceremonial locations and landmarks, and temporary or seasonal camps. Together, these represent a traditional cultural landscape.

2.2 Criteria for the Determination of Resource Importance

A number of criteria are used in identifying significant historic/archaeological resources and are based upon the criteria for inclusion in the San Diego County Local Register. Significance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture.

The San Diego County Register was modeled after the California Register. As such, a cultural resource is determined significant if the resource is listed in, or determined to be eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, or the San Diego County Register of Historical Resources. Any resource that is significant at the National or State level is by definition significant at the local level.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources; or is not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or is not identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that a resource may be historical as defined in Public Resources Code section 5020.1(j) or 5024.1.

The following criteria must be considered when evaluating a resource's importance. The first four criteria were derived from the significance criteria found in the California Environmental Quality Act and the San Diego County Register of Historical Resources (Ordinance No.9493; San Diego County Administrative Code §396.7). The San Diego County Register is similar to both the National Register and California Register but is different in that significance is evaluated at the local level.

1. Resources associated with events that have made a significant contribution to the broad patterns of California or San Diego County's history and cultural heritage. Examples

include resources associated with the Battle of San Pasqual (Mexican-American War, 1846) or gold mining in the Julian area (1870s), or a Kumeyaay settlement in the Cuyamaca Valley. Each of these resources would be considered significant because it is associated with an event that has made a significant contribution to the broad patterns of San Diego County's history and cultural heritage.

2. Resources associated with the lives of persons important to our past, including the history of San Diego County or its communities. Resources that are associated with the life of George W. Marston (Benefactor/Merchant/Civic Leader), Kate Sessions (Horticulturalist), John D. Spreckels (Investor/Developer), Ellen Browning Scripps (Philanthropist), Ah Quin (Chinese Merchant/Labor Contractor), Manuel O. Medina (Pioneer of the Tuna Industry), Jose Manuel Polton (Hatam [Kumeyaay Captain of the Florida Canyon Village]), or Jose Pedro Panto (Kumeyaay Captain of the San Pasqual Pueblo) illustrates this criteria because this list identifies examples of individuals that are important to the history of San Diego County or its communities.

3. Resources that embody the distinctive characteristics of a type, period, region (San Diego County), or method of construction, or represents the work of an important creative individual, or possesses high artistic values. Resources representing the work of William Templeton Johnson (Architect – Balboa Park, Serra Museum), Irving Gill (Architect – Bishop's School), Lilian Rice (Rancho Santa Fe), or Hazel Waterman (Designer – Estudillo Adobe Restoration) would be considered significant because they represent the work of an important creative individual; or if a resource is identified as a Queen Anne, Mission Revival, Craftsman, Spanish Colonial, or Western Ranch Style structure, it would be significant because it embodies the distinctive characteristics of a type or period.

4. Resources that have yielded or may be likely to yield, information important in prehistory or history. Most archaeological resources contain information; however the amount of information varies from resource to resource. For example, a small lithic scatter will contain information, but it will be on a much more limited basis than that of a village or camp site. The information may be captured during initial recordation and testing of the site or may require a full data recovery program or additional treatment/mitigation. **Any site that yields information or has the potential to yield information is considered a significant site.** Most resources will be considered significant because they contain some information that contributes to our knowledge of history or prehistory. The criteria used to evaluate a single resource are the same criteria used to evaluate cumulative impacts to multiple resources outside the boundary of a project.

5. Although districts typically will fall into one of the above four categories, because they are not specifically identified, the following criterion is included which was obtained from the National Register:

   Districts are significant resources if they are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic

merit to warrant individual recognition, but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture. A traditional cultural landscape is an example of a prehistoric district because individual sites must be considered within the broader context of their association with one another.

6. Resource Protection Ordinance. Cultural resources must be evaluated for both the California Environmental Quality Act as outlined in criteria 1-4 above and the Resource Protection Ordinance pursuant to Article III of the ordinance. Under the Resource Protection Ordinance, cultural resources are considered "RPO" significant if they meet the definition of a RPO "Significant Prehistoric or Historic Site", as set forth in Section 3.1 above.

7. Human remains are considered "highly sensitive" by the County. As such, human remains require special consideration and treatment. Regulations require that if human remains are discovered, the County Coroner shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission, shall be contacted in order to determine proper treatment and disposition of the remains. The following criterion was included pursuant to the California Environmental Quality Act (§15064.5) and California State Code (PRC5097.98 and HSC7050.5). As such, a resource shall be considered significant if it contains any human remains interred outside of a formal cemetery. Mitigation measures will be developed on a case by case basis by the County archaeologist and the archaeological consultant. In addition, it is of the utmost importance to tribes that human remains be avoided whenever feasible.

8. Integrity is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. The evaluation of integrity is somewhat of a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its historical associations or attributes and context. Resources must retain enough of their historical character or appearance to be recognizable as historical resources and to convey the reasons for their significance. An evaluation of integrity is an essential part of determining significance for historical resources such as building, structures, and districts.

   Integrity is evaluated through the assessment of a cultural resource's attributes, and may include location, design, setting, materials, workmanship, feeling, and association. It must be judged with reference to the particular criteria under which a resource is proposed for eligibility (structural, architectural, artistic, historic location, archaeological site, historic district). Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

   Attributes - Attributes are those distinctive features that characterize a resource. They should be evaluated and compared to other properties of its type, period, or method of construction.

Location - Location is the place where the property was constructed or the place where the historical event occurred. The actual location of an historical property, complemented by its setting, is particularly important in recapturing the sense of historical events and persons.

Design - Design is the combination of elements that create the historical form, plan, space, structure, and style of a property. This includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials. Design can also apply to districts and to the historical way in which the buildings, sites, or structures are related. Examples include spatial relationships between major features; visual rhythms in a streetscape or landscape plantings; the layout and materials of walkways and roads; and the relationship of other features, such as statues, water fountains, and archaeological sites.

Setting - Setting is the physical environment of an historical property. It refers to the historical character of the place in which the property played its historical role. It involves how, not just where, the property is situated and its historical relationship to surrounding features and open space. The physical features that constitute the historical setting of an historical property can be either natural or manmade and include such elements as topographical features, vegetation, simple manmade paths or fences and the relationships between buildings and other features or open spaces.

Materials - Materials are the physical elements that were present during the development period and are still present or, if materials have been replaced, the replacement(s) must have been based on the original. The property must be an actual historical resource, not a re-creation. For example, a Victorian style wood-frame dwelling that has been covered with reconstructed stucco has lost its integrity of materials. Conversely, an adobe wall that has been reconstructed with similar adobe mud, as opposed to adobe-simulate concrete, would retain its integrity of materials.

Workmanship - Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history. It is the evidence of the artisans' labor and skill in constructing or altering a building, structure, object, or site. It may be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. Examples of workmanship in historic buildings include tooling, carving, painting, graining, turning, and joinery. Examples of workmanship in precontact contexts include pottery, stone tools, basketry, rock art, bedrock milling, and stone structures.

To assess integrity one must:

(1) Define essential physical features that must be present to a high degree for a property to represent its significance;

(2) Determine whether the essential physical features are apparent enough to convey the property's significance; and

(3) Compare the property with similar properties in the locally significant theme.

A property that is significant for its historical association should retain the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). If the property is a site where there are no material cultural remains, such as a battlefield, the setting must be intact. If the historical building associated with the event, pattern, or person no longer exists, the property has lost its historical integrity.

A property important for illustrating a particular architectural style or construction technique must retain the physical features that constitute that style or technique. A property that has lost some historical materials or details can be considered if it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. A property should not be considered if it retains some basic features conveying massing, but has lost the majority of the features that once characterized its style. Normally changes to a structure that are reversible will not affect integrity because they will be less than significant.

Properties being considered for the first five criteria above must not only retain the essential physical features, but the features must be visible enough to convey their significance and historical identity. This means that even if a property is physically intact, its integrity is questionable if its significant features are concealed under modern construction. Archaeological properties are the exception to this – by nature they may not require visible features to convey their significance.

Note: Unless a resource is determined to be "not significant" based on the above criteria, it will be considered a significant resource. If it is agreed to forego significance testing on cultural sites, the sites will be treated as significant resources and must be preserved through project design. In addition, a treatment plan must be prepared that will include preservation of cultural resources.

3.0 ANALYSIS OF PROJECT EFFECTS

3.1 Methods

3.1.1 Survey Methods

The survey of the project area was conducted on February 22 and 23, 2011 by Mr. Andrew R. Pigniolo, RPA, Mr. Nathanial Yerka, and Mr. Matthew Sivba. Ms. Tonya Largo served as Native American monitors during the survey. Although brush covered approximately 70 percent of the project area it was possible to survey the entire area in 10 to 15 m transect intervals. Surface visibility averaged approximately 50 percent throughout the project area. Special attention was paid to rock outcrops and knoll tops and open chaparral understory. The cultural resources survey of the project adequately served to identify cultural resources. Cultural resources identified during the survey were recorded on State of California, Department of Parks and Recreation forms and are included in Appendix C.

3.1.2 Curation

No artifacts were recovered from any of the sites during the survey therefore no artifact curation is necessary at this time.

3.1.3 Native American Participation

Native American involvement in the project included Red Tail Monitoring and Research, Inc. who provided Ms. Tonya Largo, from the Campo Indian Reservation, as Native American Monitor to participate in the field survey.

3.2 Survey Results

In addition to relocating the previously recorded sites CA-SDI-17845 and CA-SDI-17846, the survey identified three previously unrecorded historic resources CA-SDI-20236 (FRAS-S-1), CA-SDI-20237 (FRAS-S-2), and CA-SDI-20238 (FRAS-S-3), and two isolated historic artifacts P-37-031968 (FRAS-I-1), P-37-031969 (FRAS-I-2), within the project area (Figure 4) (Table 3).

CA-SDI-17845 served as a prehistoric temporary camp with associated bedrock milling features. CA-SDI-17846 (P-37-027277) is a cluster of non-native, relocated mortars and pestles from the southwest or Mexico that have been used as landscaping decorations in a garden.CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238 are small historic refuse scatters. P-37-031968 is an isolated metal beverage can. Isolate P-37-031969 is a single glass bottle. Both isolates were located more than 50 m downslope from sites CA-SDI-20237, and CA-SDI-20238 but are probably displaced from these deposits by erosional factors. The resources are described in greater detail below.

Isolate flakes P-37-027278, P-37-027279, and P-37-027280 were located within the project area on a previous survey, but were not relocated during the current survey. P-37-027278 was an isolated Santiago Peak Volcanic flake. Isolates P-37-027279, and P-37-027280 are both isolated clear quartz flakes in a disturbed context around a house structure.

Figure 4

Project Location and Associated Cultural Resources

(Confidential figure located in Appendix D)

Table 3. Summary of Survey Results

Site Number	Type	Features	Artifacts	Size
CA-SDI-17845	Temporary Camp with Bedrock Milling	3 milling features and possible additional milling feature	2 flake tools, 1 hammerstone, 2 manos, 1 metate fragment, 50+ debitage, and 20+ FAR	130 x 100 m
CA-SDI-17846 (P-37-027277)	Non-native Groundstone Artifacts	N/A	4 vesicular basalt mortars and 3 pestle fragments	1 x 1 m
CA-SDI-20236(FRAS-S-1)	Historic Refuse Scatter	None	100+ 3-in. or smaller metal cans, including evaporated milk; 42+ 4 to 5-in. size cans; 5 6.5-in. large cans; 2 fuel cans; 2 5- in. metal coil springs; 1 stove pipe; 2 cone top cans; 30+ bottle glass fragments; 6 ceramic fragments	9 x 45 ft.
CA-SDI-20237 (FRAS-S-2)	Historic Refuse Scatter	None	90+ 2 to 3-in. size cans; 70+ 4 to 5-in. cans; 8 6.5-in. cans; 6 bundles of metal wire; 1 5-gal. paint can lid; 19 glass liquor bottle fragments with screw caps; 1 milk glass container fragment	110 x 62 ft.
CA-SDI-20238 (FRAS-S-3)	Historic Refuse Scatter	None	24± 2-3-in. metal cans; 1 5-in. metal can; 1 paint can; glass Jadite bowl fragments; 30+ glass canning jar fragments; 10+ green and clear bottle glass fragments; glass tumbler & baking dish fragments	10 x 48 ft.
P-37-027278	Isolated Flake	None	Santiago Peak Volcanic interior flake	N/A
P-37-027279	Isolated Flake	None	Clear quartz interior flake	N/A
P-37-027280	Isolated Flake	None	Clear quartz interior flake	N/A
P-37-031968 (FRAS-I-1)	Isolated Metal Can	None	2.5-in. dia. beverage can	N/A
P-37-031968 (FRAS-I-2)	Isolated Glass Bottle	None	Pharmaceutical product bottle	**N/A**

3.2.1 Sites

CA-SDI-17845

Site CA-SDI-17845 is a prehistoric temporary camp at the base of a small ridge focused around a large granitic rock outcrop. This site was initially recorded during the 2006 survey of the area (Pigniolo and Kwiatkowski 2006). The site is northeast of a small gazebo and garden. Although one feature is located below the main rock outcrop, most of the site activity appears to be focused on a slightly flatter area above and east of the main rock outcrop area. The site is approximately 130 m north/south by 100 m east/west. Subsurface depth is likely based on the artifacts exposed by brushing.

The site includes at least three bedrock milling features. Feature A is located near the top of the outcrop and includes a single mortar. The rock is heavily exfoliated and other milling may have been present on the feature in the past. Only the shape of the mortar remains and not the ground surface. Feature B is a larger boulder adjacent to Feature A. It contains at least one slick and, again, others may have been present, but have since exfoliated off. Feature C is on a separate rock, below the main outcrop. It contains at least three basins. Evidence of ground surfaces remain on some, but other areas have exfoliated. Another large flat rock is present in the site area, but brushing has covered much of the surface. This rock may represent an additional feature once it is exposed.

The main concentration of artifacts is above and east of the main milling area. Artifacts include 2 flaked lithic tools, 1 volcanic cobble mano fragment with a pecked surface, 1 bifacial granitic shouldered mano fragment, 1 granitic slab metate fragment, 1 Santiago Peak Volcanic hammerstone fragment, and more than 50 pieces of debitage of materials that are approximately 70% Santiago Peak Volcanic, 20% Table Mountain Volcanic and 10% quartz.

The site also includes approximately 20 fragments of fire-affected rock. Some are clustered and may represent a disturbed hearth feature. Site integrity is poor. The fire department required brush clearing in this area and the use of heavy equipment in shallow soils during brushing has heavily impacted the site. Erosion is further impacting the site as a result of brush being cleared.

The site was relocated during the current survey and found to be generally as previously recorded, however, some surface disturbance related to imported material and clippings from other areas has occurred to the surface obscuring some of the previous surface artifacts and introducing some imported gravel. No artifacts were collected during the survey and no curation is necessary.

CA-SDI-17846 (P-37-027277)

This resource consists of collection of non-local artifacts used as decorative items in a garden. These materials were initially recorded during the 2006 survey of the area (Pigniolo and Kwiatkowski 2006). The use of vesicular basalt in the artifacts suggests an origin in Mexico or the southwest. The artifacts used as decoration along with other non-local rock in a cactus and succulent garden. They are clustered in an approximately 1 by 1 m area in the southeastern portion of the fenced garden. The artifacts include four vesicular basalt mortars and three elongated pestles among other non-local rock. The resource obviously has no integrity because these items have been transported from their original source locality. These items were still present in 2011. No artifacts were collected during the survey and no curation is necessary.

CA-SDI-20236 (FRAS-S-1)

Site CA-SDI-20236 is a historic refuse scatter located immediately west of the easternmost north/south dirt road. The site is just north of a cleared and graded machinery or construction pad. The scatter measures approximately 45 ft. north/south by 9 ft. east/west. Although a minimal amount of refuse is dispersed for some 5 ft. east of the dirt road, the main concentration of artifacts is on the western downslope side. The scatter is dispersed along a meandering seasonal wash. Subsurface depth is unlikely beyond the present resting depth of the material.

Metal artifacts include 100+ 2 to 3-inch diameter cans, including evaporated milk cans, 42+ 4 to 5-inch diameter cans, 5 6.5-inch diameter large (paint) cans, 2 fuel cans, 2 5-inch diameter coil springs, and 1 stove pipe. Also present are two 6-inch tall cone top beverage cans that contained either beer or soda. This type of can was made from 1935 to the mid-1950s but most commonly produced in the 1930s to 1940s (Busch 1981:193).

Five diagnostic glass pieces were observed including a round Best Foods jar base of a typical cylindrical shape indicating it was made after the mid-1940s when this company's facet-sided jar stopped being used (based on advertisements). Another glass container base, made by the Glass Container Corporation, displays the markings "5 GC (overlapping, angular letters) 9." This mark was used after 1945. The "9" might be a date code for 1959, as seen on Glass Container Corp wine bottle collections from historic deposits in downtown San Diego. A jar made by Owens-Illinois Glass Co. has the base markings "20 <(I)> 6" over " 3767-C." The "6" code indicates a date of manufacture in 1936 due to the lack of stippled texture on the base, however this single-digit code could have also been used on their containers in 1946. The second code indicates this was a wide-mouthed food jar. A base of a large jar or gallon jug was also made by the Owens-Illinois Glass Co. sometime after 1954.

Additional artifacts observed are more than 20 assorted glass fragments, including a ribbed milk white glass bowl. At least six ceramic fragments of ironstone and porcelain were also noted along with a rim of a stoneware storage crock.

The integrity is fair. These sites exist along a dirt road where deposition was either a one-time event or occurred over multiple episodes. The slope of this area lends to natural erosion and dispersement of the cultural material from its initial deposit. CA-SDI-20236 has two additional factors for ongoing integrity loss. The first is that the north/south dirt path transects the easternmost boundary of the site. The artifacts on the eastern side of the dirt road–whether part of the initial deposit or a subsequent dump–will transcend into the road due to their upslope location. The second factor is that CA-SDI-20236 has several woodrat structures atop the cultural material. This biological intrusion will have bioturbation effects. No artifacts were collected during the survey and no curation is necessary.

CA-SDI-20237 (FRAS-S-2)

CA-SDI-20237 is another historic refuse scatter located to the west of the same north/south dirt road, situated approximately 650 ft. (198 m) due north of CA-SDI-20236. Like CA-SDI-20236, the bulk of this site is concentrated adjacent to the dirt road but is somewhat dispersed along a meandering seasonal wash, downslope to the southwest. The site measures 110 ft. north to south and 62 ft. east to west, with the main concentration in the northeast portion of the site that measures 75 ft. northeast to southwest and 20 ft. northwest to southeast. Subsurface depth is unlikely beyond the present resting depth of the material.

The metal artifacts include 90+ 2 to 3-inch diameter cans, 70+ 4 to 5-inch diameter cans, 8 6.5-inch diameter cans, 1 5-gal. paint can lid, and 6 bundles of wire. Glass bottles include at least 19 liquor bottle fragments, most with screw caps. One base of a pint liquor bottle has the embossed mark of "76 D-247 45" over "61." The right code of "45" indicates the bottle was made in 1945. Another pint liquor bottle base is marked "D-9" over "83 GC (overlapping, angular letters) 61," which was made in 1961.

Assorted clear and green glass bottle fragments were also observed. Two clear glass fragments of the same "Circle A Sparkling Beverages" bottle have a white applied color label (ACL) that was used on this brand of soda bottles in the early 1950s (Chris Weide, personal communication 2011). At least two dark green ½ gallon Gallo wine bottle fragments are among the scatter. Their base marking includes "GALLO FLAVOR-GUARD BOTTLE" "REFILLING PROHIBITED" and "REG. CAL." The Gallo Glass Co., of Modesto,

California, made bottles for Gallo Winery beginning in early 1959 (*Glass Industry* 1959:17) and the trademark registration for the term"Flavor-Guard" was filed in June 16, 1959, so this bottle has to post date this time.

Other glass items include a milk glass container fragment, a clear glass tumbler fragment with an enameled old car design, and several fragments of Jadite glassware (opaque milky green glass). The tumbler appears to portray an early twentieth century two-seater Runabout car portrayed in black and white, having white wheel spokes. These tumblers were popular in the late 1950s to early 1960s when early automobiles became a popular fad.

The Jadite fragments include a Swirl pattern bake ware bowl base portion marked, "OVEN" over "Fire King" (in script) over "WARE" and "MADE IN USA." This particular configuration of the Fire King marking was used by the Anchor Hocking Glass Co. from 1951 to 1960 (Kilgo 1997). No artifacts were collected during the survey and no curation is necessary.

CA-SDI-20238 (FRAS-S-3)

This site is another historic refuse scatter also located directly west of the eastern most north/south dirt road. It is situated approximately 650 ft. (198 m) due north of CA-SDI-20237 and approximately 150 ft. (46 m) south of the northern property line that parallels an east/west utility road. The bulk of this site is concentrated adjacent to the north/south oriented dirt road, and like the other two scatters, the refuse dissipates downslope, displacing material along a meandering western flowing seasonal wash.

Metal artifacts include at least 24 2 to 3-inch diameter cans, 1 5-inch diameter can, and 1 paint can. The scatter also includes 30+ glass canning jar fragments and 10+ green and clear glass bottle fragments. One marked base is from a Karo Syrup bottle with markings "Karo Syrup" and "DES. PAT. 127,618" with "REG. US PAT OFF." over "1 ½ LBS, NET. WT." This syrup company started using this patented glass bottle in late-1940. No other bottles were observed to have diagnostic markings.

Also observed was a the flat-based bottom half of an unmarked forest green glass tumbler. Anchor Hocking Glass Co. made juice glasses of this same shape and color known by the pattern name of Roly Poly from 1950 to 1967 (Florence 2001). Several Jadite glassware fragments were observed, as well as at least one baking dish fragment. The Jadite pieces are of a satin-looking Jadite bowl with a straight rim and a restricted base, possibly a chili bowl. These bowls, with metal lids, were used as promotional "give aways," often containing cottage cheese, during the 1950s.

The base portion of a clear glass baking dish has the markings used by the McKee Glass Company from 1917-1953 (Zweig 2010). The embossed mark consists of "207" over "GLASBAKE" over "217" within a rectangular outline. The base has a stippled texture and has three raised concentric interrupted rings (to dissipate heat). A similar 8-inch baking dish with the same model numbers was found on the internet. The auction seller stated that there is a patent date of "May 27 19" on the tab handle, indicating this dish design was patented in 1919. When this dish was actually discarded is not evident however, since such ware would usually be used until it broke, unlike food or beverage containers typically discarded after finishing the contents. No artifacts were collected during the survey and no curation is necessary.

3.2.2 Isolates

P-37-027278

Isolate P-37-027278 was initially recorded during the 2006 survey of the area (Pigniolo and Kwiatkowski 2006) as an isolated interior Santiago Peak Volcanic flake. It was located below a large boulder near the crest of the ridge along the eastern project boundary. The artifact was approximately 2.5 by 3 by 0.5 cm in size. The artifact is an interior core reduction flake. It was not heavily patinated, but was weathered with some small lichen growth. The integrity of the area is good, although a north/south trending dirt road is present approximately 5 m west of the isolate. This isolate was not relocated during the current survey due to changes in surface visibility.

P-37-027279

P-37-027279 was initially recorded during the 2006 survey of the area (Pigniolo and Kwiatkowski 2006) as an isolated clear quartz interior flake. The artifact was approximately 1.5 by 1 by 1 cm in size and represents core reduction. It was located approximately 18 m south southwest of the corner of a fence around a barn in the area. A house is approximately 25 m west. The area appears to have been previously graded related to the nearby barn and house construction and the integrity of the area is low. This isolate was not relocated during the current survey due to changes in surface visibility.

P-37-027280

P-37-027280 is also an isolated clear quartz interior flake initially recorded during the 2006 survey of the area (Pigniolo and Kwiatkowski 2006). The artifact was approximately 3 by 2 by 1.5 cm in size and appeared to represent core reduction. It was located more than 30 m from P-37-027279. P-37-027280 was located approximately 10 m north of an existing residence in a graded dirt road/parking area. The integrity of the area is low. This isolate was not relocated during the current survey due to changes in surface visibility.

P-37-031968 (FRAS-I-1)

This is an isolated 2.5-inch diameter metal beverage can that was opened with a church-key opener. These flat-top cans were commonly made for beer by 1936 and used until replaced by cans with pull-tab openers by 1963 (Busch 1981).

It is located approximately 25 ft. south of the northern property line and 135 ft. from the western property line. The north/south property line is just south of a east/west utility dirt road and the southern portion of the east/west property line lies just east of a north/south utility dirt road populated by utility poles. This artifact can also be located from CA-SDI-20238 by heading west/northwest for approximately 380 ft. The integrity of the area is fair. No artifacts were collected during the survey and no curation is necessary.

The presence of this isolate could be due to the proximity to the utility access road, but the location of this isolate downslope from CA-SDI-20238, which contains deposits of the same type of cans that exhibit downslope displacement, is more likely the causative factor for its location.

P-37-031969 (FRAS-I-2)

P-37-031969 is an isolated glass bottle with an intact metal screw cap. This bottle most likely contained a liquid pharmaceutical product, or perhaps a toiletry lotion. The bottle is 7 inches tall and is 2.5 inches wide with a tapered shoulder (a "Royal Oval" shape, as shown in a 1935 Owens-Illinois Glass Co. catalog). The markings on the base include the Hazel-Atlas Glass Co. logo of an H over an A and also the code of "P-7." These markings are positioned in opposing directions rather than the usual one above the other. The Hazel-Atlas Glass Co. used this logo from 1923 to 1965 (Roller 1983:152).

This isolate is located 40 ft. east of the western east/west property line, approximately 490 ft. west/southwest of CA-SDI-20237. The integrity of the area is fair. The partially buried bottle was found near the western property line that is adjacent to a utility access road. The isolate's deposit could be due to this proximity but it may have been displaced from the scatter upslope at CA-SDI-20237. No artifacts were collected during the survey and no curation is necessary.

4.0 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

4.1 Resource Importance

The cultural resource survey resulted in the location of five sites (CA-SDI-17845, CA-SDI-17846, CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238) and five isolates (P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969) within the project area.

Sites CA-SDI-17845, CA-SDI-17846, CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238 have not been previously evaluated for nomination to the California Register of Historical Resources (California Register) or for significance under the County RPO. In the absence of testing, CA-SDI-17845, CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238 qualify as significant under County of San Diego Guidelines, CEQA and the County's RPO. As a series of relocated artifacts without context and integrity, site CA-SDI-17846 does not qualify for nomination to the California Register or as significant under the County RPO. As isolated prehistoric and historic artifacts, isolates P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969 do not qualify for nomination to the California Register or as significant under the County RPO.

4.2 Impact Identification

Project impacts will occur in several development phases. The current Phase 1 through Phase 4 development plans indicate that none of the cultural resources are in areas proposed for direct impacts. CA-SDI-17845 is located outside, but adjacent to the Phase 1 area of direct impacts. An approximately 30 foot buffer is between the site boundary and the proposed impacts (Figure 5). This buffer and installation of temporary fencing during construction should mitigate any indirect impacts to CA-SDI-17845.

Site CA-SDI-17846 is near, but outside grading impacts proposed for Phase 4 of the project. CA-SDI-20236, CA-SDI-20237, CA-SDI-20238, and P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969 are located outside areas proposed for development and will not be impacted.

Figure 5

Phase 1 Project Plan and Associated Cultural Resources

(Confidential figure located in Appendix D)

5.0 MANAGEMENT CONSIDERATIONS-MITIGATION MEASURES AND DESIGN CONSIDERATIONS

The goal of the project was to identify resources that may be impacted by the project. The cultural resource survey resulted in the location of five sites (CA-SDI-17845, CA-SDI-17846, CA-SDI-20236, CA-SDI-20237, and CA-SDI-20238) and five isolates (P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969) within the project area.

5.1 Mitigable Impacts

The current Phase 1 through Phase 4 development plans indicate that none of the cultural resources are in areas proposed for direct impacts. CA-SDI-17845 is located outside, but adjacent to the Phase 1 area of direct impacts. An approximately 30 foot buffer is between the site boundary and the proposed impacts. Site CA-SDI-17846 is near, but outside grading impacts proposed for Phase 4 of the project. CA-SDI-20236, CA-SDI-20237, CA-SDI-20238, and P-37-027278, P-37-027279, P-37-027280, P-37-031968 and P-37-031969 are located outside areas proposed for development and will not be impacted. CA-SDI-17845 represents a significant cultural resource and will be avoided during project construction through the establishment of an open space easement, fencing, and construction monitoring. Figure 6 shows the open space easement on the project plans. CA-SDI-17846 does not qualify as significant cultural resources and no further treatment is necessary.

The majority of the western portion of the project is in Holocene-age alluvium that retains some potential for cultural resources, although cuts and excavated areas within the project did not indicate the presence of any cultural material. Archaeological and Native American construction monitoring is recommended during all earthmoving activities.

5.2 No Significant Adverse Effects

No significant adverse effect will result from project impacts.

5.3 Mitigation Measures

ANY PERMIT: *(Prior to the approval of any plan, issuance of any permit, and prior to occupancy or use of the premises in reliance of this permit).*

CULT#1 -_ARCHAEOLOGICAL GRADING MONITORING [PDS, FEE X 2]
INTENT: In order to mitigate for potential impacts to undiscovered buried archaeological resources on the project site, a grading monitoring program and potential data recovery program shall be implemented pursuant to the County of San Diego Guidelines for Determining Significance for Cultural Resources and the California Environmental Quality Act (CEQA). **DESCRIPTION OF REQUIREMENT:** A County Approved Principal Investigator (PI) known as the "Project Archaeologist," shall be contracted to perform cultural resource grading monitoring and a potential data recovery program during all grading, clearing, grubbing, trenching, and construction activities. The grading monitoring program shall include the following:

Figure 6

Project Plan and Cultural Resources Open Space

(Confidential figure located in Appendix D)

a. The Project Archaeologist shall perform the monitoring duties before, during and after construction pursuant to the most current version of the County of San Diego Guidelines for Determining Significance and Report Format and Requirements for Cultural Resources, and this permit. The Contract or Letter of Acceptance provided to the County shall include an agreement that the grading monitoring will be completed, and a Memorandum of Understanding (MOU) between the Project Archaeologist and the County of San Diego shall be executed. The Contract or Letter of Acceptance shall include a cost estimate for the monitoring work and reporting.

b. The Project Archeologist shall provide evidence that a Kumeyaay Native American has been contracted to perform Native American Grading Monitoring for the project.

c. The cost of the monitoring shall be added to the grading bonds or bonded separately.

DOCUMENTATION: The applicant shall provide a copy of the Grading Monitoring Contract or Letter of Acceptance, cost estimate, and MOU to the [*PDS, PCC*]. Additionally, the cost amount of the monitoring work shall be added to the grading bond cost estimate. **TIMING:** Prior to the approval of the Final Map and prior to the approval of any plan and issuance of any permit, the contract shall be provided. **MONITORING:** The [*PDS, PCC*] shall review the Contract or Letter of Acceptance, MOU and cost estimate or separate bonds for compliance with this condition. The cost estimate should be forwarded to [*PDS, LDR*], for inclusion in the grading bond cost estimate, and grading bonds and the grading monitoring requirement shall be made a condition of the issuance of the grading or construction permit.

OCCUPANCY: *(Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).*

CULT#2 - CULTURAL RESOURCES REPORT [PDS, FEE X2]
INTENT: In order to ensure that the Grading Monitoring occurred during the grading phase of the project, a final report shall be prepared. **DESCRIPTION OF REQUIREMENT:** A final Grading Monitoring and Data Recovery Report that documents the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program shall be prepared. The report shall include the following items:

a. DPR Primary and Archaeological Site forms.

b. Daily Monitoring Logs

c. Evidence that all prehistoric archaeological materials collected during the grading monitoring program have been submitted to a San Diego curation facility or a culturally affiliated Native American Tribal curation facility that meets federal standards per 36 CFR Part 79, and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to the San Diego curation facility or culturally affiliated Native American Tribal curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter

from the curation facility stating that the prehistoric archaeological materials have been received and that all fees have been paid.

or

Evidence that all prehistoric materials collected during the grading monitoring program have been repatriated to a Native American group of appropriate tribal affinity. Evidence shall be in the form of a letter from the Native American tribe to whom the cultural resources have been repatriated identifying that the archaeological materials have been received.

Historic materials shall be curated at a San Diego curation facility and shall not be repatriated. The collections and associated records, including title, shall be transferred to the San Diego curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that the historic materials have been received and that all fees have been paid.

d. If no cultural resources are discovered, a Negative Monitoring Report must be submitted stating that the grading monitoring activities have been completed. Grading Monitoring Logs must be submitted with the negative monitoring report.

DOCUMENTATION: The applicant's archaeologist shall prepare the final report and submit it to the [*PDS, PCC*] for approval. Once approved, a final copy of the report shall be submitted to the South Coastal Information Center (*SCIC*) and the culturally-affiliated Tribe. **TIMING:** Prior to any occupancy or final grading release, the final report shall be prepared. **MONITORING:** The [*PDS, PCC*] shall review the final report for compliance this condition and the report format guidelines. Upon acceptance of the report, [*PDS, PCC*] shall inform [*PDS, LDR*] and [*DPW, PDCI*], that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then [*PDS, PCC*] shall inform [*PDS or DPW FISCAL*] to release the bond back to the applicant.

Draft Grading Plan Notes:

PRE-CONSTRUCTION GRADING AND/OR IMPROVEMENTS: *(Prior to any clearing, grubbing, trenching, grading, or any land disturbances.)*

(CULTURAL RESOURCES)

CULT#GR-1 ARCHAELOGICAL MONITORING [PDS, FEE X2]
INTENT: In order to comply with the County of San Diego Guidelines for Significance – Cultural Resources, a Cultural Resource Grading Monitoring Program shall be implemented. **DESCRIPTION OF REQUIREMENT:** The County approved Project Archaeologist, Kumeyaay Native American Monitor, and [*PDS, PCC*], shall attend the pre-construction meeting with the contractors to explain and coordinate the requirements of the grading monitoring program. The Project Archaeologist and Kumeyaay Native American Monitor

shall monitor original cutting of previously undisturbed deposits in all areas identified for development including off-site improvements. The grading monitoring program shall comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources. **DOCUMENTATION:** The applicant shall have the contracted Project Archeologist and Kumeyaay Native American attend the preconstruction meeting to explain the monitoring requirements. **TIMING:** Prior to the pre-construction meeting, and prior to any clearing, grubbing, trenching, grading, or any land disturbances this condition shall be completed. **MONITORING:** The [*DPW, PDCI*] shall invite the [*PDS, PCC*] to the preconstruction meeting to coordinate the Cultural Resource Monitoring requirements of this condition. The [*PDS, PCC*] shall attend the preconstruction meeting and confirm the attendance of the approved Project Archaeologist.

DURING CONTRUCTION: *(The following actions shall occur throughout the duration of the grading construction).*

(CULTURAL RESOURCES)

CULT#GR-X ARCHAEOLOGICAL MONITORING [PDS, FEE X2]
INTENT: In order to comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources, a Cultural Resource Grading Monitoring Program shall be implemented. **DESCRIPTION OF REQUIREMENT:** The Project Archaeologist and Kumeyaay Native American Monitor shall monitor original cutting of previously undisturbed deposits in all areas identified for development including off-site improvements. The grading monitoring program shall comply with the following requirements during earth-disturbing activities:

a. During the original cutting of previously undisturbed deposits, the Project Archaeologist and Native American Monitor shall be onsite as determined necessary by the Project Archaeologist. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist in consultation with the Kumeyaay Native American Monitor. Monitoring of cutting of previously disturbed deposits will be determined by the Project Archaeologist in consultation with the Kumeyaay Native American monitor.

b. In the event that previously unidentified potentially significant cultural resources are discovered, the Project Archaeologist, in consultation with the Kumeyaay Native American monitor, shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. At the time of discovery, the Project Archaeologist shall contact the PDS Staff Archaeologist. The Project Archaeologist, in consultation with the PDS Staff Archaeologist and the Kumeyaay Native American monitor, shall determine the significance of the discovered resources. Construction activities will be allowed to resume in the affected area only after the PDS Staff Archaeologist has concurred with the evaluation. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the Project Archaeologist and approved by the Staff Archaeologist, then carried out using professional archaeological methods. The Research Design and Data Recovery Program shall include (1) reasonable efforts to

preserve (avoidance) "unique" cultural resources or Sacred Sites pursuant to CEQA §21083.2(g) as the preferred option, (2) the capping of identified Sacred Sites or unique cultural resources and placement of development over the cap, if avoidance is infeasible, and (3) data recovery for non-unique cultural resources.

c. If any human remains are discovered, the property owner or their representative shall contact the County Coroner and the PDS Staff Archaeologist. Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the Native American Heritage Commission, shall be contacted by the property owner or their representative in order to determine proper treatment and disposition of the remains. The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the MLD regarding their recommendations as required by Public Resources Code Section 5097.98 has been conducted. Public Resources Code §5097.98, CEQA §15064.5 and Health & Safety Code §7050.5 shall be followed.

DOCUMENTATION: The applicant shall implement the grading monitoring program pursuant to this condition. **TIMING:** The actions identified in this condition shall occur throughout the duration of the grading construction. **MONITORING:** The [*DPW, PDCI*] shall make sure that the Project Archeologist is on-site performing the Monitoring duties of this condition. The [*DPW, PDCI*] shall contact the [*PDS, PCC*] if the Project Archeologist or applicant fails to comply with this condition.

ROUGH GRADING: *(Prior to rough grading approval and issuance of any building permit).*

(CULTURAL RESOURCES)

CULT#GR-3 ARCHAEOLOGICAL MONITORING [PDS, FEE]
INTENT: In order to comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources, a Grading Monitoring Program shall be implemented. **DESCRIPTION OF REQUIREMENT:** The Project Archaeologist shall prepare one of the following reports upon completion of the grading activities that require monitoring:

a. If no archaeological resources are encountered during grading, then submit a final Negative Monitoring Report substantiating that grading activities are completed and no cultural resources were encountered. Grading monitoring logs showing the date and time that the monitor was on site must be included in the Negative Monitoring Report.

b. If archaeological resources were encountered during grading, the Project Archaeologist shall provide a Grading Monitoring Report stating that the field grading monitoring activities have been completed and that resources have been encountered. The report shall detail all cultural artifacts and deposits discovered during monitoring and the anticipated time schedule for completion of the evaluation and curation phases of the monitoring.

DOCUMENTATION: The applicant shall submit the Grading Monitoring Report to the [PDS, PCC] for review and approval. Once approved, a final copy of the report shall be submitted to the South Coastal Information Center and the culturally-affiliated Tribe. **TIMING:** Upon completion of all grading activities, and prior to Rough Grading Final Inspection (Grading Ordinance SEC 87.421.a.2), the report shall be completed. **MONITORING:** The [*PDS, PCC*] shall review the report or field monitoring memo for compliance with the project MMRP, and inform [*DPW, PDCI*] that the requirement is completed.

FINAL GRADING RELEASE: *(Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).*

(CULTURAL RESOURCES)

CULT#GR-4 ARCHAEOLOGICAL MONITORING [PDS, FEE]
INTENT: In order to comply with the County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements for Cultural Resources, a Grading Monitoring Program shall be implemented. **DESCRIPTION OF REQUIREMENT:** The Project Archaeologist shall prepare a final report that documents the results, analysis, and conclusions of all phases of the Grading Monitoring Program if cultural resources were encountered during grading. The report shall include the following, if applicable:

a. Department of Parks and Recreation Primary and Archaeological Site forms.

b. Daily Monitoring Logs

c. Evidence that all prehistoric archaeological materials collected during the grading monitoring program have been submitted to a San Diego curation facility or a culturally affiliated Native American Tribal curation facility that meets federal standards per 36 CFR Part 79, and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to the San Diego curation facility or culturally affiliated Native American Tribal curation facility and shall be accompanied by payment of the fees necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that the prehistoric archaeological materials have been received and that all fees have been paid.

or

Evidence that all prehistoric materials collected during the grading monitoring program have been repatriated to a Native American group of appropriate tribal affinity. Evidence shall be in the form of a letter from the Native American tribe to whom the cultural resources have been repatriated identifying that the archaeological materials have been received.

Historic materials shall be curated at a San Diego curation facility and shall not be repatriated. The collections and associated records, including title, shall be transferred to the San Diego curation facility and shall be accompanied by payment of the fees

necessary for permanent curation. Evidence shall be in the form of a letter from the curation facility stating that the historic materials have been received and that all fees have been paid.

d. If no cultural resources are discovered, a Negative Monitoring Report must be submitted stating that the grading monitoring activities have been completed. Grading Monitoring Logs must be submitted with the negative monitoring report.

DOCUMENTATION: The applicant's archaeologist shall prepare the final report and submit it to the [*PDS, PCC*] for approval. Once approved, a final copy of the report shall be submitted to the South Coastal Information Center (SCIC) and the culturally-affiliated Tribe. **TIMING:** Prior to any occupancy, final grading release, or use of the premises in reliance of this permit, the final report shall be prepared. **MONITORING:** The [*PDS, PCC*] shall review the final report for compliance this condition and the report format guidelines. Upon acceptance of the report, [*PDS, PCC*] shall inform [*PDS, LDR*] and [*DPW, PDCI*], that the requirement is complete and the bond amount can be relinquished. If the monitoring was bonded separately, then [*PDS, PCC*] shall inform [*PDS or DPW FISCAL*] to release the bond back to the applicant.

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7.0 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

7.1 List of Preparers

Laguna Mountain Environmental, Inc.
Andrew R. Pigniolo, RPA, Primary Author
Nathaniel Yerka, Secondary Author

7.2 List of Persons and Organizations Contacted

Campo Indian Reservation
Tonya Largo

Native American Heritage Commission
Larry Myers

South Coastal Information Center (SCIC)
David Caterino

Laguna Mountain Environmental, Inc - Archival Maps and Records

8.0 LIST OF MITIGATION MEASURES AND DESIGN CONSIDERATIONS

Mitigation Measures	Design Considerations
Avoidance of direct and indirect impacts to CA-SDI-17845 within the project area during construction and project operations.	Avoidance of project impacts during construction through the establishment of temporary fencing and construction monitoring.
Implement an archaeological and Native American monitoring and data recovery program to mitigate potential impacts to undiscovered buried archaeological resources.	During grading, an archaeological and Native American monitor should be present to ensure that any undiscovered buried archaeological resources are identified. If resources are identified, then data recovery excavation may be necessary if impacts cannot be avoided.
If cultural resources are identified and recovered during monitoring curation will occur.	All prehistoric archaeological materials collected during the grading monitoring program will be submitted to a San Diego curation facility or a culturally affiliated Native American Tribal curation facility that meets federal standards per 36 CFR Part 79, and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to the San Diego curation facility or culturally affiliated Native American Tribal curation facility and shall be accompanied by payment of the fees necessary for permanent curation.

APPENDICES

A. Resume of Principal Investigator
B. Records Search Confirmations
C. Site and Isolate Records (Confidential)
D. Confidential Figures (Confidential)

APPENDIX A

RESUME OF PRINCIPAL INVESTIGATOR

ANDREW R. PIGNIOLO, M.A., RPA

Principal Archaeologist
Laguna Mountain Environmental, Inc.

Education

San Diego State University, Master of Arts, Anthropology, 1992
San Diego State University, Bachelor of Arts, Anthropology, 1985

Professional Experience

2002-Present	Principal Archaeologist/President, Laguna Mountain Environmental, Inc., San Diego, California
1997-2002	Senior Archaeologist, Tierra Environmental Services, San Diego, California
1994-1997	Senior Archaeologist, KEA Environmental, Inc., San Diego, California
1985-1994	Project Archaeologist, Ogden Environmental and Energy Services, San Diego, California
1982-1985	Reports Archivist, Cultural Resource Management Center (now South Coastal Information Center), San Diego State University
1980-1985	Archaeological Consultant, San Diego, California

Professional Affiliations

Register of Professional Archaeologists (RPA; formerly called SOPA), 1992-present
Society for American Archaeology
Society for California Archaeology
Pacific Coast Archaeology Society
Certified Archaeology Consultant, San Diego County
Certified Archaeology Consultant, Riverside County
Certified Archaeology Consultant, City of San Diego
Permitted for Bureau of Land Management lands in California

Qualifications

Mr. Andrew Pigniolo is RPA/SOPA certified (1992-present) and is a certified archaeology consultant for San Diego and Riverside Counties. Mr. Pigniolo has more than 29 years of experience as an archaeologist, and has conducted more than 650 projects throughout southern California and western Arizona. His archaeological investigations have been conducted for a wide variety of development and resource management projects including military installations, geothermal power projects, water resource facilities, transportation projects, commercial and residential developments, and projects involving Indian Reservation lands. He has conducted the complete range of technical studies including archaeological overviews, archaeological surveys, test excavations, historical research, evaluations of significance for National Register eligibility, data recovery programs, and monitoring projects.

Relevant Projects

Rancho San Vicente Project *(Turrini & Brink Planning Consultants)* Mr. Pigniolo served as Project Archaeologist, Principal Author, and Field Manager of a testing program at 24 archaeological sites located within an 850-acre planned development near Ramona, San Diego County, California. The project was conducted for compliance with County of San Diego guidelines and CEQA.

Los Coyotes Landfill Cultural Resources *(Bureau of Indian Affairs)* Project Archaeologist and Field Manager of a cultural resources survey for a landfill and related facilities on Los Coyotes Indian Reservation in San Diego County, California. The project involved a literature search and field survey to identify the presence and location of archaeological sites within the project boundary in compliance with NEPA.

Salt Creek Ranch Testing Program (*City of Chula Vista)* Mr. Pigniolo served as Project Archaeologist, Principal Author, and Field Manager of a large testing program which included 27 archaeological sites that were evaluated under CEQA and City of Chula Vista guidelines.

State Route 56 Transportation Alternatives Project *(City of San Diego)* Mr. Pigniolo was Senior Archaeologist, Principal Author, and Field Manager for a large testing and evaluation program at 13 sites in northern San Diego. Six of these were significant pursuant to CEQA and NHPA criteria providing a variety of important data on the Archaic period.

Imperial Project 2,500-Acre Survey and Evaluation *(Bureau of Land Management)* Mr. Pigniolo served as the Senior Archaeologist, Author, and Field Manager for an intensive archaeological inventory of more than 2,500 acres in eastern Imperial County, California for a proposed gold mine project. The project included the involvement of Native American representatives. More than 90 sites, including eight very large multicomponent sites, were identified and evaluated for National Register eligibility. A Traditional Cultural Property was identified and evaluated in the main portion of the project area.

Daley Rock Quarry Cultural Resources Survey and Test *(The Daley Corporation)* Project Archaeologist, Author, and Field Manager for the testing program and a series of associated surveys for a large prehistoric quarry (CA-SDi-10,027) located in southern San Diego County in compliance with County of San Diego guidelines and CEQA.

MCAS Tustin Relocation, MCAGCC Twentynine Palms 5,000-Acre Survey Project *(Commandant of the Marine Corps, COMCABWEST Base Realignment and Closure)* Mr. Pigniolo was Principal Investigator, Author, and Field Manager of a proposed base relocation project in San Bernardino County, California. The project included intensive inventory of an approximately 5,000 acre area and the recording of 137 archaeological sites and 207 isolated artifacts. The project was conducted under Section 106 of the national Historic Preservation Act (NHPA).

Reconnaissance of Sky Oaks Ranch *(Systems Ecology/Biology, San Diego State University)* Mr. Pigniolo participated in archaeological survey of more than 1,500 acres in the eastern portion of San Diego County.

Olympic Training Center Boathouse Project *(City of Chula Vista)* Project Archaeologist for an archaeological survey and testing program at two prehistoric archaeological sites adjacent to Lower Otay Lake.

Otay Ranch 5,000-Acre Survey Project *(City of Chula Vista)* Mr. Pigniolo served as Project Archaeologist for a survey of approximately 5,000 acres in southern San Diego County in compliance with County of San Diego guidelines, CEQA, and guidelines of the City of Chula Vista.

Scripps Poway Parkway Alternatives Project *(City of Poway)* Mr. Pigniolo was Principal Investigator, Author, and Field Manager of a survey of approximately 1,400 acres in the City of Poway. The survey resulted in the identification of 69 archaeological and historical resources within the area of potential effect. The survey was conducted under guidelines for the California Environmental Quality Act (CEQA) and the National Historic Preservation Act (NHPA).

160-Acre Eastlake Parcel of Otay Ranch *(City of Chula Vista/County of San Diego)* Project Archaeologist for an archaeological survey identifying three sites and ten isolates.

Monofill Land Exchange Project *(Magma Operating Company)* Mr. Pigniolo was Principal Investigator and Project Manager of an archaeological field survey of 1,280 acres to create a buffer zone around an existing landfill operation. The survey identified 92 prehistoric and historic sites and 42 isolated artifacts. The project was conducted in compliance with NEPA.

Otay Mesa OHV Park Survey *(County of San Diego)* Associate Archaeologist and Field Manager of a survey of the eastern portion of Otay Mesa in southern San Diego County pursuant to CEQA and County of San Diego guidelines.

Viejas Indian Reservation 1,200-Acre Survey *(Gold River Country)* Project Archaeologist for an archaeological survey of the entire Viejas Indian Reservation identifying more than 60 archaeological sites.

Campo Indian Reservation Cultural Resource Inventory (*U.S. Department of the Interior National Park Service)* Mr. Pigniolo participated in an archaeological survey of approximately 12,000 acres. The survey included working closely with local Native Americans in the identification and recordation of a variety of prehistoric and historic cultural resources.

APPENDIX B

RECORDS SEARCH CONFIRMATION

South Coastal Information Center
4283 El Cajon Blvd., Suite 250
San Diego, CA 92105
Office: (619) 594-5682
Fax: (619) 594-4483
scic@mail.sdsu.edu
scic_gis@mail.sdsu.edu

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM
CLIENT IN-HOUSE RECORDS SEARCH

Company: Laguna Mountain Evnironmental

Company Representative: Carol Serr

Date: 2/2/2011

Project Identification: Freedom Ranch - #1105

Search Radius: 1 mile

Historical Resources: SELF

Trinomial and Primary site maps have been reviewed. All sites within the project boundaries and the specified radius of the project area have been plotted. Copies of the site record forms have been included for all recorded sites.

Previous Survey Report Boundaries: SELF

Project boundary maps have been reviewed. National Archaeological Database (NADB) citations for reports within the project boundaries and within the specified radius of the project area have been included.

Historic Addresses: SELF

A map and database of historic properties (formerly Geofinder) has been included.

Historic Maps: SELF

The historic maps on file at the South Coastal Information Center have been reviewed, and copies have been included.

Copies: 48

Hours: 1.5

This is not an invoice. Please pay from the monthly billing statement

APPENDIX C

SITE AND ISOLATE RECORDS

(Confidential - Bound Separately)

APPENDIX D

CONFIDENTIAL FIGURES

(Confidential - Bound Separately)