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CLASS II AND CLASS III CULTURAL RESOURCES INVENTORY REPORT *for the* TULE WIND PROJECT, McCAIN VALLEY, SAN DIEGO COUNTY, CALIFORNIA

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MANAGEMENT SUMMARY

Iberdrola Renewables (IBR) plans to develop a wind-energy generation facility in McCain Valley, located in San Diego County, California. HDR Engineering, Inc. (HDR) was contracted by IBR to assemble the environmental documents related to the undertaking. ASM Affiliates, Inc. (ASM) was contracted by HDR to complete the cultural resources inventory for the proposed project. Since this project encompasses lands under federal (Bureau of Land Management—BLM) and state (California) jurisdiction, a joint EIR/EIS is being prepared with the BLM, El Centro Field Office as the lead federal agency for implementing Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA), and the California Public Utilities Commission (CPUC) as the lead state agency for implementing the California Environmental Quality Act (CEQA), providing oversight of the regulatory process. The project also intersects private property and Native American reservation lands, the latter fall under the jurisdiction of the Bureau of Indian Affairs (BIA). Permitting for the project is also required by San Diego County and the US Army Corps of Engineers.

ASM conducted a Class III cultural resources inventory for the Tule Wind Project area of potential effects (APE), and a Class II sample inventory of portions of the non-APE project right of way (ROW), in accordance with BLM guidelines for renewable energy inventories. This inventory was completed to satisfy requirements of Section 106 of the NHPA and CEQA that require an inventory and evaluation of cultural resources on lands proposed for development.

A total of approximately 4,900 acres was subject to 100-percent intensive survey, including both Class III (3,159 acres) and Class II (1,741 acres) survey areas. A small portion of the Class III survey area, totaling 381 acres, in the southeast corner of the project area and some access roads on Indian Reservation lands, was not surveyed due to private property access issues. Most of the Class II survey acreage was on BLM land (1,278 acres), with 82 acres on Indian Reservation land, and 365 acres on private property. The Class III inventory (including the 381 acres remaining to survey) covers 1,809 acres on BLM land, 167 acres on State land, 172 acres on Indian Reservation land, five acres on Caltrans land, less than one acre on County land, and 1,005 acres on private land.

Prior to survey, Tetra Tech (2008) completed a Class I cultural resources inventory (i.e., records search) of the Tule Wind ROW, and ASM completed an additional Class I study to update the original records search according to the new ROW alignment. In all, ASM identified 151 cultural resources, including 108 within the project APE and 43 within the Class II sample areas. The large majority of these (n = 102) were discovered during survey while the rest (n = 49) were previously recorded. Prehistoric cultural resources range from large, complex habitation sites to isolated bedrock milling stations, while historic cultural resources include refuse deposits, ranch facilities, mining sites, home sites, and transportation corridors.

Additional resources may be identified during future survey of potential project realignments or in the remaining APE to be surveyed along the 1000-ft transmission line corridor.

This inventory was not designed or intended to provide formal recommendations of eligibility for sites to be listed on the National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR). However, all resources were assessed for their potential for CRHR or NRHP listing based on surface inventory data. ASM assessed 25 cultural resources (15 within the APE and 10 within Class II sample areas) as potentially eligible for NRHP and CRHR listing, based on surface inventory data alone. These eligibility assessments will help guide IBR in project redesign to achieve avoidance of impacts, or to minimize impacts where avoidance is not feasible.

1. INTRODUCTION

1.1 PROJECT OVERVIEW

This report documents the results of a cultural resources inventory completed by ASM Affiliates, Inc. (ASM) for the Tule Wind project in McCain Valley, San Diego County, California (Figure 1.1). IBR is proposing to construct and operate the Tule Wind Project, consisting of wind turbines capable of generating up to 200 megawatts of electricity. The proposed project will be located on a combination of lands administered by the Bureau of Land Management (BLM) and the California State Lands Commission (CSLC), as well as lands on the Ewiiaapaayp Indian Reservation and some private parcels (Table 1.1). Some proposed access roads also extend onto Manzanita and Campo Indian Reservation lands. Additionally, the project will include a 3.6- to 4.1-mi-long 138-kilovolt transmission line to interconnect the project to the proposed East County (ECO) substation operated by San Diego Gas & Electric (SDG&E) (currently two alternative routes are under consideration). The potential Section 106 impacts for the ECO Substation project are under separate review by BLM, and a separate cultural resource inventory report was prepared by HDR/e2m. HDR Engineering (HDR) is providing support for IBR's request for the BLM to authorize a Right-of-Way (ROW) grant for site access and clearance for the proposed Project. The BLM is the lead agency for complying with the National Environmental Policy Act (NEPA); and the California Public Utilities Commission (CPUC) is the lead agency for complying with the California Environmental Quality Act (CEQA). The current archaeological survey was conducted in support of an Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) being produced for the project.

Table 1.1 Class III and Class II Inventory Coverage by Landholder

Inventory	Class III	Class II	Total
BLM	1809	1293	3102
State	167	0	167
County	1	0	1
Caltrans	5	0	5
Indian Reservation	172	83	255
Private	1005	365	1370
Subtotal-Surveyed	**3159**	**1741**	**4900**
Private--Unsurveyed	381	0	381
Grand Total	**3540**	**1741**	**5281**

Figure 1.1 Project location map.

ASM conducted a Class III cultural resources inventory of the proposed project Area of Potential Effects (APE) to identify cultural resources that are eligible or are potentially eligible for listing on the National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR). This inventory included an intensive pedestrian survey providing 100-percent coverage of the APE (not including 381 acres on private land). A Class I records search was completed by Tetra Tech in 2008 for the preferred project alternative. An additional records search was conducted by ASM for portions of two alternative alignments that were not covered by the Tetra Tech records search. Additionally, ASM conducted a Class II cultural resources inventory of the non-APE areas within the project ROW. This Class II sample survey was conducted to comply with guidelines provided by the BLM, California Desert District Office relating to wind energy projects, and was a subjective sample of areas within the ROW considered to have high potential for cultural resources. As noted in Chapter 3, the methods used to complete the Class II sample survey were identical to the Class III intensive inventory.

The records search by Tetra Tech (2008) covered a one-mile buffer around the project ROW, as defined in 2008, and identified a total of 190 previously recorded archaeological sites: 39 previously recorded archaeological sites are within the 2008 ROW, and 151 previously recorded archaeological sites are outside the ROW but within a one-mile buffer of the 2008 ROW. The supplemental records search conducted by ASM in 2009 at the South Coastal Information Center (SCIC) resulted in the identification of an additional 21 archaeological sites: seven within the Class III footprint and 14 outside the footprint but within a one-mile radius.

The Class III pedestrian survey of the APE covered approximately 3,159 acres, and the Class II sample survey of the proposed ROW covered another 1,741 acres, for a total of 4,900 acres. A total of 381 acres in the Class III footprint remain to be surveyed. In all, 151 cultural resources (not including isolated finds) were documented during the survey. Aside from Highway 80, recorded as a historic road, the remaining 150 cultural resources include small scatters of prehistoric and historic artifacts to large prehistoric habitations or historic home sites. The majority of these sites ($n = 108$), including Highway 80, were identified in the Class III inventory while 43 others were identified in the Class II sample inventory. Newly discovered sites far outnumbered previously recorded sites. In the Class III inventory, 68 archaeological sites were newly discovered (40 were previously recorded, including Highway 80), and in the Class II sample inventory, 34 archaeological sites are newly discovered and nine are previously recorded.

To facilitate future planning, ASM provided preliminary NRHP eligibility assessments for each archaeological site. Except in rare circumstances, making recommendations of NRHP eligibility for archaeological sites includes a formal evaluation phase that typically involves more intensive recording and excavation. As such, the preliminary NRHP assessments provided herein are not formal recommendations but estimations based on surface observations of site character and the potential for buried deposits. These preliminary assessments provide a measure of potential future work that may be required at archaeological sites documented in the proposed project area. To this end, within the Class III inventory APE, 15 archaeological

sites have been identified as likely to meet NRHP eligibility criteria. Of the remaining 93 sites within the APE, 91 are not likely to be eligible and two are classified as uncertain. Considering just the Class II sample survey, 10 archaeological sites are likely to be eligible for NRHP listing and 33 sites are likely ineligible. A detailed justification for these eligibility assessments is provided in Chapter 5.

The following sections describe the regulatory context of the proposed project, the project Area of Potential Effects (APE), ASM's key personnel, and the structure of this report.

1.2 PROJECT APE

The APE is the geographic area or areas, regardless of land ownership, within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. For the current proposed project, the APE, as defined by IBR, consists of an approximate 3,540-acre footprint, including a new 3.6- to 4.1-mi. transmission line.

The current project APE is shown on Figures 1.2 and 1.3; the APE will act as the survey corridor requiring 100-percent survey coverage. The APE varies in extent relative to the various project components as described below:

- A 400-ft. corridor along linear turbine strings with the option of expanding the corridor to 800-ft. to avoid potentially eligible cultural resources;
- A 150-ft. corridor along access roads, transmission lines (overhead and underground), and collector lines;
- A 100-ft. buffer around staging areas, substations, and other project related parcels.

The general APE parameters are different for lands under San Diego County jurisdiction. For county lands, all transmission lines will be surveyed with a 1,000-ft. corridor to allow for movement of the lines during project construction as needed.

The APE includes several alternative alignments for turbine strings and transmission lines. All alignments—i.e., the preferred alternative and secondary alternatives—are included in this Class III inventory and were covered by the records search and a pedestrian survey. The turbine string alignments are somewhat flexible. Each turbine string survey corridor will be 400 ft. wide. However, when a potentially eligible cultural resource was identified within the 400-ft. corridor, the survey corridor in the area of the site was expanded to 800 ft. Covering areas adjacent to potentially eligible resources allows for the assessment of alternative turbine locations along the same string without having to re-mobilize survey crews at a later date when the project design has been modified for avoidance.

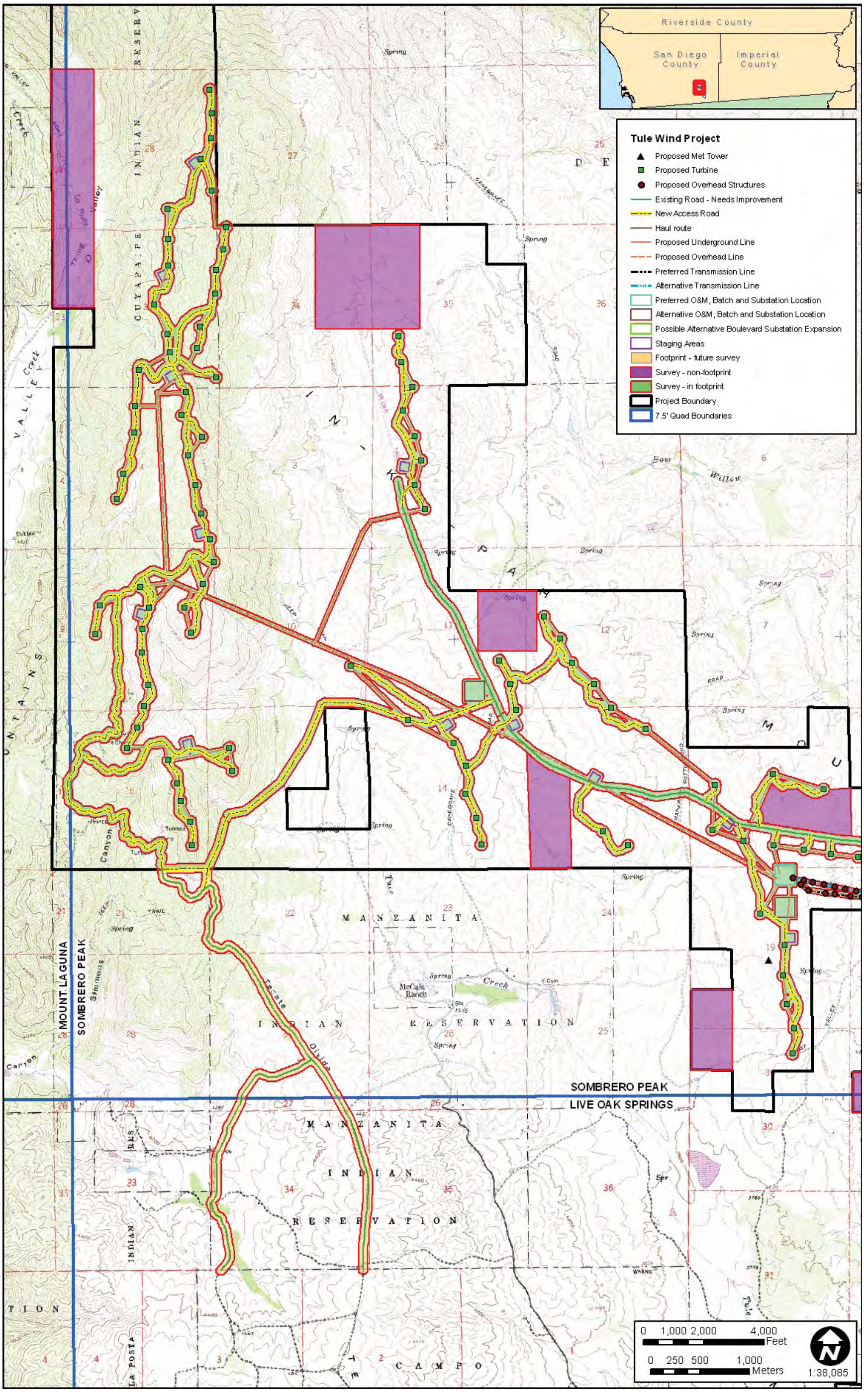

Figure 1.2 Project location map showing the project APE and Class II survey Areas.

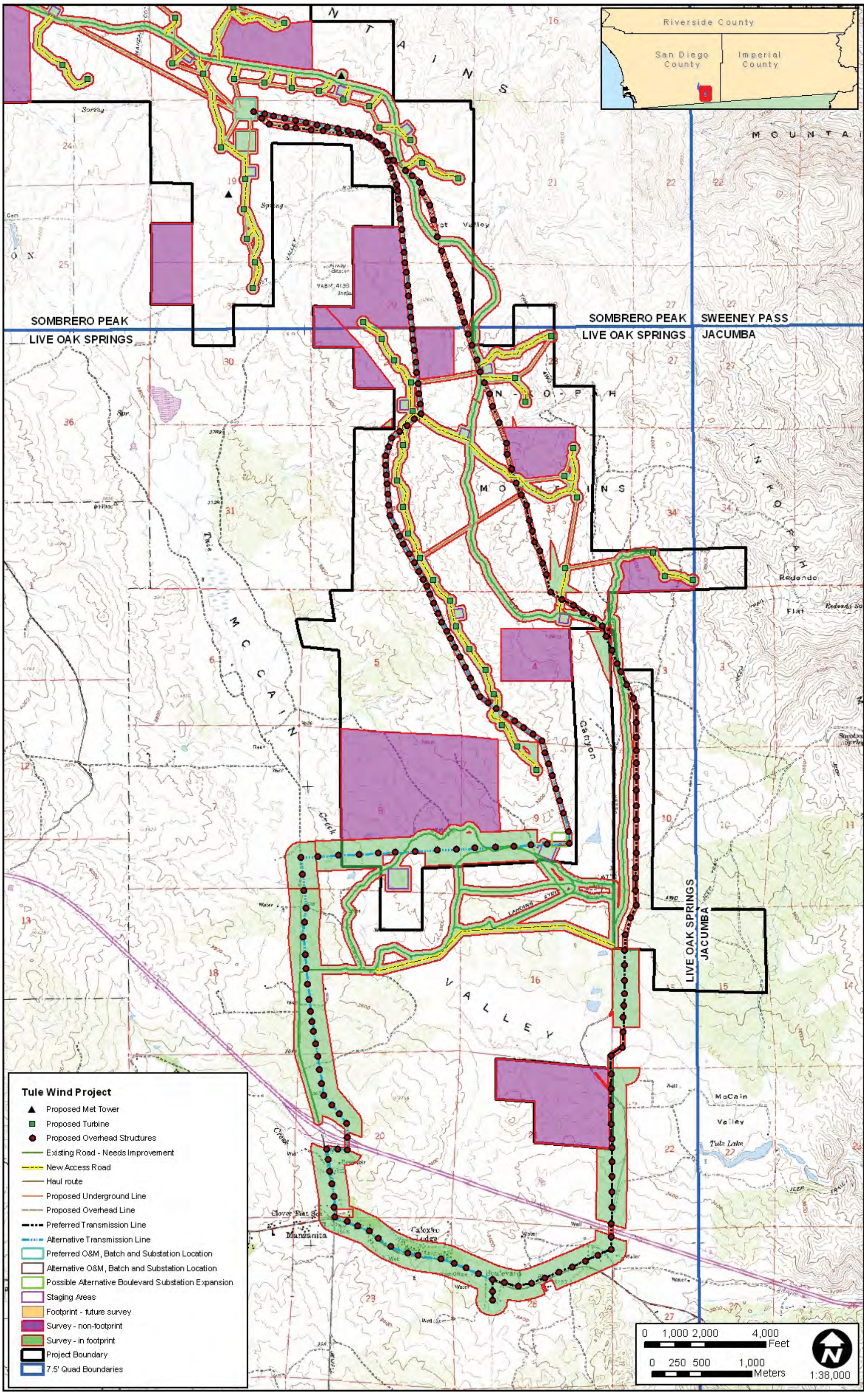

Figure 1.3 Project location map showing the project APE and Class II survey areas.

1.3 PROJECT RIGHT OF WAY

The project ROW is depicted in Figures 1.2 and 1.3 (identified as "project boundary"). Recently, the BLM and California State Historic Preservation Office (SHPO) revised the guidelines for archaeological inventories related to wind energy projects. A large amount of land remains under the granted ROW that will not be covered by the APE Class III inventory, since the ROW is typically much larger than the actual project footprint (APE). To remedy this, the revised BLM guidelines require that a Class II sample survey be conducted of the non-APE ROW in areas with higher probability for containing cultural resources (Appendix C). Areas selected for the Class II inventory were based on previous research, the results of Native American Consultation to a limited extent, and the results of the Class III inventory of the project APE.

1.4 REGULATORY CONTEXT

The project APE encompasses Federal, state, and private land, thus requiring compliance with regulations set forth in CEQA and the National Historic Preservation Act (NHPA) governing the discovery and treatment of cultural resources.

1.4.1 California Environmental Quality Act (CEQA)

CEQA requires that all private and public activities not specifically exempted be evaluated for the potential to impact the environment, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. The law defines historical resources as "any object, building, structure, site, area, or place, which is historically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (Division I, Public Resources Code, Section 5021.1(b)).

Lead agencies have a responsibility to evaluate historical resources against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources. Mitigation of adverse impacts is required if the proposed project will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA guidelines provide that a project that demolishes or alters those physical characteristics of a historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance.

The CRHR is used in the consideration of historic resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible to be a California State Landmarks and Points of Historical Interest. Properties of local

significance that have been designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise.

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, Title 14 CCR, Section 4852) consisting of the following:

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

1.4.2 National Historic Preservation Act (NHPA)

The NHPA established the NRHP and the President's Advisory Council on Historic Preservation (ACHP), and provided that states may establish SHPOs to carry out some of the functions of the NHPA. Most significantly for federal agencies responsible for managing cultural resources, Section 106 of the NHPA directs that "[t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP." Section 106 also affords the ACHP a reasonable opportunity to comment on the undertaking (16 USC 470f).

36 Code of Federal Regulations, Part 800 (36 CFR 800) implements Section 106 of the NHPA. It defines the steps necessary to identify historic properties (those cultural resources listed in or eligible for listing in the NRHP), including consultation with federally recognized Native American tribes to identify resources with important cultural values; to determine whether or not they may be adversely affected by a proposed undertaking; and the process for eliminating, reducing, or mitigating the adverse effects.

The content of 36 CFR 60.4 defines criteria for determining eligibility for listing in the NRHP. The BLM evaluates the significance of cultural resources identified during inventory phases in consultation with the California SHPO to determine if the resources are eligible for inclusion in the NRHP. Cultural resources may be considered eligible for listing if they possess integrity of

location, design, setting, materials, workmanship, feeling, and association. The criteria for determining eligibility are essentially the same in content and order as those outlined under CEQA, but the criteria under NHPA are labeled A through D (rather than 1-4 under CEQA).

Regarding criteria A through D of Section 106, the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, cultural resources, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

A. are associated with events that have made a significant contribution to the broad patterns of our history; or

B. are associated with the lives of persons significant in our past; or

C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. have yielded or may be likely to yield, information important in prehistory or history [36 CFR 60.4].

To facilitate the evaluation of cultural resources in California, the BLM has devised guidelines for inventory and determining the eligibility of prehistoric and historic sites. The guidelines supplement the NRHP criteria for evaluation and provide consistency on BLM lands across the state. These “Cultural Resource Inventory General Guidelines” have been revised to keep pace with current guidance in the field of cultural resource management.

The current proposed Class III inventory is not designed to generate enough data to make eligibility determinations on previously recorded or newly discovered cultural resources; such determinations are typically made during a subsequent evaluation phase (e.g., excavations at prehistoric sites). However, the inventory will generate enough data to offer management assessments of the eligibility of cultural resources recorded during the inventory. These assessments will help guide the development of evaluation and mitigation plans to determine site eligibility and the significance of project impacts.

1.5 KEY PERSONNEL

John Cook, ASM President, served as the Project Manager with ultimate project oversight and budget management. Micah Hale, Ph.D., was the Principal investigator (PI) responsible for development and execution of field procedures, data collection, site interpretations, significance evaluations, and management recommendations. The PI also directed the preparation of draft and final reports and was responsible for maintaining schedules, budgets, and coordination with HDR. Mr. Brad Comeau was the overall field director with assistance from Mr. Chad Willis, M.A., as crew chief. The crew consisted primarily of experienced

ASM personnel but included several individuals from outside the company that have worked on previous projects in the region, including ASM's recent cultural resources inventory for SDG&E—some alignments for the SDG&E project cut through McCain Valley and the current project APE. All field directors and crew chiefs assisted the PI in mobilizing field crews and dealing with logistics. ASM also coordinated with appropriate Native American tribes to identify tribal representatives that accompanied field crews during the pedestrian survey.

1.6 REPORT STRUCTURE

This report is divided into five chapters. Following this introduction, Chapter 2 provides a project context, describing natural environments and the general culture history of the region from an archaeological, ethnographic, and historic perspective, along with a research design that can be used to direct further work with archaeological resources. Chapter 2 also includes a brief summary of Tetra Tech's (2008) records search. The survey design and methods are described in Chapter 3. Chapter 4 summarizes the results of the pedestrian survey while Chapter 5 reviews the survey data with respect to research themes and management considerations. Several appendices contain site forms and site location maps (Confidential Appendix A), the sample survey letter report and maps submitted in advance of the draft Environmental Impact Statement (EIR) (Confidential Appendix B), BLM guidelines for cultural resources inventories that relate to wind energy generation projects (Appendix C), the Health and Safety Plan (Appendix D), and Resumes of key personnel (Appendix E), Native American consultation notes (Confidential Appendix F), and the results from Tetra Tech's (2008) and ASM's (2009) records searches (Confidential Appendix G).

2. PROJECT CONTEXT

This chapter reviews the environmental setting of the survey area, along with prehistoric, ethnohistoric, and historic contexts. Previous archaeological research conducted in the area is also included. The discussion that follows is a summary describing how pertinent investigations in the general region have contributed to the current constructions of past cultural history, and is not intended to be an exhaustive account of all research conducted in the area.

2.1 NATURAL SETTING

The project area lies within the mountains province of eastern San Diego County, California (Bowman 1973). The foothills province lies about 10 km to the west, while the coastal plains province is approximately 30 km to the west. Specifically, the project area overlaps McCain Valley, situated between Tecate Divide to the west and Inkopah Mountain to the east. McCain Valley is drained by Tule Creek and its tributaries.

Geologically, the project area is underlain by pre-Cretaceous rock, which outcrop as granite and gneiss (similar to granite), with other patches of exposed quartz diorite and granodiorite (Strand 1962). Much of the surrounding area contains Mesozoic granitic rocks. Metamorphic and granitic rocks provided material for milling tools used by the prehistoric inhabitants of the region, and quartz dikes within the granitic rocks provided a local material for manufacturing flaked stone tools. The region's prime source of material for flaked stone tools was the metavolcanic rock of the Santiago Peak formation, which is available in streambeds in low-lying areas approximately 20 km to the southwest. The valley floor is composed of Quaternary non-marine alluvium characterized by coarse loamy sand derived from granodiorite. Coarse granitic sand with low organic content typifies archaeological site deposits. These deposits are well-drained, failing to contain anthropogenic sediments from short term occupations for long periods of time. At the more substantial archaeological sites, however, sufficient organic residue was generated such that midden soils can still be observed.

The climate is classified as Mediterranean Hot Summer, or Csa in the Köppen classification (Pryde 2004). Rainfall is about 33 cm per year, falling primarily between December and March. The average January daily minimum temperature is 4°C (39°F), and the average July daily maximum is 32°C (90°F). The climate would have imposed few constraints on prehistoric hunter-gatherers in the region.

The predominant natural vegetation community of the region is chaparral, although perhaps mixed with coastal sage scrub (Pryde 2004). Typical plant species include laurel sumac (*Rhus laurina*), black sage (*Salvia mellifera*), manzanita (*Arctostaphylos* spp.), redshank (*Adenostoma sparsifolium*), oak (*Quercus* spp.), chamise (*Adenostoma fasciculatum*), and California lilac (*Ceanothus* sp.), along with various grasses and legumes. Riparian species are associated with drainages. Mammals, birds, and reptiles within these communities provided potential food

resources to prehistoric inhabitants. Much of the natural vegetation in low-lying areas has been displaced by modern land uses for grazing, and orchards. However, the steep mountain slopes harbor relatively intact, dense chaparral and Oak communities. These vegetation communities have been in place since the early Holocene, by at least 7500 B.P., when the climate became noticeably warmer and drier (Axelrod 1978).

2.2 CULTURAL CONTEXT

Evidence for continuous human occupation in the San Diego region spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. Each of these reconstructions describes essentially similar trends in assemblage composition in more or less detail. This research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 B.C.), Archaic (8000 B.C.-A.D. 500), Late Prehistoric (A.D. 500-1750), and Ethnohistoric (post-A.D. 1750).

2.2.1 Paleoindian (pre-5500 B.C.)

Evidence for Paleoindian occupation in coastal southern California is tenuous, especially considering the fact that the oldest dated archaeological assemblages look nothing like the Paleoindian artifacts from the Great Basin. One of the earliest dated archaeological assemblages in coastal southern California (excluding the Channel Islands) derives from SDI-4669/W-12, in La Jolla. A human burial from SDI-4669 was radiocarbon dated to 9590-9920 years before present (B.P.) (95.4 percent probability) (Hector 2007). The burial is part of a larger site complex that contained more than 29 human burials associated with an assemblage that fits the Archaic profile (i.e., large amounts of ground stone, battered cobbles, and expedient flake tools). In contrast, typical Paleoindian assemblages include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of ground stone tools. Prime examples of this pattern are sites that were studied by Emma Lou Davis (1978) on Naval Air Weapons Station China Lake near Ridgecrest, California. These sites contained fluted and unfluted stemmed points and large numbers of formal flake tools (e.g., shaped scrapers, blades). Other typical Paleoindian sites include the Komodo site (MNO-679)—a multicomponent fluted point site, and MNO-680—a single component Great Basin Stemmed point site (see Basgall et al. 2002). At MNO-679 and -680, ground stone tools were rare while finely made projectile points were common.

Turning back to coastal southern California, the fact that some of the earliest dated assemblages are dominated by processing tools runs counter to traditional notions of mobile hunter-gatherers traversing the landscape for highly valued prey. Evidence for the latter—that is, typical Paleoindian assemblages—may have been located along the coastal margin at one time, prior to glacial desiccation and a rapid rise in sea level during the early Holocene (pre-7500 B.P.) that submerged as much as 1.8 km of the San Diego coastline. If this were true,

however, it would also be expected that such sites would be located on older landforms near the current coastline. Some sites, such as SDI-210 along Agua Hedionda Lagoon, contained stemmed points similar in form to Silver Lake and Lake Mojave projectile points (pre-8000 B.P.) that are commonly found at sites in California's high desert (see Basgall and Hall 1990). SDI-210 yielded one corrected radiocarbon date of 8520-9520 B.P. (see Warren et al. 2004). However, sites of this nature are extremely rare and cannot be separated from large numbers of milling tools that intermingle with old projectile point forms.

Warren et al. (2004) claimed that a biface manufacturing tradition present at the Harris site complex (SDI-149) is representative of typical Paleoindian occupation in the San Diego region that possibly dates between 10,365 and 8200 B.C. (Warren et al. 2004:26). Termed San Dieguito (see also Rogers 1945), assemblages at the Harris site are qualitatively distinct from most others in the San Diego region because the site has large numbers of finely made bifaces (including projectile points), formal flake tools, a biface reduction trajectory, and relatively small amounts of processing tools (see also Warren 1964, 1968). Despite the unique assemblage composition, the definition of San Dieguito as a separate cultural tradition is hotly debated. Gallegos (1987) suggested that the San Dieguito pattern is simply an inland manifestation of a broader economic pattern. Gallegos' interpretation of San Dieguito has been widely accepted in recent years, in part because of the difficulty in distinguishing San Dieguito components from other assemblage constituents. In other words, it is easier to ignore San Dieguito as a distinct socioeconomic pattern than it is to draw it out of mixed assemblages.

The large number of finished bifaces (i.e., projectile points and non-projectile blades), along with large numbers of formal flake tools at the Harris site complex, is very different than nearly all other assemblages throughout the San Diego region, regardless of age. Warren et al. (2004) made this point, tabulating basic assemblage constituents for key early Holocene sites. Producing finely made bifaces and formal flake tools implies that relatively large amounts of time were spent for tool manufacture. Such a strategy contrasts with the expedient flake-based tools and cobble-core reduction strategy that typifies non-San Dieguito Archaic sites. It can be inferred from the uniquely high degree of San Dieguito assemblage formality that the Harris site complex represents a distinct economic strategy from non-San Dieguito assemblages.

If San Dieguito truly represents a distinct socioeconomic strategy from the non-San Dieguito Archaic processing regime, its rarity implies that it was not only short-lived, but that it was not as economically successful as the Archaic strategy. Such a conclusion would fit with other trends in southern California deserts, wherein hunting-related tools are replaced by processing tools during the early Holocene (see Basgall and Hall 1990).

2.2.2 Archaic (8000 B.C.-A.D. 500)

The more than 2,500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the San Diego region. If San Dieguito is the only recognized Paleoindian component in the San Diego region, then the dominance of hunting tools implies that it derives from Great Basin adaptive strategies and is not necessarily a local adaptation. Warren et al. (2004) admitted as much, citing strong

desert connections with San Dieguito. Thus, the Archaic pattern is the earliest local socioeconomic adaptation in the San Diego region (see Hale 2001, 2009).

The Archaic pattern is relatively easy to identify (albeit hard to define) with assemblages that consist primarily of processing tools: millingstones, handstones, battered cobbles, heavy crude scrapers, incipient flake-based tools, and cobble-core reduction. These assemblages occur in all environments across the San Diego region, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (see Byrd and Reddy 2002; Warren 1968; Warren et al. 2004). Despite enormous amounts of archaeological work at Archaic sites, little change in assemblage composition occurs until the bow and arrow is adopted at around A.D. 500, as well as ceramics at approximately the same time (Griset 1996; Hale 2009). Even then, assemblage formality remains low. After the bow is adopted, small arrow points appear in large quantities and already low amounts of formal flake tools are replaced by increasing amounts of expedient flake tools. Similarly, shaped millingstones and handstones decrease in proportion relative to expedient, unshaped ground stone tools (Hale 2009). Thus, the terminus of the Archaic period is equally as hard to define as its beginning because basic assemblage constituents and patterns of manufacturing investment remain stable, complemented only by the addition of the bow and ceramics.

2.2.3 Late Prehistoric (A.D. 500-1750)

The interval following the Archaic and prior to ethnohistoric times (A.D. 1750) is commonly referred to as the Late Prehistoric (M. Rogers 1945; Wallace 1955; Warren et al. 2004). However, several other subdivisions continue to be used to describe various shifts in assemblage composition, including the addition of ceramics and cremation practices. In northern San Diego County, the post-A.D. 1450 period is called the San Luis Rey Complex (True 1980), while the same period in southern San Diego County is called the Cuyamaca Complex and is thought to extend from A.D. 500 until ethnohistoric times (Meighan 1959). Rogers (1929) also subdivided the last 1,000 years into the Yuman II and III cultures, based on the distribution of ceramics. Despite these regional complexes, each is defined by the addition of arrow points and ceramics, and the widespread use of bedrock mortars. Vagaries in the appearance of the bow and arrow and ceramics make the temporal resolution of the San Luis Rey and Cuyamaca complexes difficult. For this reason, the term Late Prehistoric is well suited to describe the last 1,500 years of prehistory in the San Diego region.

Temporal trends in socioeconomic adaptations during the Late Prehistoric are poorly understood. This is partly due to the fact that the fundamental Late Prehistoric assemblage is very similar to the Archaic pattern, but includes arrow points, large quantities of fine debitage from producing arrow points, ceramics, and cremations. The appearance of mortars and pestles is difficult to place in time because most mortars are on bedrock surfaces; bowl mortars are actually rare in the San Diego region. Some argue that the ethnohistoric intensive acorn economy extends as far back as A.D. 500 (Bean and Shipek 1978). However, there is no substantial evidence that reliance on acorns, and the accompanying use of mortars and pestles, occurred prior to A.D. 1400. True (1980) argued that acorn processing and ceramic use in the

northern San Diego region did not occur until the San Luis Rey pattern emerged after approximately A.D. 1450. For southern San Diego County, the picture is less clear. The Cuyamaca Complex is the southern counterpart to the San Luis Rey pattern, however, and is most recognizable after A.D. 1450 (Hector 1984). Similar to True (1980), Hale (2009) argued that an acorn economy did not appear in the southern San Diego region until just prior to ethnohistoric times, and that when it did occur, a major shift in social organization followed.

2.2.4 Ethnohistoric (post-A.D. 1750)

Early descriptions of the lifeways of San Diego County ethnohistoric groups were provided by explorers, missionaries, administrators, and other travelers, who gave particular attention to the coastal populations (Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Laylander 2000). Subsequent ethnographers in the early twentieth century were able to give much more objective, detailed, and penetrating accounts. Most of the ethnographers attempted to distinguish between observations of the customs of surviving Native Americans and orally transmitted or inferred information concerning the lifeways of native groups prior to European intrusion into the region. The second of these subjects provides a terminal baseline for discussing the cultures of the region's prehistory. Despite the relatively rich ethnographic record, attempts to distinguish between the archaeological residues that were produced by the linguistically unrelated but culturally similar Luiseño and Ipai/Kumeyaay have been largely unsuccessful (Pigniolo 2004; True 1966).

The project area lies within the territory usually ascribed to speakers of the Kumeyaay language, but near their boundary were speakers of the very closely related Ipai language to the north. Kumeyaay and Ipai are Yuman languages, with ties to other groups in northern Baja California, on the lower Colorado River, and in western Arizona. The separation of the Ipai and Kumeyaay languages from their closest relative, Cocopa in the Colorado River delta, may date back about 1,000-1,200 years, and the separation from other Yuman groups may have occurred around 1,500-2,000 years ago (Laylander 1985).

Aboriginal subsistence in the region was based largely on acquiring natural plants and animals, rather than the cultivation of agricultural crops. Acorns were a staple for the western groups, as were agave and mesquite for eastern groups. Numerous other plants were valued for their dietary contributions from their seeds, fruit, roots, stalks, or greens, and a still larger number of species had known medicinal uses. Game animals included deer first and foremost, but mountain sheep and pronghorn antelope were also present, as well as bears, mountain lions, bobcats, coyotes, and other medium-sized mammals. Small mammals were probably as important in aboriginal diets as larger animals, with jackrabbits and cottontails being preeminent, but woodrats and other rodents were commonly exploited. Various birds, reptiles, and amphibians were consumed as well; food taboos were few in number and inconsistent, judging from the surviving ethnographic record. The only precontact domesticated animal was the dog. It is not clear whether marine fish and shellfish were a mainstay for some coastal groups or merely provided supplemental or emergency food sources for groups that were oriented primarily toward terrestrial resources. Interregional exchange systems are known to have linked the coast with areas to the east in particular, but exchange may have been

concerned more with facilitating social and ceremonial matters than with meeting material needs (Shipek 1982).

The Kumeyaay had developed a varied material culture that functioned well but was not highly elaborated, at least by global standards. A variety of tools was made from stone, wood, bone, and shell, and these served to procure and process the resources of the region. Needs for shelter and clothing were minimal, but considerable attention was devoted to personal decoration in the form of ornaments, painting, and tattooing. The local pottery was well made, although infrequently decorated. Basketry was a craft that was particularly refined (Shipek 1982).

The Kumeyaay were subdivided into essentially sovereign local communities or tribelets. Community membership was generally inherited from the male line. In practice, however, some degree of intermixing of these patriclans was certainly present during the historic period, and this may have reflected a considerable degree of flexibility in community membership during prehistoric times as well. Later descriptions of the settlement systems have been inconsistent, and there may have been considerable variability in practice (cf., Laylander 1991, 1997; Owen 1965; Shipek 1982; Spier 1923). In some areas, substantially permanent, year-round villages seem to have existed, with more remote resources beyond the daily foraging range being acquired by special task groups. In other areas, communities appear to have followed an annual circuit among seasonal settlements, or to have oscillated between summer and winter villages, often with the group splitting up into its constituent families during certain seasons. Some differences in settlement strategies may have reflected local differences in resource availability or cyclical effects of variability between times of plenty and times of stress. Rights of ownership over the land and its various resources were vested both in individual families and in the clans or communities as a whole. Leadership within communities had at least a tendency to be hereditary, but it was relatively weak; authority was more ceremonial and advisory than administrative or judicial. Headmen had assistants, and shamans exerted an important influence in community affairs, beyond their role in curing individual illness.

2.2.5 Historic (post-A.D. 1542)

European activity in the region began as early as A.D. 1542, when Juan Rodríguez Cabrillo landed in San Diego Bay (Carrico 1993). Sebastián Vizcaíno returned in 1602, and it is possible that there were subsequent contacts that went unrecorded. These brief encounters made the local native people aware of the existence of other cultures that were technologically more complex than their own. Epidemic diseases may also have been introduced into the region at an early date, either by direct contacts with the infrequent European visitors or through waves of diffusion emanating from native peoples farther to the east or south (Preston 2002). It is possible, but as yet unproven, that the precipitous demographic decline of native peoples had already begun prior to the arrival of Gaspar de Portolá and Junípero Serra in 1769.

Spanish colonial settlement was initiated in 1769, when multiple expeditions arrived in San Diego by land and sea, and then continued northward through the coastal plain toward

Monterey. A military presidio and a mission to deal with the local Kumeyaay and Ipai were soon firmly established at San Diego, despite violent resistance to them from a coalition of native communities in 1776 (Carrico 1993). Private ranchos subsequently established by Spanish and Mexican soldiers, as well as other non-natives, appropriated much of the remaining coastal or near-coastal locations (Pourade 1960-1967).

Mexico's separation from the Spanish empire in 1821 and the secularization of the California missions in the 1830s caused further disruptions to native populations in western San Diego County. Some former mission neophytes were absorbed into the work forces on the ranchos, while others drifted toward the urban centers at San Diego and Los Angeles or moved to the eastern portions of the county where they were able to join still largely autonomous native communities. In 1843, the small (28-acre) Cañada de Los Coches rancho in Lakeside was granted to Apolinaria Lorenza, and in 1845, the 48,000-acre El Cajon rancho was granted to María Antonia Estudillo (Carrico 1993).

United States conquest and annexation, together with the gold rush in northern California, brought many additional outsiders into the region. Development during the following decades was fitful, undergoing cycles of boom and bust. Small-scale settlement of El Cajon and Lakeside began in the late 1800s, including the construction of the San Diego-Cuyamaca Eastern Railroad and the flume from Cuyamaca Reservoir in the 1880s and 1890s. These developments supported small-scale exploratory mining. However, it was not until the second half of the twentieth century that the urbanization of the region exploded.

The Campo-Jucumba region, including McCain Valley was largely considered unsettled southern California territory—a fact that drew to the region a few prominent ranchers such as the McCain family. Originally from Arkansas and Texas, the McCain family began ranching in California as early as 1858 in the Mendocino region, and after an aborted return trip to Arkansas, decided to settle in what is now known as McCain Valley in 1868 (Ní Ghabhláin et al. 2010; Wade et al. 2008). With the McCain family alongside several small sheep and cattle ranching outfits tied to the Laguna Mountain area (just northwest of McCain Valley), ranching thrived until the mid-twentieth century. After this time, ranching dwindled in productivity due to several reasons, including more productive cattle outfits to the north, a collapse in the demand for wool, and the appropriation of some prime pasturelands (such as Laguna Meadows) by the National Parks Service for watershed protection and conservation (see Wade et al. 2008). In its heyday, cattle ranching associated with McCain Valley spread as far south as the lower portions of northern Baja (Wade et al. 2008). Not surprisingly, the intensification of ranching and homesteading in the McCain Valley area lead to conflicts with local Kumeyaay inhabitants. One such conflict, recounted by Tom Lucas, a local Kwaayimii Indian, was the apparent last stand of some Kumeyaay families in conflict with the McCain family that took place near McCain Valley in Campo or Jacumba in the 1880s (Carrico 1983, 1987). However, it is also true that many of the Native American inhabitants were employed by local ranchers, including Tom Lucas (Carrico 1983). Wade et al. (2008) provide a region-wide overview of ranching in San Diego County including eligibility considerations, and Ní Ghabhláin et al.

(2010) provide a detailed historic context that covers part of the current Project area, including a NRHP evaluation of the built environment near Boulevard and historic Highway 80.

2.3 RECORDS SEARCH RESULTS

Tetra Tech completed a records search and literature review for the Tule Wind Project in 2008. This records search, conducted at the SCIC at San Diego State University, covered most of the current project APE. The southernmost extent of the current project APE was not included in the original Tetra Tech records search, thus requiring an additional records search for the current study.

Tetra Tech's (2008) records search covered a one-mile buffer around the project ROW, as defined in 2008. The records search identified 39 cultural resources within the 2008 ROW, and another 151 cultural resources outside the ROW but within a one-mile radius of the 2008 ROW (Table 2.1). Of the 190 cultural resources identified by Tetra Tech (2008), 13 are described as recommended eligible for NRHP listing, three as not eligible for CRHR listing, and the rest (n = 177) are described as eligibility status unknown or not evaluated (see Table 2.1). The supplemental records search conducted by ASM resulted in the identification of an additional 21 archaeological sites that have not been evaluated; seven of these within the Class III footprint and 14 outside the footprint but within a one-mile radius (Table 2.2). The results of Tetra Tech's (2008) study, and ASM's supplemental records search, including a tabulation of previous cultural resource studies and previously recorded cultural resources, are provided in Appendix G.

SDG&E is in the environmental review process for the construction of its Sunrse-Powerlink transmission line, a portion of which (Link 1, Section 9B) passes through McCain Valley overlapping the Tule Wind project footprint in some places. The Sunrse-Powerlink cultural resources inventory documented a number of cultural resources that also fall within the Tule Wind Class III and Class II inventory areas, but were not identified during records searches due to the recency of their recordation. With permission from the BLM and SDG&E, ASM was able to obtain information on the cultural resources recorded during the Sunrise-Powerlink survey and integrate those results in the current Tule Wind inventory. This integration was based on thorough field checks of each previously recorded site. In all, the cultural resources that overlap the Sunrise-Powerlink and Tule Wind inventories include seven prehistoric archaeological sites and one site with both historic and prehistoric components (Table 2.3).

Table 2.1 Tetra Tech (2008) Records Search Results

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-118	1950'S	Not evaluated	Prehistoric (of Roger's Yuma II and III)	Pottery scatter	1-Mile Radius	Pottery scatter.
CA-SDI-10123	1983	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Sparse pottery scatter and lithic material.
CA-SDI-10125	1979	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-10328	1979	Not evaluated	Prehistoric (Late Period)	Artifact scatter	ROW	Lithic and Tizon Brown pottery scatter (4 items)
CA-SDI-10329	1979	Not evaluated	Prehistoric (Late Period)	Artifact scatter	ROW	Lithic and Tizon Brown pottery scatter (4 items)
CA-SDI-10335	1979	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Rock shelter with lithic and pottery scatter.
CA-SDI-10359	1979	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Bedrock milling feature with lithic and pottery scatter
CA-SDI-10360	1979	Not evaluated	Prehistoric	Milling feature and artifact scatter	ROW	Bedrock milling station with lithic and pottery scatter
CA-SDI-10595	1986	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Bedrock milling feature with lithic and pottery scatter
CA-SDI-10596	1986	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Bedrock milling feature with lithic and pottery scatter
CA-SDI-10597	1987	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10651	2006	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Large temporary camp.
CA-SDI-10653	2006	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse scatter.
CA-SDI-10654	1986	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Habitation/ethnographic village site.
CA-SDI-10655	1986	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Temporary camp, milling feature.
CA-SDI-10656 (CA-SDI-7157)	2006	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Large temporary camp with milling features, stone circle, lithic and pottery scatters.
CA-SDI-10974	1995	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Habitation site with milling station, lithic scatter and pottery scatter.
CA-SDI-10975	1995	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling feature with lithic and pottery scatter.
CA-SDI-10976	1995	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling feature with lithic and pottery scatter.
CA-SDI-10977	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10978	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10979	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10980	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-10981	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10982	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10983	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10984	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-10985	1995	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-1150	1969	Not evaluated	Prehistoric (Late Period)	Milling stations and lithic scatter	ROW	Bedrock milling features and lithic scatter
CA-SDI-12866	1983	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-12867	2007	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Milling feature.
CA-SDI-12868	2007	Not evaluated	Historic	Historic mining features	1-Mile Radius	Historic mine features.
CA-SDI-15188	1999	Not evaluated	Historic	Historic dam	1-Mile Radius	Breached dam.
CA-SDI-15189	1999	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-15190	1999	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-16007	1999	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Temporary camp with hearth feature.
CA-SDI-16037	1999	Not evaluated	Prehistoric	Milling feature, lithic scatter	1-Mile Radius	Bedrock milling feature and lithic scatter.
CA-SDI-16038	1999	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature.
CA-SDI-16038	1999	Not evaluated	Prehistoric (Late Period)	Milling station	ROW	Bedrock milling feature
CA-SDI-16039	2003	Not evaluated	Prehistoric	Rock cairn, lithic scatter	1-Mile Radius	Rock cairn and lithic scatter.
CA-SDI-16040	2003	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-16041	2003	Not evaluated	Prehistoric	Rock cairn, lithic scatter	1-Mile Radius	Rock cairn and lithic scatter.
CA-SDI-16042	2003	Not evaluated	Prehistoric	Lithic scatter, rock features	1-Mile Radius	Lithic scatter and rock features.
CA-SDI-16044	2003	Not evaluated	Prehistoric	Rock cairn, lithic scatter	1-Mile Radius	Lithic scatter and rock cairn.
CA-SDI-16045	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16046	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16047	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16048	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16049	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16050	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-16051	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16052	2003	Not evaluated	Historic	Historic fence	1-Mile Radius	Historic fence line.
CA-SDI-16053	2003	Not evaluated	Undetermined	Rock features	1-Mile Radius	Rock ring feature and rock cairn.
CA-SDI-16054	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16055	2003	Not evaluated	Undetermined	Rock cairn	1-Mile Radius	Rock cairn.
CA-SDI-16364	2001	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-16365	2004	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-16366	2001	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-16367	2001	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-16373	2001	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter and ground stone.
CA-SDI-16374	2001	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse.
CA-SDI-16385	2002	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse.
CA-SDI-16394	2002	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse.
CA-SDI-164	1940'S	Not evaluated	Prehistoric	Pottery scatter	1-Mile Radius	Pottery scatter.
CA-SDI-16786	2003	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse.
CA-SDI-16823	2003	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse.
CA-SDI-16825	2003	Site tested, eligibility determination not available	Historic	Historic trash scatter	1-Mile Radius	Historic refuse. Site was tested but results and eligibility not provided on site form.
CA-SDI-16826	2003	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse.
CA-SDI-16827	2003	Not evaluated	Historic	Historic trash scatter, historic foundation	1-Mile Radius	Historic refuse and foundations.
CA-SDI-17116	2004	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter with bulldozer tracks.
CA-SDI-17118	2006	Not evaluated	Prehistoric (Late Period)	Artifact scatter	ROW	Sparse lithic and pottery scatter
CA-SDI-17135	2004	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-17816	2005	Not evaluated	Prehistoric (Late Period)	Artifact scatter	ROW	Sparse lithic and pottery scatter. Site condition is poor due to OHV traffic and illicit surface collection.

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-17821	2005	Not evaluated	Prehistoric	Historic trash scatter	ROW	Historic refuse dumps
CA-SDI-17822	2005	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-17827	2005	recommended eligible	Prehistoric	Habitation site	1-Mile Radius	Temporary camp with milling feature, lithic and pottery scatter.
CA-SDI-17828	2005	Not evaluated	Prehistoric/Historic	Lithic scatter, historic trash scatter	1-Mile Radius	Lithic scatter and historic glass.
CA-SDI-17844	2006	Not evaluated	Prehistoric/Historic	Habitation site	1-Mile Radius	Seasonal camp with milling feature, lithic and pottery scatter.
CA-SDI-17845	2006	Not evaluated	Prehistoric/Historic	Artifact scatter and historic feature	1-Mile Radius	Lithics and groundstone; livestock corral
CA-SDI-17869	N/A	Not evaluated	Prehistoric	Pictographs	1-Mile Radius	Pictographs.
CA-SDI-18048	2006	Not evaluated	Historic	Historic structure, historic features	1-Mile Radius	Collapsed historic structure and associated features.
CA-SDI-18049	2006	Not evaluated	Historic	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-18050	2005	Not evaluated	Prehistoric (Late Period)	Artifact scatter	ROW	Sparse lithic and pottery scatter and a mano.
CA-SDI-18051	2006	Not evaluated	Historic	Artifact scatter	1-Mile Radius	Lithics and one milling slab.
CA-SDI-18827	2007	Not evaluated	Historic	Datum marker	1-Mile Radius	General Land Office survey datum.
CA-SDI-18850	2007	Not evaluated	Historic	Datum marker	1-Mile Radius	General Land Office survey datum.
CA-SDI-18851	2007	Not evaluated	Historic	Milling features	1-Mile Radius	Milling features.
CA-SDI-18921	2008	Not evaluated	Historic	Historic trash scatter	1-Mile Radius	Historic refuse dump.
CA-SDI-2535	1977	recommended eligible	Prehistoric (E. Diegueno of the Yuman III)	Rock shelter, pictographs	ROW	Rock shelter and pictographs
CA-SDI-2704	2003	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Rock shelter with pictographs and FAR, ground stone, lithic and pottery scatters.
CA-SDI-2729	1976	recommended eligible	Prehistoric	Seasonal camp	ROW	Seasonal camp
CA-SDI-2730	1975	Not evaluated	Prehistoric	Possible rock shelter, lithic scatter	ROW	Potential rock shelter with some lithics
CA-SDI-2731	2006	Not evaluated	Prehistoric	Lithic scatter	ROW	Lithic scatter

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-2732	2006	Not evaluated	Prehistoric	Large village site	ROW	Originally recorded as a large village site. A 2006 attempt to relocate was unsuccessful. Authors suggest site is actually CA-SDI-4009 located several hundred meters to the southwest.
CA-SDI-3997	1975	recommended eligible	Prehistoric	Habitation site	1-Mile Radius	Milling station and midden.
CA-SDI-3998	1975	recommended eligible	Prehistoric	Habitation site	1-Mile Radius	Milling station and midden.
CA-SDI-3999	2006	recommended eligible	Prehistoric	Habitation site	1-Mile Radius	Milling station, midden and lithic scatter.
CA-SDI-4000	1975	recommended eligible	Prehistoric (Late Period)	Habitation site	1-Mile Radius	Milling station, midden and lithic scatter.
CA-SDI-4001	1975	Not evaluated	Prehistoric	Milling station	1-Mile Radius	Milling station.
CA-SDI-4002	2006	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Seasonal village site.
CA-SDI-4003	1975	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic scatter and pottery scatter.
CA-SDI-4004	1975	Not evaluated	Prehistoric (Late Period)	Habitation site	1-Mile Radius	Rock shelter, milling station, lithic and pottery scatter.
CA-SDI-4006	1975	Not evaluated	Prehistoric	Milling feature, lithic scatter	1-Mile Radius	Milling slick and lithic scatter.
CA-SDI-4007	1975	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-4009	2006	Not evaluated, potentially eligible	Prehistoric (Late Period)	Seasonal village site	ROW	Seasonal village site and surrounding sattelite sites with several bedrock milling features and a lithic and ceramic scatter
CA-SDI-4010	2006	recommended eligible	Prehistoric	Large village site	1-Mile Radius	Large complex habitation site with midden and milling features.
CA-SDI-4343	1975	Not evaluated	Prehistoric	Milling feature, lithic scatter	1-Mile Radius	Milling feature and lithic scatter.
CA-SDI-4344	1975	Not evaluated	Prehistoric	Milling feature, lithic scatter	1-Mile Radius	Milling feature and lithic scatter.
CA-SDI-4345	1975	Not evaluated	Prehistoric	Milling feature, lithic scatter	1-Mile Radius	Milling feature and lithic scatter.
CA-SDI-4346	1975	Not evaluated	Prehistoric	Milling feature, pottery scatter	1-Mile Radius	Milling feature and pottery scatter.
CA-SDI-4473	N/A	Not evaluated	Historic	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-4788	1986	Not evaluated	Prehistoric	Milling feature, pottery scatter	1-Mile Radius	Milling feature and pottery scatter.
CA-SDI-4788	2005	Not evaluated	Prehistoric	Lithic scatter	ROW	Lithic scatter.

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-5058	1979	Not evaluated	Prehistoric	Milling feature, lithic scatter	1-Mile Radius	Milling features and lithic scatter.
CA-SDI-5059	1979	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic scatter and pottery scatter.
CA-SDI-5060, 10333, 10334, 10407	1979	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling feature with lithic and pottery scatter.
CA-SDI-5162	N/A	N/A	Prehistoric	Habitation site	ROW	Rock shelter and lithic and pottery scatter
CA-SDI-5171	N/A	N/A	Prehistoric	Habitation site	ROW	Rock shelter and lithic and pottery scatter
CA-SDI-5417	2005	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-5418	2005	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-5430	1978	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling features and lithic , pottery scatters.
CA-SDI-5933	2003	Not eligible for CRHP, not evaluated NRHP	Prehistoric	Habitation site	1-Mile Radius	Temporary camp with milling feature. Site tested and determined not eligible for listing on the California Register of Historic Resources.
CA-SDI-6779	1976	Not evaluated	Prehistoric	Milling stations	ROW	Bedrock milling features
CA-SDI-6884	1979	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-6884, 10126, 10128	1979	recommended eligible	Prehistoric	Habitation site	1-Mile Radius	Rock shelter with lithic and pottery scatter.
CA-SDI-6885	1978	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Bedrock milling station with lithic and pottery scatter
CA-SDI-6893	2003	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Milling slick.
CA-SDI-6894	1979	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Large temporary camp.
CA-SDI-6895	1979	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Large temporary camp.
CA-SDI-6896	1979	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Small temporary camp.
CA-SDI-6897	1979	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Small temporary camp.
CA-SDI-6898	1979	Not evaluated	Historic	Historic camp	1-Mile Radius	Possible historic US Army Camp.
CA-SDI-6899	2003	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Milling slick.
CA-SDI-6901	2003	Not eligible for CRHP, not evaluated NRHP	Prehistoric	Habitation site	1-Mile Radius	Temporary camp with milling feature. Site tested and determined not eligible for listing on the California Register of Historic Resources.
CA-SDI-6902	2003	Not eligible for CRHP, not evaluated NRHP	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling feature. Site tested and determined not eligible for listing on the California Register of Historic Resources.
CA-SDI-6978	1978	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic scatter and tool.

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-6995	1978	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Several bedrock milling surfaces (50+), lithic and pottery scatter and midden.
CA-SDI-6996	2007	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter. ECORP unable to relocate in 2007.
CA-SDI-7135	1979	Not evaluated	Historic	Historic trash scatter and historic features	1-Mile Radius	Historic refuse and features.
CA-SDI-7136	1979	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock milling station.
CA-SDI-7137	1979	Not evaluated	Prehistoric	Possible lithic quarry	1-Mile Radius	Possible quartz and diorite quarry.
CA-SDI-7138	2005	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Rock shelter with lithic debitage. Site not relocated during a 2005 attempt.
CA-SDI-7139	2005	Not evaluated	Historic/Prehistoric	Artifact scatter	1-Mile Radius	Originally recorded as a historic site with a ceramic scatter. During a 2005 revisit the historic refuse and features associated with grazing were relocated but the ceramic scatter was not.
CA-SDI-7140	1979	Not evaluated	Prehistoric	Milling station	1-Mile Radius	Bedrock milling station.
CA-SDI-7141	1979	Not evaluated	Historic	Historic trash scatter and historic features	1-Mile Radius	Historic refuse and features.
CA-SDI-7142	1979	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-7143	1979	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Rock shelter and lithic scatter.
CA-SDI-7144	1979	Not evaluated	Prehistoric/Historic	Milling features, artifact scatter	1-Mile Radius	Milling features with lithic and pottery scatter and historic refuse associated with cattle grazing.
CA-SDI-7145	1979	Not evaluated	Prehistoric	Milling features, artifact scatter	1-Mile Radius	Milling features with lithic and pottery scatter.
CA-SDI-7146	1979	Not evaluated	Prehistoric/Historic	Milling features, artifact scatter	1-Mile Radius	Milling features with lithic and pottery scatter and historic refuse.
CA-SDI-7148	1979	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.
CA-SDI-7149	1979	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Milling station.
CA-SDI-7150	2006	Not evaluated	Prehistoric (Late Period)	Habitation site	ROW	Rock shelter with a midden, lithic and pottery scatter
CA-SDI-7151	2006	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Habitation site.
CA-SDI-7151	2006	Unknown	Prehistoric (Late Period)	Habitation site	ROW	Rock shelters, habitation site with midden, lithic and pottery scatter. Site heavily impacted by OHV traffic.
CA-SDI-7152	1979	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery scatter.

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-7153	1979	Not evaluated	Prehistoric/Historic	Habitation site	1-Mile Radius	Rock shelter with stone enclosure with wodden arch, glass and shell casings. Sparse lithic and pottery.
CA-SDI-7154	1979	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter.
CA-SDI-7154	1979	Not evaluated	Prehistoric	Lithic scatter	ROW	Lithic scatter
CA-SDI-7157 (aka CA-SDI-10656)	2006	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Large temporary camp with milling features, stone circle, lithic and pottery scatters.
CA-SDI-7158	1979	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter of 5 flakes.
CA-SDI-7159	1979	Not evaluated	Prehistoric	Milling feature and historic trash scatter	1-Mile Radius	Milling feature and historic refuse.
CA-SDI-7161	1979	Not evaluated	Prehistoric	Lithic scatter	1-Mile Radius	Lithic scatter of 5 flakes.
CA-SDI-7162	2006	Not evaluated	Prehistoric	Milling feature, pottery scatter	1-Mile Radius	Bedrock milling features and pottery scatter
CA-SDI-7163	1979	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling station with lithic and pottery scatter.
CA-SDI-7164	1979	recommended eligible	Prehistoric	Habitation site	ROW	Rock shelter with a lithic and pottery scatter
CA-SDI-778	1961	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Bedrock mortar.
CA-SDI-8093	1978	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Temporary camp and lithic and pottery scatter.
CA-SDI-82	1949	Not evaluated	Prehistoric	Pottery scatter	1-Mile Radius	Pottery scatter.
CA-SDI-8353	1980	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling station with lithic and pottery scatter.
CA-SDI-8355	1980	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Habitation site with milling station, lithic scatter and pottery scatter.
CA-SDI-8372/8375	2000	Not evaluated	Prehistoric/Historic	Milling feature, artifact scatter	1-Mile Radius	Milling feature with lithic and pottery scatter and the Historic McCain Ranch (SDI-8375)
CA-SDI-8388	2006	recommended eligible	Prehistoric	Temporary camp	ROW	Originally recorded as a temporary camp with lithics and pottery. This site was not relocated during ASM's 2006 survey and relocation efforts.
CA-SDI-84	2005	Not evaluated	Prehistoric (Late Period)	Pottery scatter	1-Mile Radius	Originally recorded as a lithic and pottery scatter. Site was not relocated during an attempt in 2005.
CA-SDI-8683	1995	Not evaluated	Prehistoric	Artifact scatter	1-Mile Radius	Lithic and pottery (Tizon) scatter and ground stone.
CA-SDI-8684	1981	Not evaluated	Prehistoric	Milling station	ROW	Milling station
CA-SDI-8702	1981	Not evaluated	Prehistoric	Lithic scatter, pottery scatter	ROW	Lithic scatter and pottery scatter

Trinomial	Last update to record	NRHP Status	Age	Type	In ROW or 1-Mile Radius	Description
CA-SDI-8703	1981	recommended eligible	Prehistoric	Habitation site	ROW	Temporary camp, possible fire pit, lithic scatter and pottery scatter
CA-SDI-8704	1981	Not evaluated	Prehistoric	Artifact scatter	ROW	Lithic scatter and pottery scatter
CA-SDI-8705	1981	recommended eligible	Prehistoric	Habitation site	ROW	Rock shelters and associated lithic scatter and pottery scatter
CA-SDI-8707	1981	Not evaluated	Prehistoric	Habitation site	ROW	Temporary camp, lithic scatter and pottery scatter
CA-SDI-8708	1981	Not evaluated	Prehistoric	Milling feature	ROW	Cupule
CA-SDI-8709	1981	Not evaluated	Prehistoric	Milling feature	ROW	Milling station
CA-SDI-8710	1981	Not evaluated	Prehistoric	Milling feature, artifact scatter	1-Mile Radius	Milling feature, midden and pottery.
CA-SDI-8710	1981	Not evaluated	Prehistoric	Habitation site	ROW	Milling station, midden, and pottery scatter
CA-SDI-8711	1981	Not evaluated	Prehistoric	Milling station	ROW	Milling station
CA-SDI-8712	1981	Not evaluated	Prehistoric	Habitation site	ROW	Temporary camp, lithic scatter
CA-SDI-8717	1981	Not evaluated	Prehistoric	Milling feature	1-Mile Radius	Milling station.
CA-SDI-9028	2006	Not evaluated	Prehistoric	Milling features, artifact scatter	1-Mile Radius	Milling features with lithic and pottery scatter.
CA-SDI-9029	2006	Not evaluated	Prehistoric	Milling features, artifact scatter	1-Mile Radius	Milling features with lithic and pottery scatter.
CA-SDI-9223	2005	Not evaluated	Prehistoric (Late Period)	Habitation site	ROW	Temporary camp with milling features and a lithic and pottery scatter
CA-SDI-9224	1982	Not evaluated	Prehistoric (Late Period)	Artifact scatter	ROW	Lithic scatter, projectile points, and ground stone
CA-SDI-9228	2005	Not evaluated	Prehistoric (Late Period)	Habitation site	ROW	Pottery scatter (Tizon Brown sherds)
CA-SDI-9540	1981	Not evaluated	Prehistoric	Habitation site	1-Mile Radius	Temporary camp with midden.
CA-SDI-9540	1981	Not evaluated	Prehistoric (Late Period)	Habitation site	ROW	Temporary camp site with midden, lithics and pottery fragments.
CA-SDI-9715	1983	Not evaluated	Historic	Historic structure, historic trash scatter	1-Mile Radius	Historic structure and refuse.
P-37-24023	2000	Not evaluated	Historic	Historic road	1-Mile Radius	Old US 80 (paved highway).
P-37-28936	N/A	Not eligible	Prehistoric	Pottery isolate	ROW	Isolated pottery fragment

Table 2.2 ASM (2009) Records Search Update

Trinomial	Last update to record	NRHP Status	Age	Type	Class III APE or 1-Mile Radius	Description
CA-SDI-00087	2005	Not Evaluated	Prehistoric	Prehistoric pottery and seed cache	1-Mile Radius	3 ollas and a cooking pot with seeds of various plants, possibly dating to 1850. 4m^2 area.
CA-SDI-08217	1980	Not Evaluated	Prehistoric	Artifact scatter	1-Mile Radius	quartz and andesite porphyry flakes, core, scraper. 15000m^2 area.
CA-SDI-08218	1980	Not Evaluated	Prehistoric	Artifact scatter	1-Mile Radius	quartz and andesite porphyry flakes, 1 mano, 1 scraper. 2000m^2 area.
CA-SDI-09225	1982	Not Evaluated	Prehistoric	Large habitation	Class III	rock shelter, 3 milling stations, artifact scatter, handstone, millingstone, steatite fragment, hammerstone. 30 x 15m.
CA-SDI-09226	2006	Not Evaluated	Prehistoric	Temporary camp	1-Mile Radius	light lithic and ceramic scatte with 2 handstones and one possible slick. 17 x 12m.
CA-SDI-13670	1994	Not Evaluated	Prehistoric	Habitation site	1-Mile Radius	6 milling features w/ 113 elements, 200+ flakes, 100+ debitage, 2 cores, 17 groundstone, 1 pestle, 6 hammerstones, 300+ ceramics. 110 x 100m.
CA-SDI-13671	1994	Not Evaluated	Historic	Historic trash dump	1-Mile Radius	household and kitchen items, building materials, automotive items; dates to early 1900s. 21 x 10m.
CA-SDI-16786	2003	Not Evaluated	Historic	Historic trash scatter	Class III	Ironstone, metal, galss and bottle fragments. Tested in 2003 and found not significant under CEQA. 106 x 45m.
CA-SDI-16824	2005	Not Evaluated	Historic	Historic homestead	Class III	3 foundations, well, trash scatter which includes purple glass, ironstone, glass, metal cans. 300 x 250ft.
CA-SDI-17731	2005	Not Evaluated	Historic	Historic trash dump and wooden trough	1-Mile Radius	wooden trough, ~150 cans/bottles spread between one dump location and an associated scatter, possibly dating to 1914. 47 x 32m.
CA-SDI-17732	2005	Not Evaluated	Historic	Historic trash dump	1-Mile Radius	350+ cans, 50+ glass frags, 25+ ceramic frags, battery cases and othe rdomestic household refuse possibly dating to 1915. 60 x 45m.
CA-SDI-17733	2005	Not Evaluated	Historic	Historic trash dump; isolated flalke	1-Mile Radius	household refuse scatter in dating to earkly 1900s, one prehistoric flake. 90 x 45m.

Trinomial	Last update to record	NRHP Status	Age	Type	Class III APE or 1-Mile Radius	Description
CA-SDI-18993	2008	Not Evaluated	Historic	Historic trash dump	Class III	25-50 cans, 1 ceramic frag, 1-5 glass fragments; likely dating as early as the 1930s
CA-SDI-18994	2008	Not Evaluated	Historic	Historic trash dump	Class III	25-50 cans, 1 ceramic frag, 25-50 glass fragments; likely dating as early as the 1930s. 82x42ft
CA-SDI-19019	2007	Not Evaluated	Historic	Historic trash scatter	1-Mile Radius	120+ cans, glass fragments, paint can, rubber tire. Likely dating to 1940s-50s. 222 x 45m
CA-SDI-19020	2007	Not Evaluated	Historic	Historic trash scatter	1-Mile Radius	disassociated scatter of cans, bicycle wheel, spark plugs, glass, barbed wire, etc. 35 x 29m
CA-SDI-19042	2009	Not Evaluated	Prehistoric	Lithic scatter	1-Mile Radius	2 quartz flakes, 2 metavolcanic flakes, 1 chert flake. 16 x15m.
CA-SDI-19045	2009	Not Evaluated	Prehistoric	Lithic scatter	1-Mile Radius	9 flakes, 2 cores, 1 ceramic sherd. 49 x 19m.
CA-SDI-19225	2007	Not Evaluated	Prehistoric	Milling station	1-Mile Radius	1 bedrock milling station with 1 slick. 7 x 5m.
CA-SDI-19256	2007	Not Evaluated	Prehistoric	Milling station	1-Mile Radius	2 milling stations with 3 mortars and 4 slicks. 18 x 18m.
CA-SDI-19277	2008	Not Evaluated	Historic	Historic trash dump	Class III	10 glass fragments (including SCA, aqua and milk) , 12 ceramic fragmens, one wood stove leg; possibly dating to the late 1800s. 48 x 18m.
CA-SDI-19278	2008	Not Evaluated	Prehistoric	Lithic scatter	Class III	3 metavolcanic flakes. 19 x 13m.

Table 2.3 Archaeological Sites in the Tule Wind Footprint that were Recorded During the SDG&E Sunrise-Powerlink Survey

Site Designation	Class III or II	Landholder	Source	Age	Site Type	NHRP Status
SDI-19854/ SDGE-BC-6	Class III	BLM	SDG&E	Both	Lithic Scatter and HPRD	Not Evaluated
SDI-19857/ SDGE-BC-9	Class III	Private	SDG&E	Prehistoric	Lithic Scatter	Not Evaluated
SDI-19860 SDGE-BC-13	Class III	BLM	SDG&E	Prehistoric	Bedrock Milling Station	Not Evaluated
SDI-19849 SDGE-BC-37	Class III	BLM	SDG&E	Prehistoric	Artifact Scatter	Not Evaluated
SDI-19868 SDGE-BW-83	Class III	BLM	SDG&E	Prehistoric	Artifact Scatter	Not Evaluated
SDI-19869 SDGE-BW-84	Class III	BLM	SDG&E	Prehistoric	Artifact Scatter	Not Evaluated
SDI-19935 SDGE-BW-128	Class III	BLM	SDG&E	Prehistoric	Artifact Scatter	Not Evaluated
SDI-19872 SDGE-BW-130	Class III	Private	SDG&E	Prehistoric	Lithic Scatter	Not Evaluated

2.4 RESEARCH DESIGN

While innumerable concepts and theoretical perspectives have been used to interpret archaeological findings in the San Diego region, several broad themes can be outlined that generally guide interpretations. These themes include site formation processes, chronology, settlement and site function, and subsistence. Though general, the research themes are designed to provide information that can be used at the survey level to generate assessments of NRHP eligibility. However, should avoidance of an archaeological site be impossible, these themes are detailed enough to direct Phase II evaluation with the goal of determining NRHP eligibility. Finally, this research design does not address Traditional Cultural Properties (TCP) that may be present in or near the project APE. Research regarding TCPs may become an issue at a later phase of the project. ASM generated little information during survey from Native American monitors and informants regarding the general vicinity of specific TCPs, despite both direct and indirect questioning conducted on the phone and during field visits.

2.4.1 Site Formation Processes

Prehistoric sites vary in complexity and duration of use, and both social and natural factors contribute to the formation and composition of their deposits. The nature of site occupation (e.g., food procurement and/or processing, other types of resource procurement, social events, and short-term or seasonal occupation) can lead to spatial patterning of artifacts, food remains, and site features. Sites with bedrock milling facilities commonly exhibit horizontal stratification of activity areas. Midden constituents near the bedrock milling stations sometimes vary from those in adjacent parts of the site. From the records search results, it is clear that known and potential project sites will contribute to a greater understanding of site formation processes as they relate to aboriginal occupation over time.

Postdepositional processes can alter the character of prehistoric sites (Gross 1993; Schiffer 1987; Waters 1992). Bioturbation, erosion, alluvial deposition, and historic and modern land use can affect the integrity of prehistoric archaeological sites. These disturbances complicate archaeological interpretation, particularly of complex, multicomponent sites. The current study will benefit from a strong understanding of local geology and landform development. To the extent that site integrity enhances or deflates the interpretive potential of a cultural deposit, it may contribute to or detract from its scientific value:

- Do inclusive chronometric data from project sites permit the identification and definition of temporally and/or spatially discrete prehistoric occupations or historic dumps?
- Are the definitions of discrete components supported by multiple, independent chronological controls, and if so how similar are their age estimates?
- Is there substantial evidence of occupational "overprinting"? How has this affected the temporal integrity of habitation components or refuse deposits?
- What kinds of impacts are affecting sites in different parts of the study area and how extensive are they?
- How pervasive is evidence of looting? Is it more prevalent and/or visible at prehistoric or historic sites?
- Have adverse impacts affected the data potential of each evaluated site?

2.4.2 Chronology and Dating

Chronological issues are basic to any archaeological research design, as they provide the primary framework of prehistory. Previous research in the southern San Diego region has documented a range of prehistoric sites dating to both the Archaic (6000 B.C. to A.D. 500) and Late Prehistoric periods (post-A.D. 500). To the southeast near Jamul, Yohe and Chace (1995) documented a late La Jollan (i.e., Millingstone) deposit dominated by millingstones, handstones, cobble tools, and other items. Rodent protein residue was collected from a basin millingstone in a buried context, implying the functional generality of these tools. In the eastern foothills and valley floors to the southeast (e.g., Otay Mesa), a strong record that postdates A.D. 1000 has been documented. These sites have assemblages with large numbers of arrow points, small flake-based tools, and ceramics, but also include sizeable amounts of millingstones and handstones relative to mortars and pestles. The distribution of such artifacts is uneven at many sites in the region and there may be temporal patterning in how sites were occupied, leaving differential traces of assemblage constituents. Along these lines, potential research issues derived from this basic problem include:

- How did the transition from the Archaic period to the Late Prehistoric period occur? This transition is characterized by shifts in food storage and cooking technology with the inception of ceramics, and possibly a shift in hunting technology with the addition of the bow and arrow. These shifts did not occur simultaneously (cf.

McDonald et al. 1993), and their implications for local population expansion in the Late Prehistoric period are unknown.

- Was there a shift in emphasis of acorn use during the Late Prehistoric period? The mortar and pestle appear to have been added to the repertoire of food processing tools during the Late Prehistoric period, but only in small numbers. Is there evidence for earlier use of bedrock mortars? Is the addition of the mortar and pestle correlated to the inception of ceramics in the region and/or intensified use of a particular resource?

Because chronological controls are essential to any archaeological investigation, several other basic questions concerning the temporal data potential of evaluated sites pertain to the current study, including:

- Can the chronological placement of project sites be determined?
- What kinds of chronometric data can project sites provide? Of those obtained during survey, how well do they correlate in terms of the age estimates they provide (e.g., projectile point types vs. obsidian hydration dates).
- Are there data indicating the presence of multiple occupation episodes at project sites?
- Do marker artifacts appear to fit with temporal patterns recognized in the surrounding region? Are there any unique diagnostic items present?
- Can chronometric data from project sites help to refine dating schemes in the local region?

2.4.3 Settlement and Site Function

Cook's (1985) inventory work in McCain Valley documented widespread occupation during the Late Prehistoric, particularly during the last 1,000 years based on large amounts of ceramic sherds. Additionally, work by Meighan (1959), Hector (1984) and others has documented substantial occupation of the Peninsular Ranges during the last 500 years. The Late Prehistoric is a time when significant shifts in settlement and subsistence may have occurred. While several important prehistoric sites and ethnohistoric villages are known for the broader region, the character of settlement and subsistence shifts has not been fully explored. A key variable in understanding social organization during this time is to determine the kinds of socioeconomic shifts that occurred after adoption of the bow and arrow and the subsequent widespread use of ceramics. Sites from the McCain Valley region may have the potential to generate important data for addressing this issue, particularly the presence of arrow points and abundant amounts of pottery. Specific data requirements include information on arrow point manufacture and general patterns of lithic reduction, and raw material use—including exotic stone. Was arrow point production occurring at sites in the project area or were they discarded in exhausted condition? What does the debitage assemblage imply about the production and/or maintenance of stone tools at project sites?

Information on ceramic vessel form, function, and the diversity therein is also critical for determining whether residential occupation was brief or prolonged. How many kinds of vessels are indicated in the assemblage and for what purposes were they used? The latter is particularly important for understanding intensification in the exploitation of plant foods (see Eerkens 2001). Is there evidence, in the form of clay daub and other manufacturing tools, that clay vessels were being manufactured at sites in the project area? Finally, the manufacture and use of groundstone implements in conjunction with the ubiquitous milling elements known for the project area can help clarify the nature of site occupation and settlement duration. Shaping of handstones and pestles can be an indication that populations are somewhat mobile, implying use in off-site contexts—the idea being that shaping can reduce mass thereby reducing transport costs (Hale 2001).

2.4.4 Subsistence

Subsistence orientation and settlement patterns are interwoven and dependent on the availability of resources, together creating a system of decisions regarding settlement locations, desired faunal and vegetal resources, seasonal movements, food processing techniques, and storage habits. Subsistence strategies of the Kumeyaay have been described as bipolar, but dependent upon where the lineage home area was located. In reality though, most subsistence strategies were much more complex, and can be described as systems of "fission and fusion."

Milling implements occur at numerous sites in the project area, and both macroscopic and microscopic vegetal remains (primarily seeds) may be present. Several questions that can be addressed using data from project sites are: What vegetal and faunal remains are present? How specialized was the subsistence strategy (i.e., were any species a focus of exploitation)? In particular, what role did acorns play versus small seeds and tubers? What types of "exotic" food resources are present? Can faunal/vegetal remains be correlated to types of milling stations at site loci? Can seasonal and/or diachronic changes be discerned in the subsistence emphasis? If diachronic change is detected, can this be related to technological changes such as the introduction of ceramics, arrow points, and the mortar and pestle?

Answers to such questions typically involve collection of data during excavation, and by flotation of column samples. However, evidence from the surface can also be used to address such research questions. Recent work with bedrock milling stations on Camp Pendleton focused on the extraction of food residues from tiny cracks or pits in bedrock mortar and basined millingstone surfaces (Becker 2009). Becker successfully recovered plant and animal residue from bedrock milling stations, generating strong implications for settlement and subsistence.

Regarding historic resources, issues of subsistence are typically addressed from refuse deposits while settlement relates to land patents, ranching activity, etc. Refuse deposits typically contain a variety of different food and beverage containers that not only speak to the kinds of resources consumed, but also whether luxury or high-end items were purchased for consumption—a reflection of the socioeconomic context of local inhabitants. It is typical for refuse deriving from miners or other somewhat transient occupants to consist of basic food cans and liquor

containers, while household refuse deposits tend to be more diverse, including cosmetics, cleaners, etc. Thus, historic refuse deposits have the potential to add to our understanding of the historical occupation of the region beyond basic titleholder information.

3. SURVEY DESIGN AND METHODS

This chapter reviews the regulatory framework and field methods of the Class III inventory of the project footprint and transmission lines, and for the Class II sample inventory of the ROW.

The Secretary of the Interior has issued standards and guidelines for the identification and evaluation of historic properties (*The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* [48 FR 44720–44726]), which are used to ensure that the procedures are adequate and appropriate. The identification and evaluation of historic properties are dependent upon the relationship of individual properties to other similar properties (NPS and ACHP 1998:18-20). Information about properties regarding their prehistory, history, architecture, and other aspects of culture must be collected and organized to define these relationships (NPS 2009), which is the intent of the current Class III cultural resources inventory.

As noted in the BLM Manual, Section 8100, Subsection .01, "Managing cultural resources is viewed as an integrated system of identifying and evaluating cultural resources, deciding on their appropriate uses, and administering them accordingly" (BLM 2004). This system recognizes that cultural resources are "fragile, irreplaceable resources with potential public and scientific uses, representing an important and integral part of our Nation's heritage" (BLM 2004: Subsection .06A). As such, any survey design needs to take such considerations into account.

Survey techniques are loosely grouped into two categories, reconnaissance and intensive (BLM 2004; NPS 2009). The choice of survey category depends on the level of effort required for a particular project, which can vary depending on the nature of the properties or property types, the possible adverse effects on such properties, and agency requirements (NPS and ACHP 1998:18). The selection of field survey techniques and level of effort must be responsive to the management needs and preservation goals that direct the survey effort. For any survey, it is important to consider the full range of historic properties that may be affected, either directly or indirectly, and consider strategies that will minimize any adverse effects and maximize beneficial effects on those properties (BLM 2004; NPS 2009; NPS and ACHP 1998).

The current Class III and Class II inventories are classified as intensive to ensure that cultural resources identified in the field were adequately documented to support subsequent evaluation and treatment plans. Intensive surveys entail the documentation of the types of properties that are present, the precise locations and boundaries of all identified properties, the method of survey (including the extent of survey coverage), and data on the appearance, significance, and integrity of each property (NPS 2009). For the current Class III and Class II inventories, full coverage (100 percent), systematic pedestrian surveys with 20-m transect intervals were performed.

The APE for the project has been defined as encompassing (a) a minimum corridor of 400 ft./120 m (200 ft./60 m on each side of centerline) for the turbine strings, (b) a minimum corridor of 150 ft./50 m (75 ft./25 m each side of centerline) for new and existing access roads, and overhead and buried transmission lines, and (c) a 100-ft./30 m buffer around the footprints of staging areas, borrow areas, substations, and other transmission infrastructure. An additional 1,000 ft./300 m (500 ft./150 m each side of centerline) was allocated for alternative transmission line corridors south of the project ROW, spanning Interstate 8. Together, the APE encompasses 3,570 acres, including 3.6 to 4.1 miles/5.8 to 6.6 km of transmission line.

3.1 FIELD METHODS

For the current Class III and Class II intensive inventories, each survey crew consisted of a field director/crew chief plus one to four crewmembers, all of whom met the applicable Secretary of the Interior Qualification standards. Local Native American monitors accompanied ASM personnel during the survey. Standard transect spacing was 20 m, although spacing was reduced to 3 to 5 m within identified archaeological sites in order to adequately define the site character. The systematic 20-m transects were interrupted to do judgmental inspections of locations such as potential milling stations on exposed bedrock outcrops within the APE. The survey transects generally followed the APE orientation to maintain survey efficiency, or, for the Class II sample survey areas, transects followed major topographic routes.

Areas with a low potential for cultural resources due to slopes greater than 25 percent were addressed by a mixed strategy survey. This focused on ridges, midslope terraces, rock outcrops that were likely to contain rockshelters, caches, or rock art, and watercourses where isolated milling stations and task-specific sites may have been located. Areas covered by standard systematic 20-m transects and those covered using a mixed strategy were distinguished on project maps. Slopes and other small areas with brush that could not be penetrated by survey personnel are clearly defined on maps in the next chapter.

Daily survey forms on the progress, condition, and findings of the survey were completed. These forms included a description of vegetation cover (including contextual photos), as well as estimates of ground surface visibility, rated as poor (0-25 percent), fair (26-50 percent), good (51-75 percent), or excellent (76-100 percent).

Evidence for buried cultural deposits was opportunistically sought through inspection of natural or artificial erosion exposures and the spoils from rodent burrows. In the daily survey notes, the field director and/or crew chief assessed the potential for buried sites on the basis of geomorphology. For instance, large alluvial valleys tend to have higher potential for buried sites, and areas with shallow bedrock (such as McCain Valley) have lower potential for buried sites.

BLM was kept informed of archaeological site findings on a regular basis and coordinated to ensure that interested parties, such as Tribes, are also informed of this information. Several field visits were conducted with Native Americans outside of daily survey work to keep the Tribes informed and to facilitate the early implementation of measures to avoid potentially significant sites.

Standard global positioning systems (GPS) aided navigation. Together with hard-copy field maps, GPS was used to keep the field crew aware at all times of the limits of the APE, and areas of different land ownership. GPS was also used to record the datums of archaeological sites to decimeter-level accuracy. This information was downloaded with the Microsoft ActiveSync program and converted to GIS shape files using Pathfinder software. A GIS specialist created digital maps to accompany the site forms and report and provided copies of project shape files to the BLM as needed.

This was a non-collection survey. ASM archaeologists recorded artifacts in the field, using appropriate descriptions, drawings and photos, to facilitate interpretations of site character. All new prehistoric and historic sites were recorded, and records for previously recorded sites in the survey area were updated, confirming or correcting information on their locations, spatial extent, general characteristics, and likely eligibility status. Sites were defined as any concentration of three or more artifacts, with at least two different artifact classes represented (i.e., debitage and ground stone, or debitage and a biface), in a 25-m^2 area. Site boundaries were defined when over 50 m of space separated cultural materials. Isolated artifacts were defined as three or fewer artifacts (two artifacts if different classes were present, three artifacts of the same class—i.e., three pieces of debitage) in a 25-m^2 area. Isolated artifacts were recorded and numbered separately from sites. ASM personnel assigned a temporary site number to all cultural resources that met the definition of an archaeological site. Site recording included definition of site boundaries, features, and formed artifacts. Detailed sketch maps demonstrated the relationship of the location of each site to topographic features and other landmarks. Digital photographs documented the environmental associations and the specific features of all sites, as well as the general character of the survey area. If a site extended beyond the APE or sample survey area limits, and if access to the area beyond the APE was available, the entire site as visible on the surface was recorded. It was not uncommon, however, for sites to be separated by natural landscape features, such as large drainages.

3.1.1 Sampling Approach

As discussed in Chapter 1, the cultural resources inventory for the Tule Wind project includes the footprint (approximately 3,540 acres) as well as a 10-percent sample (approximately 1,741 acres) of the non-footprint ROW. In order to facilitate completion of a draft EIS/EIR in March, 2010, the BLM requested that a 25-percent sample of the total acreage covered by the project footprint and non-footprint ROW be inventoried for cultural resources to facilitate project planning and the initiation of consultation with the SHPO. In general, no attempt was made to randomize the non-footprint ROW to select sample survey areas. Instead, sample survey areas were chosen that had a high probability of containing cultural resources and that could provide survey coverage in parts of the ROW that were not affected by the current

project footprint. Based on previous studies in the region, especially Cook (1985), areas of high probability included the margins of major drainages and valleys, or near springs, and tended to be located at relatively lower elevations in the study area. More details of the sampling design are summarized in the Work Plan for this project (Hale et al. 2009).

The results of this sample inventory were documented in a letter report dated March 8, 2010. However, rather than a 25-percent sample, ASM was able to complete a 55-percent sample that included 2,524 acres within the project footprint and 400 acres of the Class II sample survey areas. The results of the sample inventory were sufficient for the BLM to proceed with the draft EIS/EIR in March, 2010. The sample survey letter report is provided in Appendix B.

3.2 SITE CLASSIFICATION

The primary objective of the survey was to provide descriptive information on the resources present, while at the same time, providing enough information to consider the potential significance of the archaeological sites in relation to one another in terms of settlement and subsistence. To this end, a basic typological framework was used to characterize the sites.

Prehistoric site types include:

- Habitation Sites. These are relatively substantial deposits, typically including at least three different types of cultural evidence, such as multiple bedrock milling stations, flaked lithics, ground stone, ceramics, faunal remains, hearth or cooking features, cremations, and midden deposits. These sites are thought to represent more substantial occupations, whether resulting from serial occupation or from sedentary year-round occupation.
- Artifact Scatter. These consist of at least two different kinds of artifacts (i.e., lithics and ground stone), but tend to lack evidence of more extensive habitation, such as faunal material and substantial midden deposits. Artifact scatters typically result from a variety of daily economic tasks performed at a single location for a limited duration. Artifact scatters can also have milling stations.
- Bedrock Milling Stations. These primarily consist of bedrock milling stations (mortars, basins, and/or slicks). They are interpreted as work stations used to process a variety of foods and other materials, probably in most cases plant materials (i.e., seeds, roots, nuts), but also including animals. These stationary features can be incipient and include a limited number of ephemeral milling surfaces, or they can be representative of planned reoccupation. The latter typically include mortars that are difficult and time consuming to manufacture. In an intensively occupied landscape, it is common to find solitary milling stations deriving from opportunistic processing needs.
- Lithic Scatters. These consist exclusively of flaked lithic materials, such as debitage, cores, and tools. They represent areas where tools were manufactured

or reworked, ranging from heavily used workshops to flaking stations where activity was more casual and transient.

- Ceramic Scatters. These consist exclusively of ceramic potsherds. They may range from pot drops, where pieces from a single vessel were discarded or found at the point of original breakage, to extensive, multiple-vessel scatters that may represent habitation, resource processing, or pottery manufacturing.
- Isolates. Occurrences of three or fewer artifacts of the same kind (i.e., three pieces of debitage), or two or fewer artifacts of different type within a 25-m^2 area will be classified as isolates. As a rule, such remains are not eligible for listing on the NRHP and do not require formal recordation or further consideration within the planning process.

Historic period sites are likely to be both functionally more diverse and more readily interpretable. Among the types that may occur in the study area are residential sites, refuse deposits, transportation routes and facilities, mining sites, and historical isolates. Remains that are not recognizably more than 45 years old were not documented.

Historical resource types include:

- Homesites. These are residential sites typically characterized by a residential building or remnants thereof, associated outbuildings, and facilities associated with the historic occupation, such as barns, corrals, fence lines, agricultural features, wells, refuse deposits, etc. It is often necessary to conduct archival research to get information on chain of title, land patents, or homestead claims to determine affiliation with certain individuals or families.

- Refuse Deposits. These are historical archaeological sites consisting of disposed rubbish that may have originated from a variety of sources, including homesites, temporary encampments, cattle camps, or mining explorations, to name a few. Refuse deposits may represent a single dump episode and could derive from occupations in the immediate vicinity or more remote locations. It is often true that large refuse deposits derive from multiple dumping episodes from different time periods.

- Travel Corridors. Improved and unimproved roads and railroads can be historical resources despite use into current times. It is more difficult to demonstrate that an unimproved road is a historical resource because these are more easily moved. Improved roads, however, and railroads are often documented as to dates of construction.

- Mining Sites. These include concentrations of mining features such as adits, tailings piles, mine shafts, and associated equipment or structures. Mining sites

may also contain refuse deposits and buildings associated with the mining operation.

- Isolates. Historical isolated finds are three or fewer of the same kind of artifact (i.e., three oil cans), or isolated features such as water troughs, mining prospect pits, or mining claim cairns. Historic isolates are not considered eligible for NRHP listing and do not require formal evaluation.

3.3 DOCUMENTATION

Documentation of sites complies with the reporting specifications outlined in the BLM 8100 Manual, as stipulated in the BLM Cultural Resources Use Permit and Field Authorizations for this Undertaking, and to every reasonable extent with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740), and the *California Office of Historic Preservation Planning Bulletin Number 4(a)*, December 1989, *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format (ARMR Guidelines) for the Preparation and Review of Archaeological Reports*. All prehistoric and historic sites identified during this inventory were recorded on California Department of Parks and Recreation Form DPR 523 (Series 1/95), using the *Instructions for Recording Historical Resources* (Office of Historic Preservation 1995).

3.4 NATIVE AMERICAN PARTICIPATION

As noted, local Native Americans from different tribes participated in the field survey. ASM contacted all tribes with which the BLM is conducting government-to-government consultation to solicit participation in the survey as monitors, and information on potential sacred sites or traditional cultural properties within or near the project area. With their consent, Native American input during the survey was documented in the daily survey log (although such input was rare). A Native American monitor accompanied each of ASM's survey crews. Native American monitors included those from Manzanita (Dave Elliot Jr., Dave Elliot Sr.), La Posta (Cody Elliot, Lance Conway), Ewiiaapaayp (James "Sonny" Robertson), and Santa Ysabel (monitors provided by Clint Linton of Red Tail Monitoring). The participating Native American monitors walked along with crews, including difficult terrain, during the pedestrian survey and were explicitly requested to provide ASM with information regarding TCPs or specific areas of tribal concern encountered during survey. Additionally, ASM conducted two field visits to date with Native American representatives to better inform them of the kinds of resources ASM crews were documenting, as well as to familiarize the Native American community at large with the physical extent of the project and IBR's efforts to achieve avoidance of impacts to cultural resources. To date, the consultation process with Native American groups is incomplete and ASM has not generated any specific information on TCPs or other areas of Native American interest.

Native American consultants were either hired as ASM employees (ASM handles payroll, transportation in the field and insurance) or arranged with ASM to be subcontractors (Tribe handles payroll, transportation in the field and insurance). The hiring arrangement was made as per the preference of each tribe or individual representative.

3.5 TREATMENT OF HUMAN REMAINS

It is typically very difficult to positively identify human bone located on the ground surface since weathering and other taphonomic processes greatly reduce bone size and the chances of locating diagnostic bone elements. Nonetheless, the presence of bone was recorded and a tentative assessment of the bone origin was made. Most often, bone found on the surface was clearly non-human. However, some archaeological sites contained calcined bone fragments that could derive from human cremations. The presence of calcined bone was clearly noted and mapped, cautioning that human remains may be present to facilitate project planning and ensure preservation of those areas. No positive identifications of human bone were made that would have warranted notification of the San Diego County Medical Examiner.

3.6 ASSISTANCE WITH TRIBAL CONSULTATION

ASM assisted HDR in coordinating the various aspects of tribal consultation required by the BLM, Bureau of Indian Affairs (BIA), County of San Diego, and those tribes directly involved in the project via land ownership. General notes on such coordination are provided in Appendix F. ASM made initial contacts with tribes to identify key people, then provided background information about the project through meetings and site visits. ASM also met with the Kumeyaay Cultural Repatriation Committee (KCRC) to introduce the project and discuss any concerns about human remains and objects of cultural patrimony that may be identified as a result of the field surveys. ASM coordinated these meetings with the BLM, HDR, and IBR (the applicant). Additionally, ASM actively sought Native American monitors to participate in the survey to observe our work and have an opportunity to examine the archaeological resources identified during the inventory.

The California Native American Heritage Commission (NAHC) was contacted on September 10, 2009 to conduct a search of their files for any recorded Sacred Lands or Native American heritage sites located within one mile of the project property. The NAHC responded to ASM with a letter indicating that the NAHC has on file numerous Native American cultural resources within one-half mile of the project area, although these sites were not specified. Additionally, the NAHC response letter provided a listing of all Native American tribal representatives that may have further knowledge of such sites within the project area. ASM provided the NAHC response letter to the BLM to facilitate the BLM's government-to-government consultation with Native American tribes. Tribes were invited into consultation via letter on December 19, 2008 and December 9, 2009. ASM then followed up on the BLM consultation initiation with a series of phone calls to request information about the project area.

All tribes were informed that survey-level data collection is adjunct to, but not a substitute for, Government-to-Government consultation on this proposed undertaking. ASM activities included field visits with tribal elders and assisting BLM in Government-to-Government consultation. All Native American communications are documented in a contact diary and the results are included as Appendix F (omitting confidential information). Any confidential information was conveyed directly to BLM to maintain privacy.

4. SURVEY RESULTS: PROJECT FOOTPRINT

This chapter documents the results of the Class III cultural resources inventory of the project footprint APE, as well as the results of the Class II sample inventory. Together, the Class III and Class II inventories identified 151 cultural resources (Table 4.1, Figure 4.1a-4.1d – [See Appendix A]). Of these, 108 archaeological sites were identified during the Class III inventory and another 43 were identified in Class II sample survey areas. These numbers include a total of six archaeological sites—three each in Class III and Class II inventories—that were identified outside of the APE and survey areas, respectively, but were recorded nonetheless because their location was in close proximity to the survey areas.

Table 4.1 Cultural Resources Identified in the Class III and Class II Inventories

Site	Survey	Landholder	New or Existing?	Age	Site Type*	Potential Eligibility NRHP Status
Class III Eligible Sites (n = 15)						
37-024023	Class III	Intersects BIA, Private, BLM	Existing	Historic	Highway 80	Segments of road are contributing elements to NRHP listing
SDI-10359	Class III	BLM, Private	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-17817	Class III	BLM	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-19001/ 19003	Class III	BLM, Private	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-19018	Class III	BLM	Existing	Prehistoric	Small Habitation	Potentially Eligible
SDI-7150	Class III	BLM	Existing	Prehistoric	Small Habitation	Potentially Eligible
SDI-9223/ 17816	Class III	BLM	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-19364/ SPBB-S-1	Class III	BLM	Existing	Prehistoric	Large Habitation	Potentially Eligible
Tule-BC-35	Class III	Private	New	Prehistoric	Large Habitation	Potentially Eligible
Tule-BC-54	Class III	State, Private	New	Prehistoric	Small Habitation	Potentially Eligible
Tule-CW-11	Class III	Private	New	Prehistoric	Small Habitation	Potentially Eligible
Tule-CW-12	Class III	BLM, Private	New	Prehistoric	Small Habitation	Potentially Eligible
Tule-CW-17	Class III	BLM, Private	New	Prehistoric	Small Habitation	Potentially Eligible
Tule-CW-25	Class III	Private	New	Historic	Home Site	Potentially Eligible
Tule-EP-08	Class III	Private	New	Both	Large Habitation and Historic Homesite	Potentially Eligible
Class III Ineligible Sites and Sites with Uncertain Eligibility (n = 93)						
SDI-1151	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-4788	Class III	BLM, State, Private	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-6897	Class III	Private	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-6900	Class III	Private	Existing	Both	BMS and HPRD	Likely Ineligible
SDI-9225	Class III	BLM	Existing	Prehistoric	Large Habitation	Likely Ineligible
SDI-16786	Class III	Private	Existing	Historic	HPRD	Likely Ineligible
SDI-16824	Class III	Private	Existing	Historic	HPRD and foundations	Likely Ineligible

Site	Survey	Landholder	New or Existing?	Age	Site Type*	Potential Eligibility NRHP Status
SDI-16827	Class III	Private	Existing	Historic	HPRD and structural remains	Uncertain
SDI-17118	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-17119	Class III	BLM	Existing	Prehistoric	Ceramic Scatter	Likely Ineligible
SDI-17815	Class III	BLM	Existing	Prehistoric	Lithic Scatter	Likely Ineligible
SDI-17822	Class III	BLM	Existing	Prehistoric	Lithic Scatter	Likely Ineligible
SDI-17829	Class III	BLM	Existing	Prehistoric	Lithic Scatter	Likely Ineligible
SDI-17830	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-18050	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-18054	Class III	BLM	Existing	Prehistoric	Ceramic Scatter	Likely Ineligible
SDI-18993	Class III	Private	Existing	Historic	HPRD	Likely Ineligible
SDI-18994	Class III	Private	Existing	Historic	HPRD	Likely Ineligible
SDI-19000	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-19002	Class III	BLM	Existing	Prehistoric	Large Habitation	Likely Ineligible
SDI-19045	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-19291	Class III	BLM	Existing	Prehistoric	Ceramic Scatter	Likely Ineligible
SDI-19301	Class III	BLM	Existing	Prehistoric	Small Habitation	Likely Ineligible
SDI-19854 SDGE-BC-6 SPED-S-1	Class III	BLM	Existing	Both	Lithic Scatter and HPRD	Likely Ineligible
SDI-19857 SDGE-BC-9	Class III	Private	Existing	Prehistoric	Lithic Scatter	Likely Ineligible
SDI-19860 SDGE-BC-13	Class III	BLM	Existing	Prehistoric	Bedrock Milling Station	Likely Ineligible
SDI-19849 SDGE-BC-37	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-19868 SDGE-BW-83	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-19869 SDGE-BW-84	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-19935 SDGE-BW-128	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
SDI-19872 SDGE-BW-130	Class III	Private	Existing	Prehistoric	Lithic Scatter	Likely Ineligible
SDI-19851 SPED-S-5	Class III	BLM	Existing	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-01	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-02	Class III	BLM	New	Prehistoric	Small Habitation	Likely Ineligible
Tule-BC-03	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-04	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-09	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-10	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-12	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-13	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-14	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-15	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-16	Class III	BLM	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-BC-17	Class III	BLM	New	Prehistoric	Lithic Scatter	Likely Ineligible

Site	Survey	Landholder	New or Existing?	Age	Site Type*	Potential Eligibility NRHP Status
Tule-BC-18	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-19	Class III	Private	New	Historic	HPRD	Likely Ineligible
Tule-BC-20	Class III	Private	New	Historic	HPRD	Likely Ineligible
Tule-BC-21	Class III	Private	New	Historic	HPRD	Likely Ineligible
Tule-BC-22	Class III	Private	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-BC-23	Class III	BLM	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-BC-24	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-25	Class III	BLM	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-BC-27	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-28	Class III	BLM	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-BC-29	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-30	Class III	BLM	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-BC-31	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-32	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-33	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-34	Class III	Private	New	Both	Large Habitation and Historic Homesite	Likely Ineligible
Tule-BC-36	Class III	Private	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-BC-39	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-40	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-41	Class III	BLM, Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-42	Class III	State, Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-56	Class III	BLM	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-BC-57	Class III	Private	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-58	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-66	Class III	BIA	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-67	Class III	BIA	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-68	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-69	Class III	State	New	Historic	Mining Site	Likely Ineligible
Tule-BC-72	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-73	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-74	Class III	State	New	Historic	Mining Site	Likely Ineligible
Tule-CW-01	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-CW-02/ LD-S-2	Class III	State	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-04	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-CW-05	Class III	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-CW-07	Class III	Private	New	Historic	HPRD	Likely Ineligible
Tule-CW-10	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-15	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-16	Class III	BLM	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-CW-19	Class III	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-20	Class III	State	New	Prehistoric	Artifact Scatter	Likely Ineligible

Site	Survey	Landholder	New or Existing?	Age	Site Type*	Potential Eligibility NRHP Status
Tule-CW-21	Class III	Private	New	Historic	HPRD	Likely Ineligible
Tule-CW-22	Class III	Private	New	Prehistoric	Small Habitation	Likely Ineligible
Tule-CW-23	Class III	Private	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-CW-24	Class III	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-EP-01	Class III	Private	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-EP-02	Class III	Private	New	Historic	Home Site	Uncertain
Tule-EP-03	Class III	Private	New	Prehistoric	Small Habitation	Likely Ineligible
Tule-EP-07	Class III	Private	New	Historic	HPRD	Likely Ineligible
Class II Sample Eligible Sites (n = 10)						
SDI-4009	Class II	BLM	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-4010	Class II	BLM	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-7151	Class II	BLM, Private	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-7154	Class II	BLM	Existing	Prehistoric	Small Habitation	Potentially Eligible
SDI-8434	Class II	BIA	Existing	Prehistoric	Large Habitation	Potentially Eligible
SDI-15746	Class II	BLM	Existing	Prehistoric	Large Habitation	Potentially Eligible
Tule-BC-43	Class II	BLM	New	Prehistoric	Large Habitation	Potentially Eligible
Tule-BC-63	Class II	BLM	New	Prehistoric	Artifact Scatter	Potentially Eligible
Tule-CW-03	Class II	BLM	New	Prehistoric	Artifact Scatter	Potentially Eligible
Tule-CW-43	Class II	Private	New	Prehistoric	Small Habitation	Potentially Eligible
Class II Sample Ineligible Sites (n = 33)						
SDI-5162	Class II	Private	Existing	Prehistoric	Small Habitation	Likely Ineligible
SDI-5171	Class II	Private	Existing	Prehistoric	Small Habitation	Likely Ineligible
SDI-9224	Class II	BLM	Existing	Prehistoric	Small Habitation	Likely Ineligible
Tule-BC-05	Class II	BLM	New	Prehistoric	Lithic Scatter	Likely Ineligible
Tule-BC-06	Class II	BLM	New	Historic	HPRD	Likely Ineligible
Tule-BC-07	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-11	Class II	BLM, Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-44	Class II	BLM	New	Prehistoric	Small Habitation	Likely Ineligible
Tule-BC-46	Class II	BLM	New	Prehistoric	Small Habitation	Likely Ineligible
Tule-BC-47	Class II	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-48	Class II	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-49	Class II	BLM	New	Prehistoric	Small Habitation	Likely Ineligible
Tule-BC-50	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-51	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-52	Class II	Private	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-BC-53	Class II	Private	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-55	Class II	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible
Tule-BC-59	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-60	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-61	Class II	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-62	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-64	Class II	BIA	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-BC-65	Class II	BIA	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-CW-30	Class II	BLM	New	Prehistoric	Bedrock Milling Station	Likely Ineligible

Site	Survey	Landholder	New or Existing?	Age	Site Type*	Potential Eligibility NRHP Status
Tule-CW-31	Class II	BLM	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-CW-33	Class II	BLM	New	Prehistoric	Ceramic Scatter	Likely Ineligible
Tule-CW-34	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-35	Class II	Private	New	Historic	HPRD	Likely Ineligible
Tule-CW-36	Class II	Private	New	Historic	HPRD	Likely Ineligible
Tule-CW-40	Class II	BLM	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-41	Class II	Private	New	Historic	Home Site	Likely Ineligible
Tule-CW-42	Class II	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible
Tule-CW-44	Class II	Private	New	Prehistoric	Artifact Scatter	Likely Ineligible

NOTE: *, Site Type is defined in Chapter 3; BMS, Bedrock Milling Station; HPRD, Historic Period Refuse Deposit.

The identified archaeological sites are both previously recorded and newly documented. Within the Class III footprint, a total of 40 identified sites were previously recorded and the rest ($n = 68$) were newly documented. In the Class II sample survey, nine identified sites were previously recorded and 34 were newly documented.

The Class I records search conducted for this project provided details on previously recorded archaeological sites within a one-mile radius of the project right of way. Every effort was made to relocate previously recorded sites during the survey. All but six previously recorded archaeological sites (SDI-7164, SDI-8388, SDI-8705, SDI-9228, SDI-10331, and SDI-10596) were relocated and updated, if necessary. No trace of cultural material could be found at the reported locations of the six sites not relocated, despite intensive searching in the general vicinity. In no case were any of the six sites thought to be buried or obscured by vegetation. In fact, reported cultural deposits at the non-relocated sites were ephemeral and several different factors can account for their disappearance, including erosion, illicit collecting, and misidentification of cultural material. The six sites that could not be found are discussed in more detail, below.

The following sections describe general field conditions and survey constraints, followed by brief descriptions of each site, separated by Class III and Class II inventories. More detailed information on each site is available on the site forms provided in Appendix A. Cultural resources inventories are not designed to provide formal evaluations of archaeological sites. However, it is possible to estimate a site's potential eligibility for listing on the National Register of Historic Places (NRHP) based on surface evidence. To this end, each site description includes a statement about its potential NRHP eligibility. Of the 108 archaeological sites within the Class III inventory, 15 are likely to meet the criteria for NRHP eligibility—13 of these are prehistoric sites, one is historic Highway 80, and another is a historic home site (see Table 4.1). Of the 43 archaeological sites identified in the Class II sample inventory, 10 are likely to meet the criteria for NRHP eligibility—all of these are prehistoric sites. The potential eligibility of each site is also codified on the site location maps (see Figures 4.1a-4.1d in Appendix A).

4.1 SURVEY CONDITIONS

Due to access limitations, some areas within the APE were not surveyed. These areas are delineated on Figures 4.1a-4.1d. In particular, the eastern leg of the 1000-ft transmission line corridor, some small parcels within the same corridor but on the western alignment, and the access roads leading south onto the Manzanita and Campo reservations were not surveyed because crews did not have permission to access those parcels.

Survey conditions often pose unique constraints on an archaeologist's ability to identify and record archaeological materials. Vegetation cover is often one of the most limiting factors on the discovery of archaeological deposits and features. Figures 4.2a and 4.2b characterize ground visibility throughout the APE and Class II survey areas. The following scale was used to rate visibility: poor (0-25 percent), fair (26-50 percent), good (51-75 percent), or excellent (76-100 percent). This scale is not absolute but is intended to adequately characterize relative ground visibility to aid management considerations for areas that were heavily vegetated and that may contain archaeological deposits that were undetected. It is clear from the maps that ground visibility varied widely throughout the entire APE and all Class II survey parcels (Figures 4.3 and 4.4). It was not uncommon to have patches of good visibility interspersed among areas of poor visibility. However, dense vegetation tends to cluster on slopes, while valley floors tended to have less dense shrubs and more grass. Regardless of visibility constraints, surveyors were able to inspect the ground at their feet in all surveyed areas, reducing the potential of substantial archaeological deposits having gone unnoticed between crew member survey transects. It is more likely that isolated milling stations or ephemeral flake scatters, if present, went undetected between transects in areas with dense vegetation.

As stated in the description of field methods (Chapter 3), excessively steep slopes were not systematically surveyed (Figure 4.5). Instead, steep slopes were sampled using individual forays up ridgelines if less steep, potentially habitable areas were located mid-slope. In general, steep slopes—and ridgelines isolated between such slopes—are considered to have very low potential for containing substantial cultural deposits. This presumption was confirmed during the current survey, in that efforts failed to identify anything more than a few ephemeral artifact scatters on the ridge in the northwestern corner of the project area (see Figure 4.1a).

The project area was strewn with boulder fields and granite monoliths. Often, habitation debris (i.e., midden, artifacts, etc.) was found to be concentrated around granite outcrops, and these outcrops commonly contained milling surfaces (i.e., mortars, milling slicks, etc.). In fact, milling surfaces are some of the most common cultural constituents in the entire project area. Rock shelters are also a common cultural feature. Typically, spaces created by large boulders leaning against one another were used as campsites (see Figure 4.6). Thus, while the boulder fields were somewhat of an obstacle to surveyors, they were also magnet locations of human occupation during prehistoric, historic, and recent times.

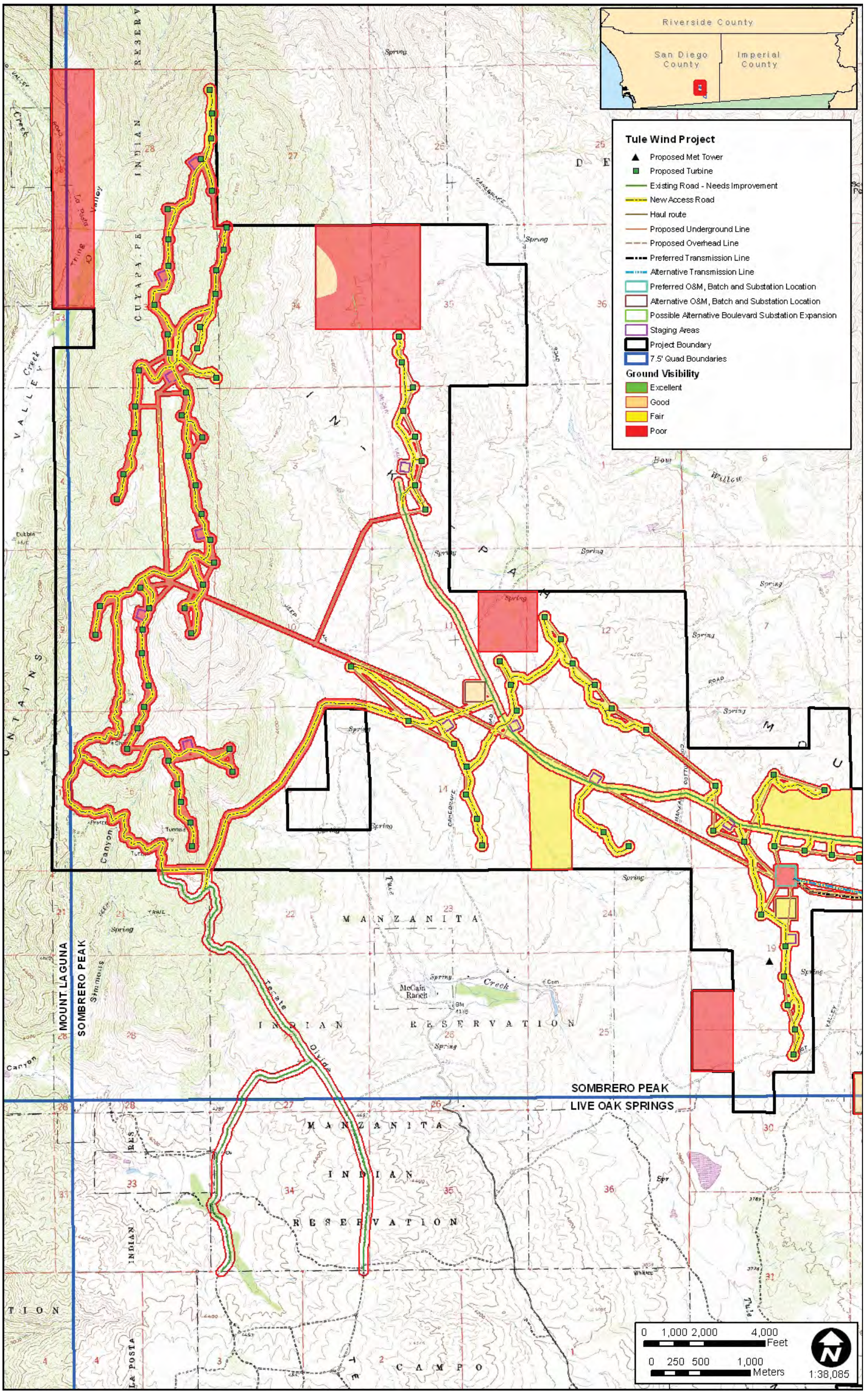

Figure 4.2a Map characterizing ground visibility and showing the locations of areas not surveyed.

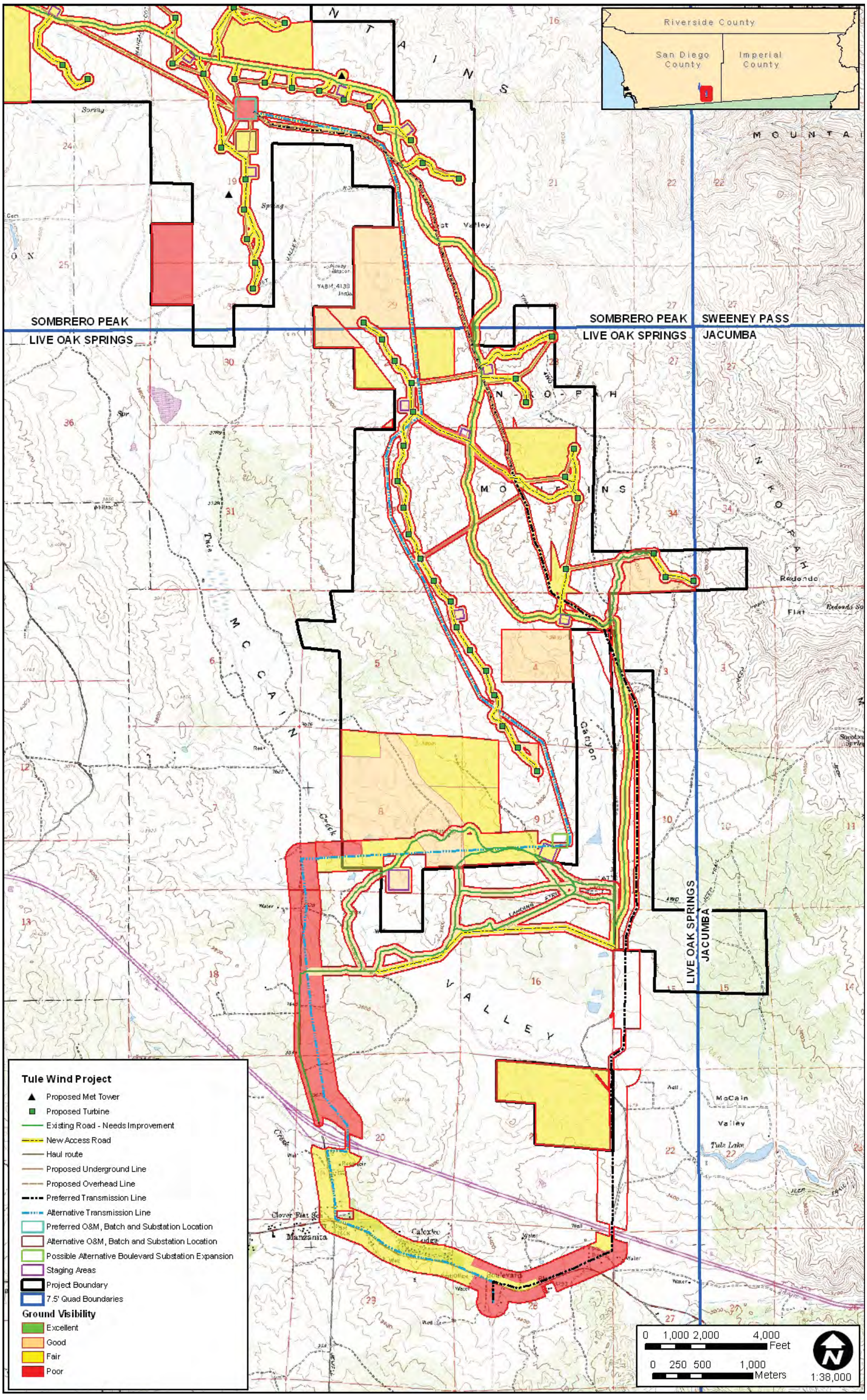

Figure 4.2b Map characterizing ground visibility and showing the locations of areas not surveyed (continued).

Figure 4.3 Overview of survey area with dense vegetation.

Figure 4.4 Overview of survey area showing typical field conditions and fair visibility.

Figure 4.5 Overview of steep slopes with dense vegetation in northwest ROW.

Figure 4.6 Overview of a rock shelter from SDI-7154; these are common features in the project APE.

4.2 SITE DESCRIPTIONS: CLASS III INVENTORY

The Class III inventory resulted in the documentation of 108 archaeological sites, of which, 68 are newly recorded. Some of the larger sites span Class III and Class II inventory areas (see Figures 4.1a-4.1d).

4.2.1 Class III: Previously Recorded Archaeological Sites

SDI-1151

This site is located near McCain Valley Road. It was originally recorded in 1969 by the Pacific Coast Archaeological Society and later updated by ASM in 2006. The site contains at least five milling stations and a small scatter of lithics and ceramics. Previous records indicate that the site has been subject to significant illicit collecting over the years. The current survey noted an area of potential midden soil with a small artifact scatter at the east end of the site beyond the original site boundary. Newly recorded artifacts include eight flakes (five metavolcanic, three quartz) and five brownware ceramic sherds. The newly recorded artifacts were found in a circular area surrounded on all sides by dirt roads. The site is presently recorded to cover a 50-x-27-m area. This site has low data potential due to its condition and remaining attributes and does not appear to meet the criteria for NRHP eligibility.

SDI-4788

This site was first recorded and surface collected in 1973 by the BLM. It has been updated several times since then. The site reportedly covers a 670-x-160-m area along McCain Valley Road. Currently the site is defined by a light lithic scatter and a milling station as reported in 2009 by ASM. It is unclear whether or not the distribution of artifacts is part of the original deposit or if it is due to road construction/maintenance and/or other modern activity in the area. Given the high frequency of road maintenance, it is more likely that artifacts have been redistributed several times along the shoulder of McCain Valley Road. As such, formal evaluation would likely result in a determination that the site does not meet the criteria for NRHP listing due to poor integrity and meager cultural deposits.

SDI-6897

This site was originally recorded by Chase in 1979 as containing four ceramics and eight basalt flakes located on the east slope of a small hill. During the current survey ASM updated the site to include 14 metavolcanic flakes, three quartz flakes, eight ceramics and one grey chert cottonwood projectile point. The site boundary was also extended to the south to incorporate the additional flakes. The site now covers a 90-x-50-m area. However, no midden soil was identified during any of the recording phases and little potential for substantial buried deposits exists. The site has low data potential and is not likely to meet NRHP eligibility criteria.

SDI-6900

This site was originally recorded by Chase in 1979 as a single bedrock milling station with two mortars. Brian F. Smith and Associates (BFSA) relocated the site in the same condition and

location in 2003. During the current survey, ASM recorded one additional slick and a possible abandoned mortar on the same milling station. In addition, a historic component was also recorded. Although the site forms make no mention of it, there is a historic can and glass dump adjacent to the milling station and a possible prospecting pit about 20 m to the south. Cans include hole-in-top, rotary-opened sanitary, oblong knife-cut and key-strip, oval internal friction, and rotary-opened hole-in-top, among others. One sun-colored amethyst glass fragment, one bottle base and 400+ glass shards were also observed. The site is currently recorded as covering a 60-x-55-m area. No evidence of midden soil or the potential for substantial buried deposits was identified. The site has low data potential does not appear to meet the criteria for NRHP eligibility.

SDI-7150

This site was originally recorded in 1979 by Jackson Underwood as a 4-x-4-m rock shelter with a scatter of ceramic sherds and debitage. This site was revisited and updated in 2006 by ASM and at this time they noted that the site had been impacted by off-highway vehicle (OHV) use and that a weakly developed and highly disturbed midden was present along with a single flake and Tizon brownware sherd. The site was again revisited by ASM for the current survey and the site was found to be in the same disturbed condition as described in 2006. However, there were no artifacts visible on the surface during the current survey. The presence of midden soil indicates that the site has relatively moderate to high data potential and may meet the criteria for NRHP eligibility under Criterion D.

SDI-8388 (Not Relocated)

This site was originally recorded by Vernon in 1974 as a light density artifact scatter including ceramics and lithic debitage. In 2006 ASM was unable to relocate the site and determined that Vernon probably misidentified the location of the site. During the current survey, ASM was again unable to relocate the site.

SDI-8705 (Not Relocated)

This site was recorded by Tom Cable in 1981 as an artifact scatter consisting of one pot sherd, nine flakes, and one handstone fragment spread over a 200-x-175-m area. During the current survey, ASM was unable to relocate this site. It is possible that OHV activity in the area may have impacted the site as there is extensive evidence of off-road traffic within the vicinity of this site. It is also possible that this site may have been mapped incorrectly.

SDI-9223/17816

This site consists of two separate previously recorded sites. SDI-9223 was originally recorded by Pat Welch in 1982 for the BLM. It includes 100+ ceramics, 60+ flakes, one hammerstone, one projectile point and one milling station with two slicks. SDI-17816 was originally recorded in 2006 by ASM as a small lithic and ceramic scatter. During the current survey ASM relocated both of these sites and updated them to include additional milling stations at each site and a dispersed lithic and ceramic between them, subsequently uniting the two sites into one over a 480-x-90-m area. Overall, the combined site SDI-9223/17816 now contains a total of

nine milling stations. An ephemeral drainage runs west-to-east through the site at the northern edge of the original boundary of SDI-9223. SDI-9223 is now recorded as Locus B. The original artifact counts were generally accurate, however while expanding the site to include additional milling stations to the east additional artifacts were observed. These include: 59 brownware ceramics and nine lithic debitage. Locus A (SDI-17816) is located immediately north of Locus B on the north side of the drainage. Locus B includes 23 brownware fragments, three buffware fragments, four quartz debitage and 15 metavolcanic debitage. Newly recorded non-locus artifacts north of the drainage include 21 ceramics, 41 metavolcanic debitage, 23 quartz debitage and three obsidian flakes. A dirt road/OHV trail runs north-south through the center of the site. The vast majority of artifacts are located west of the dirt road. Patches of midden soils were observed in several places. Based on surface data alone, this site does appear to have enough data potential to be considered eligible for NRHP listing under Criterion D and may contain buried cultural deposits.

SDI-9225

This site was originally recorded by Pat Welch of the BLM in 1982 as containing a rock shelter, two milling stations and an artifact scatter of flakes, ceramics, handstones, millingstones, a hammerstone, a core, retouched flakes and burned bone. The majority of artifacts were reported to be located south of the rock shelter, between two large bedrock outcrops. During the current survey, the rock shelter and milling stations were relocated, as was the dense artifact scatter to the south. Two additional milling stations and a light, dispersed artifact scatter were also recorded. The newly recorded artifact scatter extends the site boundary to the north onto the south and east slopes of the next hill. Artifacts recorded at the site consist of 28 brownware ceramics, 42 metavolcanic flakes, 22 quartz flakes, a millingstone and three handstones. In all, the site measures approximately 200 x 150 m. OHV activity is an ongoing disturbance to the site and it is possible that this site is actively looted. The site appears to be in similar condition as previously reported, even though some of the tools were not relocated. This site is considered to have relatively low data potential given the low probability for substantial buried cultural deposits. As such, the site is not likely to meet the criteria for NRHP eligibility following formal evaluation.

SDI-9228 (Not Relocated)

This site was originally recorded by Pat Welch in 1982 for the BLM as including approximately 20 Tizon brownware ceramic sherds. During the current survey, no ceramics could be found at either the mapped location nor the UTMs listed in the site form. A single metavolcanic flake was found in the mapped location.

SDI-10331 (Not Relocated)

This site was originally recorded in 1979 by the BLM as consisting of one core, three scrapers, flakes, brownware and buffware ceramics, and milling slicks in an approximate 100-x-150-m area. While revisiting the site for the current survey, only two brownware sherds and three flakes were observed in an approximate 100-x-100-m area, meaning that it fails to qualify as an

archaeological site. For this reason, the site is considered not relocated. In fact, no cultural material was discovered within the project APE.

SDI-10359

This site was originally recorded by the BLM in 1979. Cultural constituents recorded in 1979 included flakes, ceramics, a handstone, two basins and a slick. During the current survey the site was relocated and expanded. Newly recorded cultural constituents include five new milling stations (one mortar and four slicks), 13 metavolcanic flakes, eight pieces of quartz debitage and two brownware sherds. The site now covers a 325-x-150-m area. The site expansion extends down slope to the west and south. The majority of the site is located on top of a large hill overlooking Tule Creek and McCain Valley. Numerous large granitic outcrops are present on top of the hill. Vegetation includes cholla, scrub oak, sage brush, chamise and grass. Live oak trees are present about 100-150 m southwest of the site. The southern portion of the site contains light brown alluvial silty sand and may have patches of midden deposit. Decomposing granite makes up the soil matrix on top of the hill. This site has relatively high data potential and appears to be eligible under Criterion D for NRHP listing.

SDI-10596 (Not Relocated)

This site was originally recorded by CRM Center at SDSU in 1986. The site consists of one bedrock milling station with two slicks and a light artifact scatter covering a 250-x-125-m area. No midden soil was found at the site. Although a small portion of the mapped site boundary crosses into the current project APE, ASM did not locate any artifacts within the APE during the current survey. It is possible that the actual site boundary is north of the mapped area as the site record mentions that the site dimensions are only approximate.

SDI-16786

This site is a historic trash scatter with glass and ironstone that was tested by BFSA in 2003 and recommended as not eligible for NRHP listing. In 2010, ASM relocated the trash scatter but only a few glass fragments were observed on the ground surface. Presumably, the evaluation conducted by BFSA removed most cultural material from the surface. The site covers a 106-x-45-m area. The previous evaluation by BFSA apparently exhausted the site's research potential and ASM found no evidence during the current survey that additional cultural deposits remain at the site. This site has low data potential and does not appear to meet the criteria for NRHP listing.

SDI-16824

This site was originally recorded in 2003 by BFSA. The site contains a historic foundation in poor condition, a well, and a dispersed scatter of ironstone, glass, and cans covering a 100-x-80-m area. ASM relocated the site in 2010 in the same general condition and location as previously recorded and no evidence was found of substantial buried cultural deposits. Pending formal evaluation, this site is not likely to meet the criteria for NRHP eligibility due to low data potential.

SDI-16827

This was originally recorded by BFSA in 2003 to include a historic trash scatter, a concrete trough and a concrete foundation. During the current survey ASM relocated the site and found it to be in the same general location and condition as previously reported. However, the size and shape of the site were updated to reflect its current condition. The trough and foundation are located adjacent to each other near the northwest corner of the site. The artifact scatter, which is very light and highly dispersed, spreads out to the south and east. The site extends east to within about 20 m of McCain Valley Road. Artifacts include dozens of small amethyst and cobalt glass fragments, barbed wire fencing, a mattress spring, sanitary cans, fuel cans and unidentifiable metal. There is also a small disarticulated pile of milled wood which likely is the remains of a windmill. An abandoned dirt road runs through the site in a U-shape. Vegetation at the site consists of oak trees, sagebrush, sugarbush, scrub oak, grass, buckwheat and yucca. Soil consists of alluvial light brown silty sand and decomposing granite and is unlikely to contain a buried cultural deposit. This site has low data potential and does not appear to meet NRHP eligibility criteria.

SDI-17118

This site was originally recorded in 2004 by Tierra Environmental Services as containing two ceramic sherds and one flake covering a 10-x-30-m area. In 2006 ASM relocated the site and suggested that the site should have been recorded as two isolates. During the current survey the site was relocated and found to be in the same location and condition as reported in 2006. There is no indication of buried cultural deposits or midden soil. Based upon the current criteria for site definition, this artifact scatter is considered an archaeological site, but it has low data potential and does not appear to meet the criteria for NRHP eligibility.

SDI-17119

This site was originally recorded in 2004 by Tierra Environmental Services to include four ceramic fragments. ASM updated the site in 2006 to include two additional ceramics. During the current survey ASM found the site to be in the same condition as in 2006, however the mapped location was updated slightly. Given that the site only contains a small number of pot sherds, it does not appear to meet NRHP eligibility criteria.

SDI-17815

This site was originally recorded by ASM in 2006 to include 11 pieces of debitage in a 11-x-7-m area. The site was relocated during the current survey and found to be in the same location and condition. The dearth of cultural material and lack of evidence for subsurface deposits means that this site is not likely to be eligible for NRHP listing.

SDI-17817

This complex habitation site was recorded by ASM in 2006 as covering a 270-x-150-m area and containing approximately 100 milled surfaces, approximately 150 pottery fragments, and 70 pieces of lithic debitage. The site is noted as having poor integrity as portions of it have

been disturbed by heavy equipment used to build a campground, likely exposing archaeological deposits to looting. In 2009, ASM recorded a small expansion to the site that was confirmed during the current survey. Despite the fact that soils are limited in most areas, patches of midden soil were observed in various places across the site and there is a moderate potential for the presence of substantial buried deposits, indicating that the site is likely to be eligible for NRHP listing based on Criterion D.

SDI-17822

This site contains one bedrock milling station with seven slicks associated with 12 metavolcanic flakes, two ceramics, and one handstone, covering 35-x-30-m area. The site boundary is within 10 m of McCain Valley Road. Due to abundance of exposed bedrock in the site limits, a subsurface deposit unlikely. ASM recently recorded the site in 2005, and it was relocated and updated for the current survey. This site has low data potential it does not appear to meet the criteria for NRHP listing.

SDI-17829

This site was originally recorded in 2005 by ASM and then relocated in 2009 by ASM for the current survey. The site includes eight metavolcanic flakes and one obsidian projectile point (unknown type) covering a 13-x-11-m area along the edge of McCain Valley Road. No midden soils were identified and, given exposed bedrock on the surface it is unlikely that subsurface cultural deposits are present. This site has low data potential and does not appear to meet the criteria for NRHP listing.

SDI-17830

This site was originally recorded by ASM in 2005 to include four ceramics sherds, four flakes and a Cottonwood projectile point covering a 22-x-6-m area. In 2009 ASM revisited the site and was able to identify five ceramic sherds but none of the lithic artifacts. During the current survey ASM relocated the ceramic sherds but was again unable to relocate the debitage. Recent installation of a drainage pipe under McCain Valley Road may have impacted the site. A subsurface deposit at this site is unlikely and the site is considered to have low data potential. This site has low data potential and does not appear to meet the NRHP eligibility criteria.

SDI-18050

This site, originally recorded in 2006 by ASM, and relocated during the current survey, was determined to be in similar condition as it was originally described. The site contains a light artifact scatter consisting of one handstone, one hammerstone and 10 buffware ceramic fragments covering a 10-x-3-m area. The site is located on deflated coarse granitic sand with shallow bedrock exposed in various places near the site. No midden soil was identified and it is unlikely that substantial buried cultural deposits are present at the site. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

SDI-18054

This site was originally recorded in 2006 by ASM to include 16 Tizon brownware ceramic fragments in a 15-x-12-m area. During the current survey, the site was found to be in the same general condition and location. This site is not likely to be eligible for NRHP listing due to the dearth of cultural material and because the site has a low potential for substantial subsurface cultural deposits.

SDI-18993

This site was originally recorded in 2008 by the US Army Corps of Engineers (USACE). The site consists of a historic-period refuse deposit, including 25-50 metal cans and fragments, one ceramic sherd, and five amethyst glass fragments which date as early as 1930. The site covers a 15-x-11-m area. During the current survey ASM relocated the site and found it to be in the same location and condition as previously reported. This site has low data potential and does not appear to meet the NRHP eligibility criteria.

SDI-18994

This site is a historic-period refuse deposit dating as early as 1930's to 1950's. This site was originally recorded by the USACE in 2008 and it consists of less than 50 metal cans and fragments, 50 clear glass fragments, and one white ceramic dishware sherd covering a 27-x-13-m area. During the current survey ASM relocated the site and found it to be in the same location and general condition as previously reported. This site has low data potential and does not appear to meet NRHP eligibility criteria.

SDI-19000

This site was originally recorded by SWCA in 2007 for the Sunrise Powerlink Project. The site consists of a dispersed artifact scatter covering a 56-x-35-m area. During the current survey ASM found the site to be in the same location and general condition as previously reported. Artifacts include 29 brownware ceramic sherds, five metavolcanic flakes, and five quartz flakes. The only change observed at the site was that a few of the ceramics were observed to have been washed down slope to the east. A few vehicle tracks were also observed to have crossed the site, but appear to have only caused minor damage. Vegetation includes scrub oak, mountain mahogany, sugarbush, cholla, yucca whipplei, grass and buckwheat. Soil at the site consists primarily of decomposing granite with some light brown silty sand with low potential for a buried cultural deposit. This site ha slow data potential and does not appear to meet the NRHP eligibility criteria.

SDI-19001/19003

SDI-19001 and SDI-19003 were originally recorded by SWCA for the Sunrise Powerlink Project in 2007. According to the site form, at SDI-19001 there are nine milling stations containing 17 milling surfaces (slicks and mortars), approximately 1,000 pieces of lithic debitage (quartz and metavolcanic), one core, two bifaces, three handstones, one pestle, and ~1000 ceramic sherds. Midden soil may be present in at least two areas, with the entire site

covering a 280-x-170-m area. Currently, the site was found to extend beyond the recorded site boundary to the northeast; however that portion of the site is located on private property to which SWCA did not have access at the time. The property line, as delineated by a barbed wire fence, was used as an arbitrary boundary for the site. ASM updated the site while surveying for the Sunrise Powerlink Project in 2009 (Figure 4.7 and 4.8). A light lithic and ceramic scatter was recorded that extends the site boundary to the southeast. SWCA also recorded SDI-19003 as including three rock shelters, and a small lithic and ceramic scatter. For the current project, ASM recorded an additional update to SDI-19001 which united the two sites into one. This expansion includes a small area south of the barbed wire fence and a large area north of the fence on the private land. This expansion includes 16 milling stations, one rock circle and one rock shelter. Newly recorded artifacts include 1,000+ceramics (dozens of which are burned), three etched brownware ceramics, 1,000+ flakes (primarily metavolcanic and quartz with small amounts of obsidian, basalt and chert), two side-notched projectile points, one biface, 15+ handstones, and nine millingstones. Two new concentrations and three new loci were delineated.

Concentration 1 is a small, 30-x-30-m concentration of flakes and ceramics in a small clearing on the east side of the site. Artifacts in the concentration include 25+ ceramics, 40+ flakes and one millingstone fragment. Although the density of artifacts in this concentration is not particularly high compared to most of the site, it is significantly higher than in the immediate surrounding area.

Concentration 2 is located along the north side of the fence at the bottom of the hill below a rock shelter. Concentration 2 is a very dense ceramic scatter (400+ sherds) with 100+ lithics, burned bone fragments and a chert Desert Side-notched projectile point. This concentration covers an approximate 40-x-30-m area.

Locus A comprises the northeast portion of the site. A large granite ridge runs north south through the center of the locus. The majority of the artifacts are split between a small, 30-x-70-m clearing in the middle of the ridge to the bottom of the slope to the southeast. Artifact densities drop significantly on the west and northeast sides of the ridge. Artifacts in this locus include 250+ flakes, seven handstone fragments, two cores and one side-notched projectile point.

Figure 4.7 Overview of SDI-19001/19003 with a rock shelter in the background.

Figure 4.8 Overview of rock shelter in Concentration 3 at SDI-19001/19003.

Locus B comprises the northwest corner of the site. It is situated on an east-facing slope above a large creek. Bedrock outcrops are present at the east and west sides of the locus, but only one milling station was identified (#25). The locus consists of 100+ flakes, and three handstone fragments.

The newly recorded rock shelter is a small opening underneath a single large granite boulder (Figure 4.9). The roof and walls of the cave have been heavily charred, particularly in the rear of the cave. Dark brown midden soil is present in the cave and extends down the slope for at least 20 m. Five calcined large mammal bone fragments were also recorded approximately 20 m east of the rock shelter, however due to their small size none could be positively identified as to species. These calcined bone fragments may be cremated human remains.

In all, with SDI-19001 and SDI-19003 combined, the site now covers an approximate 850-x-370-m area. The soil at the site is predominately light brown silty sand with decomposing granite. Large, granite bedrock outcrops and boulders are present throughout the site. Two large drainages run north/south through the site with numerous smaller tributary washes. Aside from rodent burrowing and erosion, disturbances to the site have been minimal; only one dirt bike track was observed through the southeast portion of the site. However, illicit artifact collection has occurred at the site, as indicated by a sifting screen located adjacent to the rock shelter. The dense cultural deposits at this site have high data potential and this site appears to be eligible for NRHP listing under Criterion D.

Figure 4.9 Close-up of rock shelter in Concentration 3 at SDI-19001/19003, note soot on rock ceiling.

SDI-19002

This artifact scatter was originally recorded by SWCA in 2007 as including 11 brownware ceramics, 13 flakes, and one quartz biface. During the current survey ASM expanded the site to the east and south. Most original items were relocated and newly recorded artifacts include three handstones, 14 quartz debitage, 11 metavolcanic debitage and one brownware ceramic fragment. The majority of the expansion extends down slope to the south, crossing a small drainage and continuing to the ridge of small hill. To the east, the site extends about 20 m beyond the originally recorded boundary. Nine of the newly recorded debitage in this area (seven quartz and two metavolcanic) are located in a small concentration near the southwest corner of the site. The remaining debitage are evenly distributed throughout the site. Soil consists of alluvial light brown silty coarse sand. No midden soil was observed and there is little potential for substantial buried cultural deposits. SWCA's inference regarding buried deposits, based on the presence of a partially buried ceramic fragment, is not strong evidence and is countered by the presence of shallow and exposed bedrock outcrops within and surrounding the site. The site is sparsely vegetated with ephedra, cholla, buckwheat, scrub oak, cacti and grass, allowing for good visibility. The site now covers a 130-x-750-m area. Despite its size, this diffuse artifact scatter is not likely to yield substantial data on cultural deposits and will not likely meet the criteria for NRHP eligibility.

SDI-19018

This site was originally recorded in 2007 by SWCA, and later updated in 2009 by ASM for the Sunrise Powerlink Project. The site contains seven milling stations with 18 slicks, two mortars and 13 cupules, thousands of flakes and hundreds of ceramics covering an area 120-x-90-m. During the current survey ASM relocated the site and found it to be in the same location and condition as previously recorded. Although no midden soils were identified, there are pockets of soil associated with relatively higher surface artifact densities, indicating that there is moderate potential for buried cultural deposits. For this reason, the site may meet the criteria for NRHP eligibility.

SDI-19045

This site was originally recorded in 2007 by SWCA and later updated in 2009 by ASM for the Sunrise Powerlink project. It consists of a light artifact scatter of nine flakes, two cores, and one brownware ceramic fragment covering an approximate 140-x-75-m area. During the current survey ASM found the site to be in the same location and condition as previously reported. This sparse artifact scatter is spread over an area with shallow and exposed bedrock overlain by coarse granitic sand. No midden soil was identified nor were areas with a high potential for substantial buried cultural deposits. This site is not likely to meet the criteria for NRHP eligibility due to low data potential.

SDI-19291

This site was recorded in 2008 by Gallegos and Associates for the Sunrise Powerlink project as a low-density scatter of three brownware ceramic sherds in a 5-x-5-m area. During the current survey this site was relocated in the same location and condition as previously reported. The

low density of this site, and because no evidence was found for midden soil or buried cultural deposits, indicates that this site does not appear to meet the criteria for NRHP eligibility.

SDI-19301

This site was originally recorded and later updated for the Sunrise Powerlink Project by ASM. The site consists of one milling station and a dispersed lithic and ceramic scatter covering a 130-x-45-m area. During the current survey ASM relocated the site and found it to be in the same location and condition as most recently reported, but artifacts were found to be spread over a 155-x-50-m area. In all, less than 50 pieces of ceramic and 25 pieces of debitage were identified. No evidence of midden soils was identified and the general vicinity has low potential for substantial buried cultural deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

SDI-19364 (SPBB-S-1)

This site was originally recorded in 2009 for the Sunrise Powerlink Project as containing a dispersed lithic scatter, three projectile points and one handstone. During the current survey ASM relocated the site and discovered additional cultural material along the west side of McCain Valley Road spread over a 237-x-117-m area. Artifacts observed in the newly recorded area include one chert biface, one quartz serrated projectile point, one metavolcanic flake with battering, 110 quartz debitage (83 interior flakes, 26 shatter, one secondary), one basalt secondary flake, and 12 metavolcanic flakes (three secondary, eight interior, one shatter). A small deposit of whitish clay soil is present at the west end of the site on the north side of a confluence of two small drainages. This soil covers an area approximately 15-x-15-m and may be a source material for locally made ceramics. Approximately 20 m northeast of the clay is a small area of dark brown silty sand that may be a midden deposit spread over an approximate 20-x-20-m area. Including all areas, the site is currently recorded as covering a 280-x-237-m area. Vegetation is very dense chaparral including chamise, yucca, cholla, sugar bush, scrub oak, buckwheat and grass. Disturbances to the site appear limited to the construction of McCain Valley Road and brush clearing along the edge of the road for a fire break. The eligibility of this site is questionable, given that surface deposits are relatively diffuse. However, formal evaluation may find that this site is eligible for NRHP listing under Criterion D.

SDI-19849 (SDG&E-BC-37)

This site was originally recorded by ASM in 2009 for the Sunrise Powerlink Project. Artifacts recorded at the site include 34 brownware ceramic sherds and one quartz flake covering a 59-x-32-m area. During the current survey ASM relocated the site in the same location and condition. Bedrock is shallow in the immediate vicinity, covered with a thin layer of granitic sand and precluding the possibility of substantial subsurface cultural deposits, and indicating that this site has low data potential and does not appear to meet the criteria for NRHP.

SDI-19851 (SPED-S-5)

This site was originally reported by Laguna Environmental in 2004 (thought not recorded) and ASM recorded the site for the Sunrise Powerlink Project in 2009. The site consists of a light lithic and ceramic scatter on the south side of McCain Valley Road. Artifacts recorded at the site include nine pieces of lithic debitage, one scraper and one brownware ceramic covering an 84-x-24-m area. During the current survey ASM relocated the site in the same location and condition as previously reported. The site does not contain midden soil and no areas with the potential for buried cultural deposits were identified. The site has low data potential and does not appear to meet the criteria for NRHP eligibility.

SDI-19854 (SDG&E-BC-6, SPED-S-1)

This multi-component site was originally recorded in 2009 by ASM for the Sunrise Powerlink project. The site contains a lithic scatter and a possible historic can scatter covering a 39-x-25-m area. The site was revisited in 2010 by ASM and found to be in the same condition and location. No midden soil or areas with a high potential for buried deposits were identified. The site does not appear to meet the criteria for NRHP listing.

SDI-19857 (SDG&E-BC-9)

This site was originally recorded by ASM in 2009 for the Sunrise Powerlink Project. The site consists of one quartzite flake and two quartz shatter in a 2-x-1-m area. During the current survey ASM relocated the site and found it to be in the same location and condition as previously reported. No evidence of midden soils or areas that could contain substantial buried deposits was identified. The site has low data potential and does not appear to meet the criteria for NRHP eligibility.

SDI-19860 (SDG&E-BC-13)

This site was originally recorded by ASM in 2009 for the SDG&E Sunrise Powerlink Project. The site consists of a single milling station with five slicks covering a 3-x-3-m area. During the current survey ASM relocated the site in the same location and condition. No midden soil or areas that may contain substantial buried cultural deposits were identified. This site has low data potential does not appear to meet the criteria for NRHP eligibility.

SDI-19868 (SDG&E-BW-83)

This is a small, 40-x-20-m scatter of 14 metavolcanic flakes and one core that was originally recorded by ASM in 2009 for the Sunrise Powerlink Project. During the current survey, ASM relocated the site in the same location and condition as previously reported. No midden soils or evidence of buried deposits was identified. The site does not appear to meet the criteria for NRHP eligibility.

SDI-19869 (SDG&E-BW-84)

This site is an artifact scatter consisting of 19 flakes, two cores, one hammerstone and five brownware ceramic sherds spread diffusely over a 219-x-55-m area. The site was originally recorded by ASM for the Sunrise Powerlink Project and relocated during the current survey. The site was found to be in the same condition as it was originally recorded. No buried deposits or midden soils are indicated from surface deposits. The site is not likely to meet the criteria for NRHP listing.

SDI-19872 (SDG&E-BW-130)

This small scatter of 16 quartz flakes covers a 31-x-20-m area and was originally recorded by ASM in 2009 for the Sunrise Powerlink Project. The current survey found the site to be in the same location and condition as previously reported, and confirmed the lack of evidence for midden soil or buried cultural deposits. The site does not appear to meet the criteria for NRHP eligibility.

SDI-19935 (SDG&E-BW-128)

This site was originally recorded in 2009 by ASM for the Sunrise Powerlink Project. The site is a moderate density artifact scatter including 140 flakes, a hammerstone, a piece of polished bone, four handstones and two reworked flakes covering a 129-x-95-m area. During the current survey ASM relocated the site in the same condition and location as previously reported. The site did not exhibit signs of midden soil or buried cultural deposit, given the shallow bedrock underlying a thin veneer of granitic sands. The site has low data potential and is not likely to meet the criteria for NRHP eligibility.

37-024023

This is the historic Highway 80, which is listed on the NRHP. The highway runs through the southern margin of the Class III footprint, through the town of Boulevard. Survey crews noted the presence of the road but no updated mapping or description was necessary. Highway 80 was discussed and evaluated in a historic context prepared for the SDG&E Sunrise Powerlink project (see Ni Ghablain et al. 2010), finding that some segments of the highway are contributing elements to NRHP listing.

4.2.2 Class III: Newly Discovered Archaeological Sites

Tule-BC-01

This site consists of a single milling station on a small granite boulder with two slicks, measuring 3.4 x 1.9 m. No artifacts were found associated with the milling station. The site is located on a moderately sloping saddle between two hills. The saddle contains a few other small outcrops and boulders, all of which are highly exfoliated. Soils are light brown silty sand riddled with small rodent burrows. No midden soil was observed. No drainages are present in the immediate area. Vegetation in the area includes chamise, holly-leaf redberry, scrub oak, grass, buckwheat and cholla. The site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-02

This site, covering an area of 60 x 40 m, contains one rock shelter with one milling station and a small artifact scatter. The rock shelter is likely a wind and or sun shelter as it does not have a roof. The floor of the shelter is a large, flat granite rock that also contains the milling station. The milling station consists of five slicks. Artifacts recorded at the site include one brownware ceramic, two metavolcanic flakes and one granite handstone. Large ephemeral drainages are located to the north and south of the shelter. The site is situated on the top of a hill marked by numerous granite boulders within a north-south trending ridgeline. Soils at the site consist of decomposing granite with some light brown silty sand. Vegetation includes red shank, cholla, buckwheat, scrub oak, and grass. The site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-03

This site is a light artifact scatter with one milling station containing four slicks. The site dimensions are 69-x-45-m. Artifacts observed at the site include one metavolcanic core, two granite handstones, six metavolcanic interior flakes and one metavolcanic secondary flake. The milling station is located along the north bank of a wide, shallow ephemeral drainage. The artifacts are located about 30 m to the north of the milling station on a small, flat terrace. Highly exfoliated granitic outcrops and boulders are present throughout the surrounding area. Approximately half of the granitic bedrock has decomposed into coarse sand. The site is situated on a generally flat terrace on top of a north-south trending ridgeline. Light brown silty sand with decomposing granite is present at the north end of the site. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-04

This site consists of a single milling station and one brownware ceramic sherd. The site is situated on the south-facing slope of a small hill on the east side of McCain Valley Road. Soil at the site consists of gravelly silt and decomposing granite. No midden soil was observed. Ground surface visibility was limited by dense vegetation and leaf duff, although intensive surface inspection did not reveal additional cultural material. Vegetation in the area consists of chamise, cholla, holly-leaf redberry, scrub oak and grass. The site is 5.4-x-1-m in size. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-09

This site is a light artifact scatter contained in a 34-x-5-m area, located in the town of Boulevard. Artifacts observed include two quartz shatter, one chert shatter, one obsidian interior flake and one brownware ceramic sherd. The entire area surrounding the site has been highly disturbed by OHV activity, modern trash, and brush piles. Small, highly weathered bedrock outcrops are located about 20 m north of the site. Soil at the site is comprised of light brown sand underneath a thin layer of granitic sand. Vegetation in the area consists of sagebrush, grass, Mojave yucca and scrub oak. Live oak trees are also in the vicinity,

primarily to the west. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-10

This site is a light artifact scatter covering a 15-x-10-m area located between two earthen berms along State Route 94. Artifacts observed include one metavolcanic secondary flake, one quartz interior flake, one granite handstone and one brownware ceramic. The earthen berms are comprised of dark brown silty sand, suggesting that an intact cultural deposit may have been present at one time, although little evidence of remnant soils exists. The southern berm was likely created by the excavation of a drainage ditch which is located between State Route 94 and the southern berm. Vegetation includes sage brush and grass growing in coarse granitic sand. Numerous live oak trees are also located about 40 m north of the site. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-12

This site consists of a dispersed artifact scatter and one milling station covering a 62-x-49-m area. The site is situated within a large granitic outcrop on the south slope of a small hill. A small east-west trending drainage is located on the south side of the site. Artifacts include three brownware fragments, two quartz shatter, one metavolcanic shatter, one quartzite interior flake, one metavolcanic planer and one metavolcanic hammerstone. Soil at the site is light brown coarse sandy silt combined with decomposing granite. All of the artifacts are located to the south of the milling station with the exception of two flakes that are located to the east. An OHV trail runs north-south on the east side of the hill at the edge of the site. Vegetation includes yucca, cholla, scrub oak, ephedra, buckwheat and chamise. The site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-13

This site is a light, dispersed artifact scatter covering a 110-x-40-m area, located about 50 m west of McCain Valley Road. The ground surface is mostly flat, with a slight slope to the east. No bedrock outcrops are present in the immediate vicinity. The nearest drainage is located on the east side of McCain Valley Road. Artifacts recorded at the site include two millingstone fragments, one handstone fragment, 25 quartz flakes, four metavolcanic flakes and one chalcedony flake. Visibility was limited due to dense chaparral so additional artifacts may be present in the general vicinity, but it is unlikely that subsurface cultural deposits exist at the site due to extensive deflation. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-14

This site is comprised of a light artifact scatter of 11 pieces of debitage and a granite millingstone covering a 30-x-30-m area. Lithics include chert, quartz and metavolcanic flakes. The site is situated on the top and west slope of a hill within a north-south trending ridgeline. A few small, highly exfoliated granitic outcrops are present in the surrounding area, particularly to the west. The soil matrix at the site is comprised of decomposing granitic sand

covered by chamise, sage, cholla, and other cacti. The deflated context likely precludes the presence of subsurface cultural deposits. A large OHV trail runs north-south along the east side of the site, but little modern disturbance was evident. The site has low data potential and is not likely to meet NRHP eligibility criteria.

Tule-BC-15

This site is comprised of a single milling station with one slick on a highly exfoliated granitic outcrop that measures 12 x 6.7 m. The milling station is located on the west slope of a north-south trending ridgeline. Ephemeral drainages are present on both the north and south sides of the milling station. OHV tracks are present throughout the surrounding area. The soil matrix at the site is deflated, decomposing granite and vegetation is limited to shiny leaf yerba, sugar bush, grass, cholla and yucca. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-16

This site is a dispersed lithic scatter with one possible biface. The site is situated on the eastern slope of a large hill, within a north-south trending ridgeline. Most of the artifacts are located in a small clearing with occasional granite outcrops located primarily to the west and north. Artifacts include one possible quartz biface, 50 pieces of quartz debitage and eight pieces of metavolcanic debitage. Soil at the site is light brown fine sand and decomposing granite; midden soils are not present. Site dimensions are 71 x 61 m. Vegetation in the area is classified as desert chaparral and includes cholla, buckwheat, shiny leaf yerba, scrub oak and red shank. No water sources are present in the immediate area. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-17

This site is a light, dispersed lithic scatter with one biface covering an area of 94 x 71 m. The site is located on a mostly flat terrace below a large granite outcrop peak. No drainages are present in the immediate vicinity. The head of an east-trending ephemeral drainage begins about 80 m to the south. No bedrock outcrops are located in the site, however numerous outcrops and boulders are located to the north and west. Artifacts recorded at the site include one chert mid-stage biface, 25 pieces of quartz debitage, and three pieces of metavolcanic debitage. Light brown coarse sand and decomposed granite define the site matrix; no midden soils were identified and there is little potential for buried deposits. Vegetation includes cholla, scrub oak, sugar bush, red shank and grass. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-18

This artifact scatter consists of two brownware fragments and one quartz shatter in a 33-x-8-m area; just enough cultural material to qualify as a site. The site is located on the eastern slope of a small hill defined by weathered granite bedrock overlain by a thin mantle of coarse granitic sand. No midden soils were observed and it is unlikely that buried cultural deposits are present. Vegetation is thin, but consists of chamise, cholla, and scrub oak with minimal

understory. No drainages were observed in the vicinity of the site. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-19

This site is a historic bottle and can dump dating to the early 1950's and prior. The site is contained in a 15-x-15-m area and appears to represent a single dumping episode that has since been dispersed. Artifacts include 20+ beer bottles, wine bottles, food jars, a ketchup bottle, 40+ sanitary beer cans, five internal screw cylindrical cans, one fuel can, one meat can, five hole-in-top cans, and five oil cans. Almost all of the artifacts are whole. They have likely been preserved because a sugar bush has completely overgrown the deposit, except for a few cans that have been pushed or washed down slope. Maker's marks on the bottles include Owens-Illinois (1953), Anchor-Hawking, Latchford Marble (1953), E&J Gallo (1952), Owens-Illinois (1951), and GC (1952). The site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-20

This site is a historic can and glass dump dating to the 1950's and prior, covering a 29-x-13-m area. The site is located 20 m east of Ribbonwood Road on the east slope of a small hill. Glass artifacts include 11 E&J Gallo wine bottle bases (1954/1955), one Owens-Illinois beer bottle base (1955), two Owens-Illinois beverage bottle bases (1956), and one NW bottle base (1952). Cans recorded at the site include 200+ sanitary fruit/vegetable cans, one paint can, five coffee cans, 80+ sanitary beverage cans, and 80+ hole-in-cap milk cans. The glass artifacts are predominately clustered in one pile and the cans in a separate pile 4 m to the north, suggesting two separate dumping events. Soil at the site is decomposing granite. Contexts for buried cultural material were not observed and the site does not appear to meet the criteria for NRHP eligibility.

Tule-BC-21

This site is a historic refuse scatter covering a 23-x-10-m area situated on the east slope of a low hill covered with very dense chaparral. It is located east of Ribbonwood Road. The deposit contains primarily household goods including one Heinz ketchup bottle, one Best Foods mayonnaise jar, one sun-colored amethyst wine bottle (pre-1920), 10+ milk cans, 10+ hole-in-top cans, 10+ flat top fruit/vegetable cans, four sanitary fish cans, indistinguishable glass bottle fragments and one earthenware ceramic fragment. This concentrated deposit appears to be associated with a single dump episode. The site has low data potential and is not likely to meet NRHP eligibility criteria.

Tule-BC-22

This site is a small, light lithic scatter situated on the west slope of a low hill approximately 150 m north of a seasonal drainage. No bedrock outcrops are present in the immediate area; however an abundance of bedrock is present on the hill to the east. Artifacts include three metavolcanic interior flakes and one quartz interior flake covering an 11-x-9-m area. This site may be associated with and/or connected to SDI-10331, but vegetation between the two sites

was too dense to formalize the association. Soil at the site is alluvial silty sand with decomposing granite, which is unlikely to contain midden deposits. The site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-23

This site likely represents a single pot drop. Four brownware ceramic fragments were found in 6-x-2-m area on a slight east-facing slope on the south side of McCain Valley Road. Ground visibility was inhibited by dense chaparral so it is possible more artifacts may be present. However, soil in this area is alluvial sand and silt with decomposing granite and holds little potential for substantial buried cultural deposits. Neither bedrock outcrops nor drainages are present in the immediate area. This limited artifact scatter has low data potential and does not appear to meet the criteria for NRHP listing.

Tule-BC-24

This site comprises a light artifact scatter with one milling station contained in an 80-x-55-m area. The site is located on a flat terrace between two hilltops on top of a north-south trending ridgeline characterized by highly exfoliated granitic bedrock outcrops. The milling station contains one slick, and artifacts include 11 metavolcanic flakes and seven brownware fragments. All of the ceramics are located in a small cluster near the southwest corner of the site. No midden soils were observed and none are likely to be present, given that the site matrix is comprised of decomposing granitic sand. OHV trails bisect the east and north sides of the ridge. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-25

This site is a light lithic scatter situated within and between two shallow, parallel drainages. Two flakes are located in the southern wash and five other flakes are in the northern wash. Together, the artifacts include four metavolcanic interior flakes, two chert interior flakes and one metavolcanic secondary flake contained in a 51-x-40-m area. No midden soils or signs of buried cultural deposits were identified. A dense red shank stand is located between the washes limiting visibility. Additional artifacts may be present beneath the leaves and branches of the trees. A few highly exfoliated granite boulders area located within the tree stand. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-27

This site consists of a single milling station with two slicks located along its northern edge. No artifacts or midden soils were identified, despite the fact that vegetation in the immediate and surrounding area is sparse. This low-lying granite bedrock measures approximately 8 x 3 m in size and is highly exfoliated. The site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-28

This small ceramic scatter consists of nine brownware body sherds and one brownware rim sherd spread over a 22-x-12-m area. The site is located on the gentle slope of a low hill, south of McCain Valley Road. One ephemeral wash is located approximately 15 m to the northeast of the site. The site matrix is light brown coarse silty sand with decomposing granite; no midden soils were observed and none are likely to be present. Vegetation, which is quite dense, includes chamise, Mojave yucca, scrub oak and sugar bush. The site has low data potential and is not likely to be eligible for NRHP listing.

Tule-BC-29

This is a light artifact scatter covering a 98-x-61-m area situated at the top of a small hill covered with numerous outcrops of weathered bedrock. Multiple small ephemeral drainages run off the peak in all directions. The artifacts are concentrated in two loci on either side of the peak of the hill. Locus A is located on the east side of the hill. It covers an area 24 x 27 m and contains 56 ceramic sherds, one handstone fragment, one retouched flake, six pieces of metavolcanic debitage and one quartz shatter. Locus B is located on the west side of the peak. It covers an area 24 x 10 m and contains 29 ceramic fragments and four quartz shatter. One quartz flake and two ceramic fragments were found outside of each locus but within the site boundaries. Soil consists of light brown alluvial silt and coarse sand with no midden soil identified and very little chance of midden being present given the shallow depth of bedrock. The site has low data potential and is not likely to meet the criteria for NRHP eligibility.

Tule-BC-30

This site is a small ceramic scatter of six sherds in a concentrated, 10-x-4-m area, likely representing a pot drop. The site is located on a flat, alluvial hilltop/terrace on the south side of McCain Valley Road. Soil at the site consists of brown coarse sand covered with moderately dense chamise, cholla and scrub oak. No evidence of buried deposits or midden soils was identified. The site has low data potential and is not likely to meet the criteria for NRHP eligibility.

Tule-BC-31

This site consists of a light artifact scatter situated on the east slope of a low hill at the edge of a small valley. Artifacts include one handstone fragment and nine pieces of metavolcanic debitage and one quartz flake contained in a 30-x-7-m area. All of the artifacts are scattered in and along the edge of two dirt roads. Vehicle traffic associated with the roads has contributed to accelerated deflation and exposure of cultural material. Very dense vegetation, including red shank trees, limited ground visibility almost exclusively to the road surfaces. Given the exposure of granite bedrock and decomposing granite sediments in the roadbed, it is unlikely that substantial buried cultural deposits are present within the site. The site has low data potential and does not appear to meet criteria for NRHP eligibility.

Tule-BC-32

This site contains a dispersed artifact scatter with two loci situated at the transition from a valley floor into foothills. Numerous flat, weathered granite outcrops line the edge of the valley and two small drainages run through the center of the site from north to south. One dirt road runs north-south along the west edge of the site. Both loci and all non-locus artifacts are contained in a 130-x-78-m area. Locus A is located towards the north half of the site and measures 22-x-12-m, and Locus B is situated at the south end of the site, covering a 15-x-15-m area. Dispersed flakes and ceramics are located to the east of the loci connecting the two loci in to one site. Locus A contains 12 flakes (quartz, metavolcanic, obsidian). Locus B contains one biface fragment, one possible hammerstone, nine metavolcanic flakes and 21 quartz flakes. Non-locus artifacts include one brownware ceramic fragment, one handstone fragment, 13 pieces of metavolcanic debitage, eight pieces of quartz debitage and one basalt flake. The soil matrix consists of light brown sandy silt. Live oak trees are present at Locus B and to the north of Locus A, while sagebrush, red shank, and grass constitute a moderately-dense understory. This area has also been used for extensive cattle grazing. No evidence of midden soils was identified and substantial buried cultural deposits are unlikely to be present. The site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-33

This site contains a light artifact scatter and one milling station contained in a 93-x-37-m area. The site is located at the edge of a steep cliff overlooking a small valley. Highly exfoliated bedrock covers the site, with a thin mantle of coarse granitic sand. As such, there is limited potential for buried cultural deposits and no midden soils were observed. Vegetation is moderately dense, consisting of chamise, yucca, scrub oak, holly leaf redberry, and grass. Artifacts include two handstone fragments, 19 pieces of metavolcanic debitage and three pieces of quartz debitage. Disturbances to the site are limited to an SDG&E distribution line that runs east-west along the northern edge of the site. This site has low data potential and is not likely to meet NRHP eligibility criteria.

Tule-BC-34

This is a large, 465-x-210-m multi-component site that includes historic structures/ruins and artifacts along with a prehistoric habitation (Figure 4.10). The site is structured around a small natural spring located at the base of a series of small hills at the edge of a valley. The spring surfaces at the base of a large bedrock outcrop contain a milling station. A concrete catch basin is built around the spring. Numerous oak trees are present at the bottom of the hill adjacent to the drainage. Other plants observed in the area include sugar bush, holly-leaf redberry, cholla, grass, buckwheat, and yucca. The prehistoric component of the site consists of multiple loci spread primarily over a series of small hills and drainages. A portion of the lithic scatter is also located on the valley floor to the south of the hills. Prehistoric artifacts observed include 10 handstone fragments, one obsidian biface, one hammerstone, one rhyolite possible hammerstone, 170+ ceramics, 250+ pieces of debitage, and 10 milling stations. The historic component of the site consists of one house ruin, one outbuilding, the catch basin at the spring, concrete footings at the spring that may have been used for a water tank, concrete footings and

a wood pile which may be the ruins of a windmill, a historic road, two mining pits/prospecting pits, a refuse dump of household goods (beverage cans, salt shaker, etc.), wooden ruins of what may have been a corral, and a wooden trough. A deep drainage runs between the base of the hills and the valley. Small ephemeral drainages run down slope through the site from west to east. Disturbances include cattle grazing and other contemporary ranching activities. Light brown silt sand alluvial soil is present throughout most of the site and there is strong potential for buried cultural deposits. Despite its size and complexity, the overall data potential at this site is such that, following a formal evaluation program, it is unlikely to retain enough data potential and historic significance to be considered eligible for NRHP listing.

Figure 4.10 Overview to the west of Tule-BC-34 with concrete footings located at the spring in the background.

Tule-BC-35

This is a large prehistoric site covering a 435-x-220-m area with 10 milling stations, ceramics, lithic debitage, flaked stone tools and groundstone tools. Three loci and one concentration were delineated (Figure 4.11).

Locus A, measuring 190 x 90 m, contains one milling station with three basins and four slicks, 238 metavolcanic flakes, 68 quartz flakes, one obsidian flake, two handstones, one millingstone, one core and one metavolcanic Elko projectile point base. Locus B covers a 150-x-135-m area and contains seven milling stations with 12+ slicks and two saucer mortars, 45 metavolcanic flakes, 23 quartz flakes, three brownware sherds, seven handstones, and one

millingstone. Locus A is bounded by dirt roads to the south and west, and a small drainage to the north. Locus B is immediately south of Locus A. A dirt road marks the western edge of Locus B and its southern extent is situated on top of a small, east-west trending, granitic outcrop.

Figure 4.11 Overview of Tule-BC-35.

Concentration 1 is a 5 x 5 m dense ceramic scatter of 30+ brownware sherds located on the east side of Locus B. Additional cultural constituents southeast of Locus B include one milling station with one conical mortar, one millingstone, five metavolcanic flakes, two quartz shatter and one brownware sherd.

Locus C, which covers a 225-x-180-m area, comprises the remaining portion of the site north of Locus A. This locus contains several bedrock outcrops that are highly exfoliated, possibly obscuring previous milling surfaces. The northeastern portion of this area has been disturbed by what appears to have been vegetation removal via bulldozer. Resources observed in Locus C include 250 flakes, 500 potsherds, two manos, two projectile points, one scraper, three cores, and one milling station with two milling slicks.

A deep wash and a natural spring are located approximately 50 m west of the site. Disturbances to the site include cattle grazing, two dirt roads, a modern outhouse and a small campground which is located along the west side of Locus A. There also appears to be a plow

scar that runs northeast-southwest through Locus B. Soil at the site consists primarily of light brown alluvial silty sand. No midden soil was observed, though there is potential for substantial buried cultural deposits. This site has relatively high data potential and is likely to be considered eligible for NRHP listing.

Tule-BC-36

This site is a small lithic scatter containing eight pieces of metavolcanic debitage (seven interior flakes, one shatter) and one quartz interior flake spread over a 26-x-19-m area. The site is located on a small terrace at the bottom of the south-facing slope of a small hill. A seasonal drainage runs west-to-east at the south edge of the site. Numerous highly exfoliated bedrock outcrops are located to the east of the site on a larger hill. Vegetation in the area consists of scrub oak, buckwheat, chamise, cholla, live oak and grass. Chamise is very thick to the north of the site, possibly obscuring additional artifacts. Bedrock in the site vicinity is shallow and there is little potential for substantial buried cultural deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-39

This site is a light artifact scatter and two milling stations contained in a 45-x-25-m area. The site is located on top of a small hill overlooking the valley floor to the south and west. The hill is covered with exfoliated bedrock outcrops. All artifacts are located up slope, to the east of the milling stations. No drainages are present in the immediate vicinity; the nearest drainage is a deep wash/creek, about 150 m to the west. Artifacts include two handstones and two metavolcanic interior flakes and four metavolcanic secondary flakes. The milling stations contain a total of three slicks. An SDG&E distribution line runs east-west along the northern edge of the site and cattle grazing in the vicinity is common. Vegetation includes cholla, chamise, buckwheat, sage brush and grass. Soils are consists of brown silty coarse sand and have a low potential for buried cultural deposits. The site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-40

This site contains a single milling station with two slicks on exfoliated bedrock measuring 2.8-x-2.1-m in size. No artifacts were observed at the site. The milling station is located at the edge of a large field that is used for cattle grazing. The field has been cleared and may have been disked or plowed. Currently, only small cholla, buckwheat and scrub oak grow in the area. Two other bedrock outcrops are situated near the milling station; both of those are also exfoliated. The nearest drainage is located approximately 60 m to the east. Soil at the site consists of light brown coarse sand and silt alluvium, however, no artifacts were found in the vicinity and it is unlikely that buried cultural deposits exist. The site has low data potential and is not likely to meet the criteria for NRHP eligibility.

Tule-BC-41

This site is a light artifact scatter with two milling stations contained in a 171-x-50-m area. The two milling stations, all of the ceramics and about half of the lithics are located at the base of a

small hill on the west side of a valley that is cut from north-south by a small drainage. The other half of the lithics are located at the top of the hill, about 40 m to the east. Total artifacts include 36 metavolcanic flakes, 12 quartz flakes, one quartzite flake, four obsidian flakes, 13 brownware ceramics, two buffware ceramics and one quartzite hammerstone. A total of four slicks are present on the two milling stations. The area surrounding the site has been used extensively for cattle grazing. A large pile of construction materials (primarily concrete culverts) is located about 25 m east of the site. Vegetation includes cholla, chamise, live oak, scrub oak, Manzanita and grass while site soils are composed of light brown silty sand with a veneer of decomposing granite. No midden soils were identified and it is unlikely that buried cultural deposits are present. The site does not appear to meet the criteria for NRHP eligibility.

Tule-BC-42

This site is a light lithic scatter with one milling station contained in a 76-x-75-m area, spread over a small hill at the west edge of a valley. The site was recorded in two loci with a small drainage as the arbitrary boundary between them. Loci designations were only used to facilitate site recording. Locus A (55 x 40 m in size) contains 43 metavolcanic flakes (one primary, 11 secondary, 31 interior) and one metavolcanic groundstone. Locus B covers a 58-x-25-m area and contains four quartz secondary flakes, one metavolcanic secondary flake and 12 metavolcanic interior flakes. A granite handstone fragment is located between the two loci. The milling station, located in the southeast corner of Locus A, contains four slicks. A deep drainage runs north-south at the eastern edge of the site, at the bottom of the hill. The hill itself contains numerous large granitic outcrops that are highly exfoliated. Vegetation includes chamise, buckwheat, cholla, grass, scrub oak and one four-leaf Pinyon Pine tree. Multiple oak trees are present along the creek. Soil at the site is composed of light brown silty sand. Numerous trees have been cut down in the immediate vicinity and the area has been used for cattle grazing. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-54

This habitation site covers a 125-x-92-m area and includes three milling stations with three slicks and one saucer mortar, six millingstones, eight handstones, one core, one chopper, and 111 pieces of debitage. The site is situated on top of a low, flat hill that overlooks McCain Valley to the west and south (Figure 4.12). The hill contains numerous flat, low-lying granite outcrops. A large, north-south trending creek forms the eastern site boundary. Smaller creeks are present on the west and south sides of the site. Milling stations 2 and 3 are both located at the western edge of the site on adjacent outcrops. Concentration 1 was delineated to the east of Feature 2 and north of Feature 3. It contains both the highest density of flakes and probable midden soil (dark brown to black sandy loam) covering an 18-x-12-m area. The remainder of the site contains silty sand and decomposing granite. The handstones and millingstones are dispersed evenly across the site. Disturbances to the site include ground surface water erosion and cattle grazing. Vegetation is very sparse and includes shiny leaf yerba, scrub oak, sugar bush, yucca, buckwheat, cholla, holly leaf redberry and grass. Concentration 1 probably contains subsurface cultural deposits, as does the area immediately east of the concentration,

near the middle of the site. Given that this site has high data potential, it is likely to meet the criteria for NRHP eligibility.

Figure 4.12 Overview of Tule-BC-54.

Tule-BC-56

This site consists of a possible pot drop containing 22 brownware sherds in a 4-x-3-m area. The site is located on the north edge of a seasonal stream on the east side of a large north-south trending ridgeline. Most of the sherds are situated on a large, flat granite outcrop. A few of the sherds are located adjacent to the bedrock and in the drainage. Water erosion is the only disturbance observed at the site. Vegetation includes scrub oak, chamise, cholla, grass, Manzanita and buckwheat. Soils are comprised of alluvial silty sand with decomposing granite. There is low potential for subsurface deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-57

This site contains a single bedrock milling station with one slick and one piece of metavolcanic shatter. The site is located on the eastern slope of a large north-south trending ridgeline. The milling station is a small, flat, tabular rock measuring 3 x 1 m in size, and located at the east end of a small bedrock outcrop. All of the rocks in the outcrop are similar in size and shape to the milling station. No drainages are present in the immediate vicinity. Vegetation is very dense surrounding the outcrop, effectively reducing visibility to near-zero percent. Plants observed include scrub oak, cholla, buckwheat, holly leaf redberry and grass. Soil at the site is

decomposing granite indicating that a subsurface deposit is unlikely. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-58

This site is a light artifact scatter which includes one possible metavolcanic scraper, one metavolcanic shatter and two metavolcanic interior flakes in an 18-x-5-m area. The site is located on the east side of a small hill within a large north-south trending ridgeline below a large, spherical monolith. Additional granite outcrops and boulders are present near the top of the hill. Soil at the site is alluvial light brown silty sand and decomposing granite. A subsurface deposit is highly unlikely. No drainages are present in the immediate area, however due to the slope of the hill (10 degrees), erosion has been exacerbated. The surrounding area is occasionally used for cattle ranching. The vegetation, which includes mountain mahogany, scrub oak, cholla, holly leaf redberry and grass, is very sparse. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-66

This site is a light lithic scatter covering a 6-x-5-m area. The site is situated at the confluence of a small seasonal drainage and a semi-permanent creek within the north-south trending mountain ridge between McCain Valley and Thing Valley. No bedrock outcrops are present at the site, although some may be obscured by the dense vegetation. Artifacts at the site include two metavolcanic interior flakes, one chert interior flake, one quartz interior flake and one quartz shatter. Disturbances to the site include immigrant foot traffic and water erosion from the creek. Vegetation includes chamise, scrub oak, cholla, mountain mahogany, sugarbush and grass. The soil matrix consists of decomposing granite and has a low potential for buried cultural deposits. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-67

This site contains a light artifact scatter covering a 31-x-20-m area. The site is situated on a gently sloping saddle between two mountain peaks overlooking McCain Valley to the east. There is a large creek located about 70 m south of the site, below the saddle. Artifacts observed at the site include four pieces of quartz debitage, one quartz retouched flake and 12 brownware ceramic sherds (one rim). No disturbances were noted at the site. Vegetation includes chamise, mountain mahogany, manzanita, sugarbush and yucca. Soil at the site consists of decomposing granite and has a low potential for buried cultural deposits. This site has low data potential and does not appear to meet NRHP eligibility requirements.

Tule-BC-68

This site consists of a bedrock milling station with two metavolcanic flakes, covering a 27-x-17-m area. The site is located along the western bank of a seasonal creek in the middle of a large north-south trending mountain ridge. The milling station is a large, highly exfoliated granite outcrop which contains one highly exfoliated oval mortar. No disturbances were noted at the site. Decomposing granitic sediments characterize site deposits and there is a low

potential for buried cultural deposits. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-69

This is a historic mining site covering a 45-x-18-m area. The site is located approximately half way up the western slope of a very steep mountain. Features observed at the site include a mine shaft, two adits, a small tailings pile and a small road which connects the two adits. The road appears to have been built from the tailings of the two pits. Based upon the tailings, this site appears to be an iron mining location. No disturbances were noted at the site. Dense vegetation includes chamise, sugarbush, Manzanita, and yucca. Very little soil is present at the site; the ground surface is primarily granite and quartz bedrock with some decomposing granite. No diagnostic artifacts were identified to help place this site in time. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-72

This site consists of a bedrock milling station with two pieces of debitage contained in a 25-x-7-m area. The site is situated on a flat terrace overlooking McCain Valley and Imperial Valley to the east. No drainages are present in the immediate vicinity of the site; however a large creek runs northwest-southeast approximately 190 m to the north of the site. Artifacts include one quartz shatter and one retouched quartz flake. The milling station is a large, flat granite outcrop with one slick. Several basins may also be present on the outcrop. However, due the extreme exfoliation no other milling elements could be positively identified. No disturbances, other than the exfoliation, were observed at the site. The decomposed granitic sediments hold little potential for buried cultural deposits. This site has low data potential and does not appear to meet NRHP eligibility requirements.

Tule-BC-73

This site is a light artifact scatter covering a 17-x-10-m area. The site is situated on gently sloping, south facing terrace on the top of a mountain ridge. A seasonal creek, which trends north-south, is located about 150 m to the west. Artifacts include two brownware ceramic sherds, four quartz interior flakes, and one metavolcanic interior flake. Vegetation is very dense, and additional artifacts may be present underneath the vegetation. No disturbances were noted at the site. The soil matrix at the site consists of decomposing granite with a small amount of alluvial silty coarse sand. A subsurface cultural deposit is unlikely. The site has low data potential and does not appear to meet the NRHP eligibility criteria.

Tule-BC-74

This site is a historic mining site which covers a 210–x-95-m area. The site is situated on the steep, south-facing slope of a mountain peak within the Inkopah Mountain Range. Mining features at the site include a quarry, a prospecting pit, two tailings piles and two sorting areas. Artifacts include two hinge-lid tobacco tins, one rotary-opened coffee can, and two sanitary cans. The presence of multiple flowering and flowered yucca growing in the quarry and in the sorting areas, as well as the 1930-1950's age of the metal cans, indicates that this mining site

was occupied during historic times. This site is unlikely to contain a buried refuse deposit and does not appear to meet the NRHP eligibility criteria.

Tule-CW-01

The site consists of two bedrock milling stations, one containing one mortar and the other containing two slicks. The site is located on the top of a ridge with a commanding view of the Anza Borrego Desert. There are no midden soils or artifacts present on the surface; however, the ground surface is covered by a layer of dead vegetation. The two features are contained in an approximate 15-x-15-m area. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-02

This site consists of four brownware potsherds and one metavolcanic flake contained in a 10-x-10-m area. It is located near the top of a knoll that is marked out for development of a windmill and helicopter pad. There is a small drainage to the northwest of the site that is actively eroding the site surface. There is low potential for subsurface deposits, as there is no midden soil present. The site does not appear to meet the criteria for NRHP eligibility.

Tule-CW-04

This site consists of a single bedrock milling station containing two slicks. The slicks are situated on a large granite boulder that has some moderate exfoliations. The site is located approximately 30 m east of McCain Valley Road in an area of high bedrock density. The site covers an area of approximately 10 x 8 m. There is low potential for subsurface deposits, as no midden soil is present. The site does not appear to meet the criteria for NRHP eligibility.

Tule-CW-05

This is a small site covering an approximate 8-x-8-m area, consisting of a single bedrock milling station containing two slicks, and two metavolcanic flakes. The site is located approximately 35 m west of McCain Valley Road. An intermittent drainage is located adjacent to the site. There is low potential for subsurface deposits, as no midden soil is present. The site does not appear to meet the criteria for NRHP eligibility.

Tule-CW-07

This site is a historic trash dump spread over a 15-x-10-m area and consisting of 100+ cans, (sanitary, milk, oil, paint, and beer), and clear and brown broken glass. The concentrated nature of this assemblage indicates that it derives from a single dump event. The assemblage is typical of a historic refuse deposit that dates to the 1950's. It is located on the north side of a long dirt driveway. The deposit is confined to the surface and it is unlikely that artifacts are buried, given that surface deposits are comprised of coarse granitic sand over shallow bedrock. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-10

This site is located at the top of a knoll with expansive views to both the east and west. The site consists of 40+ brownware potsherds, 10+ metavolcanic flakes, and one handstone fragment contained in a 20-x-25-m area. The site deposit is characterized by coarse granitic sand with a low potential for subsurface deposits. No midden soil was identified. Vegetation is sparse, including sage, yucca, grass, and scrub oak. The site does not appear to meet the criteria for NRHP eligibility.

Tule-CW-11

This site is located at the top of a knoll that has several large granite boulders providing shelter from prevailing winds. The site consists of one rock shelter with a dry stacked stone windbreak at one end and approximately five brownware sherds within it. There are also five milling stations, which contain five conical mortars, one basin, and one milling slick. Another 50 brownware sherds and 15 metavolcanic flakes were found on the surface outside of the shelter. The site covers an area of approximately 30 x 50 m and has a moderate potential for subsurface deposits. The nearest water source is an unnamed intermittent drainage located approximately 100 m south of site. This site has at least moderate data potential and it is likely to meet the criteria for NRHP eligibility.

Tule-CW-12

This site covers a 230-x-150-m area at the top of a ridge with a view to the south. The deposit is sparse over most of the site, but slightly more concentrated at the center. In all, the site contains 70 brownware sherds and 350 pieces of debitage, along with two handstones, one hammer stone, one millingstone, one quartz biface, and one milling station containing one mortar. Debitage consists of quartz, chert, obsidian, and green metavolcanic flakes. There is a moderate potential for subsurface deposits, and midden soil may be present in the concentration. This site appears to meet the eligibility criteria for NRHP listing.

Tule-CW-15

This site is situated on and around a large bedrock outcrop, which provides an excellent wind break. The site consists of one bedrock milling station with one mortar and three slicks, three handstone fragments, and one brownware sherd. The site covers an area of approximately 15-x-30-m and has a low potential for subsurface deposits. No midden soil was identified. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-16

This site is a small lithic scatter located on a hillside, consisting of five metavolcanic flakes and one quartz flake in a 15-x-15-m area. No midden soil was identified and there is low potential for buried cultural deposits, given that the site matrix consists of granitic sand over shallow bedrock. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-17

This small habitation site is located on the top of a knoll and along its eastern slope (Figure 4.13). The site contains three milling stations with a total of two mortars and two slicks. There are also 100 brownware sherds, 50 flakes, one millingstone, two handstone fragments, one projectile point, and one rock shelter. The site covers an area of approximately 50 x 50 m. The deposit at the site is sparse over much of the area; however, there is a moderate potential for subsurface deposits near the milling stations and within the rock shelter. Gray discoloration near the milling stations and rock shelter indicate that midden soils may be present. The site is likely to meet the eligibility criteria for NRHP listing under Criterion D.

Figure 4.13 Overview of Tule-CW-17

Tule-CW-19

This site is located in an area of dense granite bedrock and boulders. The site consists of 38 brownware sherds, 10 flakes, and two bedrock-milling stations contained in a concentrated 30-x-10-m area. One milling station contains one slick while the other contains four slicks. The site has low potential for subsurface deposits; no midden soil was identified. This site has low data potential and does not appear to meet the criteria for NRHP listing.

Tule-CW-20

This site is located in an area of dense granite boulders and bedrock. The site contains 25 potsherds, five green metavolcanic flakes, one millingstone fragment, one handstone, one core and five slicks on a single boulder. The site boundary covers an area of approximately 30 x 30

m. The site is located at the base of a foothill and has low to moderate potential for subsurface deposits. However, coarse granitic sand forms a thin veneer over shallow bedrock and any subsurface deposits, if present, are not likely to contain substantial cultural material. This site has low data potential and does not appear to meet the criteria for NRHP listing.

Tule-CW-21

This site is located along the roadside within the Rough Acres Ranch. The site is a trash dump used by the ranch and covers an area of 20 x 40 m that has been dug down approximately 3 m and filled with refuse. The bulk of the material appears to date to the 1950's, however, there is modern debris mixed in. The site contains 100+ sanitary cans, miscellaneous metal fragments, and a large quantity of wood and is considered to have low data potential and does not appear to meet the criteria for NRHP listing.

Tule-CW-22

This site is a rock shelter containing four brownware sherds. It covers a 6-x-6-m area located adjacent to a dirt road within Rough Acres Ranch. The roof of the shelter is blackened by soot, and likely contained a hearth at some point in the past. No evidence of midden soil or buried deposits was identified at this incipient shelter. The site does not appear to meet the criteria for NRHP eligibility.

Tule-CW-23

This site is a small, 20-x-20-m lithic scatter located adjacent to a dirt road within Rough Acres Ranch. Artifacts include 10 metavolcanic flakes and one core. The site has a low potential for subsurface deposits because granitic sand and shallow bedrock give no indication that midden soils or substantial amounts of buried cultural material could be present. The site does not appear to meet the criteria for NRHP eligibility.

Tule-CW-24

This is a sparse artifact scatter associated with five milling stations covering a 90-x-60-m area located on either side of a dirt road within Rough Acres Ranch. The five milling stations contain six slicks, and are associated with 10 metavolcanic flakes, one brownware sherd, and two handstones. The site has been impacted by the placement of a water tower for an adjacent home site, and given extensive historic and modern habitation, the site may have been scavenged for prehistoric artifacts. No midden soil or areas likely to contain buried cultural deposits were identified. The site has low data potential and is not likely to meet the criteria for NRHP eligibility.

Tule-CW-25

This is a historic home site that is located within Rough Acres Ranch, and is believed to be one of the original homes on the ranch (Figure 4.14). The home is constructed on wood floor beams without a concrete foundation. The lumber within the home is dimensional, but is held together with various styles of wire nails. The siding consists of 6-in planks painted white with

green trim. The roof of the home consists of wood and corrugated tin. In the area surrounding the home there is a mixture of modern and historic debris, as well as a minor prehistoric component. The debris consists of several horseshoes, sanitary cans, clear and brown glass, as well as modern plastic. The prehistoric component consists of one handstone fragment, one handstone used as fill in a concrete footer, and one green metavolcanic flake. There are several granite boulders to the south of the home, one of which has a historic petroglyph that reads "JD 1933." The site covers a 50-x-40-m area. Given the strong integrity of the structure, and the possible historic context, this site is probably eligible for NRHP listing under criterion A and/or D.

Figure 4.14 Overview of Tule-CW-25.

Tule-EP-01

This is a bedrock rock-milling site containing one feature with two milling slicks. The site is located in the town of Manzanita on private land. The site is approximately 12-x-12-m (36-x-26-ft) in size. There is a low probability for subsurface deposits given that granitic sands form just a thin mantle over shallow bedrock. This site has low data potential, and it is not likely to meet the criteria for NRHP eligibility.

Tule-EP-02

This is a historic site consisting of the remnants of a stone masonry building with granite stone and mortar construction. A chimney still stands inside the structure with an emblem of the Freemason Society. Wooden frames remain around some windows in the building. The site is

contained in an approximate 25-x-29-m area. It is located on State Route 94 in Boulevard. Some historic subsurface deposits may be present. The NRHP eligibility of this site is uncertain; more research needs to be done to place this structure in a historic context.

Tule-EP-03

This is a prehistoric site consisting of 17 pottery sherds, eight interior metavolcanic flakes, two steatite fire affected rocks, three pieces of animal bone and four features (boulders) with a total of eight milling slicks and dispersed midden soil. The site measures 101 x 42 m and is located south of State Route 94 on a private parcel. The presence of subsurface cultural deposits was not confirmed but pockets of buried archaeological material may be present. If present, it is not likely that buried material would yield substantial or different kinds of data. As such, and given the extensive historic and modern occupation of the area, it is not likely that this site would meet the criteria for NRHP eligibility.

Tule-EP-07

This is a historic site that contains 10 hole-in-top metal cans, one cream colored ceramic vessel base, one amethyst glass jar fragment, and a metal spoon. All artifacts are contained in a 10-x-35-m area located on private land north of State Route 94 near Rose Avenue. The ceramic fragment has a makers mark bearing the Howard Laughlin USA logo. The site is not likely to contain significant buried cultural deposits and probably derives from a single dump episode. It does not appear to meet the criteria for NRHP eligibility.

Tule-EP-08

This is a multi-component prehistoric and historic site covering an approximate 270-x-270-m area located north of State Route 94. The prehistoric component contains 33 milling stations (boulders) with a total of 165 milling surfaces, three portable grinding stones, one handstone fragment, 13 brownware pottery sherds, two chert flakes, 10 metavolcanic flakes, 10 quartz flakes one chert core and patches of midden soil among the boulders (Figures 4.15 and 4.16). The presence of midden soil indicates that there is at least a moderate probability of discovering subsurface cultural deposits with high data potential. The historic aspect of the site contains two remnants of historic structures, and one privy. However, there is nothing particularly distinctive about any of the structural remains. Overall, the prehistoric component has high data potential and would probably be eligible for NRPH listing under criterion D. This historic component generally lacks strong integrity and uniqueness and would probably not meet any of the criteria for NRHP listing.

Figure 4.15 Overview of the prehistoric component at Tule-EP-08.

Figure 4.16 Overview of the historic component at TuleEP-08.

4.3 SITE DESCRIPTIONS: CLASS II SAMPLE INVENTORY

The Class II inventory covered approximately 1,741 acres across 14 discontiguous parcels, and resulted in the documentation of 43 archaeological sites, including nine previously recorded sites, and 34 newly discovered sites.

4.3.1 Class II: Previously Recorded Archaeological Sites

SDI-4009

This site was originally recorded in 1975 by the BLM, and then later updated in 2006 by ASM as a large habitation site with numerous bedrock milling stations and thousands of flakes and potsherds. In 2010, ASM revisited this site and generally confirmed the 2006 records. However, the current effort focused only on the western boundary of the site that extended into the current project area. This resulted in the extension of the western site boundary by approximately 50 m to the west to include more than 100 brownware ceramic sherds, 30 metavolcanic flakes, and three milling stations containing 10 slicks. This site may be eligible for NRHP listing under Criterion D.

SDI-4010

This site is a large habitation site that was originally recorded in 1975 by the Imperial Valley College Museum (IVCM) and has been updated multiple times since then (see Appendix G). Previous documentation at the site reported multiple loci which include bedrock milling stations, midden deposits, artifact scatters and human remains scattered about low-lying areas interspersed with large granite outcrops (Figure 4.17). During the current survey ASM relocated portions of the recorded site and also recorded an update to the site boundary.

Figure 4.17 Overview of SDI-4010.

Three new bedrock milling stations with a total of eight slicks and a dispersed artifact scatter extend west/southwest from the reported boundary over a wide terrace up to the base of the large north-south trending ridgeline. Artifacts in this area include more than 100 flakes, 50 ceramics, nine handstones, three millingstones, two pieces of incised brownware rim sherds, one chert biface, one petrified wood biface and a drilled brownware ceramic handle. This expansion to the site covers a 200-x-120-m area, with the overall site now covering an expansive 600-x-425-m area. Patches of midden soil can be found in large and small areas throughout the current recorded site boundary and there is a strong potential for buried subsurface deposits. Although site records indicate that looting has occurred, no evidence of such activity was observed in the newly recorded areas. OHV activity, both on and off existing trails, continues to impact the site. A small drainage runs west-east along the southern boundary of this new area. Vegetation in the area consists of chamise, sugar bush, grass, cholla, holly-leaf redberry and scrub oak. Numerous live oak trees are present in the area. This site does appear to meet the criteria for NRHP eligibility.

SDI-5162

This site was originally recorded in 1975 by the BLM as a prehistoric site with a rock shelter and a brownware ceramic scatter. In 2010 ASM relocated this site finding it to be in generally the same condition that it was in when originally recorded. However, the site boundary was extended 70 m to the east to include an additional 50 brownware ceramic fragments and more than 10 green metavolcanic interior flakes. No cultural deposits were identified within the rock shelter. The site now covers a 99-x-75-m area. The artifacts at this site are sparsely scattered over coarse sand with little potential for substantial buried cultural deposits. Due to low data potential, it is unlikely that this site would meet NRHP eligibility criteria following a formal evaluation.

SDI-5171

This site was originally recorded in 1975 by the BLM as a possible rock shelter with associated cultural material. The current survey relocated the site in generally the same condition. However, the site boundary was extended to the southwest to include an additional 30 brownware ceramic sherds and eight green metavolcanic flakes. The site now covers a 274-x-230-m area. No midden soil was identified inside the rock shelter or across the site. The coarse granitic sand is only a thin mantle over the shallow and often exposed granite bedrock. There is little potential for substantial buried cultural deposits. Low data potential indicates that this site is not likely that this site would meet NRHP eligibility criteria.

SDI-7151

This site was originally recorded in 1979 by Dominici and Johnson as containing an extensive ceramic and lithic scatter, three rock shelters, one biface, a scraper, and a brownware ceramic figurine. The site record was updated in 2006 by ASM, noting that the site has been previously documented, tested, and evaluated for NRHP eligibility; however, the site record was not updated after these studies. ASM's update noted that the site appears to have been extensively surface collected, but maintains much of the material as described in the original site record.

The current survey relocated the site and found that there are three milling stations, three rock shelters, a large lithic and ceramic scatter, and several handstones and millingstones present. The site appears to be unchanged from the last update in 2006 but is now recorded as covering a 500-x-400-m area. This site appears to meet the criteria for NRHP eligibility under Criterion D, given relatively high data potential.

SDI-7154

This site was originally recorded in 1979 by the BLM as a habitation site containing a rock shelter, three oval slicks, two bifaces, one hammerstone, one core/scraper, one core, flakes and ceramics in a 3-x-8-m area. During the current survey, it was determined that the original mapped location of the site was inaccurate, and that additional features were present but not recorded, including two milling stations and a rock circle, expanding the site boundary significantly. The rock shelter is located on the top of a small hill within a large north-south trending ridgeline. The two new milling stations are located to the north of the rock shelter. The rock circle/hearth is located on the east side of the boulder that forms the east side of the rock shelter. The soil in the rock shelter is primarily decomposing granite. However, there appears to be alluvial silty sand covering a 2-x-4-m area in the northeast corner of the shelter that may contain midden deposits. The lithic and ceramic scatter extends down slope in all directions from the rock shelter to cover an area of 113-x-105-m. None of the previously recorded tools were relocated; however two handstones and one millingstone were recorded. Also recorded were 44 metavolcanic flakes, five quartzite flakes, 56 quartz flakes, one rhyolite flake, 30 brownware sherds and seven buffware sherds. The site has been subject to numerous disturbances. An OHV trail is present about 40 m west of the site and the surface is littered with bullet shells from extensive target shooting. A small number of modern beverage cans was also observed. The dense cultural deposits have high data potential, indicating that this site is likely to meet the criteria for NRHP eligibility under Criterion D.

SDI-7164 (Not Relocated)

This site was originally recorded in 1979 by the BLM to include a rock shelter, four milling stations, and one core/chopper. During the current survey no cultural resources were observed at either the mapped location or the UTM coordinates given in the site form. It is likely that this site is on private property east of the current project ROW. ASM did not have access to the private land for the current survey.

SDI-8434

This site was originally recorded by Westec in 1980 to cover an area 408-x-360-m. Tierra Environmental Services revisited the site in 2004 and found the site to be in generally the same condition but made a few updates to the site map. The site is situated along both the north and south sides of a creek where the creek exits the mountains and enters Thing Valley. During the current Class II sample survey ASM relocated the site and determined that the location of the site was slightly mis-mapped. To re-map the site ASM recorded milling stations, rock shelters, caches, loci boundaries and major landscape features. Five loci were delineated instead of the 11 originally recorded. However, due to time constraints, ASM was only able to record in

detail the northern half of the site, north of the creek bed, but the southern boundary was delineated. The Class II inventory only required that site boundaries and basic descriptions be completed; a much less intensive enterprise than Class III inventory efforts. However, this was the only archaeological site that was recorded to the minimum Class II requirements during the Class II sample inventory. Overall, this site contains multiple rock shelters, one rock shelter with pictograph rock art, dozens of bedrock milling stations spread over multiple granite outcrops, dense artifact concentrations containing lithics, ceramics, and groundstone, and large patches of midden soil.

Loci A, B, D and E are located on the north side of the creek; Locus C is on the south side. Locus A is located on a small bedrock covered hill at the east end of the site, approximately 25 m west of Thing Valley Road. This locus includes the original loci 1, 2, 3, 5, and 6. Locus A contains two rock shelters and 31 milling stations with a total of 54+ slicks, 34+ basins and three saucer mortars. Locus B is located on the west, south and east sides of the large hill/ridge to the west of Locus A and includes the original Loci 9 and 10. Locus B contains five rock shelters (one of which has 11 pictographs on the interior), one handstone cache with three handstones and 63 milling stations with a total of 175+ slicks, 42+ basins, four basins with collars, and two conical mortars with collars. There is also a large vertical boulder which may contain a ground surface on the south facing vertical face (Feature #134). Locus D, located on top of the ridge to the north of Locus B, contains three milling stations with two basins and four slicks. Locus D corresponds to the original Locus 8. Locus E, which includes the original Locus 4, is located on a small knoll to the north of Locus A. Locus E contains 24 milling stations with 50+ slicks, 24+ basins and three mortars. Seven additional non-locus milling stations were recorded which contain a total of eight slicks and two basins. Many of the milling stations throughout the site are covered with soil and vegetation; additional features are likely at all loci.

Locus C was only briefly examined to confirm boundaries and basic assemblage characteristics. According to the original site record there are no milling stations in that area. During the current project two milling stations were observed. This area contains dark brown alluvial silty sand; midden soil may be present. The ground surface is covered with thick vegetation and leaf duff significantly limiting visibility.

Locus 11 in the original site record was not examined in detail, but was visited during the current survey. According to the site update from 2004, Locus 11 was recorded in detail and is located south of the creek, southwest of Locus B. This locus contains six milling stations.

Hundreds of lithic and ceramic artifacts are scattered throughout the site with the highest densities on the west side of Locus A and the southeast side of Locus B. The only areas of the site which do not contain artifact scatters are the steep portions of the eastern slope and the south/west slope of Locus B. The lack of observed artifacts may be due to the severity of the slopes and/or the dense vegetation in these areas, particularly on the south/west side. Two small, dense ceramic concentrations were also noted. Concentration 1 is located at the north end of Locus E. It contains 51 brownware sherds (one is decorated), and 20 buffware sherds.

Concentration 2 contains 58 brownware sherds in a 1-x-2-m area. One polished bone fragment was found on the west side of Locus A. The bone is a non-human cranium fragment which may have a drilled hole.

A sample of additional artifacts observed at the site include at least three retouched flakes, two hammerstones, two cores, two incised brownware ceramics, three millingstones, and six handstones.

Midden soil is present throughout loci A and B except at the peaks of each hill where decomposing granite is a thin veneer over bedrock. The soil matrix at Locus D consists of decomposing granite with no evidence of buried deposits. The soil at Locus E consists of brown silty sand alluvium with decomposed granite and may contain midden. The original site record lists seven hearth features, none of which were observed during the current survey. Disturbances to this site appear limited to the construction of Thing Valley Road and erosion. Vegetation at the site includes numerous oak trees, scrub oak, manzanita, sugarbush, grass, cacti, and chamise. This site has a high probability for buried cultural deposits and appears to be eligible for NRHP listing based on Criterion D; a presumption also mentioned by Westec on their 1980 site form.

SDI-9224

This site was originally recorded in 1982 as an artifact scatter containing approximately 20 flakes, three projectile point fragments, one biface, one core, and six handstones covering a 30-x-15-m area. During the current survey, ASM relocated the site in the same general condition as previously reported. However, the mapped location was inaccurate, as was the site boundary, which was expanded to the north onto the next hill to include additional flakes and handstones. Two new milling stations with two basins and three slicks were also recorded; one is located within the originally recorded site and one is located at the north end of the site on top of the adjacent hill. Currently, artifacts include 46 flakes, one quartz biface tip, one quartz Cottonwood projectile point, six handstones, one metavolcanic core, one chalcedony biface, and one metavolcanic hammerstone. Lithic materials represented include chalcedony, quartz, obsidian, metavolcanic and quartzite. Additionally, seven small burned mammal bone fragment were also recorded; neither the type nor species could be determined on any of the bones in the field. The site now covers a 177-x-66-m area. No midden soil or evidence of substantial buried cultural deposits was identified. Despite the diversity of artifacts, This site has low data potential and does not appear to be eligible for NRHP listing due to low data potential.

SDI-15746

This site was originally recorded in 2000 by Cooley as a light lithic scatter of 10 flakes, two ceramic sherds and one flake tool, covering a 200-x-50-m area. Many of the flakes were observed to be located in the road. In 2006, ASM was only able to relocate two flakes along the road. At that time ASM suggested that the site be considered “background noise” and not an actual site. During the current survey, the site was expanded and updated to reflect its current condition, which included significantly altering the original site boundary. The site should now be considered a very large habitation site consisting of six loci and two

concentrations. The disparity in records between 2006 and the current survey is likely due to recent erosion that may have uncovered cultural deposits, and due to less dense ground cover (i.e., grass, annuals, etc.).

Locus A is situated at the end of the road and contains a light lithic scatter that represents the majority of the original site boundary. This locus covers a 100-x-100-m area that has been extensively disturbed by modern vehicular traffic, camping, target practice, and other off-road activities.

Locus B is located on the east side of the original site boundary. This locus is a large habitation area with six milling stations and an abundance of ceramic sherds. There is an obvious lack of formed artifacts on the surface of this locus, and given its close proximity to McCain Valley Road and modern camping refuse visible at the site, it has likely been surface collected by looters. The area covered by this locus is 310-x-100 m. The assemblage contains 1,300 brownware and 100 buffware ceramic sherds, one green metavolcanic side notched projectile point, one obsidian projectile point base, one millingstone fragment, and 65 flakes. There are six milling stations with 40 milling surfaces present. The vegetation on the north-eastern boundary of the locus is extremely dense, making a full accounting of the assemblage difficult. There is midden soil present near the milling stations, and there is a moderate to high potential for subsurface deposits.

Loci C, D and E are situated on top of the first terrace of the mountain slope on the west side of the site; each locus sits along the edge of large, steep drainages.

Locus C, located at the northwest corner of the site, contains two milling stations (Features 15 and 16) and a very light artifact scatter. This locus covers a 35-x-35-m area.

Locus D, which covers a 100-x-50-m area, is located approximately halfway between Loci C and E. It contains a possible rock shelter (Feature 13; no cultural material was observed in the cave, however it would have been a very suitable shelter given its location and size) and three milling stations (Features 10-12). A fairly dense lithic and ceramic scatter is also present at the eastern end of the locus along the north side of the drainage.

Locus E, located at the southwest corner of the site, contains three rock shelters (Features 28-30) (Figure 4.18), four milling stations (Features 17, 18, 19, and 26) and a moderately dense artifact scatter comprised primarily of brownware ceramics with lesser quantities of lithic debitage. Locus E covers a 67-x-50-m area.

Locus F is located at the bottom of the steep portion of the slope on a small terrace. This locus contains four milling stations (Features 22-25) and dense artifact scatter that includes Concentration 2. Concentration 2, situated on the north side of the milling stations, covers a 25-x-14-m area and consists of 62 brownware sherds, one obsidian biface, one handstone, one millingstone, four metavolcanic shatter and 10 quartz shatter.

Figure 4.18 Overview of rock shelter (Feature 28) at SDI-15746.

Concentration 1, located near the northern end of the site, consists of a small dense scatter of brownware sherds (37 body, six rim) and two quartz shatter. This concentration covers a 15-x-6-m area.

Throughout the remainder of the western half of the site, artifacts are generally lightly dispersed with densities decreasing towards the center of the site. Two large creeks pass through the site from west to east and form the majority of the northern and southern site boundaries. Numerous additional smaller drainages run down slope between the various loci on the western half of the site and feed into the larger creeks. Additional artifacts observed on the western third of the site include more than 200 brownware sherds, 45 buffware sherds, 100 lithic debitage, one quartz hammerstone, two handstones, and one millingstone. Overall, this site has high data potential and appears to be eligible for NRHP listing under Criterion D.

4.3.2 Class II: Newly Discovered Archaeological Sites

Tule-BC-05

This site is a small, light lithic scatter of four flakes in a 26-x-4-m area located on the southwest side of a slightly sloping hill. All of the artifacts were found in small clearings within very dense chaparral. Additional artifacts may be present underneath the vegetation and leaf duff. Soil at the site is brown silty sand alluvium and decomposing granite. No bedrock outcrops are present in the immediate area, but the deposit indicates that bedrock is

immediately subsurface. It is unlikely that substantial subsurface cultural deposits are present. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-06

This site is a small (8-x-5-m) historic trash scatter consisting primarily of household goods. All glass and ceramic artifacts are small fragments. Two meat cans, five sanitary beverage cans, one paint can, and one paint thinner can are also present. The site was determined to be historic based on the presence of one cobalt glass shard and one sun colored amethyst glass fragment. This site is located on the south side of a small wash that is now used as a horse and dirt bike trail. The trail is the remnant of Lost Valley Road. The soil matrix consists of coarse decomposing granite with low silt content. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-07

This site is a light lithic scatter with one milling station situated on a small terrace on an east facing slope of a north-south trending ridgeline. Highly exfoliated granitic outcrops are common in the surrounding area. Small, shallow, ephemeral drainages run through the site from east to west. The milling station contains three slicks. Artifacts observed include six metavolcanic secondary flakes and two quartzite secondary flakes. Soil at the site consists of decomposing granite and light brown sand; no midden soils were identified. The site covers a 22-x-22-m area. Vegetation, which is fairly sparse, includes cholla, buckwheat, grass, yucca and scrub oak. The site does not appear to meet the criteria for NRHP eligibility.

Tule-BC-11

This artifact scatter covers a 185-x-74-m area situated on a ridge top terrace overlooking McCain Valley to the west. The site is comprised of a single milling station at the edge of the terrace and a dispersed artifact scatter that covers the terrace and the top of the hill. The milling station contains five slicks. The artifact scatter consists of two handstones, one millingstone, two quartz biface fragments, one retouched obsidian flake, 16 metavolcanic flakes, 13 quartz flakes, three obsidian flakes, one rhyolite flake, one edge-ground brownware ceramic (three pieces), 33 brownware sherds, and four buffware sherds. The majority of the flakes and ceramics are located in a small clearing covering an approximate 20-x-20-m area on the east side of the milling station. Most of the tools are scattered further to the east near the top of the hill. The soil matrix at the site consists of light brown silt and fine sand with a layer of decomposing granitic sand on top. No midden soil was observed. Vegetation is generally sparse, consisting of cholla, scrub oak, yucca, grass and buckwheat. Large granitic outcrops are present throughout the area, particularly along the edge of the terrace adjacent to the milling station. Ephemeral drainages are located to the north and south sides of the site. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-43

This site is a habitation site consisting of five milling stations and a dispersed artifact scatter contained in a 191-x-90-m area. It is located north of McCain Valley Road, and only a

medium-sized drainage separates it from another very large, potentially eligible site, SDI-15746. Artifacts observed at Tule-BC-43 include more than 100 flakes, 150 ceramics, three handstones and one millingstone. One of the ceramics is an olla rim sherd. The site is situated on two small hills bisected by a shallow drainage with a low lying terrace to the east (Figure 4.19). Both peaks and the surrounding area contain highly exfoliated granite outcrops and boulders interspersed with a veneer of coarse granitic sand. A large creek runs along the southwest and south sides of the site. Vegetation at the site consists of extremely dense chaparral including chamise, cholla, sugar bush, Mojave yucca, laurel sumac, scrub oak, mountain mahogany, holly leaf redberry, buckwheat and grass. Due to the density of the vegetation, artifacts were observed primarily in small clearings (see map for locations of clearings). Dark brown silty sand (midden soil) surrounds Feature 1 near the northwest corner of the site and extends about 5 m around the feature to the north, west and east. The midden extends to the southeast nearly 50 m into a small clearing. This area contains the highest density of artifacts and is the most likely portion of the site to contain a subsurface deposit. Soil throughout the remainder of the site consists of light brown alluvial silty sand and decomposing granite. The site is located approximately 100 m north of McCain Valley Road. Near the east end of the site there are two large boulders that form a small cave. No cultural artifacts/features were observed inside, suggesting it was not used as a shelter. The southern third of the site contains very few artifacts—nearly all of these being ceramic fragments. Considering the relatively high data potential at this site, it is likely to be eligible for NRHP listing under Criterion D.

Figure 4.19 Overview of Tule-BC-43.

Tule-BC-44

This habitation site is contained in a 104-x-92-m area that includes nine milling stations with a total of 13 features, more than 75 ceramics, 18 pieces of lithic debitage, three handstones, one millingstone and one incised brownware ceramic sherd. Milling surfaces include one conical mortar, one conical mortar with a collar and 10 slicks. The site is located at the base of the Inkopah Mountains on a shelf of two west-east trending ridges separated by a small wash to the south. A second creek, trending northwest to southeast, merges with this drainage to the east of the site. Highly exfoliated granite outcrops are present throughout the area. Vegetation is very dense in the eastern half of the site along the creeks, almost completely obscuring the ground surface. The vegetation is significantly less dense in the western half of the site. Plant species observed include mountain mahogany, live oak, scrub oak, cholla, yucca, sugar bush, buckwheat, holly leaf redberry, and grass. Many of the plants, specifically the mountain mahogany, sugar bush and scrub oak, have grown abnormally large and robust compared to the surrounding area. Soil at the site consists of a thin layer of decomposing granite on top of brown silty coarse sand. No midden soil was observed. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-46

This habitation site covers a 114-x-50-m area and has 15 milling surfaces (14 slicks, one saucer mortar) on seven different milling stations, two handstones, two millingstones, one hammerstone, 24 pieces of lithic debitage and 37 ceramics sherds. The majority of artifacts were observed along the wash and in small clearings. The highest density of artifacts is in an approximate 10-x-10-m clearing immediately north of Features 1, 2 and 3. The site is situated near the base of the Inkopah Mountains on a generally flat alluvial fan. A small wash runs west-to-east through the middle of the site and feeds a larger creek running along the southern edge of the site. Ground visibility is severely limited due to very dense vegetation which includes chamise, scrub oak, sugar bush, cholla, yucca, manzanita, grass, holly-leaf redberry, mountain mahogany and shiny leaf yerba. Most of the bedrock outcrops in the area are small to medium-sized (i.e., less than 1.5 m in diameter), and all bedrock is highly exfoliated. A subsurface deposit is unlikely at this site since bedrock is exposed or shallow, covered with a thin layer of coarse granitic sand. Disturbances appear to be limited to a single barbed wire fence that runs west-east through the middle of the site, along with erosion and deflation. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-47

This site is a single milling station with one slick located 15 m north of a large west-to-east trending creek at the base of the Inkopah Mountains. The bedrock outcrop that defines the feature is 1.5 x 1.4 m in size. A barbed wire fence runs east-west approximately 12 m to the north of the milling station. Highly exfoliated granite boulders are present throughout the immediate area. Vegetation is very dense along the creek. Soil at the site is light brown alluvial silty coarse sand and decomposing granite. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-48

This site consists of three milling stations contained in a 19-x-19-m area located at the edge of a large creek. The site is situated midway up a steep slope on the east side of the Inkopah Mountains in an area filled with large granite boulders and dense vegetation. Ground visibility was limited to less than 30 percent. A barbed wire fence runs west-east approximately 10 m to the north of Feature 1. Course granitic sand mixes with sandy alluvium on the surface and patches of exposed bedrock are prevalent. No evidence for midden soil or buried cultural deposits was identified. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-49

This is a habitation site with four milling stations and a light artifact scatter contained in a 53-x-38-m area. Artifacts include one granite handstone fragment, five brownware ceramic sherds and two quartz shatter. The site is situated on a mid-slope mountain terrace on the east side of the Inkopah Mountains with a commanding view of the Salton Sea and Chocolate Mountains. Disturbances are limited to ground erosion and deflation, and a small, seasonal drainage runs down slope at the south end of the site. Vegetation is sparse in this area, with more prominent plants including mahogany, cholla, scrub oak, and grass. Soil consists of light brown silty sand and decomposing granite. Patches of exposed bedrock can be found throughout the vicinity and the presence of a subsurface cultural deposit is unlikely. This site is not likely to meet the criteria for NRHP eligibility due to low data potential.

Tule-BC-50

This is a small artifact scatter limited to a 17-x-14-m area located on an alluvial terrace that slopes down to the north. Artifacts include two handstones, five metavolcanic interior flakes and two quartz interior flakes. All of the artifacts are scattered in two small adjacent clearings where ground visibility is excellent. Ground visibility surrounding the clearings is poor due to dense vegetation, including chamise, scrub oak, yucca, cholla, sugar bush, mountain mahogany and buckwheat. Soil at the site consists of silty sand and coarse decomposed granite. There is no evidence of midden soil or areas likely to contain buried cultural deposits. This site is does not appear to meet the criteria for NRHP eligibility.

Tule-BC-51

This artifact scatter consists of one milling station with four milling slicks, one piece of red chert shatter and one metavolcanic shatter, included in a 19-x-15-m area. The site is situated on the small, east facing slope of an alluvial terrace. The site is surrounded by numerous highly exfoliated bedrock outcrops within a coarse granitic sandy matrix. Two small west-east trending creeks merge together approximately 20 m southeast of the site. The larger creek to the south contains multiple large live oak trees. Ground visibility is poor due to very dense vegetation, particularly along the drainages. The surrounding area has been used extensively for OHV activity and for target shooting, although little evidence of these activities was observed within the site limits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-52

This is a dense brownware ceramic scatter contained in a 42-x-18-m area located on a small hill covered with bedrock that overlooks McCain Valley. The vast majority of ceramics (87 body, two rim) are located in Concentration 1 (21 x 16 m in size) on the west side of the hilltop, below a small outlet in the bedrock. Above the concentration is a large opening formed by three very large boulders. Two ceramic sherds were observed in an opening formed by three large boulders. Concentration 2 (10 x 10 m in size) is located on the southeast side of the hill; it contains 13 ceramic sherds and one large olla rim sherd. A seasonal creek runs east-west along the south side of the site. Multiple large live oak trees are present in the drainage. Disturbances to the site include cattle grazing and deflation, along with a dirt road that has been graded along the west and north sides of the hill. Vegetation is very dense on the west side of the hill at Concentration 1 (chamise) and along the drainage on the south side of the hill (redshank, scrub oak, shiny leaf yerba, cholla, sugar bush). Soil consists of coarse decomposed granite mixed with a small amount of silt closer to the drainage. There is no evidence of midden soil or areas likely to contain buried cultural deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-53

This site contains two milling stations within a small bedrock outcrop covering a 14-x-3-m area. Both milling stations are on flat, low (10-20-cm-high) rock outcrops covered with lichen and sand. The site is situated in a flat alluvial fan. Two small, shallow drainages are located to the southeast of the milling stations. The first drainage is 11 m southeast of Feature 2 and the second is 35 m southeast of Feature 2. No artifacts were identified near the milling stations. Soil at the site consists of light brown silty coarse sand with little potential for subsurface cultural deposits. Ground visibility is fair, partially obscured by fairly dense vegetation, including sugar bush, chamise, scrub oak, ephedra, cholla, yucca and grass. Feature 1 was covered with sand, resulting in relatively good preservation for each of its six milling slicks. The single slick on Feature 2 is identifiable by only four smooth high points; the rest of the slick has exfoliated off. Disturbances to the site appear to be limited to cattle traffic surrounding the site. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-55

This site contains a single bedrock milling station with five highly exfoliated slicks, contained in a 9-x-7-m area. The site is situated on top of a large hill on a north-south trending ridgeline. Numerous large bedrock outcrops are exposed in the area, owing to a veneer of coarse granitic sand. A small seasonal drainage begins approximately 15 m south of the milling station and heads east down the hillside. Disturbances include cattle grazing in the vicinity and a small amount of modern trash, indicating some recent activity in the area. Vegetation is moderately dense and includes cholla, chamise, scrub oak, mountain mahogany, yucca and buckwheat. No midden soils were identified, nor were areas that are likely to contain substantial buried

cultural deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-59

This is a light artifact scatter contained in a 54-x-39-m area consisting of 38 flakes, three metavolcanic cores and one milling station with one slick. The site is situated on a mostly flat mid-slope terrace formed by large granitic outcrops on the northeast side of a large hill. A seasonal creek runs south-north on the east side of the site at the base of the terrace. Multiple small tributary drainages run down the hill from the site to the creek. Lithic debitage includes 35 metavolcanic flakes (eight secondary, 27 interior) and three interior quartz flakes. Light brown silty sand with some decomposing granite forms a veneer over shallow bedrock; the presence of a subsurface cultural deposit is unlikely. Surface visibility is excellent due to very sparse vegetation, including cholla, scrub oak, mountain mahogany, shiny leaf yerba, yucca, ephedra, holly leaf redberry, buckwheat and grass. Live oak trees are present in the drainage about 40 m northeast of the site. Two dilapidated barbed wire fences cross through the area and meet near the northeast corner of the site. One runs east-west and the other north-south. No other disturbances were observed. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-60

This artifact scatter is dispersed over a 42-x-32-m area and contains brownware ceramics, debitage, one projectile point, and one milling station with one slick. The site is situated on a southeast facing slope with a small south-north trending seasonal stream that runs along the eastern end of the site. Four smaller drainages run through the site into the stream. Artifacts include 31 brownware body sherds, four flakes (one metavolcanic secondary, two obsidian interior, one quartz interior), one metavolcanic core/hammerstone and one quartz Desert Side-Notched projectile point. Light brown silty coarse sand covers the surface amidst exposed bedrock and has little potential for subsurface cultural deposits. Ground visibility is excellent due to sparse vegetation. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-61

This is a light artifact scatter containing ceramics, flakes and one millingstone spread over a 27-x-16-m area. The site is located on a slightly eastward sloping alluvial terrace at the top of a north-south trending ridgeline. Bedrock outcrops and boulders are sparsely scattered throughout the vicinity, including in the site limits. Coarse granitic silty sand covers the surface and has low potential for buried cultural deposits. Artifacts include one granite millingstone, nine brownware ceramic sherds, three metavolcanic interior flakes and one metavolcanic secondary flake. Vegetation is sparse and includes mountain mahogany, scrub oak, buckwheat, chamise, sugar bush and grass. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-62

This site consists of a small artifact scatter covering a 25-x-21-m area. Specific artifacts include one metavolcanic interior flake and 18 brownware ceramic sherds (two rim, 16 body). Large granite outcrops and boulders cover the top of the small hill on which the site sits. The artifacts are generally concentrated in the center of the site near the base of the hill. The ground surface is extensively deflated due to wind and water erosion A small seasonal drainage runs east-west approximately 30 m south of the site. Vegetation partially reduced ground visibility. There is little potential for a buried cultural deposit. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-BC-63

This site consists of a dispersed artifact scatter containing lithic debitage, ceramics, one core, two projectile points and four pieces of mammal bone contained in a 79-x-52-m area. The site is situated on the east facing slope of a small hill (Figure 4.20). A shallow, seasonal creek runs south-to-north along the east side of the site. The hilltop contains a few large granite outcrops.

Figure 4.20 Overview of Tule-BC-63.

Artifacts include 27 brownware sherds (25 body, two rim), one metavolcanic core, four metavolcanic interior flakes, one chert interior flake, one interior quartz flake, two quartz shatter, one quartz Desert Side-notched projectile point and one chert Elko projectile point. All four of the bone fragments are located near the drainage towards the bottom of the slope. Three of the bones are calcined (two are indeterminate, one may be a clavicle) and one does not appear to be burned (cranium). None of the bones could be identified in the field as human or non-human but it is possible that they derive from a human cremation. The Elko projectile point was found at the south end of the site in the dry bed of the drainage. Vegetation is sparse in the site but is very dense in portions of the drainage and on the east side of the drainage. Soil at the site consists of coarse granitic sand and light brown silt. Some areas of the site have the potential to contain buried cultural deposits, including an area near the bottom of the slope alongside the drainage. However, no midden soils were identified. The relatively higher data potential at this site indicates that it may meet the criteria for NRHP eligibility.

Tule-BC-64

This site is an artifact scatter covering a 70-x-48-m area. The site is located at the end of a dirt road at the northeast end of Thing Valley at the edge of a steep canyon. A large drainage begins at the north edge of the site at the mouth of the canyon which leads down to the desert floor. Artifacts at the site include eight metavolcanic flakes, five quartzite shatter, three quartz shatter, one metavolcanic core, one granite handstone, two granite millingstone fragments and seven brownware ceramic sherds. Disturbances to the site include extensive vegetation clearing, as evidenced by brush piles, and the dirt road. A few small, moderately exfoliated boulders are present at the site. Vegetation includes chamise, buckwheat, sugarbush, manzanita, yucca and grass. The soil matrix consists of light brown silty decomposing granite and has a low potential for buried cultural deposits. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-BC-65

This site consists of a small ceramic scatter of 12 brownware sherds covering a 4-x-4-m area. The site is situated on a mid-slope shelf on the eastern slope of a large mountain, overlooking Thing Valley. The nearest water source is a seasonal drainage in a steep canyon approximately 250 m to the east. Numerous small, highly exfoliated granite boulders are present in the surrounding area. Vegetation includes chamise, yucca, scrub oak and holly-leaf redberry. Soil at the site consists of decomposing granite and has a low potential for buried deposits. This site has low data potential and does not appear to meet NRHP eligibility criteria.

Tule-CW-03

This small habitation site covers a 50-x-50-m area located at the top of a small knoll with a commanding view of McCain Valley and a partial view of the Anza Borrego Desert. The site contains one milling station with two mortars, more than 100 flakes, 40 brownware potsherds, two handstones, and one hammerstone. There is one chipping station that contains a concentration of approximately 40 flakes. There is an abundance of exfoliating bedrock that may be obscuring previous milling stations. The site is in good condition; however, there is

modern debris present, indicating some recent occupation. Much of the site matrix is decomposing granitic sand. However, there is slight discoloration to a small patch of silty sand near the milling station that may indicate midden development. The presence of these deposits indicates that this site may meet the criteria for NRHP eligibility pending a formal evaluation.

Tule-CW-30

This is a single bedrock milling station with one milling slick located on a small hillside bordered by two small streams. The boulder containing the feature measures 2-x-3-m in size. There is an abundant amount of exposed bedrock in the area; however, no other boulders contain milling surfaces. There are no associated artifacts or midden soil. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-31

This small ceramic scatter is located on the top of a small ridgeline. The ceramic scatter includes 42 brownware ceramic sherds in a 2-x-3-m area that probably derive from a single pot drop. No other artifacts or midden soil was found. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-33

This is a ceramic scatter located on a small knoll northeast of McCain Valley Road. Ceramics consist of approximately 10 brownware potsherds in a 3-x-2-m area, likely representative of a single pot-drop event. There is no midden soil or other artifacts present. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-34

This site is located approximately northeast of McCain Valley Road at the top of a small hill. This artifact scatter consists of a single bedrock milling station that contains one milling slick, 18 brownware potsherds, four buffware potsherds, and four green metavolcanic flakes covering a 30-x-90-m area. No midden soil was identified and there is low potential for subsurface cultural deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-35

This historic refuse deposit is located west of McCain Valley Road and south of a conservation camp. The refuse deposit measures 70 x 35 m in size and contains more than 200 cans, several broken glass bottles, and some fragments of china. The concentrated dump point contains 104 sanitary cans, four meat cans, one fuel can, more than 100 purple and clear glass fragments, as well as a few fragments of white improved earthenware. There is also what appears to be a concrete water catch basin that has a date of 20-7-1944 inscribed on it as well as a date of 10/52 on a repaired area. These dates appear to be consistent with the associated refuse. This site has low data potential and does not appear to have a subsurface cultural deposit other than

the partly buried concrete feature. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-36

This is a historic refuse deposit that covers a 30-x-30-m area. It is located west of McCain Valley Road and south of the conservation camp. The site consists of more than 200 cans (sanitary, paint, meat, coffee, baking powder, and fuel) and 75 bottles (clear, green, purple, and brown glass). Two bottles have maker's marks that help to date the site, including the Illinois Pacific Glass Company (1902-1930) and ABGM Company (1904-1916). These dates imply an early twentieth century age for the dump episode. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-40

This site is a small lithic and pottery scatter covering a 40-x-40-m area situated between two small intermittent streams. The scatter is sparse with 10 flakes and four brownware sherds. However, there are several lithic material types present, including chert, green metavolcanic, quartz, chalcedony, and obsidian. Several low-lying granite outcrops are highly exfoliated and it is possible that they may once have contained milling surfaces. No midden soil was identified and it is unlikely that buried cultural deposits are present. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-41

This historic archaeological site is located within Rough Acres Ranch and consists of a windmill, several water tanks, and a water trough in a 20-x-30-m area. The large water tank had a wooden roof that has since collapsed. One of the other water tanks is round. No associated artifacts were identified and it is not likely that the site contains subsurface deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-42

This site is located within Rough Acres Ranch and consists of a sparse artifact scatter covering a 80-x-80-m area. The site contains approximately 17 green metavolcanic and quartz flakes, nine brownware sherds, one scraper, and one core. Most of the area has been disturbed by heavy equipment related to rubbish removal. Regardless of these disturbances, this site has a low potential for intact subsurface cultural deposits. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

Tule-CW-43

This small habitation site covers a 20-x-20-m area located within Rough Acres Ranch and consists of a rock shelter and a sparse lithic and potsherd scatter (Figure 4.21). The rock shelter has an interior area of approximately 1 x 2 m, and it contains several potsherds. Outside the rock shelter, the artifact scatter contains approximately six flakes, 11 brownware potsherds, and one buffware potsherd. The rock shelter has a thin mantle of midden soil;

however, this could be due to modern occupation. The rock shelter appears to have been utilized recently as a camping area for migrants, based upon modern debris located in the shelter. The possibility of recovering cultural material from subsurface deposits in the rock shelter indicates that this site has relatively higher data potential and may meet the criteria for NRHP eligibility under Criterion D.

Figure 4.21 Overview of Tule-CW-43.

Tule-CW-44

This artifact scatter covers a small, 3-x-5-m area located in Rough Acres Ranch. The assemblage consists of approximately 48 potsherds, two metavolcanic flakes, and one broken handstone. No midden soil or other features were identified and no evidence was found to indicate that the site contains buried cultural material. This site has low data potential and does not appear to meet the criteria for NRHP eligibility.

4.4 ISOLATED FINDS

A total of 228 isolates were documented during the Class III and Class II inventories (Table 4.2; Figures 4.22a-4.22d [in Appendix A]). This includes 166 isolates documented in the Class III APE and 62 isolates documented in Class II sample survey areas. Of those isolates identified in the Class III APE, 143 are newly documented, and include 137 prehistoric isolates and six historic isolates. The remaining 23 previously recorded isolates in the Class III APE include 21 prehistoric isolates and two historic isolates. All 62 isolates in the Class II inventory are newly documented—60 of these are prehistoric and two are historic in age (see Table 4.2).

Table 4.2 Isolated Artifacts by Survey

Class III Newly Documented Isolates	Survey	Description
Tule-BC-I-1	Class III	1 Green metavolcanic secondary flake
Tule-BC-I-2	Class III	1 Metavolcanic shatter
Tule-BC-I-3	Class III	2 Brownware ceramics
Tule-BC-I-4	Class III	1 Metavolcanic primary flake
Tule-BC-I-8	Class III	1 Metavolcanic biface thinning flake, 1 metavolcanic shatter
Tule-BC-I-9	Class III	1 Metavolcanic shatter
Tule-BC-I-10	Class III	1 Metavolcanic shatter
Tule-BC-I-12	Class III	4 Amethyst glass shards form 1 bottle w/ "PCGW" embossed on base
Tule-BC-I-13	Class III	1 Metavolcanic shatter
Tule-BC-I-14	Class III	1 Brown Duraglass bottle: Owens-Illinois, plant 20, year code 7.
Tule-BC-I-16	Class III	1 Brownware ceramic sherd
Tule-BC-I-19	Class III	1 Metavolcanic secondary flake
Tule-BC-I-20	Class III	1 Brownware ceramic
Tule-BC-I-21	Class III	1 Quartz flake
Tule-BC-I-22	Class III	1 Metavolcanic hammerstone/multidirectional core
Tule-BC-I-23	Class III	1 Metavolcanic flake
Tule-BC-I-24	Class III	1 Metavolcanic flake
Tule-BC-I-25	Class III	1 Metavolcanic flake
Tule-BC-I-26	Class III	1 Quartz flake
Tule-BC-I-27	Class III	1 Granite millingstone fragment
Tule-BC-I-28	Class III	1 Metavolcanic flake
Tule-BC-I-29	Class III	2 Quartz flakes
Tule-BC-I-30	Class III	1 Granite millingstone fragment
Tule-BC-I-31	Class III	1 Granite millingstone fragment
Tule-BC-I-32	Class III	2 Brownware ceramics
Tule-BC-I-33	Class III	1 Granite handstone
Tule-BC-I-34	Class III	1 Metavolcanic chopper
Tule-BC-I-35	Class III	1 Two-gallon metal fuel can
Tule-BC-I-36	Class III	1 Quartz flake
Tule-BC-I-37	Class III	1 Metavolcanic hammerstone
Tule-BC-I-38	Class III	1 Red & white chert flake
Tule-BC-I-39	Class III	1 Brownware ceramic, 1 metavolcanic debitage
Tule-BC-I-40	Class III	3 Brownware ceramics
Tule-BC-I-41	Class III	1 Metavolcanic flake
Tule-BC-I-42	Class III	1 Metavolcanic debitage
Tule-BC-I-43	Class III	1 Metavolcanic flake
Tule-BC-I-44	Class III	1 Metavolcanic flake
Tule-BC-I-45	Class III	1 Metavolcanic flake
Tule-BC-I-46	Class III	1 Metavolcanic flake

Class III Newly Documented Isolates	Survey	Description
Tule-BC-I-47	Class III	1 Metavolcanic flake
Tule-BC-I-48	Class III	2 Quartz flakes
Tule-BC-I-49	Class III	1 Metavolcanic flake
Tule-BC-I-50	Class III	1 Metavolcanic flake
Tule BC-I-51	Class III	1 Quartz flake
Tule BC-I-52	Class III	3 Brownware ceramics
Tule-BC-I-53	Class III	1 Granite handstone frag; shaped, polished, bifacial, shouldered
Tule-BC-I-54	Class III	1 Quartz shatter
Tule-BC-I-55	Class III	1 Metavolcanic interior flake
Tule-BC-I-56	Class III	2 Brownware ceramics
Tule-BC-I-57	Class III	1 Metavolcanic shatter
Tule-BC-I-58	Class III	1 Metavolcanic shatter
Tule-BC-I-59	Class III	1 Metavolcanic secondary flake
Tule-BC-I-60	Class III	2 Metavolcanic interior flakes
Tule-BC-I-61	Class III	1 Metavolcanic shatter, 1 metavolcanic secondary flake
Tule-BC-I-62	Class III	1 Basalt secondary flake, 1 granite handstone
Tule-BC-I-63	Class III	1 Metavolcanic interior flake
Tule-BC-I-64	Class III	1 Metavolcanic shatter, 1 metavolcanic interior flake
Tule-BC-I-65	Class III	1 Metavolcanic shatter
Tule-BC-I-66	Class III	1 Metavolcanic shatter
Tule-BC-I-67	Class III	1 Multidirectional metavolcanic core
Tule-BC-I-68	Class III	1 Metavolcanic secondary flake
Tule-BC-I-69	Class III	1 Metavolcanic interior flake
Tule-BC-I-70	Class III	1 Metavolcanic secondary flake
Tule-BC-I-78	Class III	1 Metavolcanic secondary flake
Tule-BC-I-79	Class III	1 Metavolcanic secondary flake
Tule-BC-I-80	Class III	1 Metavolcanic interior flake
Tule-BC-I-81	Class III	1 Brownware ceramic
Tule-BC-I-83	Class III	1 Quartz interior flake. 1 metavolcanic interior flake
Tule-BC-I-84	Class III	2 Brownware ceramic sherds
Tule-BC-I-85	Class III	1 Metavolcanic shatter
Tule-BC-I-86	Class III	1 Metavolcanic interior flake, 1 metavolcanic shatter, 1 quartz shatter
Tule-BC-I-87	Class III	1 Brownware ceramic
Tule-BC-I-88	Class III	1 Quartz interior flake. 1 metavolcanic interior flake
Tule-BC-I-89	Class III	2 Metavolcanic interior flakes
Tule-BC-I-90	Class III	1 Metavolcanic interior flake
Tule-BC-I-91	Class III	1 Metavolcanic interior flake
Tule-BC-I-92	Class III	2 Metavolcanic interior flakes
Tule-BC-I-93	Class III	1 Metavolcanic interior flake
Tule-BC-I-94	Class III	1 Metavolcanic interior flake
Tule-BC-I-95	Class III	1 Metavolcanic secondary flake

Class III Newly Documented Isolates	Survey	Description
Tule-BC-I-96	Class III	1 Metavolcanic shatter
Tule-BC-I-97	Class III	1 Metavolcanic shatter
Tule-BC-I-113	Class III	1 Granite handstone
Tule-BC-I-114	Class III	1 Metavolcanic interior flake
Tule-BC-I-115	Class III	1 Metavolcanic secondary flake
Tule-BC-I-116	Class III	1 Metavolcanic secondary flake
Tule-BC-I-117	Class III	1 Obsidian interior flake
Tule-BC-I-118	Class III	1 Metavolcanic interior flake
Tule-BC-I-119	Class III	1 Metavolcanic interior flake
Tule-BC-I-120	Class III	1 Metavolcanic interior flake
Tule-BC-I-123	Class III	1 Late-stage Quartz biface fragment
Tule-BC-I-124	Class III	1 Metavolcanic interior flake
Tule-BC-I-125	Class III	1 Metavolcanic interior flake
Tule-BC-I-126	Class III	1 brownware ceramic
Tule-BC-I-127	Class III	1919 USGLO survey marker with rock cairn and modern petroglyph
Tule-BC-I-128	Class III	1 brownware ceramic
Tule-BC-I-129	Class III	1 Mining adit and tailings pile
Tule-BC-I-131	Class III	1 Brownware ceramic
Tule-BC-I-132	Class III	1 Brownware ceramic
Tule-BC-I-133	Class III	1 Brownware ceramic
Tule-BC-I-134	Class III	1 Quartz flake
Tule-BC-I-135	Class III	3 Brownware ceramics
Tule-BC-I-136	Class III	6 Brownware sherds
Tule-BC-I-137	Class III	1 Quartz shatter, 1 metavolcanic interior flake
Tule-BC-I-138	Class III	1 Quartz Cottonwood projectile point
Tule-BC-I-139	Class III	1 Prospecting pit, tailings and a mining claim
Tule-CW-I-01	Class III	4 Brownware sherds
Tule-CW-I-02	Class III	4 Brownware sherds
Tule-CW-I-03	Class III	Bifacial handstone fragment
Tule-CW-I-04	Class III	Unifacial quartz handstone
Tule-CW-I-05	Class III	Metavolcanic flake
Tule-CW-I-07	Class III	Metavolcanic flake
Tule-CW-I-08	Class III	3 Brownware sherds
Tule-CW-I-09	Class III	1 Quartzite hammerstone
Tule-CW-I-14	Class III	2 Metavolcanic Flakes
Tule-CW-I-15	Class III	1 Metavolcanic flake
Tule-CW-I-16	Class III	1 Metavolcanic flake
Tule-CW-I-17	Class III	1 Metavolcanic flake
Tule-CW-I-18	Class III	1 Quartz flake
Tule-CW-I-19	Class III	3 Metavolcanic flakes
Tule-CW-I-20	Class III	1 Quartz flake

Class III Newly Documented Isolates	Survey	Description
Tule-CW-I-21	Class III	2 Metavolcanic Flakes
Tule-CW-I-22	Class III	1 Metavolcanic flake
Tule-CW-I-23	Class III	3 Metavolcanic flakes
Tule-CW-I-24	Class III	2 Metavolcanic Flakes
Tule-CW-I-25	Class III	1 Quartz flake
Tule-CW-I-26	Class III	2 Brownware sherds
Tule-CW-I-27	Class III	2 Quartz flakes
Tule-CW-I-28	Class III	Handstone fragment
Tule-CW-I-29	Class III	1 Chert flake
Tule-CW-I-30	Class III	2 brownware sherds, 1 flake
Tule-CW-I-31	Class III	1 Sandstone cobble handstone
Tule-CW-I-32	Class III	1 Green metavolcanic multidirectional core/handstone
Tule-CW-I-33	Class III	1 Green metavolcanic flake
Tule-CW-I-34	Class III	1 Green metavolcanic flake
Tule-CW-I-35	Class III	1 Brownware ceramic
Tule-CW-I-36	Class III	1 Green metavolcanic flake
Tule-CW-I-37	Class III	2 Green metavolcanic flakes
Tule-CW-I-38	Class III	2 Green metavolcanic flakes
Tule-CW-I-39	Class III	2 Green metavolcanic flakes, 1 brownware sherd
Tule-CW-I-60	Class III	1 metavolcanic interior flake, 1 quartz interior flake
Tule-EP-I-1	Class III	1 Metavolcanic secondary flake
Tule-EP-I-2	Class III	1 metavolcanic shatter

Class III Previously Recorded Isolates	Survey	Description
BW-I-162	Class III	historic can
BW-I-163	Class III	historic can
BW-I-164	Class III	historic can
BW-I-124	Class III	1 volcanic flake
BW-I-165	Class III	1 flake
BW-I-166	Class III	1 flake
BW-I-167	Class III	1 flake
BW-I-168	Class III	1 flake
BC-I-02	Class III	1 flake
BC-I-03	Class III	1 volcanic flake
BW-I-127	Class III	2 flakes
P-37-029736	Class III	2 brownware ceramics
P-37-029738	Class III	1 quartz flake
P-37-029745	Class III	1 metavolcanic secondary flake
P-37-029746	Class III	1 brown basalt secondary flake
P-37-030262	Class III	No Information
P-37-030264	Class III	No Information

Class III Previously Recorded Isolates	Survey	Description
P-37-030265	Class III	No Information
P-37-030266	Class III	1 metavolcanic debitage
P-37-030356	Class III	1 metavolcanic debitage
P-37-030363	Class III	1 metavolcanic debitage
BC-I-17a	Class III	1 flake
ISO-CC-20/BC-I-17b	Class III	1 flake

Class II Newly Documented Isolates	Survey	Description
Tule-BC-I-5	Class II	1918 USGLO survey marker with rock pile
Tule-BC-I-6	Class II	1918 USGLO survey marker with rock pile
Tule-BC-I-7	Class II	2 Granite handstones
Tule-BC-I-11	Class II	1 Metavolcanic secondary flake
Tule-BC-I-15	Class II	1 Metavolcanic interior flake
Tule-BC-I-17	Class II	1 Metavolcanic secondary flake
Tule-BC-I-18	Class II	1 Quartz interior flake
Tule-BC-I-71	Class II	1 Metavolcanic interior flake, 1 quartz flake
Tule-BC-I-72	Class II	1 Brownware ceramic
Tule-BC-I-73	Class II	1 Metavolcanic interior flake
Tule-BC-I-74	Class II	1 metavolcanic interior flake
Tule-BC-I-75	Class II	1 Metavolcanic secondary flake
Tule-BC-I-76	Class II	1 Metavolcanic hammerstone fragment
Tule-BC-I-77	Class II	1 Buffware ceramic
Tule-BC-I-98	Class II	1 Metavolcanic interior flake
Tule-BC-I-99	Class II	1 Metavolcanic interior flake
Tule-BC-I-100	Class II	1 Granite millingstone fragment
Tule-BC-I-101	Class II	1 Granite handstone
Tule-BC-I-102	Class II	1 Metavolcanic shatter, 1 metavolcanic interior flake
Tule-BC-I-103	Class II	1 metavolcanic interior flake
Tule-BC-I-104	Class II	1 Metavolcanic secondary flake
Tule-BC-I-105	Class II	1 Red chert shatter
Tule-BC-I-106	Class II	1 Metavolcanic interior flake
Tule-BC-I-108	Class II	1 Metavolcanic interior flake
Tule-BC-I-109	Class II	1 Metavolcanic interior flake
Tule-BC-I-110	Class II	1 Metavolcanic interior flake
Tule-BC-I-111	Class II	1 Obsidian interior flake
Tule-BC-I-112	Class II	1 Granite handstone fragment
Tule-BC-I-121	Class II	2 Brownware ceramics
Tule-BC-I-122	Class II	2 Quartz interior flakes
Tule-BC-I-130	Class II	1 Buffware ceramic
Tule-CW-I-06	Class II	Metavolcanic flake
Tule-CW-I-10	Class II	2 Brownware sherds

Class II Newly Documented Isolates	Survey	Description
Tule-CW-I-11	Class II	2 Metavolcanic Flakes
Tule-CW-I-12	Class II	3 Brownware sherds
Tule-CW-I-13	Class II	3 Brownware sherds
Tule-CW-I-40	Class II	1 Unidirectional green metavolcanic core
Tule-CW-I-41	Class II	2 Green metavolcanic flakes
Tule-CW-I-42	Class II	1 Dark grey basalt interior flake
Tule-CW-I-43	Class II	3 Buffware sherds
Tule-CW-I-44	Class II	1 Buffware sherd
Tule-CW-I-45	Class II	1 Brownware sherd, 1 green metavolcanic flake
Tule-CW-I-46	Class II	1 Brownware sherd, 1 green metavolcanic flake
Tule-CW-I-48	Class II	2 Brownware sherds
Tule-CW-I-49	Class II	2 Brownware sherds
Tule-CW-I-50	Class II	1 Green metavolcanic flake
Tule-CW-I-51	Class II	2 Brownware sherds
Tule-CW-I-52	Class II	4 Brownware sherds
Tule-CW-I-53	Class II	1 Green metavolcanic flake
Tule-CW-I-54	Class II	2 Brownware sherds
Tule-CW-I-55	Class II	1 Brownware sherd
Tule-CW-I-56	Class II	1 Green metavolcanic flake
Tule-CW-I-57	Class II	2 Brownware sherds
Tule-CW-I-61	Class II	1 Brownware ceramic
Tule-CW-I-62	Class II	1 Green metavolcanic flake
Tule-CW-I-63	Class II	1 Pink granite handstone fragment
Tule-CW-I-64	Class II	3 Green metavolcanic flakes
Tule-CW-I-65	Class II	1 Green metavolcanic core
Tule-CW-I-66	Class II	2 Green metavolcanic flakes, 1 quartz flake
Tule-CW-I-67	Class II	1 Green metavolcanic flake
Tule-CW-I-68	Class II	1 Green metavolcanic core
Tule-CW-I-69	Class II	1 millingstone fragment

Historic isolates are relatively rare. Of the two isolates in Class II survey areas, both are 1918 USGLO survey markers surrounded by a rock cairn. Historic isolates in the Class III APE ($n = 9$) include one 1919 USGLO survey marker, two fragmented bottles, two prospect pits with tailings piles, and three food cans.

Prehistoric isolates are relatively common and generally represent background noise from intensive occupation in the general vicinity. That is, prehistoric isolates are traces of common activities at nearby sites that left fragments of pottery, debitage, and pieces of groundstone and flaked stone tools (see Table 4.2). Debitage leftover from flakedstone tool manufacture was the most commonly recorded isolate, followed by pieces of aboriginal pottery, then groundstone, and the occasional flaked stone tool. Each of these items is commonly found at prehistoric sites recorded in both the Class III APE and Class II survey areas.

Isolated artifacts are defined by their isolation from more extensive artifact scatters and are not associated with cultural deposits. The inability to make associations between isolated finds and nearby cultural deposits further reduces the data potential of isolates, even when considering all isolated finds as one assemblage. For these reasons, isolates are not considered eligible for NRHP listing.

4.5 SUMMARY

In all, the pedestrian surveys of the Class III APE and Class II sample inventory areas resulted in the documentation of 151 cultural resources, including 108 within the Class III APE and 43 within the Class II sample inventory area. Of those resources in the Class III APE, one is the historic Highway 80 that was documented in an historic context for SDG&E's Sunrise Powerlink project, finding that some road segments are contributing elements to its NRHP listing. The remaining Class III resources include 39 others that were previously recorded, and 68 newly documented sites. Within the Class II sample survey, 34 sites are newly documented and nine were previously recorded. Six previously recorded archaeological sites could not be found. Preliminary eligibility assessments for each resource were provided in the site descriptions. Those sites that likely meet the criteria for NRHP listing are discussed in further detail in Chapter 5.

5. SUMMARY AND CONCLUSIONS

The current Class III and Class II inventories were conducted to satisfy the requirements of CEQA and Section 106 of the NHPA. Important in such an endeavor is the development of an understanding of each identified resource in such a way that its historical significance can be assessed. CEQA and Section 106 of the NHPA mandate the consideration of the historical significance of a resource in an effort to gauge whether it has the potential to be listed on the CRHR or NRHP, respectively. As discussed in section 1.4 of Chapter 1, criteria 1-4 of CEQA and criteria A-D of Section 106 are similar sets of standards for determining the eligibility of a resource for CRHR or NRHP listing. The following sections discuss how survey-level data from the Class III and Class II inventories are integrated to develop eligibility assessments for each resource. However, in keeping with current BLM guidance, these assessments are not to be construed as formal eligibility recommendations but are provided to facilitate a project design that will eliminate or minimize impacts to the identified cultural resources. Further discussion with the BLM will help define the requirements for making formal eligibility recommendations, such that cultural resources with extremely low data potential (i.e., lithic scatters and ceramic scatters with no subsurface deposit) may then be recommended as not eligible for NRHP listing without further fieldwork evaluation efforts.

It is the intent of IBR to design the wind energy generation facility in such a way that project construction and maintenance will have no significant impact on known cultural resources. Should complete avoidance of impacts be achieved, a memorandum of understanding (MOU) will be developed between the BLM and IBR. Consistent with current BLM guidance, in the event that project construction cannot avoid impacts to cultural resources, formal evaluation of the potentially impacted resources will have to occur to make formal determinations of NRHP and CRHR eligibility. Eligible cultural resources will then have to be avoided or subject to data recovery. A programmatic agreement (PA) will be developed in place of an MOU if project construction and maintenance will have significant impacts to cultural resources. It is also the intent of the BLM to develop with IBR a Historic Properties Management Plan (HPMP) that will provide guidance for the future management of known cultural resources within the project area. The HPMP will include a monitoring plan and an inadvertent discovery plan that must be in place before the BLM will issue a notice to proceed (NTP) for project construction.

5.1 PRELIMINARY NRHP AND CRHR ELIGIBILITY ASSESSMENTS AND RESEARCH THEMES

The main goal of the current Class III and Class II sample inventories was to identify cultural resources located within the project APE, thereby facilitating efforts by IBR to achieve avoidance of impacts through project design. Efforts to avoid all impacts to cultural resources treat each cultural resource as potentially eligible for NRHP and CRHR listing. However, in the event that impacts to some cultural resources cannot be avoided, ASM's survey was also

designed to generate detailed information from surface deposits that could be used to provide preliminary assessments of NRHP and CRHR eligibility, with the idea that impacts to potentially eligible sites would be avoided.

Preliminary eligibility assessments were based solely on criterion D of Section 106, and criterion 4 of CEQA, since the inventory generated data that could be used to judge whether a particular cultural resource has yielded or may be likely to yield information important in prehistory or history. To date, no information has been generated through Native American consultation that could tie any of the aboriginal archaeological sites to particular place names or identify them as sacred sites. Additionally, some of the historic cultural resources that include structural remains will require archival research to determine possible associations with persons or events important in the region's history. Thus, each cultural resource was assessed for eligibility based on the data potential of its general archaeological characteristics—i.e., assemblage integrity, size, diversity, defined chronology, and the potential for buried deposits.

The value of individual archaeological sites must be understood in a regional context wherein large numbers of small assemblages that are limited in size and diversity can inform on broad land use patterns. Some individual sites have large, diverse assemblages with buried, datable deposits and these typically hold enough data potential to be considered eligible for NRHP and CRHR listing in that they can refine local and regional occupational patterns. Sites that are generally not considered eligible are those with low data potential, typically offering information that is redundant within local and regional contexts. Physical integrity of a site is a major factor in determining data potential of an archaeological deposit. Sites with compromised integrity make it difficult to draw associations between assemblage constituents and complicate the chronology of site occupation. In this sense, sites that lack strong physical integrity are typically ineligible for NRHP and CRHR listing unless the cultural deposit is robust and diverse enough that salvage work would produce a particularly unique dataset.

While it is not possible to prepare formal, substantive eligibility recommendations based on surface inventory data alone, preliminary assessments from survey-level data are often effective in assessing eligibility where resources offer redundant data, have little to no potential for dating or for the presence of buried components, and have poor physical integrity. Essentially, it is often obvious from the surface if a resource is not likely to be eligible for NRHP or CRHR listing. Examples of such resources include sites with a low density and/or diversity of artifacts spread over areas that lack deposition. Even when some subsurface deposits exist, it is often easy to determine whether formal evaluation would exhaust the data potential of those deposits, rendering the site ineligible.

Table 5.1 lists sites identified in the current Class III and Class II inventories according to potentially eligibility for NRHP and CRHR listing. Considering historic Highway 80 (site # 37-024023), SDG&E commissioned a historic properties study that included the Highway 80 corridor finding certain segments to be contributing elements to its NRHP eligible status. In particular, sections of Old Highway 80 still remain as main streets in El Cajon, Alpine, Pine Valley, and Jacumba, having the old road surface, alignment, and width preserved.

Table 5.1 Attributes of Recorded Archaeological Sites by Eligibility

Site	Survey	Landholder	Site Type	Age	Site Size (m)	Lithics	Groundstone	Ceramics	Bedrock Milling	Rock Shelters	Potential Chronological Indicators	Midden or Buried Deposits	Historic Refuse	Historic Structures/ Features		Potential Eligibility NRHP Status
Class III Eligible Sites (n = 15)						**Prehistoric Attributes**							**Historic Attributes**		**Data Potential**	
37-024023	Class III	Intersects BIA, Private, BLM	Highway 80	Historic	NA	NA	NA	NA	NA	NA	Yes	NA	NA	NA	NA	Segments of road are contributing elements to NRHP listing
SDI-10359	Class III	BLM, Private	Large Habitation	Prehistoric	325 x 150	Yes	-	Yes	Yes	-	Yes	**Yes**		-	High	Potentially Eligible
SDI-17817	Class III	BLM	Large Habitation	Prehistoric	270 x 150	Yes	-	Yes	Yes	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
SDI-19001/ 19003	Class III	BLM, Private	Large Habitation	Prehistoric	280 x 170	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**	-	-	High	Potentially Eligible
SDI-19018	Class III	BLM	Small Habitation	Prehistoric	120 x 90	Yes	-	Yes	Yes	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
SDI-7150	Class III	BLM	Small Habitation	Prehistoric	4 x 4	Yes	-	Yes	-	Yes	Yes	**Yes**		-	Moderate	Potentially Eligible
SDI-9223/ 17816	Class III	BLM	Large Habitation	Prehistoric	480 x 90	Yes	-	Yes	Yes	-	Yes	**Yes**		-	Moderate	Potentially Eligible
SDI-19364/ SPBB-S-1	Class III	BLM	Large Habitation	Prehistoric	280 x 237	Yes	Yes	-	-	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Tule-BC-35	Class III	Private	Large Habitation	Prehistoric	435 x 220	Yes	Yes	Yes	Yes	-	Yes	**Yes**	-	-	High	Potentially Eligible
Tule-BC-54	Class III	State, Private	Small Habitation	Prehistoric	125 x 92	Yes	Yes	-	Yes	-	Yes	**Yes**	-	-	High	Potentially Eligible
Tule-CW-11	Class III	Private	Small Habitation	Prehistoric	30 x 50	Yes	-	Yes	Yes	Yes	Yes	**Yes**	-	-	High	Potentially Eligible
Tule-CW-12	Class III	BLM, Private	Small Habitation	Prehistoric	230 x 150	Yes	Yes	Yes	Yes	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Tule-CW-17	Class III	BLM, Private	Small Habitation	Prehistoric	50 x 50	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Tule-CW-25	Class III	Private	Home Site	Historic	50 x 40 (150 x 120 ft)	-	-	-	-	-	Yes	**-**	Yes	Yes	Moderate	Potentially Eligible
Tule-EP-08	Class III	Private	Large Habitation and Historic Homesite	Both	270 x 270	Yes	Yes	Yes	Yes	-	Yes	**Yes**	Yes	Yes	Moderate	Potentially Eligible
Class III Ineligible Sites and Sites with Uncertain Eligibility (n = 94)						**Prehistoric Attributes**							**Historic Attributes**		**Data Potential**	**Potential Eligibility NRHP Status**
SDI-1151	Class III	BLM	Artifact Scatter	Prehistoric	50 x 27	Yes	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
SDI-4788	Class III	BLM, State, Private	Artifact Scatter	Prehistoric	670 x 160	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
SDI-6897	Class III	Private	Artifact Scatter	Prehistoric	90 x 50	Yes	-	Yes	-	-	Yes	-	-	-	Low	Likely Ineligible
SDI-6900	Class III	Private	BMS and HPRD	Both	60 x 55	-	-	-	Yes	-	Yes	-	Yes	-	Low	Likely Ineligible
SDI-9225	Class III	BLM	Large Habitation	Prehistoric	200 x 150	Yes	Yes	Yes	Yes	Yes	-	-	Yes	-	Low	Likely Ineligible
SDI-16786	Class III	Private	HPRD	Historic	106 x 45	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
SDI-16824	Class III	Private	HPRD and foundations	Historic	100 x 80	-	-	-	-	-	Yes	-	Yes	Yes	Low	Likely Ineligible
SDI-16827	Class III	Private	HPRD and structural remains	Historic	100 x 75	-	-	-	-	-	Yes	-	Yes	Yes	Low	Uncertain
SDI-17118	Class III	BLM	Artifact Scatter	Prehistoric	10 x 30	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-17119	Class III	BLM	Ceramic Scatter	Prehistoric	5 x 12	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-17815	Class III	BLM	Lithic Scatter	Prehistoric	11 x 7	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
SDI-17822	Class III	BLM	Lithic Scatter	Prehistoric	35 x 30	Yes	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
SDI-17829	Class III	BLM	Lithic Scatter	Prehistoric	13 x 11	Yes	-	-	-	-	Yes	-	-	-	Low	Likely Ineligible
SDI-17830	Class III	BLM	Artifact Scatter	Prehistoric	22 x 6	Yes	-	Yes	-	-	Yes	-	-	-	Low	Likely Ineligible
SDI-18050	Class III	BLM	Artifact Scatter	Prehistoric	10 x 3	-	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-18054	Class III	BLM	Ceramic Scatter	Prehistoric	15 x 12	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-18993	Class III	Private	HPRD	Historic	15 x 11	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible

Site	Survey	Landholder	Site Type	Age	Site Size (m)	Lithics	Groundstone	Ceramics	Bedrock Milling	Rock Shelters	Potential Chronological Indicators	Midden or Buried Deposits	Historic Refuse	Historic Structures/ Features		Potential Eligibility NRHP Status
SDI-18994	Class III	Private	HPRD	Historic	27 x 13	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
SDI-19000	Class III	BLM	Artifact Scatter	Prehistoric	56 x 35	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19002	Class III	BLM	Large Habitation	Prehistoric	130 x 750	Yes	Yes	Yes	-	-	Yes	-	-	-	Low	Likely Ineligible
SDI-19045	Class III	BLM	Artifact Scatter	Prehistoric	140 x 75	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19291	Class III	BLM	Ceramic Scatter	Prehistoric	5 x 5	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19301	Class III	BLM	Small Habitation	Prehistoric	155 x 50	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19854 SDGE-BC-6 SPED-S-1	Class III	BLM	Lithic Scatter and HPRD	Both	39 x 25	Yes	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
SDI-19857 SDGE-BC-9	Class III	Private	Lithic Scatter	Prehistoric	2 x 1	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19860 SDGE-BC-13	Class III	BLM	Bedrock Milling Station	Prehistoric	3 x 3	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
SDI-19849 SDGE-BC-37	Class III	BLM	Artifact Scatter	Prehistoric	59 x 32	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19868 SDGE-BW-83	Class III	BLM	Artifact Scatter	Prehistoric	40 x 20	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19869 SDGE-BW-84	Class III	BLM	Artifact Scatter	Prehistoric	219 x 55	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19935 SDGE-BW-128	Class III	BLM	Artifact Scatter	Prehistoric	129 x 95	Yes	Yes	-	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19872 SDGE-BW-130	Class III	Private	Lithic Scatter	Prehistoric	31 x 20	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
SDI-19851 SPED-S-5	Class III	BLM	Artifact Scatter	Prehistoric	84 x 24	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-01	Class III	BLM	Bedrock Milling Station	Prehistoric	4 x 2	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-02	Class III	BLM	Small Habitation	Prehistoric	60 x 40	Yes	Yes	Yes	Yes	Yes	-	-	-	-	Low	Likely Ineligible
Tule-BC-03	Class III	BLM	Artifact Scatter	Prehistoric	69 x 45	Yes	Yes	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-04	Class III	BLM	Bedrock Milling Station	Prehistoric	5 x 1	-	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-09	Class III	Private	Artifact Scatter	Prehistoric	34 x 5	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-10	Class III	Private	Artifact Scatter	Prehistoric	15 x 10	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-12	Class III	Private	Artifact Scatter	Prehistoric	62 x 49	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-13	Class III	BLM	Artifact Scatter	Prehistoric	110 x 40	Yes	Yes	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-14	Class III	BLM	Artifact Scatter	Prehistoric	30 x 30	Yes	Yes	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-15	Class III	BLM	Bedrock Milling Station	Prehistoric	12 x 7	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-16	Class III	BLM	Lithic Scatter	Prehistoric	71 x 61	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-17	Class III	BLM	Lithic Scatter	Prehistoric	94 x 71	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-18	Class III	Private	Artifact Scatter	Prehistoric	33 x 8	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-19	Class III	Private	HPRD	Historic	15 x 15	-	-	-	-	-	-	-	Yes	Yes	Low	Likely Ineligible
Tule-BC-20	Class III	Private	HPRD	Historic	29 x 13	-	-	-	-	-	-	-	Yes	Yes	Low	Likely Ineligible
Tule-BC-21	Class III	Private	HPRD	Historic	23 x 10	-	-	-	-	-	-	-	Yes	Yes	Low	Likely Ineligible
Tule-BC-22	Class III	Private	Lithic Scatter	Prehistoric	11 x 9	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-23	Class III	BLM	Ceramic Scatter	Prehistoric	6 x 2	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-24	Class III	BLM	Artifact Scatter	Prehistoric	80 x 55	Yes	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-25	Class III	BLM	Lithic Scatter	Prehistoric	51 x 40	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-27	Class III	BLM	Bedrock Milling Station	Prehistoric	8 x 3	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible

Site	Survey	Landholder	Site Type	Age	Site Size (m)	Lithics	Groundstone	Ceramics	Bedrock Milling	Rock Shelters	Potential Chronological Indicators	Midden or Buried Deposits	Historic Refuse	Historic Structures/ Features		Potential Eligibility NRHP Status
Tule-BC-28	Class III	BLM	Ceramic Scatter	Prehistoric	22 x 12	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-29	Class III	BLM	Artifact Scatter	Prehistoric	98 x 61	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-30	Class III	BLM	Ceramic Scatter	Prehistoric	10 x 4	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-31	Class III	Private	Artifact Scatter	Prehistoric	30 x 7	Yes	Yes	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-32	Class III	Private	Artifact Scatter	Prehistoric	130 x 78	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-33	Class III	Private	Artifact Scatter	Prehistoric	93 x 37	Yes	Yes	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-34	Class III	Private	Large Habitation and Historic Homesite	Both	465 x 210	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	Low	Likely Ineligible
Tule-BC-36	Class III	Private	Lithic Scatter	Prehistoric	26 x 19	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-39	Class III	Private	Artifact Scatter	Prehistoric	45 x 25	Yes	Yes	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-40	Class III	BLM	Bedrock Milling Station	Prehistoric	3 x 2	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-41	Class III	BLM, Private	Artifact Scatter	Prehistoric	171 x 50	Yes	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-42	Class III	State, Private	Artifact Scatter	Prehistoric	76 x 75	Yes	Yes	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-56	Class III	BLM	Ceramic Scatter	Prehistoric	4 x 3	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-57	Class III	Private	Bedrock Milling Station	Prehistoric	3 x 1	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-58	Class III	Private	Artifact Scatter	Prehistoric	18 x 5	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-66	Class III	BIA	Artifact Scatter	Prehistoric	6 x 5	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-67	Class III	BIA	Artifact Scatter	Prehistoric	31 x 20	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-68	Class III	BLM	Bedrock Milling Station	Prehistoric	27 x 17	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-69	Class III	State	Mining Site	Historic	45 x 18	-	-	-	-	-	-	-	-	Yes	Low	Likely Ineligible
Tule-BC-72	Class III	BLM	Bedrock Milling Station	Prehistoric	25 x 7	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-73	Class III	BLM	Artifact Scatter	Prehistoric	17 x 10	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-74	Class III	State	Mining Site	Historic	210 x 95	-	-	-	-	-	Yes	-	Yes	Yes	Low	Likely Ineligible
Tule-CW-01	Class III	BLM	Bedrock Milling Station	Prehistoric	15 x 15	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-02/ LD-S-2	Class III	State	Artifact Scatter	Prehistoric	10 x 10	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-04	Class III	BLM	Bedrock Milling Station	Prehistoric	10 x 8	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-05	Class III	BLM	Bedrock Milling Station	Prehistoric	8 x 8	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-07	Class III	Private	HPRD	Historic	15 x 10	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
Tule-CW-10	Class III	Private	Artifact Scatter	Prehistoric	20 x 25	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-15	Class III	Private	Artifact Scatter	Prehistoric	15 x 30	-	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-16	Class III	BLM	Lithic Scatter	Prehistoric	15 x 15	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-19	Class III	BLM	Artifact Scatter	Prehistoric	30 x 10	Yes	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-20	Class III	State	Artifact Scatter	Prehistoric	30 x 30	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-21	Class III	Private	HPRD	Historic	20 x 40	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
Tule-CW-22	Class III	Private	Small Habitation	Prehistoric	6 x 6	-	-	Yes	-	Yes	-	-	-	-	Low	Likely Ineligible
Tule-CW-23	Class III	Private	Lithic Scatter	Prehistoric	20 x 20	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-24	Class III	Private	Artifact Scatter	Prehistoric	90 x 60	Yes	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-EP-01	Class III	Private	Bedrock Milling Station	Prehistoric	12 x 12	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-EP-02	Class III	Private	Home Site	Historic	25 x 29 (75 x 87 ft)	-	-	-	-	-	-	-	-	Yes	Low	Uncertain
Tule-EP-03	Class III	Private	Small Habitation	Prehistoric	101 x 42	Yes	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible

Site	Survey	Landholder	Site Type	Age	Site Size (m)	Lithics	Groundstone	Ceramics	Bedrock Milling	Rock Shelters	Potential Chronological Indicators	Midden or Buried Deposits	Historic Refuse	Historic Structures/ Features		Potential Eligibility NRHP Status
Tule-EP-07	Class III	Private	HPRD	Historic	10 x 35	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
Class II Sample Eligible Sites (n = 10)						**Prehistoric Attributes**							**Historic Attributes**		**Data Potential**	**Potential Eligibility NRHP Status**
SDI-4009	Class II	BLM	Large Habitation	Prehistoric	1000 x 200	Yes	Yes	Yes	Yes	-	Yes	**Yes**	-	-	High	Potentially Eligible
SDI-4010	Class II	BLM	Large Habitation	Prehistoric	600 x 425	Yes	Yes	Yes	Yes	-	Yes	**Yes**	Yes	-	High	Potentially Eligible
SDI-7151	Class II	BLM, Private	Large Habitation	Prehistoric	500 x 400	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**	-	-	High	Potentially Eligible
SDI-7154	Class II	BLM	Small Habitation	Prehistoric	113 x 105	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**	-	-	High	Potentially Eligible
SDI-8434	Class II	BIA	Large Habitation	Prehistoric	408 x 360	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**	-	-	High	Potentially Eligible
SDI-15746	Class II	BLM	Large Habitation	Prehistoric	500 x 350	Yes	Yes	Yes	Yes	-	Yes	**Yes**	-	-	High	Potentially Eligible
Tule-BC-43	Class II	BLM	Large Habitation	Prehistoric	190 x 90	Yes	Yes	Yes	Yes	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Tule-BC-63	Class II	BLM	Artifact Scatter	Prehistoric	79 x 52	Yes	-	Yes	-	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Tule-CW-03	Class II	BLM	Artifact Scatter	Prehistoric	50 x 50	Yes	Yes	Yes	Yes	-	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Tule-CW-43	Class II	Private	Small Habitation	Prehistoric	20 x 20	Yes	-	Yes	-	Yes	Yes	**Yes**	-	-	Moderate	Potentially Eligible
Class II Sample Ineligible Sites (n = 33)						**Prehistoric Attributes**							**Historic Attributes**		**Data Potential**	**Potential Eligibility NRHP Status**
SDI-5162	Class II	Private	Small Habitation	Prehistoric	99 x 75	Yes	-	Yes	Yes	Yes	-	-	-	-	Low	Likely Ineligible
SDI-5171	Class II	Private	Small Habitation	Prehistoric	274 x 230	Yes	-	Yes	-	Yes	-	-	-	-	Low	Likely Ineligible
SDI-9224	Class II	BLM	Small Habitation	Prehistoric	177 x 66	Yes	Yes	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-05	Class II	BLM	Lithic Scatter	Prehistoric	26 x 4	Yes	-	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-06	Class II	BLM	HPRD	Historic	8 x 5	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
Tule-BC-07	Class II	BLM	Artifact Scatter	Prehistoric	22 x 22	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-11	Class II	BLM, Private	Artifact Scatter	Prehistoric	185 x 74	Yes	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-44	Class II	BLM	Small Habitation	Prehistoric	104 x 92	Yes	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-46	Class II	BLM	Small Habitation	Prehistoric	114 x 50	Yes	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-47	Class II	BLM	Bedrock Milling Station	Prehistoric	1.5 x 1.5	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-48	Class II	BLM	Bedrock Milling Station	Prehistoric	19 x 19	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-49	Class II	BLM	Small Habitation	Prehistoric	53 x 38	Yes	Yes	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-50	Class II	BLM	Artifact Scatter	Prehistoric	17 x 14	Yes	Yes	-	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-51	Class II	BLM	Artifact Scatter	Prehistoric	19 x 15	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-52	Class II	Private	Ceramic Scatter	Prehistoric	42 x 18	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-53	Class II	Private	Bedrock Milling Station	Prehistoric	14 x 3	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-55	Class II	BLM	Bedrock Milling Station	Prehistoric	9 x 7	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-59	Class II	BLM	Artifact Scatter	Prehistoric	54 x 39	Yes	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-60	Class II	BLM	Artifact Scatter	Prehistoric	42 x 32	Yes	-	Yes	Yes	-	Yes	-	-	-	Low	Likely Ineligible
Tule-BC-61	Class II	Private	Artifact Scatter	Prehistoric	27 x 16	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-62	Class II	BLM	Artifact Scatter	Prehistoric	25 x 21	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-64	Class II	BIA	Artifact Scatter	Prehistoric	70 x 48	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-BC-65	Class II	BIA	Ceramic Scatter	Prehistoric	4 x 4	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-30	Class II	BLM	Bedrock Milling Station	Prehistoric	2 x 3	-	-	-	Yes	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-31	Class II	BLM	Ceramic Scatter	Prehistoric	2 x 3	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-33	Class II	BLM	Ceramic Scatter	Prehistoric	3 x 2	-	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-34	Class II	BLM	Artifact Scatter	Prehistoric	30 x 90	Yes	-	Yes	Yes	-	-	-	-	-	Low	Likely Ineligible

Site	Survey	Landholder	Site Type	Age	Site Size (m)	Lithics	Groundstone	Ceramics	Bedrock Milling	Rock Shelters	Potential Chronological Indicators	Midden or Buried Deposits	Historic Refuse	Historic Structures/ Features		Potential Eligibility NRHP Status
Tule-CW-35	Class II	Private	HPRD	Historic	70 x 35	-	-	-	-	-	Yes	-	Yes	Yes	Low	Likely Ineligible
Tule-CW-36	Class II	Private	HPRD	Historic	30 x 30	-	-	-	-	-	Yes	-	Yes	-	Low	Likely Ineligible
Tule-CW-40	Class II	BLM	Artifact Scatter	Prehistoric	40 x 40	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-41	Class II	Private	Home Site	Historic	20 x 30	-	-	-	-	-	Yes	-	Yes	Yes	Low	Likely Ineligible
Tule-CW-42	Class II	Private	Artifact Scatter	Prehistoric	80 x 80	Yes	-	Yes	-	-	-	-	-	-	Low	Likely Ineligible
Tule-CW-44	Class II	Private	Artifact Scatter	Prehistoric	3 x 5	Yes	Yes	Yes	-	-	-	-	-	-	Low	Likely Ineligible

Within the Tule Wind project APE, no such unimproved, preserved segments remain. Additionally, two historic sites could not be assessed for eligibility without further archival research, including SDI-16827—a historic period refuse deposit with associated structural remains, and Tule-EP-02—a historic home site with a standing structure. Of the other resources assessed as potentially eligible (n = 25), 15 are in the Class III APE and 10 are in the Class II sample survey areas (see Table 5.1). Aside from Highway 80, the 14 other potentially eligible resources in the Class III APE include six large habitations, six small habitations, one with both prehistoric (large habitation) and historic (home site) components, and one other historic home site. Within the Class II sample, all potentially eligible resources are prehistoric sites, including six large habitation sites, two small habitations, and two dense artifact scatters (see Table 5.1).

Sites assessed as potentially eligible either exhibited the presence of midden soils or buried deposits, with relatively rich or robust artifact assemblages (prehistoric sites), or had structures and other features that could add to regional historic occupation themes. For prehistoric sites, determining the presence—or potential thereof—for midden soils or buried artifact deposits was relatively easy since bedrock was often exposed on the surface, precluding the presence of cultural deposits. Potentially eligible resources also tended to have chronological indicators (i.e., time sensitive artifacts, or organic residues that could be radiocarbon dated). For instance, potentially eligible prehistoric habitation sites commonly had multiple time-sensitive artifacts on the surface, such as small Cottonwood Triangular arrow points that tend to post date A.D. 600 in the San Diego region (see Hale 2009). Potentially eligible historic sites often contain temporally diagnostic cans, bottles, and other items and are associated with land patent and chain-of-title information that can directly date each occupation. The relatively high data potential of potentially eligible sites was also based on site integrity and the ability to tie rich deposits with chronological indicators. Though some of these sites have been and continue to be impacted by OHV traffic, camping, and illicit artifact collection, the majority of deposits at potentially eligible sites tend to be intact enough to draw critical associations within and between artifacts and features.

Sites characterized as potentially eligible include resource categories with intrinsically high data potential, such as prehistoric habitation sites and historic home sites. A more complete picture is provided in Table 5.2 that tabulates sites by attribute (the presence of lithics, groundstone, ceramics, bedrock milling stations, midden soils/ buried deposits, chronological indicators, historic refuse, historic structures/ features, and data potential), and potential eligibility. Of the 16 prehistoric large habitations identified, only three in the Class III APE are listed as likely ineligible for reasons of poor integrity, low artifact density, and a lack of midden soils or buried cultural deposits (see Table 5.1). Large habitations are characterized by more intensive occupation and tend to have higher artifact densities, features, and midden. In contrast, small prehistoric habitations were occupied less intensively or for shorter durations, and as a result, have less robust assemblages and may not have midden soil. Of the 18 small habitations, the majority (n = 10) are classified as likely ineligible due to relatively low data potential. This is especially true if formal evaluations were to be conducted at small habitations, whereas the data potential of large habitations would not be exhausted following

formal evaluation. Additionally, only two artifact scatters in the Class II sample inventory were assessed as potentially eligible, but these sites had the potential for buried deposits, and may very well turn out to meet the criteria for a habitation site if such buried deposits were discovered.

Table 5.2 Preliminary Eligibility by Resource Type and Survey (Class III and Class II)

	Potentially Eligible	Likely Ineligible	Uncertain	Total
Class III				
Large Habitation	6	2		8
Large Habitation and Home Site	1	1		2
Small Habitation	6	4		10
BMS		13		13
BMS and HPRD		1		1
Artifact Scatter		38		38
Lithic Scatter		12		12
Lithic Scatter and HPRD		1		1
Ceramic Scatter		7		7
Home Site	1		1	2
HPRD		9		9
HPRD and Structural Remains		1	1	2
Mining Site		2		2
Road	1			1
Class III Total	**15**	**91**	**2**	**108**
Class II Sample				
Large Habitation	6			6
Small Habitation	2	6		8
BMS		5		5
Artifact Scatter	2	13		15
Lithic Scatter		1		1
Ceramic Scatter		4		4
Home Site		1		1
HPRD		3		3
Class II Total	**10**	**33**		**43**
Grand Total	**25**	**124**	**2**	**151**

Note: HPRD, historic period refuse deposit; BMS, bedrock milling station.

Other resource types, such as bedrock milling stations, artifact scatters, lithic scatters, ceramic scatters, and historic period refuse deposits were all found to have low data potential. This is partly due to low artifact density, lack of integrity, and lack of subsurface deposits or the potential thereof. Bedrock milling stations that lacked associated cultural deposits were relatively common ($n = 14$) and are a signature of transient food processing. However, without chronological controls, it is difficult to place these sites in time and thus more difficult

to associate their use to patterns of increasing or decreasing processing intensity. In fact, the isolated bedrock milling stations tend to be characterized by ephemeral milling slicks and lack the more costly to make mortar surfaces. This lack of investment in grinding surfaces is another indication of expedient processing.

Artifact scatters are typically more complex than lithic scatters and ceramic scatters since artifact scatters are defined by greater diversity containing a mixture of lithic tools and tool-making debris, groundstone, and ceramic sherds. The higher diversity is an indication that multiple economic activities were taking place on site. On the other hand, lithic scatters consist solely of lithic tools and tool manufacturing debris—evidence of tool production, and ceramic scatters are small concentrations of pottery sherds—evidence of a broken ceramic vessel. In that artifact scatters ($n = 53$) are four to five times more common than lithic scatters ($n = 13$) and ceramic scatters ($n = 11$), it can be assumed that settlement in McCain Valley was more geared toward local subsistence rather than task-specific hunting (lithic retooling) or gathering (ceramics used for storage and transport). Whether McCain Valley was occupied seasonally as a stopover between interior deserts and the coastal plain, or if it had stable resident populations, the dominance of artifact scatters indicates multiple economic activities per occupation that are likely to derive from a family unit rather than solitary foragers. That large habitations are relatively common on the landscape ($n = 16$) implies that there were stable occupations in McCain Valley, whether or not these were sedentary encampments.

Most artifact scatters, lithic scatters, and ceramic scatters are in areas where bedrock is either exposed or is covered by a veneer of coarse sand, inhibiting the accumulation of subsurface deposits. Additionally, ongoing erosion has deflated existing sediments, exposing artifacts on the surface. While it is likely that small, low density scatters derive from a single occupation, it is near impossible to identify separate occupations in these deflated contexts, reducing the value of these sites to regional discussions of settlement, subsistence and trade.

5.2 ADDITIONAL MANAGEMENT CONSIDERATIONS

As previously stated, the NRHP and CRHR eligibility assessments provided in this chapter are not formal eligibility recommendations. If an identified cultural resource will be impacted by project construction or maintenance activities, formal evaluation of that resource must occur. For resources with archaeological deposits, evaluation typically includes some combination of surface collection, excavation, mapping and special analyses that are designed to understand site formation and human habitation of that resource in a regional context. For historic sites that include standing structures and other evidence of a built environment, additional archival research is necessary to determine chain-of-title, a history of residents, and other such information. For this reason, if it is determined that project construction and/or maintenance will impact identified cultural resources, then each resource must be formally evaluated. If project construction will impact the margin of a known cultural resource, limited boundaries testing may be an option to determine the extent of subsurface cultural deposits, potentially reducing the overall site boundary—absent stationary surface features (i.e., rock shelters,

bedrock milling stations, etc.), and allowing construction to proceed without evaluation of the entire resource. An archaeological and Native American monitor should be present during all ground disturbing activities.

If project redesign can result in avoidance of all cultural resources, then formal NRHP testing and evaluation will not be necessary. In this scenario, it is recommended that one archaeological monitor and one Native American monitor be present for each construction crew during project construction when activities are within 100 ft/30 m of a known cultural resource to provide monitoring for protection of nearby sites and for unanticipated discoveries. If all adverse effects to historic properties cannot be avoided, or if the 381 acres of private property remain unsurveyed, then either a Programmatic Agreement (PA) or Memorandum of Agreement (MOA) will be written to guide the completion of the section 106 process.

It is the intent of BLM to write both a Historic Properties Treatment Plan (HPTP) to provide guidance on the treatment of both known cultural resources and inadvertent discoveries and to provide documentation of approved mitigation and treatment measures, and a Long Term Historic Properties Management Plan for the ongoing protection and management of cultural resources in and near the project area after the wind farm is on line. These plans will be written in consultation with SHPO, the ACHP, and other consulting parties.

As the project progresses, it is anticipated that IBR will realign aspects of the current APE, thus requiring additional survey and resource documentation. Supplemental survey reports will be prepared to document the results of surveys for new alignments, or for the remaining 381 acres on private property that require survey.

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APPENDICES

APPENDIX A

Site Location Maps and Site Forms

Confidential

APPENDIX B

End of Field Report for Sample Survey

Confidential

APPENDIX C

Class II Sample Survey Guidelines and Approach

Supplemental Instructions on Determining the Level of Effort for Additional Cultural Resources Field Investigations for Type 3 Wind Applications and Plans of Development in the California Desert District

The following provides additional guidance and instruction for implementing the *Supplemental Procedures for Solar and Wind Power Generation Applications* amendment to the State Protocol Agreement. This guidance focuses on the level of effort for additional cultural resources field investigations for Type 3 wind applications and plans of development (POD) in the California Desert District. This guidance has been developed in consultation with the State Historic Preservation Office. This guidance does not change any of the requirements or procedures stipulated in the *Supplement*, but further refines and elaborates the guidance provided at Section II(3) of the *Supplement* regarding the manner in which BLM determines the level of effort for additional cultural resources field investigations.

1. The area of potential effect (APE) for considering direct effects is still defined as the area subject to the Federal Action, or issuance of the right-of-way.
    a. Upon acceptance of a Type 3 wind application and plan of development (POD), the APE is defined to be the necessary lands included within the entire right-of-way regardless of the extent of lands in the POD.
    b. For the final POD and areas of direct impact or disturbance:
        i. BLM will conduct a Class III survey of all areas proposed for development within the POD, including a 100 foot buffer around the area included within the POD. A 100 foot buffer will be applied uniformly around the external perimeter of the POD, including turbine locations, roads, transmission corridors, staging areas and other supporting infrastructure improvements.
        ii. Sites located during field investigations will be recorded completely within the APE, even if the boundaries of the site extend outside the buffered area of the POD.
    c. For the areas located within the final ROW and APE, but outside the area of direct effects as described in the POD and subjected to BLM Class III survey, a BLM Class II field investigation will be conducted.
        i. The Class II field investigation strategy should be based on results of information garnered during Tribal consultation and the literature review, may include some broad transect survey, or may be targeted at areas with increased probability of containing sites.
        ii. The Class II strategy will be developed in consultation with the proponent or proponent's designated consultant and should be a statistically based sample survey, designed to aid in characterizing the probable density, diversity, and distribution of cultural properties in an area, to develop and test predictive models, and to answer significant research questions.

iii. Where the final POD footprint has not been completely finalized (tower locations, etc.), the applicant may move forward with Class III survey of the POD plus the100 buffer for the most likely development scenario, understanding that additional field investigations may be required if the final development scenario includes areas outside the lands surveyed.

2. The ROD and ROW may be conditioned to require a cultural resources management plan or other monitoring strategy to ensure appropriate management (avoidance, monitoring) for known sites within the ROW.

APPENDIX D: SAMPLING APPROACH FOR THE TULE WIND CLASS III AND CLASS II SURVEYS

The Tule Wind project includes a Class III cultural resources inventory for the entire project footprint, and a Class II sample survey of 10-percent of the overall right-of-way (ROW) outside of the project footprint. In an effort to better define a level of effort for cultural surveys related to wind energy projects, the BLM revised the guidelines governing cultural resources inventories such that only the project footprint requires a 100-percent Class III survey, while the remaining ROW must be sampled with a Class II inventory to document the presence and character of cultural resources in the overall ROW (see Appendix C). This is different than more land intensive solar energy projects on BLM land, for which 100-percent of the project ROW must be inventoried.

The Tule Wind project footprint is defined by survey corridors of various sizes surrounding planned project facilities, including all collector lines, transmission lines, turbine strings, access roads, turbine strings, staging areas, substations, and other related facilities. A 400-ft corridor will surround all turbine strings, with the ability to expand the corridor to 800-ft during the Class III survey to achieve avoidance of impacts to cultural resources. All access roads, transmission lines and collector lines will have a 150-ft corridor, and all staging areas, substations, and other facilities will have a 100-ft buffer. A departure from these survey buffers is on lands administered by the County of San Diego, on which all transmission lines will be surveyed with a 1000-ft corridor to allow for flexibility in transmission line sighting. Altogether, these survey corridors and buffers amount to approximately 3,570 acres for the project footprint, based on a minimum 400-ft buffer around turbine strings.

For the Tule Wind project, the BLM has agreed that a 10-percent sample of the overall non-footprint ROW is a sufficient level of effort for the Class II sample inventory. Much of McCain Valley is considered to have high potential for archaeological sites, not including high, narrow ridges surrounded by steep slopes. This is confirmed in the results from a records search and a recent survey for the San Diego Gas & Electric (SDGE) Sunrise-Powerlink survey that intersects the Tule Wind project area that document dozens of archaeological sites within and near the Tule Wind project footprint. Given that much of the project ROW consists of either low hills and valleys, or high ridges with steep slopes, the 10-percent sample of the non-footprint ROW is likely to generate a representative sample of archaeological sites. A 10-percent sample of the ROW amounts to approximately 2,000 acres. Together with the Class III inventory, the total survey coverage will amount to approximately 5,570 acres.

To facilitate the completion of an EIS/EIR for the Tule Wind project in conjunction with other related undertakings, it has been determined that, of the 5,570 acres covered by the Class III and Class II inventories, approximately 25-percent shall be initially surveyed to establish a baseline of cultural resources in the project vicinity to help guide the NEPA (National Environmental Policy Act) process of analyzing impacts to resources, with the remaining 75-

percent to be subsequently inventoried. This 25-percent sample will include pedestrian survey of approximately 1,500 acres (approximately 25-percent of 5,570 acres).

Allocation of the 1,500-acre 25-percent inventory across both the project footprint and the ROW sample area was based on the results of a records search and the SDGE Sunrise-Powerlink survey that intersects the southern, eastern, and western aspects of the Tule Wind project ROW. Both the records search and Sunrise-Powerlink survey documented numerous archaeological sites in low valleys and among rolling hills. Very few archaeological sites have been recorded on high ridges, and none are known to exist on the steep slopes. Based on these results, approximately 1,100 acres have been allocated to the project footprint, covering areas that have high potential for archaeological sites or have a higher density of previously recorded archaeological sites (Figure D-1). Another 400 acres have been allocated to areas of high potential within the ROW but outside of the project footprint.

APPENDIX D

Health and Safety Plan

APPENDIX D. HEALTH AND SAFETY PLAN

An effective safety program involves a number of aspects: responsibility, compliance, communication, hazard assessments, rates of exposure to hazardous materials and situations, and hazard corrections. ASM has made specific preparations to minimize safety hazards in the field and ensure prompt action in the unlikely event of an emergency. It is ASM's policy that all safety precautions are undertaken in accordance with the requirements of the Office of Safety and Health Administration (OSHA) 29 CFR 1910 and 29 CFR 1926.

D.1 SAFETY HAZARDS IN THE FIELD

Potential health and safety hazards typically encountered by archaeologists include physical, biological, and chemical hazards (Tables D.1, D.2, D.3, and D.4). Prior to any fieldwork, ASM safety personnel will be responsible for identifying potential hazards for a particular project.

Table D.1 Potential Safety Hazards

Physical Hazards	Biological Hazards	Chemical Hazards
Heat/cold stress	Airborne fungi	Toxic chemicals
Sun	Mosquito/insect-borne diseases	Hazardous waste
Construction hazards	Hanta virus	air
Noise	Rabies	soil
Slips, trips, falls	Tetanus	water
Traffic exposures	Poison ivy/sumac	Asbestos
Excavations (cave ins)	Poisonous snakes	Lead
Unsafe buildings/structures	Poisonous insects	Pesticides
Confined spaces		
Heavy lifting		
Tools		

Table D.2 Emergency Contact Information

Contact	Phone
Medical Emergency	911
ASM Affiliates Carlsbad Office	(760) 804-5757
ASM Safety Officer - Mark S. Becker, Ph.D.	(760) 804-5757 (760) 331-7597 (after-hours emergency only)
ASM Principal Investigator – Micah Hale, Ph.C.	(760) 804-5757 (760) 917-3880 (after-hours emergency only)

Table D.3 General Safety Rules and Procedures

▸ Practice sun protection by using a hat, sunscreen, and loose, light-colored clothing.
▸ Carry at least two quarts of water with you and refill every chance you get.
▸ Wear appropriate shoes and use moleskin or foam to keep "hot spots" from turning into blisters.
▸ Know the symptoms of temperature stress.

Table D.4 Symptoms of Heat or Cold Stress

Heat Stress	Cold Stress
▸ Rash ▸ Nausea ▸ Cold, clammy skin and inability to sweat ▸ Facial reddening ▸ Confusion, delirium, or lack of coordination ▸ Weakness	▸ Frostbite ▸ Chilblain (inflammation of extremities followed by spasms and pain) ▸ Hypothermia

Notify your crew chief if you have or notice someone else with these symptoms.

- Avoid dehydration problems by limiting or avoiding alcohol consumption in the evening and coffee during the day.
- Do not wander off during fieldwork or go to isolated areas without notifying your crew chief.
- Snakes like to sun on rocks or sand in the morning and to hide under rocks during the heat of the day. Be alert. In the event of a snakebite, do not treat the bite. Transport the victim to the nearest emergency room. Attempt to identify the snake species.
- Obey all traffic laws and speed limits. Be cautious on dirt roads.
- Use of illegal drugs, either on or off the job during fieldwork, is grounds for immediate dismissal.
- In the event of an emergency, consult your contact phone list (provided prior to the start of fieldwork).
- For emergency service, call 911.
- Be prepared to give your location by UTM coordinates in an emergency.

Each crew member will be given a printed copy of this safety plan, which includes the list of emergency phone numbers (see Table 4.2).

Additionally, the addresses and telephone numbers will be provided for the closest hospital(s) to each segment of the APE, along with maps showing how to get to them.

D.2 SAFETY INDOCTRINATION

Prior to any fieldwork, a safety indoctrination meeting will be held to review potential safety hazards for the region, type of project, and/or weather conditions. All crew chiefs will be aware of potential safety hazards and at least one first-aid-trained person will be included on each field crew. Additionally, all new employees will be required to go through safety training during their orientation.

Field crew will also participate in weekly tailgate safety meetings.

D.3 PRE-EMERGENCY PLANNING

Prior to any fieldwork being undertaken, a pre-emergency plan will be outlined for each field project. For projects located in urban areas where professional emergency responders are readily available, the pre-emergency plan may be as simple as identifying the location of the nearest emergency room. For project work in remote locations, the pre-emergency planning may involve coordination between crew chiefs and project safety personnel, identification of project specific hazards, evacuation routes, response procedures, etc. Depending upon the nature and location of the field project, emergency planning may involve:

- Emergency recognition and planning
- Designation of personnel roles, authority, training, and communication
- Identification of project-specific hazards
- Security and control
- Evacuation routes
- Decontamination
- Emergency medical treatment and first aid
- Emergency alerting and response procedures
- Protective and emergency equipment
- Emergency monitoring equipment
- Task-specific planning

Each vehicle will be equipped with a first aid kit, spare tire and tire inflator, tow rope, water cooler, tool kit, fire extinguisher, shovel, and bucket. Contact information and reporting instructions for ambulance, physician, hospital, fire, police and other persons to contact in an emergency will be provided to each crew member and will be maintained in each vehicle for the life of a project. All field personnel will be trained in the use of hand-held radios during an

emergency and cellular telephones will also be made available for use (in areas where service is available).

D.4 INJURIES ON THE JOB

In the event of an injury or illness, all work will cease until the nature of the injury or illness has been examined by the crew chief or safety personnel. Any injury or illness will be formally reported to the ASM Safety Manager and will be documented on a designated Accident Report Form. Immediate medical attention will be sought in case of bodily injury.

D.5 TRAFFIC AND MOTOR SAFETY

All personnel that drive ASM vehicles will be required to show proof of a valid driver's license. Insurance cards will be included in each vehicle and contact information and procedures in case of an accident or emergency will be provided to crew chiefs. While ASM vehicles are professionally maintained, all drivers will be responsible to check tire inflation, brakes, and fluids before driving them. Each vehicle will be equipped with a first-aid kit and drinking water sufficient for all field crew. Seatbelt use is mandatory.

D.5.1 Reporting Accidents

Any traffic accidents will immediately be reported to the Safety Manager and ASM office manager, Jenny Zahniser. An ASM Vehicle Accident Form will be completed. Should bodily injuries be incurred, emergency medical treatment will immediately be obtained for the injured. Contacting of ASM's insurance provider will be managed by Ms. Zahniser.

D.5.2 Considerations of Criminal Activity in the Region

The project vicinity is near the United States and Mexico international border; an area with a history of known illicit activity, including drug and human trafficking and related violence. While there is no specific cause to indicate that such activities will be encountered in the project area, appropriate measures will be followed to ensure the safety of field personnel. Federal and local authorities, including the US Border Patrol and San Diego County Sheriff's office, will be notified of the presence of field crews and scheduled survey dates and times. In such communications, ASM will secure a point of contact at each agency to directly report criminal activity and to request periodic checks on crew safety through phone contact. The appropriate wireless phone carrier (i.e., the carrier that has the strongest signal in the project area) will be secured to ensure phone contact at all times. In emergency situations, the crew will dial 911.

APPENDIX E

Resumes of Key Personnel

John R. Cook
President

Firm Name: ASM Affiliates, Inc., Carlsbad, California

Hire Date: September 1, 1977

Total Years of Experience: 32

Employment History:

1977-present	President, ASM Affiliates, Inc., Carlsbad, California
1998-present	Vice President, *pan.gis, inc.*, Carlsbad, California
2002-present	Vice President, ASM Planning and Research Collaborative, Carlsbad, California
1978-1995	Principal and Senior Archaeologist, Brian F. Mooney Associates, San Diego, California
1972-1978	Staff Archaeologist, San Diego State University Foundation, San Diego, California

Education:

B.A.	1976/Anthropology/San Diego State University
B.A.	1976/Philosophy/San Diego State University

Additional Training:

1995	University of Nevada, Reno/Native American Graves Protection and Repatriation Act Course
1980-1982	San Diego State University/Graduate studies in Cultural Resource Management
1984-1986	University of California, San Diego/Extension studies in Business Administration CACI, Inc./Instruction and certification in Simscript II.5, a model simulation program language
1970-1972	Fullerton College/Chemical Engineering major

Registrations:

1983	Register of Professional Archaeologists

Professional Memberships: N/A

Other Capabilities: N/A

Awards/Commendations:

Clearances: N/A

Citizenship: USA

Languages: N/A

References:

Chris White, Environmental Program Manager, Caltrans District 11, (858) 616-6611

Danielle Page, Senior Archaeologist, Department of the Navy NAVFAC Southwest, (619) 532-2090

Mike Elling, Senior Project Manager, City of San Diego Metropolitan Wastewater Department, (858) 292-6477

Professional Profile:

Mr. Cook has more than 31 years of professional archaeological experience, including 27 years of experience in the administration of regional cultural resource management consulting firms. He has been a member of the Register of Professional Archaeologists since 1983, and was accredited in field research, theoretical research, and archaeological administration by the former Society of Professional Archaeologists (SOPA). As owner and President of ASM Affiliates since its incorporation in 1977, as well as Principal in another southern California-based environmental consulting firm for more than 18 years, Mr. Cook has managed and supervised 1,200 cultural resource management projects and master contracts. In the capacity of Principal Investigator, Supervisory Archaeologist, and technical analyst, Mr. Cook has experience throughout California, Arizona, and Nevada on all types of cultural resource studies. He has developed particular strengths in lithic analysis, quantitative methods, predictive modeling, and government compliance procedures. Mr. Cook is the Director of the Imperial Valley College Desert Museum.

Mr. Cook has been responsible for the coordination of cultural resource management studies and related resource analysis issues for environmental impact reports, assessments, and statements. He has managed and supervised major federal contract efforts for the U.S. Army Corps of Engineers, Department of the Navy SWDIV, Bureau of Land Management, Bureau of Reclamation, Western Area Power Administration, Bureau of Indian Affairs, and the U.S. Forest Service. He has also managed State and local agency contracts for the California Department of Transportation, the City of San Diego, Imperial Irrigation District, and the counties of San Diego, Riverside, and Imperial.

Project Experience

1977-present President, ASM Affiliates, Inc., Carlsbad, California
On-Call Cultural Resources Services Contracts, Caltrans District 11, San Diego and Imperial counties, California, 1990-2007. Mr. Cook has managed five separate as-needed contracts

involving the issuance of 51 task orders. Oversaw the management of all archaeological and historical resource surveys, Section 106 eligibility evaluations, data recovery mitigation, and monitoring programs conducted by ASM for sites within the alignments of Interstates 5 and 8 and State Routes 52, 56, 76, 78, 86, 94, 98, 125, and 905 within San Diego, Riverside, and Imperial counties. Coordinated with Principal Investigators and Caltrans to ensure successful project completion. Managed all budgets and schedules for the contract. Client Reference: Chris White, Caltrans District 11, (619) 688-0184

Naval Facilities Engineering Command, SWDIV Cultural Resources Contract, Department of the Navy SWDIV, California, Arizona, Nevada, New Mexico, Oregon, and Washington, 1998-2008. Mr. Cook managed 33 task orders under two consecutive as-needed contracts for SWDIV. These include 45 National Register eligibility evaluations of prehistoric and historic sites and preparation of GIS cultural resource database systems on MCB Camp Pendleton; historic building assessments on Naval Air Station North Island; archaeological monitoring at NWS Seal Beach; NAGPRA compliance for the Submarine Base on Point Loma; and archeological survey, excavation, GIS, and site signing on San Clemente Island. Oversaw the preparation of Integrated Cultural Resource Management Plans and Research Designs. Developed and implemented a unique and effective approach of geoarchaeological coring to identify deeply buried cultural deposits in alluvial contexts. Managed an extremely sensitive data recovery project, which dealt with NAGPRA issues. Managed the creation of a series of public outreach interpretive displays for MCB Camp Pendleton. Managed the design, implementation, and ongoing update to an easy to use, customized version of ArcView GIS based on Camp Pendleton's Archaeology GIS system. Client Reference: Danielle Page, Department of the Navy SWDIV, (619) 532-2090

As-Needed Cultural Resources Contract for the City of San Diego Metropolitan Wastewater Department, City of San Diego, San Diego County, California, 1997-present. Mr. Cook has managed and served as Principal Archaeologist under three multi-year contracts. Managed work in support of Metropolitan Wastewater Department (MWWD) compliance with City and County of San Diego regulations as well as state and federal Section 106 compliance in accordance with the Programmatic Agreement. Managed studies including intensive surveys of proposed disposal sites and major sewer pipelines through historic areas of the City, developed a method for pre-construction subsurface resource detection, and managed prehistoric site significance and eligibility evaluations. Managed the implementation of a geoarchaeological coring project for a potentially significant site identified by monitoring. Coordinated work between ASM personnel, subcontractors, and MWMD project managers. Currently managing work being subcontracted by ASM to another local environmental firm. Client Reference: Michael Elling, City of San Diego Metropolitan Wastewater Department, (858) 858-6477

Archaeological Surveys for Cellular Telephone Facilities in Moapa and Mesquite, Interconnect Towers, Inc., Moapa and Mesquite, Nevada, 2005-2006. As Contract Administrator, supervised all work conducted under a number of contracts to survey communications facilities located on BLM lands in the state of Nevada. Coordinated closely with ASM's client, BLM,

and a local ethnographer who conducted Native American consultation for one of the projects. Client Reference: Vince Cox, Interconnect Towers,

Clean Water Program (CWP) Background Study, City of San Diego Metropolitan Wastewater Department, San Diego County, California, 1997-2005. As Principal Investigator, managed the preparation of a comprehensive background study for all of western San Diego County south of the San Dieguito River and north of the International Border. Conducted as part a Programmatic Agreement, the Background Study consisted of an overview and synthesis of prehistory, ethnohistory, and history for the APE; identification of research data gaps; and development of research questions, data needs and test implications for potential future Section 106 compliance requirements with the CWP. The Background Study also included a review of previously recorded sites and literature reviews, sensitivity mapping for the APE and modeling for potentially buried cultural resources. Client Reference: Michael Elling, City of San Diego Metropolitan Wastewater Department, (858) 858-6477

Centre City Development Corporation On-Call Archaeologist, Centre City Development Corporation, San Diego, San Diego County, California, 1997-2005. Contract Manager for archaeological monitoring and consultation for various projects in downtown San Diego. Managed contract to prepare the San Diego Ballpark Environmental Impact Report and Mitigation Monitoring Plan. Client Reference: Lucy Contreras, Centre City Development Corporation, (619) 533-7132

Imperial Irrigation District On-Call Archaeological Services contract, Imperial Irrigation District, Imperial and Riverside counties, California, 1997-present. Mr. Cook has served as Senior Contract Manager for as-needed environmental services in Imperial and Riverside counties on an annual basis since 1997. Managed and coordinated studies including intensive surveys of electrical transmission corridors, National Register and California Environmental Quality Act (CEQA) significance evaluations of both historical and prehistoric resources, and testing and data recovery programs. Client Reference: Michel Remington, Imperial Irrigation District, (760) 482-9831

Camp Pendleton Archaeological GIS, Department of the Navy SWDIV, MCB Camp Pendleton, San Diego County, California, 1998-present. Mr. Cook managed the contract for the design of a Windows-based custom application of ArcView GIS. The design of the system was based on Camp Pendleton's Archaeology GIS system. Managed both archaeological and GIS personnel in system creation and upkeep. Client Reference: Stan Berryman, MCB Camp Pendleton, (760) 725-9738

Archaeological Studies at Carlsbad State Beach, California State Parks, Carlsbad, San Diego County, California, 2004. As Project Manager, oversaw archaeological investigations of a known prehistoric archeological site located within Carlsbad State Beach to determine the effects of installation of a sprinkler and drainage system. Administered contract, managed archaeological studies, and oversaw permitting by State Parks. Reviewed technical report and managed budget. Client Reference: Therese Muranaka, California State Parks,

Robertson Ranch Project, BRG Consulting, Carlsbad, San Diego County, California, 2004. As Project Manager, conducted third-party review of another contractor's technical archaeological study of for the proposed development of Robertson Ranch in Carlsbad. Reviewed site records and oversaw fieldwork. Commented on validity of original contractor's determination of potential site significance. Made recommendation for future studies of sites within the project area. Client Reference: Tim Gnibus, BRG Consulting, (619) 298-7127

Cultural Resources Inventory and Archaeological Monitoring for the Proposed Replacement of the Railroad Bridge over Agua Hedionda Lagoon, BRG Consulting, Carlsbad, San Diego County, California, 2004-2005. As Project Manager, directed records search and cultural resource inventory for the proposed replacement of Bridge 230.6 over Agua Hedionda Lagoon in Carlsbad. Made recommendations regarding two previously recorded sites identified within the proposed project Area of Potential Effects. Currently managing archaeological monitoring of ground disturbing activities at the sites. Client Reference: Bruce McIntyre, BRG Consulting, (619) 298-7127

Pankey Ranch Project, Pardee Homes, San Diego County, California, 2004-2005. Mr. Cook managed survey of 386 acres north of the San Luis Rey River, east of Interstate 15 in San Diego County for a proposed 62-acre residential development. Guided archival and field studies of the property as well as Native American consultation for the project. Managed manual excavation and the implementation of mechanical trenching to delineate the site limits. Coordinated all studies with ASM's client. Client Reference: Rikki Alberson, Pardee Homes, (760) 743-3156

Coso Junction Geothermal Waterline Cultural Resources Survey, Ultrasystems Environmental, Inyo County, California, 2004. Mr. Cook administered the contract for an 8-mile linear survey for the Coso Geothermal Waterline Project. The project is located between South Well, east of U.S. Highway 395 and north of Coso Junction on BLM land, to the 88-1 Injection Well on Naval Air Weapons Station (NAWS) China Lake, on BLM and NAWS properties. Oversaw background research, a Class I survey of the corridor, and records searches. Coordinated closely with the Bureau of Land Management, the Naval Air Weapons Station, and the Coso Operating Company LLC. Client Reference: Robert Motschall, Ultrasystems Environmental, (949) 788-4900

Castlerock Development Project, Pardee Homes, Santee, San Diego County, California, 2004. Mr. Cook managed survey and testing of three archaeological sites for a proposed residential development near MCAS Miramar in San Diego County. Testing entailed coordination with Explosive Ordinance Demolition contractor. Client Reference: Rikki Alberson, Pardee Homes, (760) 743-3156

On-Call Statewide Cultural Resource Services for Caltrans, all counties in California, 2004. Mr. Cook managed a subcontract to provide archaeological and historic preservation services to Caltrans throughout the state of California. Coordinated work between the prime contractor

and ASM personnel. Supervised the management of project work for Phase II investigations for the North Little Lake Rehabilitation Project, U.S. Highway 395, Inyo County. Client Reference: Dana McGowan, Jones and Stokes Associates, (916) 795-3095

Caltrans Central Region On-Call Joint Venture Contract, Caltrans Central Region, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, Tulare and Tuolome counties, California, 2003. Mr. Cook managed collaboration with the prime contractor to provide cultural resource services to Caltrans Central Region on an on-call basis. Managed administration of contract and conducted all coordination for the contract. Supervised the management of eight of the 11 task orders awarded in support of this contract. Projects involved two Phase I surveys, three extended Phase I projects, a Phase II research design, and a Phase II testing and evaluation. Client Reference: Sarah Gassner, Caltrans District 6, (559) 243-8243

Olancha-Cartago Four Lane Project, Caltrans District 6, U.S. Highway 395, Inyo County, California, 2004. Mr. Cook managed a large team of archaeologists researching prehistoric, ethnohistoric and historic use of this portion of Owens Valley. Managed collaboration between ASM and subcontractors conducting historic and ethnohistoric studies. Included managing two task orders on this contract and three task orders on the Central Region Joint Venture Contract which, in total, included 10 separate deliverables. Managed an ethnographic overview and historic Native American research, Native American consultation assistance, and a historic study report on 11 sites. Client Reference: Lynn Faraone, Caltrans District 6, (559) 243-8223

Data Recovery and Archaeological Monitoring for the Salt Creek Ranch Project, McMillin Companies, Chula Vista, San Diego County, California, 2003-2004. Mr. Cook managed Phase III data recovery of five archaeological sites and archaeological monitoring of more than 800 acres for a residential development project. Supervised the data recovery program and guided the monitoring phase. Monitoring identified one archaeological deposit. Managed testing of this deposit. Coordinated testing of deposit with archaeological monitoring personnel, the City of San Diego, and the Environmental Program Manager. Client Reference: Todd Galarneau, McMillin Companies, (619) 477-4117

Path 15 Los Banos to Gates Transmission Line Survey, Steigers Corporation for the Western Area Power Administration, Fresno and Merced counties, California, 2003. Mr. Cook managed a Class III survey of an 84-mile-long powerline corridor, 47.5 miles of existing access roads, and 68 miles of new access roads in central California. Oversaw background research, survey of the corridors, Native American consultation, records searches conducted at the Southern San Joaquin Valley Information Center and at the Central California Information Center, and archival research conducted at the Bureau of Reclamation Office in Sacramento. Guided permitting by the Bureau of Reclamation, Bureau of Land Management, and the California State Parks Department and obtained permission for access from private landholders. Consulted with Native American and Western Area Power Administration representatives to discuss and solve problems. Client Reference: Hal Copeland, Steigers Corporation, (303) 799-3633

Survey of the DARPA Grand Challenge Route, Booz Allen Hamilton, California and Nevada, 2003. Mr. Cook managed large-scale survey and records search of proposed routes for the Defense Advanced Research Project Agency's Grand Challenge Event for Autonomous Ground Vehicles between California and Nevada. Conducted survey and directed records searches and report preparation. Received letter of commendation from the Defense Advanced Research Projects Agency for work on the project. Client Reference: Peter Brandom, Booz Allen Hamilton and the Bureau of Land Management, (703) 816-5281

Survey of the San Diego Gas and Electric New Carmel Valley Substation Project, Sempra Energy Utilities, Carmel Valley, San Diego County, California, 2003. Mr. Cook managed a records search and survey of a small parcel of land proposed to be used as the site of a new power substation in Carmel Valley, central San Diego County. Client Reference: Dashiell Meeks, San Diego Gas and Electric, (858) 637-3711

Christmas Canyon Survey, Epsilon Systems Solutions, Naval Air Weapons Station China Lake, San Bernardino County, California, 2003. Mr. Cook managed and coordinated a 3,858-acre archaeological survey within the Christmas Canyon project area at the Naval Weapons Testing Station (NAWS) China Lake. Coordinated work between the prime contractor, Bureau of Land Management, and archaeological personnel. Oversaw the management of subsurface examination of four sites with potential subsurface components and made recommendations for NRHP eligibility. Client Reference: Mike Baskerville, NAWS China Lake, (760) 939-1350

South Bay Pump Station, City of San Diego Metropolitan Wastewater Department, San Diego County, California, 2003. Mr. Cook managed an intensive survey and a testing program in association with the South Bay Pump Station and Conveyance System project. Oversaw the identification and recording of six cultural resources occurring within the project APE including the ethnohistoric village of Millejo. Directed testing of prehistoric sites. Client Reference: Michael Elling, City of San Diego Metropolitan Wastewater Department, (858) 858-6477

Survey of the Proposed Gatchell Road Widening Project, City of San Diego Metropolitan Wastewater Department, San Diego County, California, 2003. Managed survey and attempted to relocate three shell midden sites located along Gatchell Road within the Cabrillo National Monument, Point Loma, San Diego County. Client Reference: Michael Elling, City of San Diego Metropolitan Wastewater Department, (858) 858-6477

San Clemente Island Site Signing Program, Department of the Navy SWDIV, San Clemente Island, California, 2002. Mr. Cook managed a contract for site relocation and the erection and maintenance of signs denoting the location of 700+ archaeological sites on San Clemente Island. Oversaw the work of the Principal Archaeologist and field archaeologists. Coordinated with the South Bay Area Focus Team to conduct the work. Client Reference: Dr. Andy Yatsko, Central Navy Region Southwest, (619) 524-6159

Extended Testing at SDI-811 and Tango Training Area, Department of the Navy SWDIV, MCB Camp Pendleton, San Diego County, California, 2002. Mr. Cook developed an innovative strategy of large-scale geological coring to delineate and refine the vertical and horizontal limits of prehistoric site SDI-811 in an attempt to determine whether additional previously undetected buried deposits existed within the site. Coordinated with geology subcontractor and with the base to implement this program. Client Reference: Danielle Page, Department of the Navy SWDIV, (619) 532-2090

Archaeological Monitoring and Data Recovery for the MILCON P529 Project, Department of the Navy SWDIV and U.S. Army Corps of Engineers, MCB Camp Pendleton, San Diego County, California, 2000-2002. Mr. Cook managed a contract on behalf of the MCB Camp Pendleton Base Archaeologist to complete the write-up of monitoring and data recovery investigations carried out at five prehistoric sites after a previous contract for the work was defaulted by the original contractor. Oversaw the work of the Principal Archaeologist and coordinated with the Base Archaeologist and SWDIV and Army Corps project managers. The project entailed reorganization and inventory of all material recovered from the MILCON P529 excavations; catalog revision and evaluation of previously recovered cultural material including the identification of items that fall under NAGPRA (possible grave goods and objects associated with funerary activities); and made recommendations for the conservation of human remains and subsequent reburial. Client Reference: Danielle Page, Department of the Navy SWDIV, (619) 532-2090 and Stan Berryman, MCB Camp Pendleton, (619) 725-9738.

City of Santee Proposed General Plan. City of Santee, San Diego County, California, 2002. Mr. Cook managed a contract for updating the City of Santee's proposed General Plan in 2002. He conducted analysis of the City's known cultural resources using site records from the South Coastal Information Center, information derived from previous archaeological studies prepared for the area, and examination of aerial photographs. Oversaw preparation of a sensitivity map based upon this information and provided impact analyses and mitigation recommendations. Impacts included land use, conservation, construction, recreation, open space, and circulation and the project area included the San Diego River and Sycamore Canyon. Client Reference, Todd Galarneau, City of Santee, (619) 477-4117

South Bay Area Focus Team On-Call Contract, Central Navy Region Southwest, San Clemente Island, California, 1998-2001. Mr. Cook managed a three-year Cultural Resources Management Indefinite Quantity contract to conduct archaeological surveys, site record evaluations, and data recovery programs on San Clemente Island (SCLI), California. During this time, over 1,200 acres were re-surveyed and 78 sites were documented. Client Reference: Dr. Andy Yatsko, Central Navy Region Southwest, (619) 524-6159

Open-End Military Projects Contracts, U.S. Army Corps of Engineers, southern California, Arizona and Nevada, 1986-2001. As Senior Contract Manager and Principal-In-Charge, Mr. Cook managed 10 consecutive multi-year, open-ended contracts for the U.S. Army Corps of Engineers (ACOE). He directed more than 114 individual delivery orders totaling in excess of 22.6 million dollars. Oversaw the work for surveys, NRHP eligibility evaluations, preservation

plans, GIS and GPS studies, exhibit preparation, construction monitoring, and historic archival and archaeological studies in southern California and Arizona. Coordinated and supervised several large crews, research staff, and subcontractors for multiple, simultaneous delivery orders. Client Reference: Stephen Dibble, U.S. Army Corps of Engineers, Los Angeles District, (213) 452-3849

AT&T/PF.Net Fiber Optics Conduit, Foster Wheeler Environmental, San Diego, Imperial, Riverside, Orange and Los Angeles counties, California, 2000-2001. Mr. Cook managed the contract for a Phase I study consisting of record searches, surveys, site condition assessment, and site recording and updating with high precision GPS equipment, resulting in the identification of 265 cultural resources for the proposed AT&T/PF.Net Fiber Optics Conduit running lines in San Diego, Riverside, Imperial, Orange and Los Angeles counties. Provided oversight for GIS data collection for the project. Managed consecutive contract for archaeological monitoring of a 10-mile segment of the alignment on MCB Camp Pendleton. Conducted multiple agency coordination and acquired permitting from different landholding agencies including Navy, BLM, Forest Service, private property and AT&T/PF.Net Fiber Optics managers. Client Reference: Penny Eckert, Foster Wheeler Environmental, (425) 482-7847

Viejas Fee-To-Trust Transfer Application, BRG Consulting, Viejas Indian Reservation, San Diego County, California, 2001. Mr. Cook managed a review of relevant site records on file with the South Coastal Information Center and the San Diego Museum of Man followed by an intensive pedestrian survey of 314.29 acres covering four parcels of land on the Reservation. Guided the relocation of two previously recorded resources, and recording of seven newly identified resources and one isolate. Client Reference: Erich Lathers, BRG Consulting, (619) 298-7127

Amtrak O'Neil to Las Flores Survey, BRG Consulting, MCB Camp Pendleton, San Diego County, California, 2001-present. Mr. Cook managed archaeological survey of a 2.1-mile corridor along the existing Atchison, Topeka and Santa Fe railroad alignment through MCB Camp Pendleton. The field survey resulted in the recording of four newly identified historic resources and relocated four previously recorded archaeological sites. Client Reference: Erich Lathers, BRG Consulting, (619) 298-7127

Amtrak Second Main Line - San Onofre Segment, BRG Consulting, MCB Camp Pendleton, San Diego County, California, 2001-2003. Mr. Cook managed survey of the Amtrak right-of-way on MCB Camp Pendleton near San Onofre. Client Reference: Erich Lathers, BRG Consulting, (619) 298-7127

Salvation Army Test, BRG Consulting, San Diego County, California, 2001. Mr. Cook managed archaeological testing at four sites within the Salvation Army Sierra Del Mar Divisional Camp located in central San Diego County. Also made mitigation recommendations for one of the sites. Client Reference: Sean Cardenas, BRG Consulting, (619) 298-7127

Del Mar Bluffs Stabilization Project, North County Transit District, San Diego County, California, 2001. As Principal Investigator, Mr. Cook directed a study performed to determine the presence or absence of potentially significant prehistoric and historic resources within the project boundaries. Managed a review of all site records and reports on file with the Museum of Man and the South Coastal Information Center at San Diego State University and an intensive pedestrian survey of the entire project area of potential effect (APE). Client Reference: Betty DeHoney, Project Design Consultants, (858) 454-2313

Bureau of Land Management GIS, USDI Bureau of Land Management, California, 2001. As Principal Investigator, directed a GIS inventory of all BLM lands in the state of California for cultural resources. The goal of the project was to determine the number of cultural resources on BLM lands, how many had been placed in GIS, and how many site records have been indexed and scanned. Client Reference: Russell Kaldenberg, formerly with USDI Bureau of Land Management, (760) 939-1350

Leucadia County Water District Reclaimed Water Program, Dudek and Associates under contract to the Leucadia County Water District, Leucadia, San Diego County, California, 1999-2000. Mr. Cook managed a cultural resource inventory for the area to be affected by proposed expansion of Leucadia County Water District's reclaimed water supply system. Oversaw archaeological work including a review of records searches and reconnaissance of the project area, as well as solicitation of Native American input regarding potential Indian Trust Assets and other concerns. Client Reference: Rica Nitka, Dudek and Associates, (760) 942-5147

Gregory Canyon Landfill, David Evans and Associates, San Diego County, California, 1998. Mr. Cook managed an archaeological study for an environmental impact analysis conducted prior to construction activities associated with development of the proposed Gregory Canyon Landfill. Managed field examination, recordation and/or subsurface testing in anticipation of development of the proposed project of 12 archaeological sites and two historic locales. Client Reference: Lucy Hise, David Evans and Associates, (714) 588-5050

Data Recovery at CA-SDI-10027, CalMat Corporation, San Diego County, California, 1996-1997. Mr. Cook managed data recovery excavations conducted at CA-SDI-10027 simultaneously with significance evaluations at six nearby sites to provide compliance with CEQA guidelines. Guided monitored mechanical trenching to provide extensive areal coverage of CA-SDI-10027 and to locate and define subsurface deposits, which were further explored through the use of manual excavation units. Implemented replicative systems analysis to characterize the quarrying and lithic reduction activities that occurred at this site, pioneering the use of this analytical method in San Diego County. Client Reference: Steve Cortner, CalMat Corporation, (909) 875-1150

Highway 78 Realignment Project, Caltrans District 11, Imperial County, California, 1996. Mr. Cook managed survey, evaluation and data recovery projects on 20 sections of Bureau of Land Management land east of Glamis, California. Cultural resources ranged from prehistoric lithic

procurement sites to historic mining and World War II training camps. Client Reference: Chris White, Caltrans District 11, (619) 688-0184

State Route 125 Cultural Resource Studies, California Transportation Ventures, Chula Vista, San Diego County, California, 1994. Mr. Cook managed a contract with California Transportation Ventures to conduct 33 separate cultural resource studies of various scopes for CEQA and Section 106 compliance for proposed State Route 125. Studies included Phase II NRHP eligibility evaluations, Historic Study Reports and Historic Architectural Survey Reports. All of these studies were conducted within an eight-month period ending September 1994. Client Reference: Kent Olsen, California Transportation Ventures, (619) 338-8385

Rancho Cielo Archaeological Investigation, Rancho Cielo Associates, San Diego County, California, 1985. Mr. Cook managed a data recovery program at 13 Paleoindian workshops and quarries. Conducted lithic analysis on artifact collections resulting in the identification of technological traits unique to the San Dieguito. Authored technical report. Client Reference: Russ Hunt, Rancho Cielo Associates, (619) 578-8964

Evaluation of Six Prehistoric Sites in Ames Valley, U.S. Forest Service, Cleveland National Forest, San Diego County, California, 1995. As Project Manager, Mr. Cook supervised survey and testing at six archaeological sites located west of Kitchen Creek in the Laguna Mountains. Project included GPS mapping, site documentation, excavation, Native American consultation, evaluation of historic resources, extensive artifact curation, and the preparation of treatment recommendations. Client Reference: Cari VerPlank, Cleveland National Forest, (858) 673-6180

Cultural Resource Survey and Evaluation of the Proposed Mount Laguna Federal Prison Camp, U.S. Bureau of Prisons, Cleveland National Forest, San Diego County, California, 1983. As Project Manager, Mr. Cook supervised a cultural resource inventory and evaluation on 140 acres of land within CNF. Managed an intensive archaeological survey of the property, a search of records on file with CNF, and historical, architectural, and Native American heritage studies.

Cultural Resource Survey of the Laguna Mountain Recreation Area, U.S. Forest Service, Cleveland National Forest, San Diego County, California, 1981. As Project Manager, Mr. Cook managed an intensive cultural resource survey of 7,921 acres of the Laguna Mountain Recreation Area (LMRA). Directed the identification and evaluation of cultural resources, extensive Native American consultation, examination of previous archaeological research within the LMRA, and preparation of an historic overview for the area. Client Reference: Cari VerPlank, Cleveland National Forest, (858) 673-6180

Publications:

Technical Reports:

Cook, John R.

2000 *Cultural Resources Inventory and Assessment of the Level 3 Communications Fiber Optics Network Project, San Diego Local Loops and Phoenix Long Haul Components, San Diego County, California.*

1996 *Archaeological Survey of the Proposed Sweetwater River Demineralization Project, San Diego County, California*. Submitted to the Sweetwater Authority.

1987 *A Cultural Resource Inventory of the Proposed Highway 78 Realignment, Imperial County, California.*

1983 *Cultural Resource Survey and Evaluation of the Proposed Mt. Laguna Federal Prison Camp, San Diego County, California.* Submitted to the US Forest Service.

(with Scott Fulmer)

1981 *Archaeology of the McCain Valley Study Area in Eastern San Diego County, California, A Scientific Class II Cultural Resource Inventory*.

(with Dennis Gallegos and E. L. Davis)

1980 *Cultural Resource Inventory of Central Mojave and Colorado Desert Regions*. Bureau of Land Management Publication. Submitted to the Bureau of Land Management.

(with Deborah Huntley and Sherri Andrews)

2000 *A Cultural Resources Inventory of the Proposed AT&T/PF. Net Fiber Optics Conduit, Ocotillo to San Diego, California.* Submitted to Foster Wheeler Environmental Corp.

(with Deborah Huntley and Ken Victorino)

2000 *A Cultural Resources Inventory of the Proposed PF. Net/AT&T Fiber Optics Conduit San Diego to Oceanside.* Submitted to Foster Wheeler Environmental Corp.

(with Jerry Schaefer)

1988 *Results of Three Surveys on the Yuma Proving Ground: Red Bluff, OBOD, and Direct Fire Weapons Range, Arizona*. Submitted to U.S. Army Corps of Engineers.

(with Jerry Schaefer, Drew Pallette, and Carol Serr)

1995 *Cultural Resource Significance and National Register Eligibility Evaluation Program or the Proposed Olivenhain Water Storage Project, San Diego County, California*. Submitted to the Olivenhain Municipal Water District.

(with Jerry Schaefer, Drew Pallette, and Carol Serr)

1995 *Significance Evaluation of the Cultural Resources within the Proposed Gregory Canyon Landfill Project, San Diego County, California.*

(with Jackson Underwood)
1987 *Cultural Resource Inventory of the Proposed VCR Mining Project, Imperial County, California*.

Presentations: N/A

Independent Research: N/A

Teaching Experience: N/A

Laboratory Experience: N/A

Other: N/A

Micah J. Hale, M.A., Ph.D. Candidate
Principal

Total Years of Experience: 15

Employment History:

2008-Present	Principal, ASM Affiliates, Inc., Carlsbad, California
2001-2008	Senior Archaeologist, ASM Affiliates, Inc., Carlsbad, California
2000-2001	Archaeologist, Jones and Stokes, Inc., Sacramento, California
1996-2000	Archaeologist, Sacramento Archaeological Research Center, Sacramento, California

Education:

Ph.D.	In Progress/Anthropology/University of California, Davis
M.A.	2001/Anthropology/California State University, Sacramento
B.S.	1996/Anthropology/University of California, Davis

Additional Training:

2004	Ground Penetrating Radar Field Methods and Interpretation Certificate
2002	GPS Field Methods Training, ASC Scientific

Registrations:

2001	Register of Professional Archaeologists

Professional Memberships:

1997	Society of American Archaeology/member
1997	Society for California Archaeology/member
2005	Antelope Valley Archaeological Society
2004	San Diego Archaeological Society

Other Capabilities:

Public Outreach, Ground Stone Analyst, Flaked Stone Analyst, Invertebrate Analyst, Flotation, Field data collection using laser and optical transits and real-time correction Trimble GPS units, Microsoft Word, Excel, Access, Power Point, Word Perfect, Linux operating systems including Ubuntu

Awards/Commendations:

2008	US Air Force, Vandenberg AFB, Radiocarbon Grant,	$25,000
2008	Fieldwork Fellowship, Graduate Studies, UC Davis,	$2,010
2007	Fieldwork Fellowship, Graduate Studies, UC Davis,	$1,800
2006	Fieldwork Fellowship, Graduate Studies, UC Davis,	$5,650
2005-2009	Graduate Fee Fellowship/Stipend, UC Davis,	$74,500

Clearances: Active DoD high security clearance for SPAWAR, Naval Base Point Loma, NALF San Clemente Island, Vandenberg Air Force Base, and MCB Camp Pendleton

Citizenship: USA

Languages: Spanish reading fluency (speak partially)

References:

Dr. Robert Bettinger, Professor, University of California Davis

Dr. Mark Basgall, Director/Professor, Sacramento Archaeological Research Center, California State University, Sacramento

Professional Profile:

Micah Hale earned his M.A. in archaeology from California State University, Sacramento in 2001 and is completing a Ph.D. in Anthropology from U.C. Davis (expected degree date October 2009). He has been listed on the Register of Professional Archaeologists since 2001. Mr. Hale has experience as a field director, ground stone analyst, flaked stone analyst, invertebrate analyst, and author. He has served as a Principal Investigator and an Associate Archaeologist, a Public Outreach Coordinator, and Adjunct Instructor (UC Davis). He currently functions as a Project Archaeologist in the oversight of fieldwork, ground stone analysis, and report authorship.

Mr. Hale has experience conducting both academic and professional research in archaeology at the supervisory level in California, Arizona, Nevada, and Oregon, including work for Department of the Navy, Caltrans, Western Area Power Administration, California State Parks, various city and county agencies, and directly for Native American groups. Since joining ASM Affiliates in 2001 as an Associate Archaeologist, Mr. Hale has supervised numerous large-scale surveys, test excavations, and data recovery programs and has authored research designs, proposals, preliminary and final reports, and ground stone analyses. Mr. Hale has integrated his personal research interests into ASM projects and participated in professional symposiums at the Society for American Archaeology and the Society for California Archaeology. Additionally, he has conducted academic research in the Polar Arctic, Greenland. His research interests include coastal southern California, cultural evolution, human ecology, hunter-gatherers, and public outreach.

Project Experience:

Phase III Data Recovery Excavations at the Ridge Hill Facilities Site, SDI-18472, Lakeside, San Diego County, California, 2008. As Principal Investigator, supervised Native American coordination and data recovery of a Late Prehistoric site. Client Reference: Albert Lau, Padre Dam Municipal Water District, (619)-778-6274.

Coso Rock Art District National Landmark Management Plan, Inyo County, California, 2009. As Principal Investigator, supervised the development of a management plan for the regulation of the Coso Rock Art District National Landmark, China Lake Naval Weapons Station, Ridgecrest, California. Client Reference, Mike Baskerville, Base Historic Preservation Officer, China Lake NWPSSTN, (760) 939-1350.

Limited Data Recovery Excavations at University House, W-20, UCSD, La Jolla, California, 2009. As Principal Investigator, supervised data recover excavations at a 10,000-year-old burial site in support of house stabilization. Client Reference: Cathy Presmyk, Environmental Planner, University of California, San Diego, (858) 534-3860.

Phase I Survey of 450 Acres for the Torrey Pines City Park General Development Plan, San Diego County, California, 2009. As Principal Investigator, supervised the survey of 450 acres. Client Reference: Laura Burnett, WRT Associates, (619) 696-9303.

Phase II Evaluation of SDI-18619, for the NOAA Fisheries-Southwest Science Center Building Relocation, San Diego County, California, 2009. As Principal Investigator, supervised test excavations in support of CEQA. Client Reference, Cathy Presmyk, Environmental Planner, University of California, San Diego, (858) 534-3860.

Phase I Survey of 4,500 Acres on Marine Corps Air Ground Combat Center, 29 Palms, California, 2008. As Principal Investigator, supervised survey of 4,500 acres in six survey units. Client Reference: John Hale, Archeologist, Natural Resources and Environmental Affairs Marine Corps Air Ground Combat Center Twentynine Palms, (760) 830-7641.

Phase I Survey of 6,200 Acres in Johnson Valley for the Proposed Western Expansion Project, Marine Corps Air Ground Combat Center, 29 Palms, California, 2008. As Principal Investigator, supervised survey of 6,200 acres on 29 Palms MCAGCC. Client Reference: John Hale, Archeologist, Natural Resources and Environmental Affairs Marine Corps Air Ground Combat Center Twentynine Palms, (760) 830-7641.

Phase I Survey of 8,100 Acres on Edwards Air Force Base, U.S. Army Corps of Engineers, Kern County, California, 2008. As Principal Investigator, supervised survey of 8,100 acres on EAFB. Client Reference: Stephen Dibble, U.S. Army Corps of Engineers, (213) 452-3849

Phase I and II Survey of 2,500 Acres and Evaluation of 50 Sites on Edwards Air Force Base, U.S. Army Corps of Engineers California, 2008. As Principal Investigator, supervised survey of 2,500 acres and evaluation of 50 sites on EAFB. Client Reference: Stephen Dibble, U.S. Army Corps of Engineers, (213) 452-3849

Phase II Archaeological Test Excavations at Selected Sites on Vandenberg Air Force Base, University of California, Davis, Lompoc, California, 2008. As Principal Investigator and Field Director, supervised and instructed 21 students for the 2008 UC Davis Field School.

Archaeological Survey and Excavations in the Polar Arctic, University of California Davis, Northwest Greenland, 2006. As a Researcher, conducted project for National Science Foundation, National Geographic, and the Inglefieldland Polar Archaeology Expedition; UC Davis.

Archaeological Survey of the Silver Lake Recreation Area, El Dorado Irrigation District, El Dorado County, California, 2006. As Principal Investigator and Field Director, supervised an archaeological survey of the Silver Lake Recreation area. Client Reference: Trish Fernandez, El Dorado Irrigation District, (530) 622-4534

Archaeological Survey of the Paramount Mine Exploratory Drilling Project, Essex Environmental, Nevada, 2006. As Principal Investigator and Field Director, conducted archaeological survey for mining exploration. Prepared technical report. Client Reference: Essex Environmental,

Archaeological Data Recovery Excavations at Border Fields State Park, California State Parks, Imperial Beach, California, 2005. As Field Director, supervised excavation of prehistoric sites located within the APE of a fence along the US-Mexico Border in San Diego County. Prepared technical report. Client Reference: Therese Muranaka, California State Parks, (619) 778-2553

Archaeological Testing and Ground Penetrating Radar Study of the Forester Creek Biological Mitigation Area, Caltrans District 11, Santee, San Diego County, California, 2005. As Principal Investigator and Field Director, supervised archaeological testing of a private parcel. Prepared technical report. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

Archaeological Salvage Excavations of Two Ollas in Hellhole Canyon, Bureau of Land Management, San Diego County, California, 2005. As Principal Investigator, relocated a cache of prehistoric ceramic artifacts uncovered during wildfires in San Diego County. Documented cache and collected artifacts for subsequent reconstruction in the ASM laboratory. Prepared technical report detailing project. Client Reference: Rolla Queen, Bureau of Land Management, (951) 697-5386

Archaeological Data Recovery Excavations at CA-SDI-16691, Jackson Pendo Development Company, Escondido, San Diego County, California, DATE. As Principal Investigator, supervised data recovery excavation at a Late Prehistoric site in Escondido, California. Client Reference: Jackson-Pendo Development Company, (619) 267-4904

Archaeological Evaluation of Eight Prehistoric Sites in the Emerson and Quackenbush Training Areas, U.S. Army Corps of Engineers, MCAGCC Twentynine Palms, San Bernardino County, California, 2005. As Field Director, supervised excavation of eight prehistoric sites on the Marine Corps base in 29 Palms, California. Client Reference: Stephen Dibble, U.S. Army Corps of Engineers, (213) 452-3849

Archaeological Evaluation of 22 Sites on Edwards Air Force Base, U.S Army Corps of Engineers, San Bernardino County, California, 2005. As Field Director, supervised the National Register evaluation of 22 sites at Edwards Air Force Base. Client Reference: Stephen Dibble, U.S. Army Corps of Engineers, (213) 452-3849

Phase I Inventory of 1,544 Acres and Phase II Evaluation of Archaeological Sites along the Western and Northwestern Boundaries, Edwards Air Force Base, Kern County, California, 2005. As Field Director, supervised a Phase I inventory of 1,544 acres. Recorded 30 new archaeological sites, more than a dozen "submodern" refuse dumps, and a variety of isolate finds. Notable sites include several early Holocene lithic scatters (Lake Mojave-, Silver Lake- and Pinto-age deposits), a rhyolite lithic quarry, and a complex of historic dumps associated with homesteading activities around Lone Butte. Client Reference: Richard Norwood, Edwards Air Force Base, (661) 277-7077

Pankey Ranch Testing, Pardee Homes, northern San Diego County, California, 2004. As Field Director, supervised excavation of shovel test pits to delineate the boundaries of site CA-SDI-682, the prehistoric village of Tomkav. Managed field personnel, conducted excavation, and wrote portions of technical report. Client Reference: Rikki Schroeder, Pardee Homes, (760) 743-3156

Jamul Substation 6, San Diego Gas & Electric Company, Jamul, San Diego County, California, 2004. As Field Director, conducted intensive pedestrian survey of 18 acres in Jamul for a proposed substation construction project. Identified and recorded two archaeological sites within the project area. Prepared technical report. Coordinated with paleontology subcontractor and incorporated paleontology report into ASM's archaeology technical report. Client Reference: Dashiell Meeks, San Diego Gas & Electric Company, (858) 637-3711

Naval Base Point Loma Site Recordation, Department of the Navy, Point Loma, San Diego County, California, 2004. As Principal Investigator and Field Director, supervised relocation of 33 sites located on Naval Base Point Loma. Reviewed site documentation and re-recorded sites that were improperly documented by past surveys. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Bridge 230.6 Replacement, North County Transit District, Agua Hedionda, Carlsbad, San Diego County, California, 2004. As Principal Investigator and Field Director, managed an archaeological survey of an APE associated with the replacement of and historic railroad bridge. Recorded archaeological sites within APE and prepared portions of technical report. Client Reference: Erich Lathers, BRG Consulting, Inc., (619) 298-7127

El Cuervo Wetlands Mitigation, City of San Diego Land Development Review Department and Mitigation Monitoring Coordination, Carmel Valley, San Diego County, California, 2004. As co-Principal Investigator, supervised an archaeological monitoring project in central San Diego County, conducted test excavation of one site identified during monitoring. The site was

evaluated as not significant. Prepared portions of technical report and supervised on-site monitor. Client Reference: Brad Johnson, City of San Diego Land Development Review Department, (619) 533-3770

Oceanside Hilton EIR, Dudek Associates, Oceanside, San Diego County, California, 2004. As Principal Investigator and Field Director, conducted survey of the proposed Hilton Hotel at the eastern end of Buena Vista Lagoon in Carlsbad, conducted survey and prepared portions of technical report for an Environmental Impact Report. Client Reference: Rika Nitka, Dudek Associates, (760) 942-7147

San Clemente Canyon Survey, City of San Diego Metropolitan Wastewater Department, San Diego, California, 2004. As Principal Investigator and Field Director, supervised and conducted an intensive pedestrian survey of proposed access road maintenance for the San Clemente Canyon sewer line. Two cultural resources were identified. Conducted site documentation, prepared sites forms and technical report. Managed survey crew member. Client Reference: Stephanie Lohstroh, City of San Diego Metropolitan Wastewater Department, (858) 292-6409

Archaeological Testing of 23 Sites in the Las Pulgas Corridor, Department of the Navy, MCB Camp Pendleton, San Diego County, California, 2004. As Field Director, supervised field crews for Phase II testing and mechanical coring of 23 sites on Camp Pendleton. Coordinated with coring contractor and base personnel. Documented sites in the field. Supervised field crews and prepared portions of technical report. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Archaeological Survey of the La Mesa Meadows Residential Development Project, Helix Environmental, San Diego County, California, 2005. As Principal Investigator, conducted survey of a proposed residential development in San Diego County. Client Reference: Tom Huffman, Helix Environmental, (619) 298-1515

Data Recovery of Locus O, Star Canyon Development, Agua Caliente Band of Cahuilla Indians, Palm Springs, Riverside County, California, 2004. As Field Director, supervised field crews for data recovery mitigation of an archaeological deposit and human remains near Tahquitz Canyon. Coordinated with Native American representatives and prepared portions of technical report. Client Reference: Dr. Joe Nixon, Agua Caliente Band of Cahuilla Indians, (760) 883-1313

Rose-Arizone, Clay, and Photo Drainage, and Road Improvement Surveys, Department of the Navy, NALF San Clemente Island, Los Angeles County, California, 2004. As Field Director, supervised archaeological surveys and the placement of protective signing on 750 sites. Coordinated access to the island and supervised one crew member. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Remote Sensing, Department of the Navy, NALF San Clemente Island, Los Angeles County, California, 2004. As GPS Specialist, conducted data collection and image rectification for a remote sensing project in the detection of archaeological sites on the base. Supervised one crew member. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Little Lake Phase II Testing, Caltrans District 5, Little Lake, Inyo County, California, 2004. As Field Director, supervised Phase II testing of four sites including the ethnohistoric village of *Pagunda* near the town of Little Lake. Supervised field crews, coordinated fieldwork with Caltrans and subcontractors, and prepared portions of technical report. Client Reference: Chris Ryan, Caltrans District 5, (805) 549-3628

Path 15 Transmission Line Corridor, Steigers Corporation, San Joaquin Valley, Fresno and Merced counties, California, 2004. As Field Director, supervised survey of over 87 miles of 400-foot transmission line corridor and over 46 miles of access roads in Merced and Fresno counties. Supervised field crew, documented sites, coordinated with Native American representatives, coordinated access to survey areas, and prepared portions of technical report. Client Reference: Hal Copeland, Steigers Corporation, (303) 799-3633

Linda Vista Survey, City of San Marcos, San Diego County, California, 2003. As Field Director, conducted a Phase I cultural resource inventory of proposed road realignment in San Marcos. Prepared technical reports and made recommendations for additional work to be done within the project area. Client Reference: Susan Vandrew-Rodriguez, City of San Marcos Planning Department, (760) 744-1050 x 3237

Carmel Valley Substation Survey, San Diego Gas & Electric Company, Carmel Valley, San Diego County, California, 2003. As Field Director, conducted a Phase I cultural resource inventory of a proposed power substation. Client Reference: Dashiell Meeks, San Diego Gas & Electric Company, (858) 637-3711

Lake Murray Survey, City of San Diego Metropolitan Wastewater Department, La Mesa, San Diego County, California, 2003. As Field Director, conducted survey of proposed trunk sewer replacement in La Mesa. Prepared portions of technical report. Client Reference: Stephanie Lohstroh, City of San Diego Metropolitan Wastewater Department, (858) 292-6409

Extended Phase I Testing, Caltrans District 5, Little Lake, Inyo County, California, 2003. As Field Director, supervised fieldwork for extended Phase I testing of one prehistoric site along U.S. Highway 395 in Inyo County. Prepared portions of technical report. Client Reference: Chris Ryan, Caltrans District 5, (805) 549-3628

Imperial Irrigation District's Phase II Testing, Imperial Irrigation District, Imperial County, California, 2003. As Field Director, supervised Phase II testing of eight sites in the Colorado Desert. Managed field crews, conducted test excavations, prepared site documentation and

portions of technical report. Client Reference: Michel Remington, Imperial Irrigation District, (760) 482-9831

Mitigative Screening, Agua Caliente Band of Cahuilla Indians, Palm Springs, Riverside County, California, 2003. As Field Director, supervised archaeological mitigation of an impacted burial site on the Agua Caliente Reservation. Prepared mapping of the project, coordinated field efforts with Tribal representatives, oversaw monitoring of the project, and prepared portions of the technical report. Client Reference: Dr. Joe Nixon, Agua Caliente Band of Cahuilla Indians, (760) 883-1313

Cartago and Olancha Four-Lane Project, Caltrans District 5, Inyo County, California, 2002. As Field Director, supervised test excavations of 15 sites for the proposed widening of U.S. Highway 395 near Cartago and Olancha. Supervised all fieldwork and managed a team of 12 field archaeologists. Coordinated selected specialized studies, conducted ground stone analysis, and prepared large portions of the resulting 800+-page report. Client Reference: Chris Ryan, Caltrans District 5, (805) 549-3628

MCB Camp Pendleton Burn Survey, Department of the Navy, MCB Camp Pendleton, San Diego County, California, 2002. As Field Director, supervised an archaeological survey of 1,500 acres in the De Luz and Case Springs areas of Camp Pendleton. Managed field crews, documented archaeological sites, prepared site forms and portions of technical report. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Yuma Stormwater Basin, Department of the Navy, MCAS Yuma, Yuma County, Arizona, 2002. As Field Director, supervised survey of stormwater basin along the Marine Corps airfield at MCAS Yuma. Managed field crew and prepared technical report. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Archaeological Coring of SDI-811, Department of the Navy, MCB Camp Pendleton, San Diego County, California, 2002. As Field Director, supervised first phase of a geologic coring project for a shell midden site along the coast of MCB Camp Pendleton, San Diego County. Coordinated with coring contractor and base personnel. Managed field monitors and field crew. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Amtrak Second Mainline Right-of-Way, North County Transportation District, Oceanside, San Diego County, California, 2002. As Co-Field Director, managed an archaeological survey of 6.2 miles of North County Transportation District railroad right-of-way near San Onofre, California. Client Reference: Erich Lathers, BRG Consulting, (619) 298-7127

Carmel Valley Archaeological Monitoring, City of San Diego Metropolitan Wastewater Department, Carmel Valley, San Diego County, California, 2002. As Field Monitor for pre-trenching for placement of sewer line, conducted monitoring and wrote portions of technical report. Client Reference: Michael Elling, MWWD, (858) 292-6477

State Route 905 Survey, Caltrans District 11, San Diego County, California, 2002. As Co-Field Director, conducted survey and recording of sites along the State Route 905 right-of-way in southern San Diego County. Documented three prehistoric sites within the proposed right-of-way. Created site maps and prepared site forms. Client Reference: Chris White, Caltrans District 11, (619) 688-0184

Milk Vetch Emergency, Imperial Irrigation District, Imperial County, California, 2002. As archaeological monitor, conducted emergency monitoring along transmission line corridor in Imperial County. Coordinated with IID and construction personnel. Prepared technical report. Client Reference: Michael Remington, Imperial Irrigation District, (760) 482-9831

Archaeological Testing and Survey of the Lemon Tank Area, Department of the Navy, NALF San Clemente Island, Los Angeles County, California, 2002. Conducted excavations, survey, and site recording. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Archaeological Monitoring for Williams Communications Fiber Optic Line, Jones and Stokes Associates, San Luis Obispo and Bakersfield, Kern and San Luis Obispo counties, California, 2001. As Resource Monitor/Native American Coordinator, conducted archaeological monitoring for a fiber optic cable installation project that spanned 180 miles from San Luis Obispo to Bakersfield. Identified and protected archaeological resources in the project area in compliance with state and federal regulations. Managed Native American monitors and coordinated daily work with construction and environmental staff to facilitate project completion. Client Reference: Dana McGowan, Jones and Stokes Associates, (916) 739-3095

Evaluation of Four Prehistoric Sites, Jones and Stokes Associates, Camp Roberts National Guard, San Luis Obispo County, California, 1998. As Field Technician, conducted excavation in order to determine the boundaries of the site for further mitigation. Client Reference: Dana McGowan, Jones and Stokes Associates, (916) 739-3095

AT&T Cable Removal Project, Jones and Stokes Associates, Taft to Los Angeles, Kern and Los Angeles counties, California, 1998. As Field Archaeologist, conducted survey in order to determine archaeological impact by the removal of a lead-lined subsurface cable. Client Reference: Dana McGowan, Jones and Stokes Associates, (916) 739-3095

Evaluation of 11 Sites along U.S. 395, Caltrans District 5, Blackrock, Inyo County, California, 2000. As Crew Chief, managed 6-18 personnel, prepared paperwork and report. Made decisions surrounding site excavations in Owens Valley. Project included Phase II test excavation of numerous sites ranging in age from early to late Holocene. Client Reference: Mark Basgall, Sacramento Archaeological Research Center, (916) 278-5330

Evaluation of Nine Prehistoric Sites, Edwards Air Force Base, San Bernardino County, California, 1999. As Field Archaeologist, evaluated nine sites through excavation to determine

overall sensitivity and value of the archaeological remains that characterize the region. Client Reference: Mark Basgall, Sacramento Archaeological Research Center, (916) 278-5330

Burial Salvage Excavations at the Carp Site, CA-MER-295, California Department of Parks and Recreation, Los Banos, Merced County, California, 1999. As Field Supervisor, directed excavations at CA-MER-295 in the central San Joaquin Valley in order to salvage cultural remains (including burials) from further destruction by the San Joaquin River. Client Reference: Mark Basgall, Sacramento Archaeological Research Center, (916) 278-5330

Phase I Survey, Caltrans District 10, Stockton, San Joaquin County, California, 1997. As Field Archaeologist, conducted various survey and excavation projects for Caltrans throughout central California. Conducted survey and excavation, operated as a graduate student assistant to the District 10 archaeologist dealing with compliance issues, prepared site mapping and technical reports including Archaeological Survey Reports (ASR), Historic Properties Survey Reports (HPSR), and Negative Declarations. Client Reference: Mark Basgall, Sacramento Archaeological Research Center, (916) 278-5330

Phase I Survey/TEA, Caltrans, Inyo and Mono counties, California, 1996-1997. As Field Archaeologist, conducted survey of most major highways in Mono and Inyo counties, California. Documented the distribution of all cultural material within the Caltrans right-of-way in order to determine impacts by road widening. Client Reference: Mark Basgall, Sacramento Archaeological Research Center, (916) 278-5330

Archaeological Survey and Excavation, U.S. Army Corps of Engineers, MCAGCC, Twentynine Palms Marine Corps Base, San Bernardino County, California, 1998. As Field Archaeologist, participated in nine field rotations averaging 10 days each. Conducted survey of portions of the Marine Corps base to determine the distribution of cultural materials, and subsequently excavate sites based on priority. This area is characterized as high desert with the typically associated flora and fauna and archaeological sites that range in age from Early to Late Holocene. Client Reference: Mark Basgall, Sacramento Archaeological Research Center, (916) 278-5330

Subsurface survey of a proposed bicycle path along the Columbia River Slough in Northwest Portland, City of Portland, Multnomah County, Oregon, 2000. As Field Archaeologist, conducted auger testing in a variable north to south transect at 30-m intervals, and unit mapping.

Phase II Test Excavations, AT&T, Portland, Multnomah County, Oregon, and Vancouver, Clark County, Washington, 1999. This project determined the presence and condition of any cultural resources in the project areas, which were situated on the northern and southern sides of the Columbia River in Washington and Oregon.

Technical Reports:

Hale, Micah J.

in prep. *Preserving Cultural Heritage Through Public Outreach: A Curriculum for Jr. High and High School*.

2009 *Phase I and II Survey of 2,500 Acres and Evaluation of 51 Sites in the Bissell Hills and Paiute Ponds Training Areas, Edwards Air Force Base, Kern and Los Angeles Counties, California*. Prepared for Army Corps of Engineers.

2009 *Limited Data Recovery Excavations In Advance of Geotechnical Coring at University House, W-12/SDI-4669, La Jolla, California*. Prepared for Ione Stiegler and Associates.

2009 *Data Recovery Excavations at CA-SDI-18472 for the Proposed Padre Dam Municipal Water District Secondary Connection Project (Ridge Hill Facilities) Johnstown, San Diego County, California*. Prepared for Padre Dam Municipal Water District.

2005 Processing Economies, Coastal Settlement, and Intensification in Northern San Diego County. In *Proceedings of the Society for California Archaeology*, Volume 18.

2005 Ground Stone Analysis. In *From the Coast to the Inland: Prehistoric Settlement Systems Along the Las Pulgas Corridor, Camp Pendleton, California*, by Micah J. Hale and Mark S. Becker. Report submitted to Southwest Division of Naval Facilities.

2005 *Cultural Resources Inventory for the Proposed San Diego Model Schools Development Project*. ASM Affiliates, Inc., Carlsbad, California. Prepared for the City of San Diego, California.

2004 *Cultural Resources Inventory for the Replacement of Bridge 230.6 over Agua Hedionda Lagoon, San Diego County, California*. Submitted to North County Transit District, San Diego County, California.

2004 *Cultural Resources Inventory for the Gawle Property, San Diego County, California*. Submitted to Helix Environmental for the City of San Diego.

2004 *Cultural Resources Inventory for the Hines Nursery, San Diego County, California*. Submitted to Hines Nurseries, Rainbow Valley, California.

2004 *Cultural Resources Inventory for the San Clemente Canyon Trunk Sewer Maintenance and Access Routes, San Diego County, California*. Submitted to Metropolitan Wastewater Department, City of San Diego, California.

2004 *Cultural Resources Inventory for the Montezuma Trunk Sewer Replacement, San Diego County, California*. Submitted to Metropolitan Wastewater Department, City of San Diego, California.

2004 *Cultural Resources Inventory for the Oceanside Hotel EIR, San Diego County, California*. Submitted to Dudek for the City of Oceanside, California.

2004 *Historic Resources Mitigation Monitoring of the El Cuervo Norte Project, San Diego County, California*. Submitted to the City of San Diego.

2004 *Emergency Test Excavations of an Exposed Olla, Riverside County, California*. Submitted to Bureau of Land Management, Riverside County, California.

2004 *Cultural Resources Monitoring for Geotechnical Coring Related to the All-American Canal Lining Project, Imperial County, California*. Submitted to Imperial Irrigation District, Imperial County, California.

2004 *Cultural Resources Monitoring of Geotechnical Coring Related to the Coachella Canal Lining Project, Riverside County, California*. Submitted to Imperial Irrigation District, Riverside County, California.

2004 Ground and Battered Stone Analysis. In *Data Recovery Investigations at the Eucalyptus site, CA-SDI-6954, San Diego County, California*, prepared by Don Laylander, ASM Affiliates Inc., Carlsbad, California. Submitted to EDAW, Inc.

2003 *Cultural Resources Inventory for the Linda Vista Drive Re-Alignment Alternatives, City of San Marcos, California*. Submitted to Nolte for the City of San Marcos.

2003 *Cultural Resources Inventory for the Lake Murray Trunk Sewer Replacement, San Diego County, California*. Submitted to the Metropolitan Wastewater Department, City of San Diego, California.

2001 *Technological and Social Organization of the Millingstone Horizon in Southern California*. Master's thesis on file, California State University, Sacramento.

2000 *Consumer Anthropology: Theory and method of recognizing and interpreting consumption patterns for product development and marketing strategies*. Developed for Richard Knight, Director of Intelligent Products, Addidas, USA.

2000 *Cultural Resource Monitoring Report*. Jones and Stokes Associates, Inc. Prepared for AT&T Corp., Atlanta, Georgia for the AT&T cable removal project from Lucin, Utah to Red Bluff, California.

2000 Ground and Battered Stone Analysis. In *Report on Excavations at Four Locations In the Lead Mountain Vicinity of the 29-Palms Marine Base*, edited by Mark Basgall. Sacramento Archaeological Research Center.

2000 Ground and Battered Stone Analysis. In *Report on Excavations at CA-MER-295*, edited by Mark Basgall and R. Bethard. Sacramento Archaeological Research Center.

2000 Invertebrate Analysis. In *Report on Excavations at CA-MER-295*, edited by Mark Basgall and Mark Giambastiani. Sacramento Archaeological Research Center.

2000 Site reports for sites SBR-9415 and SBR-9420. In *Report on Excavations at Lead Mountain in Twentynine Palms Marine Corps Air Ground Combat Training Center*, edited by Mark Basgall. Sacramento Archaeological Research Center.

1999 Ground and Battered Stone Analysis. In *Muddle in the Middle: Phase II Excavations of Five Sites in Kern County, CA*, edited by Mark Basgall. Prepared for V. Levulett, Environmental Management, Caltrans District 5, San Luis Obispo. Sacramento Archaeological Research Center.

Hale, Micah J., Richard McElreath, and Robert Bettinger
2008 (in prep.) *Modeling Time Minimizing and Energy Maximizing Adaptive Strategies*.

Hale, Micah J. and Peter Richerson
2008 (in prep.) *Investigating the Rate-Limiting Factors of Cultural Evolution: Archaeological Evidence from Southern California*.

Hale, Micah J., and Bruce Winterhalder
2008 (in prep.) *Discontinuous Sociocultural Evolution*.

Hale, Micah J., and John R. Cook
2005 *Results of Ground Penetrating Radar Investigations at CA-SDI-10148 in the Forester Creek Biological Mitigation Site, San Diego County, California*. With contributions by Jeffrey S. Patterson. Prepared for Chris White, Caltrans District 11.

Hale, Micah J., and Mark S. Becker
2006 *From the Coast to the Inland: Prehistoric Settlement Systems Along the Las Pulgas Corridor, Camp Pendleton, California*. ASM Affiliates, Carlsbad, California. Submitted to Southwest Division of Naval Facilities.

Basgall, Mark, Lynn Johnson, and Micah Hale
2002 *An Evaluation of Four Archaeological Sites in the Lead Mountain Training Area, Marine Air Ground Task Force Training Command, Marine Corps Air Ground Combat Center, Twentynine Palms, California*. Prepared for United States Marine Corps Air Ground Combat Center, Twentynine Palms, California. Prepared by Archaeological

Research Center, Institute of Archaeology and Cultural Studies, Department of Anthropology, California State University, Sacramento.

Becker, Mark S., and Micah J. Hale
2004 Flaked Stone and Ground Stone Artifact Analysis. In *Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California*, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., and Micah J. Hale
2005 *Testing and Evaluation of CA-SDI-13,930 on Camp Pendleton Marine Corps Base, San Diego County, California: A Paleoenvironmental Approach*. ASM Affiliates, Carlsbad, California. Prepared for Southwest Division Naval Facilities Engineering Command.

2004 *Final Report on the Rose-Arizone Site Survey and Documentation, San Clemente Island*. Prepared for Dr. Andrew Yatsko, Department of the Navy, South Bay Area Focus Team.

Byrd, Brian F., and Micah J. Hale
2004 *Final Report on the San Clemente Island Protective Signing and Maintenance Project*. Prepared for Dr. Andrew Yatsko, Department of the Navy, South Bay Area Focus Team.

Byrd, Brian F., and Micah J. Hale
2004 *Final Report on the San Clemente Island Road Improvement Survey*. Prepared for Dr. Andrew Yatsko, Department of the Navy, South Bay Area Focus Team.

Byrd, Brian F., Micah J. Hale, and Sinéad Ní Ghabhláin
2004 Archaeological Testing at INY-3647. In *Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California*, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., Micah J. Hale, and Sinéad Ní Ghabhláin
2004 Archaeological Testing at INY-3650/H. In *Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California*, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., Micah J. Hale, and Sinéad Ní Ghabhláin
2004 Archaeological Testing at INY-3826. In *Phase II Archaeological Testing and Evaluation of CA-INY-3647, CA-INY-3650/H, CA-INY-3826, and P-14-7356, Little Lake Rehabilitation, U.S. 395, Inyo County, California*, edited by Brian Byrd and Seetha Reddy, ASM Affiliates. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., and Micah J. Hale
2003 *Final Report on Extended Phase I Excavation at CA-INY-2207/2758, Little Lake Rehab Project, Inyo County, California*. ASM Affiliates, Encinitas. Prepared for Lynn Faraone, Chief, Central California Cultural Resource Branch, California Department of Transportation.

Byrd, Brian F., and Micah J. Hale
2002 *Phase II Investigations of 15 Prehistoric Sites for the Cartago-Olancha Four-Lane Project, US 395, Owens Valley, California*. ASM Affiliates, Inc. Prepared for Caltrans District 6, Fresno.

Byrd, Brian F., and Micah J. Hale
2001 *Research Design for Phase II Investigations of 14 Prehistoric Sites for the Cartago-Olancha Four-Lane Project, US 395, Owens Valley, California*. ASM Affiliates, Inc. Prepared for Caltrans District 6, Fresno.

Cook, John R., Collin O'Neill, and Micah J. Hale
2001 *Archaeological Survey for the Amtrak Second Main Line, San Onofre Segment, MP 210.1 to 214.7, San Diego County*. ASM Affiliates, Inc. Draft report prepared for North County Transit District.

Giambastiani, M., M. Hale, M. Richards, and S. Shelley
2008 *Draft Report Phase II Cultural Resource Evaluations at 47 Archaeological Sites on the East and Northeast Shores of Rogers Lake, Management Region 3, Edwards Air Force Base, Kern and Los Angeles Counties, California*. Report submitted to EAFB BHPO.

Hector, Susan, Micah J. Hale, and Catherine Wright
2003 *Cultural Resource Inventory of the Path 15 Los Banos-Gates Transmission Line Construction Project, Merced and Fresno Counties, California*. Contract No. 03-186-01-01-ASM. Prepared for Steigers Corporation, Littleton, Colorado.

Laylander, Don, and Micah J. Hale
2004 *Data Recovery Excavations at Locus O, CA-RIV-45*. ASM Affiliates, Inc., Carlsbad, California. Submitted to Agua Caliente Band of Cahuilla Indians.

Reddy, Seetha N., and Micah J. Hale
2003 *Archaeological Survey of Portions of the De Luz Housing Area, O'Neill Lake, and the Case Spring Highlands, Marine Corps Base Camp Pendleton, California*. ASM Affiliates, Encinitas, California. Prepared for Southwest Division Naval Facilities Engineering Command, San Diego, California.

Teaching Experience:

2008	Adjunct Instructor, Archaeology, UC Davis
2005-present	Level III Teaching Assistant, UC Davis; taught discussion sections/ lectures for Human Evolution, Archaeology, and Human Ecology
1998-99	Acted as Public Education Coordinator for the Museum of Anthropology at UC Davis; Included instructing a course teaching archaeology students how to inform the public about the value of anthropology through in-class presentations, exhibits, and the building of 'teaching trunks' for people in grades 1-12 of primary and secondary education
1997-98	Substitute teacher with an Emergency Credential in the Woodland and Davis Joint Unified School Districts, CA, for grades K-12, all subjects excluding foreign languages
1997-present	Regularly perform presentations about the value of archaeology in classrooms at the level of the grades 1-12
1996	Acted as a teaching assistant at the UC Davis archaeological field school; job duties included student management and instruction in the methods of excavation and survey

Sherri L. Andrews, M.A.
Project Archaeologist

Firm Name: ASM Affiliates, Inc., Pasadena, California

Total Years of Experience: 12

Employment History:

2002-present	Project Archaeologist/Technical Editor, ASM Affiliates, Pasadena, California
2001-2002	Associate Archaeologist/Laboratory Director, ASM Affiliates, Carlsbad, California
2000-2001	Associate Archaeologist, ASM Affiliates, Encinitas, California
1997-present	Fishbone Analyst for ASM Affiliates, Bonner and Associates, Keith Companies, Applied Earthworks, various locations in California
1996-1997	Laboratory Assistant, Northridge Center for Public Archaeology, California State University, Northridge, California

Education:

M.A. (honors)	2000/Archaeology/California State University, Northridge
B.A.	1989/Anthropology/University of California, Los Angeles

Additional Training:

2004	CEQA Workshop, Association of Environmental Professionals
2002	Flintknapping Workshop, Zzyzx Desert Study Center
2002	Historic Bottle Identification, Society for California Archaeology
2001	Faunal Identification, Society for California Archaeology

Registrations:

2000	Register of Professional Archaeologists

Professional Memberships:

1996	Society for American Archaeology/member
1996	Society for California Archaeology/member
2002	Association of Environmental Professionals/member

Other Capabilities: MS Word, MS Excel, MS Access, WordPerfect

Awards/Commendations: Letter of commendation from the Defense Advanced Research Projects Agency

Clearances: U.S. Fish and Wildlife Colorado River Endangered Fishes Recovery Permit

Citizenship: USA

Languages: N/A

References:

Dr. Andrew Yatsko, Cultural Resources Program Manager, Navy Region Southwest, (619) 532-2800

Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Danielle Page, Senior Archaeologist, NAVFAC Southwest, (619) 532-2090

Professional Profile:

Ms. Andrews earned her M.A. in Anthropology with a specialization in Public Archaeology from California State University, Northridge (CSUN), where her thesis research dealt with sampling methodology as applied to the analysis of fish bone remains from the Eel Point site on San Clemente Island. She has been listed on the Register of Professional Archaeologists since 2000. Having served as Principal Investigator, Co-Principal Investigator, and Field Director, Ms. Andrews has experience in all aspects of project management, ranging from records searches and fieldwork to report writing and preparation. She also has experience in laboratory management, including artifact analysis, cataloging and curation, and has served as laboratory director for three university-run field schools, including the Eel Point field school run by CSUN, and the San Elijo Lagoon project run by ASM and University of California, San Diego. She currently acts as ASM's technical report editor, providing in-house quality assurance and control. Her research interests include site formation processes, desert adaptations, and faunal analysis focused on water resources.

Ms Andrews has worked extensively throughout southern California. She has done extensive survey and excavation on San Clemente Island and has been involved in testing, evaluation, and artifact and ecofact analysis on over a dozen sites on the island. She has directed many surveys and testing projects in San Bernardino and Riverside counties. Her work in San Diego County has included the supervision of numerous survey, testing, and evaluation projects on Camp Pendleton for Department of the Navy SWDIV and U.S. Army Corps of Engineers; coring of deeply buried archaeological sites on Camp Pendleton's Red Beach and near the Otay River, excavation and testing of a shell midden site in the Caltrans Interstate 5 right-of-way in Del Mar; excavation of a large Archaic shell midden site near Campus Point; excavation and testing of four inland sites near Ramona; and the Caltrans State Route 188 road widening project which involved excavation and testing of a lithic site near Tecate. In Imperial County, she has directed several survey and site recording projects, including over 20 linear miles for a fiber optic line and surveys along the All-American and Coachella canals, as well as testing and data recovery of several sites in the area. Her experience in San Luis Obispo, Santa Barbara, Los Angeles and Orange counties derives from the analysis of numerous fish bone assemblages from both prehistoric and historic sites spanning the southern California coast. In addition, she has taken part in pedestrian survey and prehistoric site and rock art recording in Baja California Sur.

Project Experience:

BLM Roads Restoration Survey, Bureau of Land Management, Imperial County, 2008-2009. As Field Director, conducted survey of 400 acres and reported results. Client Reference: Carrie Simmons, Bureau of Land Management, (760) 337-4437

Yucaipa Brineline Due Diligence Records Search Report and Survey, Dudek, San Bernardino County, 2008. As Project Archaeologist, wrote report that summarized records search of cultural resources that have been recorded along a linear project area, and conducted field survey of unpaved areas of the potential brineline route. Client Reference: Kamarul Johari Muri, Dudek, (760) 479-4292

San Clemente Island SWATs Survey, Department of the Navy, San Clemente Island, Los Angeles County, California, 2007-ongoing. As Principal Investigator and Field Director, supervised a 1,500-acre field survey at NALF San Clemente Island. Identified and documented 600 sites and prepared technical report. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

Flint Canyon Trail Improvement Project Survey, City of La Cañada Flintridge, Los Angeles County, California, 2007. As Project Archaeologist, directed field survey and authored report for small survey conducted in support of a pedestrian and equine trail improvement project. Client Reference: Ann Wilson, City of La Cañada Flintridge, (818) 790-8880

Caltrans District 7 TEA Rural Roads Inventory, Caltrans District 7, Los Angeles and Ventura counties, California, 2006-ongoing. As Project Archaeologist, coordinated and conducted fieldwork in tandem with prime contractor personnel. Prepared post-field notes and site records. As Field Director, conducted field surveys and inventories within Caltrans ROW along rural highways. Client Reference: Alex Kirkish, Caltrans District 7, (213) 897-2795

San Clemente Island Infantry Operations Area Survey, Department of the Navy, San Clemente Island, Los Angeles County, California, 2006-ongoing. As Principal Investigator and Field Director, managed a 3,500-acre field survey, recording of 200+ sites, and report authorship for large-scale survey on San Clemente Island. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

Hollywood Hills Emergency Watershed Protection Survey, USDA Natural Resources Conservation Service, Hollywood, Los Angeles County, California, 2006. As Project Archaeologist, coordinated with client, managed records search, field survey, and report authorship for small survey conducted in support of landslide repair project along the historic Lake Hollywood Reservoir. Client Reference: Frank Deitz, Natural Resources Conservation Service

Arboretum Specific Plan Survey, David Evans and Associates, Fontana, San Bernardino County, California, 2006. As Field Director, supervised field survey, recording and evaluation of five historic sites, and prepared technical report for 485-acre survey within historic

Grapeland Irrigation District for multi-use development project north of City of Fontana. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

Fortuna Mine Survey, Department of the Navy, MCAS Yuma, Yuma County, Arizona, 2006. As Field Director, supervised three crew members and co-authored report for this large-scale inventory of the historic Fortuna gold mining district in the Barry M. Goldwater Ranges. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

China Lake Naval Air Weapons Station, Epsilon Systems Solutions, Junction Ranch Survey, Inyo County, California, 2006. As Field Director, managed field survey, site recording, and prepared report for 40-acre survey near Junction Ranch Radar Cross Section range in the North Range area. Client Reference: Greg Halsey, Epsilon Systems Solutions, (760) 446-6400

Met Towers Survey Project, GHEnergy, Mojave Desert, Imperial County, California, 2006. As Project Archaeologist and report author, directed field survey to identify locations devoid of archaeological resources to be used for the construction of wind testing towers on lands administered by BLM. Client Reference: Gill Howard, GHEnergy Ltd., (909) 794 6900

Lavic Lake Testing Project, MCAGCC, Twentynine Palms, Mojave Desert, San Bernardino County, California, 2005. As Field Director, supervised crews undertaking Phase II testing and evaluation of lithic and habitation sites. Client Reference: Dr. Marie Cottrell, MCAGCC, Twentynine Palms, (760) 830-7396

Canyon Trails Survey Project, T&B Planning, Hemet, Riverside County, California, 2005-2006. As Project Archaeologist, directed field survey, site recording, and prepared report for cultural resources inventory for proposed residential development project. Client Reference: Adam Drudge, T&B Planning, (714) 505-6360

Boulder Ridge Survey Project, T&B Planning, Moreno Valley, Riverside County, California, 2005. As Project Archaeologist, directed field survey, site recording, and prepared report for cultural resources inventory for proposed development project. Client Reference: Adam Drudge, T&B Planning, (714) 505-6360

Laguna Dam Survey, USDI Bureau of Reclamation, Imperial County, California, and Yuma County, Arizona, 2005. As Field Director, supervised a cultural resources inventory and evaluation for the Laguna Dam Restoration Project. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Palo Verde Dam Survey, USDI Bureau of Reclamation, Riverside County, California, and La Paz County, Arizona, 2005. As Field Director, supervised a cultural resources inventory and evaluation for the Palo Verde Dam Bank Stabilization and River Control Project. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Drop 2 Reservoir Survey, USDI Bureau of Reclamation, Imperial County, California, 2005. As Field Director, supervised a cultural resources inventory and evaluation for a proposed inlet canal and reservoir project on the north side of the All-American Canal. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

China Lake Naval Air Weapons Station, South Range Survey, Epsilon Systems Solutions, San Bernardino County, California, 2005. As Field Director, supervised field survey, site recording, and co-authored report for a large-scale survey of South Range area. Client Reference: Greg Halsey, Epsilon Systems Solutions, (760) 446-6400

Phase I Cultural Resource Survey of 220 Acres in the Armitage Airfield and Weapons Survivability Areas, Epsilon Systems Solutions, North Range, China Lake Naval Air Weapons Station (NAWS), Epsilon, Ridgecrest, Inyo County, California, 2005. As Field Director, conducted and supervised the survey of 220 acres in a developed portion of the North Range at NAWS. The survey identified two archaeological sites, a prehistoric lithic scatter and a historic ranching/agricultural facility, and seven prehistoric isolates. Client Reference: Greg Halsey, Epsilon Systems Solutions, (760) 446-6400

Quackenbush Evaluation, MCAGCC, Mojave Desert, Twentynine Palms, San Bernardino County, California, 2005. As Field Director, supervised field crews undertaking Phase II testing and evaluation of lithic sites. Client Reference: Dr. Marie Cottrell, MCAGCC, Twentynine Palms, (760) 830-7396

Duncan Canyon Survey, David Evans and Associates, Fontana, San Bernardino County, California, 2005. As Field Director, managed survey, site recording, and prepared report for an 85-acre survey within historic Grapeland Irrigation District for multi-use development project north of City of Fontana. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

Jurupa Avenue Road Widening Project, David Evans and Associates, Fontana, San Bernardino County, California, 2005. As Project Archaeologist, managed records search, field survey, and prepared report for survey of six-mile-long portion of Jurupa Avenue for proposed road widening and annexation project. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

Dominguez Channel Widening Project, City of Carson, Los Angeles County, California, 2005. As Project Archaeologist, conducted records search, field survey, and report authorship for survey of portion of Sepulveda Boulevard and the Dominguez Channel Bridge for proposed road and bridge widening project. Client Reference: Massoud Ghiam, City of Carson, (310) 952-1700 x1812

200 North Sunrise, Liberty Escrow, Palm Springs, Riverside County, California, 2004. As Project Archaeologist, conducted field survey and prepared report for 0.9-acre survey within Palm Springs. Client Reference: Larry Schaefer, Liberty Escrow, (760) 322-5020

All-American Canal Lining Project Survey, Imperial Irrigation District, Imperial County, 2004-ongoing. As Field Director, supervised two crew chiefs and six crew members, and co-authored report for this large-scale Class II and III inventory and random sample survey. Managed complete survey of the 4,200-acre right-of-way along approximately 23 mi. of the All-American Canal, and a 10-percent random sample survey that encompassed an additional 743 acres. This project was undertaken for use in planning the placement of quarrying and staging areas for the proposed canal lining project. Client Reference: Michel Remington, Imperial Irrigation District, (760) 482-9831 or Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Thompson Ranch Survey, Encore Land Partners, Riverside County, 2004. As Field Director, managed two crew members and authored report for this 201-acre survey during which three previously unrecorded prehistoric sites were found. Client Reference: Randy Wastal, Encore Land Partners, (760) 436-1454 x24

Lot 11 Business Park, NuWays Unlimited, Temecula, Riverside County, California, 2004. As Project Archaeologist, coordinated with client, conducted records search, field survey, and prepared report for 5-acre proposed business park. Client Reference: Ed Monroe, NuWays Unlimited

Jurupa Hills Survey, Helix Environmental, Riverside County, California, 2004. As Field Director, managed survey of a parcel near the community of Sunnyside. Recorded three historical sites were recorded that were associated with a citrus growing and packing business that operated on the property between the 1920s and the 1950s:, the site of the original packing plant, a concrete-lined reservoir; and a small cobble-lined cistern. Prepared technical report. Client Reference: Dr. Steven Neudecker, Helix Environmental, (619) 992-3395

Seal Beach Sprinkler Installation Monitoring, Department of the Navy, Naval Weapons Station Seal Beach Detachment, Orange County, California, 2004-2005. As Archaeological Monitor, coordinated with the base archaeologist and monitored the installation of a sprinkler system through and near a large National Register-eligible prehistoric site on Naval Weapons Station Seal Beach. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Camino del Diablo Survey, Department of the Navy, MCAS Yuma, Yuma County, Arizona, 2004. As Field Director, supervised three crew members and wrote sections of the report for this large-scale inventory survey along approximately 40 miles of historic Camino del Diablo and other trails in the Barry M. Goldwater Ranges for use in base land use planning. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Coachella Canal Data Recovery, Coachella Valley Water District, Riverside County, 2004-present. As Field Director, supervised three crew members, co-authored report, and analyzed fish bone recovered from data recovery on two prehistoric fish camp sites located on the relic shoreline of ancient Lake Cahuilla that are expected to be impacted by the Coachella Canal

Lining Project. Project was conducted on lands administered by the USDI Bureau of Reclamation. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Coachella Canal Supplemental Survey, Coachella Valley Water District, Imperial and Riverside counties, 2004. As Field Director, supervised of two crew members and co-authored report for intensive pedestrian survey of areas added to the APE of a proposed project to line or redirect the Coachella Canal. Project conducted on lands administered by the USDI Bureau of Reclamation. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Extended Phase I Study of State Route 76, Caltrans, Oceanside, San Diego County, California, 2004. Performed shell identification and analysis for a testing project in support of proposed widening of State Route 76. Client Reference: Chris White, Caltrans District 11, (858) 616-6611

Naval Weapons Station Seal Beach Demolition Monitoring, NWS Seal Beach, Orange County, California, 2004. As Project Coordinator, authored discovery plan and technical report for this project, which involved the monitoring of demolition of a building adjacent a large National Register-eligible prehistoric site on Naval Weapons Station Seal Beach. Client Reference: Lisa Ellen Bosalet, NWS Seal Beach, (562) 626-7637 and Bernard Clauss, Clauss Construction, (619) 390-4940

Chula Vista Village 7, David Evans and Associates, Chula Vista, San Diego County, California, 2004. As Field Director, managed one crew member and prepared report for testing of small prehistoric archaeological site CA-SDI-12279. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

Santa Monica Mountains Land Exchange, Ultrasystems, Beverly Hills, Los Angeles County, California, 2004. As Field Director, conducted survey and prepared report for proposed land transfer of less than one acre. Client Reference: Robert Motschall, Ultrasystems, (949) 788-4900

Mountain Gate II, Century Homes, Palm Springs, Riverside County, California, 2004. As Field Director, conducted survey, identified one prehistoric and two historic sites, and prepared site records and report for 40-acre pre-development survey. Client Reference: Marty Butler, Century Vintage Homes, (909) 381-6007

Barstow Phase IA, David Evans and Associates, Barstow, San Bernardino County, California, 2003. As Project Manager, conducted records search, field reconnaissance and cultural resource inventory, and prepared report for proposed industrial park building site near Barstow. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

Walnut Avenue Survey, David Evans and Associates, Fontana, San Bernardino County, California, 2003. As Field Director, conducted records search, survey, and cultural resource inventory, and prepared report for proposed road widening and storm drain improvement project. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

Yucaipa Water District, Dudek and Associates, Yucaipa and Calimesa, San Bernardino and Riverside counties, California, 2003. As Field Director, conducted field survey and prepared report for cultural resource inventory of proposed alignment for improvements to the Yucaipa Water District delivery system in rural and urban portions of Yucaipa and Calimesa. Client Reference: Myloc Nguyen, Dudek and Associates, (760) 942-5147

Morongo Creek Blowsand Project, David Evans and Associates, Cathedral City, Riverside County, California, 2003. As Principal Investigator, served as Field Director for survey with one crew person and prepared report for proposed blowsand mitigation project between Cathedral City and Palm Springs. Client Reference: Josephine Alido, David Evans and Associates, (909) 481-5750

DARPA Drone Survey, Booz Allen Hamilton, San Bernardino County, California, 2003. As Co-principal Investigator and Field Director, prepared report for field reconnaissance and cultural resource inventory of proposed routes for the DARPA Grand Challenge event through the Mojave Desert. Received letter of commendation from the Defense Advanced Research Projects Agency for work on the project. Client Reference: Peter Brandom, Booz Allen Hamilton, (703) 816-5281

MWD Yorba Linda Survey, Metropolitan Water District of Southern California (MWD), Yorba Linda, Orange County, California, 2003. As Field Director, conducted records search and field survey, and prepared report for cultural resource inventory within MWD's Diemer Filtration Plant. Client Reference: Deirdre West, Metropolitan Water District of Southern California, (213) 217-6696

Papa One Survey and Papa One and Three Small Sites Testing, Department of the Navy, MCB Camp Pendleton, San Diego County, California, 2003. As Field Director, supervised six crew members and prepared reports for intensive pedestrian survey of portions of the Papa One training area and testing of 10 small lithic sites in the Papa One and Three training areas on Camp Pendleton. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

MWWD ORPS Data Recovery, City of San Diego Metropolitan Wastewater Department (MWWD), National City, San Diego County, California, 2003. As Co-Principal Investigator, coordinated all field operations, served as Field Director coordinating five crew members and drilling crew, prepared report, supervised on-site wet-screening operation and conducted special analyses on shellfish and fish bone derived from extensive midden deposits recovered in geoarchaeological coring project at the Otay River Pump Station. Client Reference: Rich Grunow, MWWD, (858) 614-5722

Coachella Canal Survey, Coachella Valley Water District, Imperial and Riverside counties, California, 2003. As Field Director, supervised three crew members for intensive pedestrian survey of the APE of a proposed project to line or redirect the Coachella Canal. Conducted analysis of fish remains found during survey. Project conducted on lands administered by the USDI Bureau of Reclamation. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Agua Caliente Tribal Building, Agua Caliente Band of Cahuilla Indians, Palm Springs, Riverside County, California, 2003. As Field Director, supervised three crew members for testing of proposed building site for the Agua Caliente Tribal Building. Client Reference: Dr. Joe Nixon, Agua Caliente Band of Cahuilla Indians, (760) 325-3400

SCLI Protective Signing, Department of the Navy, San Clemente Island, Los Angeles County, California, 2003. As Co-Field Director, managed emplacement of archaeological site protective signing project on San Clemente Island. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

CA-FRE-3219 Testing, Caltrans Central Region, Fresno County, California, 2003. As Field Director, coordinated backhoe trenching and participation of geomorphologist, and prepared report for Extended Phase I subsurface testing for buried site components at prehistoric archaeological site CA-FRE-3219 that may be impacted by proposed State Route 41 highway widening project in Fresno County. Client Reference: Steven M. Ptomey, Caltrans Central California Cultural Resources Branch, (559) 243-8243

CA-SDI-811 Coring, Department of the Navy, MCB Camp Pendleton, San Diego County, California, 2002-2003. As Field Director, supervised six crew members and coring crew for extensive coring, testing, and data recovery project at prehistoric shell midden site CA-SDI-811 along the coastal margin of Camp Pendleton in northern San Diego County. Client Reference: Stan Berryman, MCB Camp Pendleton, (760) 725-9738

San Elijo Lagoon Testing Project, National Science Foundation, Cardiff, San Diego County, California, 2001-2004. Served as Instructor, Field Supervisor, and Laboratory Director for two university-sponsored archaeological field schools conducted at San Elijo Lagoon, San Diego County. Directed students in field and laboratory procedures, analyzed artifacts and ecofacts recovered from excavation, directed flotation, prepared portions of report, and conducted fish bone analysis. Client Reference: Jon Yellen, National Science Foundation,

Survey of State Route 905, Caltrans District 11, San Diego County, California, 2002. As Field Director, managed survey and site recording within the right-of-way of proposed alignment for State Route 905. Client Reference: Chris White, Caltrans District 11, (858) 616-6611

Roblar Road Testing, Department of the Navy, MCB Camp Pendleton, California, 2001-2002. As Field Director and Laboratory Director, supervised testing of five prehistoric midden sites on Camp Pendleton, supervised excavation, column sampling, site and feature recording,

directed processing, analysis and curation of artifacts, and prepared portions of report. Client Reference: Stan Berryman, MCB Camp Pendleton, (760) 725-9738

Lemon Tank Testing, Department of the Navy South Bay Area Focus Team (SBAFT), San Clemente Island, Los Angeles County, California, 2001- 2002. As Field and Laboratory Director, supervised testing and excavation at four prehistoric archaeological sites in the Lemon Tank area of San Clemente Island. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

DeLuz Survey, U.S. Army Corps of Engineers, MCB Camp Pendleton, San Diego County, California, 2001. As Field Director, supervised 6-person field crew for intensive pedestrian survey in the DeLuz area of Camp Pendleton. Client Reference: Stephen Dibble, U.S. Army Corps of Engineers, (213) 452-3849

CA-SDI-7296 Testing, Caltrans District 11, Del Mar, San Diego County, California, 2001. As Field Director, supervised excavation and column sampling. As Laboratory Director, managed all laboratory processing, conducted analysis of artifacts and ecofacts, and prepared portions of report for testing program conducted at shell midden site CA-SDI-7296 along Interstate 5. Client Reference: Chris White, Caltrans District 11, (858) 616-6611

Old Airfield Site Testing, Department of the Navy South Bay Area Focus Team (SBAFT), San Clemente Island, Los Angeles County, California, 2001. As Field and Laboratory Director, supervised testing and excavation at five prehistoric archaeological sites in the Old Airfield area of San Clemente Island. Managed processing and curation of artifact collections. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

Ridge Road Survey, SBAFT, San Clemente Island, Los Angeles County, California, 2001. As Field Director, supervised pedestrian survey and site recording along the margins of Ridge Road in the central portion of San Clemente Island. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

PF.Net Fiber Optics, Foster Wheeler, Imperial County, California, 2001. As Field Director, supervised pedestrian survey and testing of five prehistoric archaeological sites in Imperial Valley, California. Client Reference: Penny Eckert, Foster Wheeler Environmental

LVTA Expansion Survey, SBAFT, San Clemente Island, Los Angeles County, California, 2001. As Field Director, supervised pedestrian survey and site recording for the proposed LVTA road expansion in the central portion of San Clemente Island. Client Reference: Dr. Andy Yatsko, Navy Region Southwest, (619) 532-2800

Salvation Army Test, BRG Consulting, San Diego County, California, 2001. As field crew, conducted archaeological testing at four sites within the Salvation Army Sierra Del Mar Divisional Camp located in central San Diego County.

Publications:

(with Judith F. Porcasi)

2001 Evidence for a Prehistoric *Mola mola* Fishery on the Southern California Coast. *Journal of California and Great Basin Anthropology* 23(1):51-66.

Technical Reports:

Andrews, Sherri

(with M. Giambastiani)

2005 *Archaeological Survey of 219.86 Acres in the Armitage Airfield and Weapons Survivability Areas, North Range, Naval Air Weapons Station, China Lake, California*. Submitted to Epsilon Solution Systems, Ridgecrest, California.

2004 *Cultural Resources Assessments for the 2004 DARPA Grand Challenge Route, Mojave Desert, San Bernardino County, California*. Prepared for Booz Allen Hamilton.

2004 *Cultural Resources Study for Granite Construction Environmental Assessment, Ocotillo, Imperial County, California*. Prepared for Barrett Biological Services.

2004 *Cultural Resources Assessment for Walnut Avenue Street and Storm Drain Improvements, Fontana, San Bernardino County, California*. Prepared for David Evans and Associates, Ontario.

2003 *Archaeological Investigation of the Otay River Pump Station and Conveyance System Project, San Diego County, California*. Prepared for City of San Diego Metropolitan Wastewater Department.

2003 Fish Remains. Chapter 7 in *Living by a Coastal Lagoon: Subsistence Settlement and Behavioral Modeling at SDI-4416, Camp Pendleton, California*, by Seetha N. Reddy. Draft report in preparation for the Department of the Navy SWDIV.

2003 *Cultural Resources Assessment for MDC Option 3A, Proposed Industrial Park Site, Barstow, San Bernardino County, California*. Prepared for David Evans and Associates, Ontario.

(with Mark S. Becker)

2006 *Testing and Evaluation of 10 Sites in Papa Three and Papa Two Training Areas, Camp Pendleton Marine Corps Base, California*. Prepared for Department of the Navy SWDIV.

(with Brian F. Byrd)

2004 *Archaeological Survey of the Northeastern Portion of the Papa One Training Area, Marine Corps Base Camp Pendleton, California*. Prepared for Department of the Navy SWDIV.

(with Brian F. Byrd)

2003 *Archaeological Testing of Four Sites in the Lemon Tank Area, Central San Clemente Island, California*. Prepared for Department of the Navy SWDIV.

(with Brian F. Byrd)

2002 *Ridge Road Archaeological Survey and Site Recording Project, Central San Clemente Island, California*. Prepared for Natural Resources Office, Naval Air Station, North Island.

(with Brian F. Byrd)

2002 *Archaeological Testing of Five Sites in the Old Airfield Area, North-Central San Clemente Island, California*. Prepared for Natural Resources Office, Naval Air Station, North Island.

(with Brian F. Byrd)

2000 Summary and Management Recommendations. In *Archaeological Testing of Four Sites near West Cove, Northern San Clemente Island, California*, edited by Brian F. Byrd. Prepared for Natural Resources Office, Naval Air Station, North Island.

(with Brian F. Byrd and Ken Victorino)

2000 Excavation Results. In *Archaeological Testing of Four Sites near West Cove, Northern San Clemente Island, California*, edited by Brian F. Byrd. Prepared for Natural Resources Office, Naval Air Station, North Island.

(with John R. Cook)

2000 *A Cultural Resources Inventory of the Proposed PF.Net/AT&T Fiber Optics Conduit AMP Sites, Orange, San Diego, Imperial and Riverside Counties, California*. Draft report on file.

(with John R. Cook and Deborah L. Huntley)

2000 *A Cultural Resources Inventory of the Proposed PF.Net/AT&T Fiber Optics Conduit, Ocotillo to San Diego, California*. Draft report on file.

(with John R. Cook and Deborah L. Huntley)

2000 *A Cultural Resources Inventory of the Proposed PF.Net/AT&T Fiber Optics Conduit, Los Angeles to Marine Corps Base Camp Pendleton, Los Angeles and Orange Counties, California*. Draft report on file.

(with Susan Hector)

2004 *Cultural Resources Evaluation for CA-SDI-12,279, Chula Vista Village 7 Project, Chula Vista, San Diego County, California*. Prepared for David Evans and Associates, San Diego.

(with Susan Hector)
2003 *Extended Phase I Testing for CA-FRE-3219.* Prepared for Caltrans Central Branch.

(with Sinéad Ní Ghabhláin)
2004 *Archaeological Monitoring Report for Sprinkler System Replacement near Archaeological Site CA-ORA-322/1118, at Naval Weapons Station Seal Beach, California*. Draft report prepared for Department of the Navy SWDIV.

(with Judith F. Porcasi)
2000 Vertebrate Remains from LVTA-8, LVTA-9, LVTA/SE-46, and LVTB-1, San Clemente Island, California. In *Archaeological Testing of Four Sites near West Cove, Northern San Clemente Island, California*, edited by Brian F. Byrd. Prepared for Natural Resources Office, Naval Air Station, North Island.

(with Judith F. Porcasi)
2000 Vertebrate Faunal Remains. In *Archaeological Testing of Three Sites along the LVT Road, North-Central San Clemente Island, California*, edited by Brian F. Byrd. Prepared for Natural Resources Office, Naval Air Station, North Island.

(with Seetha N. Reddy)
2001 *Middle to Late Archaic Settlement along San Dieguito Lagoon, Phase II Investigation at CA-SDI-7296, San Diego County, California*. Prepared for Caltrans District 11, San Diego.
(with Seetha N. Reddy and Mark S. Becker)
2005 *Evaluation of Five Sites Along Roblar Road on Marine Corps Base Camp Pendleton, California.* Prepared for Department of the Navy, NAVFAC.

(with Seetha N. Reddy and Collin O'Neill)
2001 *SDI-13,325 Revisited: Limited Data Recovery at a Late Archaic Coastal Settlement, Camp Pendleton, California*. Prepared for the Department of the Navy SWDIV.

(with Jerry Schaefer)
2005 *Class II and III Cultural Resources Inventory and Evaluation for the All-American Canal Lining Project, Imperial County, California*. Prepared for Imperial Irrigation District.

(with Jerry Schaefer)
2004 *Supplemental Class III Cultural Resource Inventory for the Coachella Canal Lining Project, Imperial and Riverside Counties, California*. Prepared for Coachella Water District and USDI Bureau of Reclamation.

(with Jerry Schaefer and Ken Moslak)
2004 *Cultural Resources along Selected Roads and Tracks in the Vicinity of the Western Terminus of the Camino Del Diablo, Barry M. Goldwater Range, Arizona*.

ASM Affiliates, Inc. Prepared for Southwest Division Naval Facilities Engineering Command, San Diego, and Marine Corps Air Station, Yuma.

Presentations:

2001 Diachronic Trends in Fish Exploitation on San Clemente Island, California. Paper presented at the 66th Annual Meeting of the Society for American Archaeology, New Orleans.

(with Judith F. Porcasi)
2001 A Very Big Fish Tale: Evidence for a Prehistoric *Mola mola* Fishery on the Southern California Coast. Presenter of paper presented at the 34th Annual Meeting of the Society for California Archaeology, Modesto.

(with L. Mark Raab, Fermín Reygadas, and David LaCabe)
1998 Results of a Recent Archaeological Survey in the Cape Region, Baja California Sur. Presenter for paper presented at the 32nd Annual Meeting of the Society for California Archaeology, San Diego.

(with L. Mark Raab, Fermín Reygadas, and David LaCabe)
1998 The Challenge of Archaeological Conservation in Baja California Sur. English presenter for paper presented at La Frontera: Una Nueva Concepción Cultural II Coloquio Internacional, La Paz, Baja California Sur, Mexico.

(with Eric White)
2005 Lake Cahuilla Fish Traps from the Ground Down. Poster presented at the 38th Annual Meeting of the Society for California Archaeology, Sacramento.

Independent Research: N/A

Teaching Experience:

1999 California State University, Northridge Archaeological Field School, Eel Point (CA-SCLI-43), San Clemente Island. Laboratory Director; fieldwork focused on extensive excavation of large shell midden site and laboratory techniques.

1998 Universidad Autónoma de Baja California Sur (UABCS), Museo de Historia Natural, La Paz, Baja California Sur, Mexico. Created and organized archaeological fish bone reference collection as part of cooperative arrangement between UABCS and CSUN in support of the archaeological distance learning program.

1997 San Clemente Island. May, June, Oct. 1996, worked on survey, excavation and testing projects as crew chief and field technician, in support of dissertation research for Andrew Yatsko, archaeologist, Naval Air Station, North Island, San Diego.

1997 Instituto Nacional de Antropología y Historia, Centro La Paz, UABCS, and CSUN. Regional pedestrian survey field technician, rock art recorder.

1996 California State University, Northridge Archaeological Field School, Eel Point (CA-SCLI-43), San Clemente Island. Excavation team leader, transit survey crew director; fieldwork focused on extensive excavation of large shell midden site and laboratory techniques.

1995 Southern Utah University Archaeological Field School, Virgin Anasazi Pueblo site, Arizona.

James T. Daniels, Jr.
Associate Archaeologist

Firm Name: ASM Affiliates, Inc. Carlsbad, California

ASM Hire Date: August 21, 2008

Total Years of Experience: 2

Employment History

2008-Present	Associate Archaeologist, ASM Affiliates, Inc., Carlsbad, California
2007-2008	Research Assistant and IIRMES Lab Technician, CSULB, Long Beach, California
2006-2007	Graduate Assistant, CAlifornia State University Long Beach, California

Education:

M.A.	2008/Anthropology/California State University Long Beach
B.A.	2004/Anthropology/North Carolina State University

Additional Training:

2008 Professional training workshop for GPR Slice software
Training in the use of geophysical instruments including instruments associated with ground penetrating radar (GPR), magnetometry, conductivity, and resistivity.
Training in the use of materials and chemical analysis instrumentation including the GBC Optimass orthogonal TOF ICP-MS and New Wave 213 LUV Laser Ablation System and the FEI Quanta 200 Analytical Environmental Scanning Electron Microscope.

Registrations: N/A

Professional Memberships:

2006-Present	Society for American Archaeology (SAA), member
2008-Present	Society for California Archaeology (SCA), member

Other Special Capabilities:

Proficient in software such as ArcGIS, GPR Slice, MagMap, Microsoft Office Suite, Minitab, web design using wiki and html languages.

Awards and Commendations:

2008	Inducted as an associate member into Sigma Xi Scientific Research Society

2007 Second Place: Student Poster Award. College of Liberal Arts. Poster Title: *Digital image processing of shell temper variability in Late Prehistoric ceramics*.

2006 First Place: Student Poster Award. Department of Anthropology, CSULB. Poster Title: *Analyses of Early Formative Calcareous Floors from Albeño 2 in Escuintla, Guatemala with Marisela Galindo*

Clearances

Citizenship: USA

Languages: Competent in conversational Spanish

References:

Carl P. Lipo, Associate Professor, Anthropology, Archaeology, and IIRMES, (562) 985-2393

Hector Neff, Professor of Anthropology and Research Scientist, IIRMES, CSU Long Beach, (562) 985-4468

Tracy Millis, Principal Investigator, TRC Garrow, (919) 821-3197

Professional Profile:

Mr. Daniels has two years of experience in Cultural Resource Management and two years of experience in academic lab and field research. After completing his Bachelor's degree, he volunteered at the North Carolina Office of State Archaeology under the supervision of Dr. Billy Oliver until acquiring a permanent position with TRC Garrow in Chapel Hill, North Carolina. Mr. Daniels worked as both a lab and field technician under the supervision of Tracy Millis. His duties included the management and curation of all site collections from the Marine Corps Base Camp Lejeune, contributing site descriptions and artifact assemblage table for project reports, maintaining and updating site records for the sites located on Camp Lejeune, and Phase I and II fieldwork.

In 2006, Mr. Daniels enrolled in the Master's program in Archaeological Science at California State University, Long Beach where he had the opportunity to participate in archaeological fieldwork in the Pacific Coastal region of Guatemala, Easter Island, and the Mojave Desert. In addition to traditional field experience such as excavation and surface survey, Mr. Daniels participated in multiple geophysical surveys in these regions becoming proficient in the operation of the GSSI's SRI 3000 ground penetrating radar and Geometric's 858 Magmapper magnetometer/gradiometer. His Master's thesis involves the integration of geophysical data and the spatial distribution of surface artifacts collected at the site of El Baul in Cotzumalguapa, Guatemals into GIS software to determine function of subsurface structures and features.

Selected Project Experience:

Desert Springs, BRG Consulting, Inc., Seeley, Imperial County, California, September 2008-October 2008. As Associate Archaeologist, mapped the locations and attributes of sites located within the proposed project area with Trimble GPS and incorporated the data into ArcGIS to generate detailed informative maps of the sites. Incorporated observations and results of subsurface testing phase into final report. Client Reference: Tim Gnibus, BRG Consulting, Inc., (619) 298-7127

Santa Margarita/San Luis Rey River Weed Management Program, Mission Resource Conservation District, San Diego County, California, September 2008. As Associate Archaeologist, formally requested records of previously recorded archaeological sites within project area from the South Coastal Information Center and the San Diego Museum of Man. Consulted with the Native American community regarding the project to maintain positive relations and comply with provisions of CEQA. Searched historical records house and the San Diego Historical Society in Balboa Park and composed letter report to client regarding the results of the records search and consultation. Client Reference: Judy Mitchell, Mission Resource Conservation District,

Camp Lejeune, United State Marine Corps, Jacksonville North Carolina, January 2005-July 2006. As field and lab technician, curated artifact collections; performed data entry in Microsoft Excel, Access, and ArcMap; maintained artifact catalogs and project documentation; cleaned and maintained artifact assemblages; completed and filed site forms/records; obtained site and accession numbers and participated in phase I and II field work including plain-view sketches, used Munsel soil color guide, and filled out level forms for test units; and Operation of Tremble GPS unit in mapping site boundaries

Publications

Technical Reports

Presentations:

2008 *Digital image processing of shell temper variability in late prehistoric ceramics from the Lower Mississippi River Valley*. Poster presentation at the 73rd Annual Society for American Archaeology – Vancouver, CD March 2008

Independent Research:

Teaching Experience:

Graduate Assistant, CSU Long Beach, October 2006–August 2007. Prepared lab materials for undergraduate classes, assist professors with class instruction including assisting students with questions regarding concepts presented in class, preparation, set-up, and instruction of geophysical and archaemotry instrumentation for lab classes.

Laboratory Experience:

Research Assistant and IIRMES Lab Technician, May 2007–August 2008. Maintained and operated GBC Optimass orthogonal TOF ICP-MS and New Wave 213 LUV Laser Ablation System in the Institute for Integrated Research in Materials, Environment, and Society (IIRMES) laboratory. Prepared and introduced samples for bulk chemical analysis using the LA TOF ICM-MS. Processed raw data from the ICP-MS to determine concentrations of elements and isotopes in solid artifact samples for determining artifacts provenance. Provided instruction and assistance for students from other academic institutions in the use of the TOF ICP-MS.

Lab Volunteer, North Carolina Archaeology Research Center, July-October 2004. As a laboratory technician, cleaned, labeled, and cataloged prehistoric and historic North Carolina artifacts. Acquired information on identifying prehistoric artifacts and how they may have been used

Additional Experience:

NAGPRA Inventory Update, CSU Long Beach, August 2007–Present. As Graduate Assistant, updated the inventory of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony housed at California State University, Long Beach as per the Native American Graves Protection and Repatriation Act. Researched the provenience of human remains and associated burial objects that have vague or no associated information regarding the location of the items discovery. Produced monthly reports on information regarding the materials housed at the university to present to a Review Committee.

El Baul, Cotzumalguapa, Guatemala, January 2008. Developed a field research method conducive to an integrated analysis of multiple data sets from various data collection methods. Conducted an intensive and systematic plow-zone surface survey at El Baul as a follow up to previous geophysical surveys. Led a team of students and instructed them on setting up survey grids, methods of collection, identification, and recording of artifacts. Utilized GPS technology in generating a topographic map of the survey area and the storage of survey grid data.

Geophysical Survey at Zzyzx, California, October 2007. Conducted a multi-instrumental geophysical survey including magnetometer, ground penetrating radar, and conductivity meter. Integrated GPS technology in generating a topographic map of the survey area. Conducted a pedestrian survey and developed a model to integrate the geophysical data with the topographic and artifact data acquired from the pedestrian survey.

Survey and Mapping at Akahanga, Rapa Nui, Chile, July 2007. Conducted a surface survey and mapping of large rock features at Akahanga on the east coast of the island. Conducted geophysical survey of the same area including conductivity and GPR. Led a team of students in operating a custom apparatus for obtaining aerial photographs of the entire area of Akahanga.

Geophysical Survey of El Baul, Cotzumalguapa, Guatemala, January 2007. Operated geophysical equipment including magnetometer, ground penetrating radar, and conductivity meter to detect subsurface features of a Late Classic large urban settlement, participated in excavating a portion of a large causeway associated with the urban center El Baul.

Brian T. Williams, M.A., RPA
Associate Archaeologist

Firm Name: ASM Affiliates, Inc., Carlsbad, California

Total Years of Experience: 4

Employment History:

2009	Associate Archaeologist, ASM Affiliates, Carlsbad, California.
2009	University of San Diego, Professor for Gender in Anthropology
2007-2009	Associate Archaeologist, Gallegos & Associates, Carlsbad, California
2005-2007	Intern, Barona Tribal Museum, Barona, California

Education:

M.A.	2007/Maritime Archaeology/Flinders University, Adelaide, SA, Australia
B.A.	2005/Anthropology/University of San Diego, San Diego, California

Additional Training:

2007	NOAA investigations in Northwest Hawaiian Islands, HI, USA
2007-2009	AIMA/NAS Certification and AIMA membership
2007	Flinders University Field School, Victor Harbor, SA, Australia
2006-2008	Assistant Editor to FUMAN (Flinders University Maritime Archaeology Newsletter)
2006	Site plan creation/deterioration analysis of *Clomnel*, *Thistle*, *Blackbird*, and Stockyard Creek landing site with Heritage Victoria, Port Albert, VIC, Australia
2006	Investigation and site plan creation for *Dorothy S. Sterling*, Port Adelaide, SA, Australia
2006	Investigation and ship's lines analysis of *Hecla*; Port Lincoln, SA, Australia
2006	Investigation and ship's lines analysis of *Annie Watt*; Port Adelaide, SA, Australia
2005-2007	Transcription/Translation of Native 'Iipay language for Barona Tribal Museum
2005-2007	Collections Management, Archaeology Society of San Diego
2004	Florida State University Archaeology Field School, Poggio delle Civitelle, Italy
2003	Syracuse University Field School, Pompeii, Italy

Awards/Commendations:

2008	Registered Professional Archaeologist
2007-2009	Nautical Archaeology Society Member
2005	Recipient of Anthropology Honor Student Award/ Outstanding Archaeologist Award from faculty of University of San Diego
2005	Recipient of Trans Border Institute Grant for Native American study in Baja California

2004-2009 Member of Lambda Alpha Archaeology Honor's Society
2004-2005 University of San Diego Lacrosse President
2003 Syracuse Outstanding Student Abroad Award
2001-2005 First Honors University of San Diego Dean's List

Citizenship: USA

Languages: Proficient in reading/writing/speaking Italian
Sufficient in reading Spanish and Latin

References:

Dennis Gallegos, Owner, Gallegos & Associates, (760) 929-0055
Email: Gallegos@aol.com

Alana Cordy-Collins, Anthropology Professor, University San Diego, (619) 260-4725
Email: alanacc@sandiego.edu

Father Owen Mullen, University Chaplain, University of San Diego, (858) 335-7377
Email: omullen@sandiego.edu

Professional Profile:

Brian Williams is an archaeologist who received his B.A. in Anthropology from the University of San Diego, and his M.A. in Maritime Archaeology from Flinders University, Australia. He has worked as an archaeologist on projects in Orvieto and Pompeii, Italy, Adelaide and Melbourne, Australia, and the Hawaiian Islands. The last two years he has been an Associate Archaeologist in San Diego doing Cultural Resource Management. His main areas of interest are in understanding social identity and its constructions through archaeology.

Selected Job Experience:

ASM Affiliates

San Diego Gas & Electric subcontractor PAR Electronic Monitoring at Canfield Road, Palomar Mountain, San Diego County, California, 2009. Conducted monitoring of two power pole replacements on Palomar Mountain. Coordinated with SDG&E and PAR Electronic project managers and construction foreman, conducted archaeological monitoring of pole replacement, and prepared technical report to summarize the results of the project. Client reference: Leslie Nelson, SDG&E, (760) 703-2869.

San Diego Gas & Electric pole survey off Canfield Road, Palomar Mountain, San Diego County, California, 2009. Conducted preconstruction survey of a power pole on Palomar Mountain. Conducted archaeological survey and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric subcontractor Diversified Utilities Services, Inc. preconstruction survey of 45 proposed Guard Pole locations along Aviara Parkway and El Camino Real, Carlsbad and Encinitas, San Diego County, California, 2009. As part of the SDG&E Encina to Penasquitos Reconductor Project. Coordinated work with SDG&E and Diversified Utilities Services, Inc. project managers, conducted preconstruction survey of proposed Guard Pole locations, and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric five pole survey off Magee Road, Pala, Orange County, California, 2009. Conducted preconstruction survey of five proposed pole replacements in Pala and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric transmission realignment on Mount Woodson, Poway, San Diego County, California, 2009. Coordinated with SDG&E project managers and Native American monitor, conducted archaeological survey of proposed pole removals and placements for transmission realignment, and prepared technical report to summarize the results of the project. Client reference: Leslie Nelson, SDG&E, (760) 703-2869.

San Diego Gas & Electric pole survey in Harrison Park, Cuyamaca, San Diego County, California, 2009. Conducted preconstruction survey of proposed pole replacement in Cuyamaca and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric pole survey in Japatul Valley, Alpine, San Diego County, California, 2009. Conducted preconstruction survey of proposed pole replacement in Alpine and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric Wood to Steel Project Tie Lines 6904, 625, 626, and 629 and Eagle Peak Ranch Alternative pole replacements preconstruction survey and alternative design consulting, San Diego County, California, 2009. Conducted preconstruction survey, pole fielding, and technical design consultation. Coordinated with SDG&E project managers, submitted a Sacred Lands search with Native American Heritage Committee, planned and organized archaeological survey crews, submitted new site form and update information to Forest Services and South Coastal Information Center for numerical assignment, composed individual consultation letters for Native American leaders, conducted archaeological survey of the proposed pole replacements, and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric 28 proposed pole and proposed underground conduit survey off Featherstone Canyon Road, Barona, San Diego County, California, 2009. Conducted preconstruction survey of 28 proposed pole location in Barona. Coordinated with SDG&E project managers and Native American Monitor, conducted archaeological survey, and

prepared technical report to summarize the results of the project. Client reference: Leslie Nelson, SDG&E, (760) 703-2869.

San Diego Gas & Electric pole survey at 4647 Montiel Truck Trail, Jamul, San Diego County, California, 2009. Conducted preconstruction survey of proposed pole replacement in Jamul and prepared technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric manhole placement at Torrey Pines Road and Torrey Pines Lane intersection, La Jolla, San Diego County, California, 2009. Conducted cultural monitoring of a manhole placement in La Jolla. Coordinated with SDG&E project managers and construction foreman, conducted archaeological monitoring of the manhole placement and prepared a technical report to summarize the results of the project. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

San Diego Gas & Electric Department of Energy switch relocation at La Jolla Boulevard and Ravina Street intersection, La Jolla, San Diego County, California, 2009. Conducted Record Search request with South Coastal Information Center and prepared summary of the results. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

Gallegos and Associates

San Diego Gas and Electric proposed Sunrise Powerlink Preferred Northern Route and Environmentally Superior Southern Alternative, El Centro to Poway, Imperial and San Diego County, California, 2007 and 2008. Conducted preconstruction survey and monitoring of proposed pole and project component locations along both proposed routes from El Centro to Poway. Coordinated with SDG&E project managers, engineers, subcontractors (Finley Engineering Co., Project Design Consulting, Inc., Arcadis, and TRC Companies, Inc.) and Native American monitors, contacted and met with landowners, conducted archaeological survey and monitoring, and assisted preparation of technical report to summarize results of the projects. Client reference: Susan M. Hector, Ph.D., SDG&E, (858) 654-1279.

Otay Ranch housing development, Otay, San Diego County, California, 2008. Conducted preconstruction survey for housing development in Otay. Coordinated with Native American monitors, conducted archaeological survey and prepared technical report to summarize results of the project.

Kuebler Ranch land development, Otay, San Diego County, California, 2008. Conducted preconstruction survey for land development in Otay. Coordinated with Native American monitors, conducted archaeological survey and excavation of units and trenches, and prepared technical report to summarize results of the project.

Valley Center Municipal Water District cultural resources survey, Valley Center, San Diego County, California, 2007. Produced and edited technical report to summarize results of the project.

Heritage Victoria

Heritage Victoria and Flinders University investigations in Port Albert, Gippsland, Victoria, Australia, 2006. Conducted archaeological terrestrial and underwater surveys in Port Albert. Coordinated with Heritage Victoria project managers, conducted underwater survey of three shipwrecks, carried out archaeological survey of Foster's Landing, produced site formation and deterioration processes, developed dive schedules, constructed site maps and protection plans, and prepared technical report to summarize results of the project. Client reference: Peter Harvey, Heritage Victoria, (03) 8644-8800.

Publications:

Technical Reports:

2009 Archaeological Field Check for the SDG&E Encina to Penasquitos Reconductor Project Part II: Guard Structure Pole Checks in Carlsbad and Encinitas, San Diego County, California (ETS 7963). ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Cultural Resources Survey Summary for the Proposed SDG&E Tie Line 626 Eagle Peak Ranch Alternative for the Wood to Steel Poles Replacement Project, Pine Hills, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Archaeological Survey for the SDG&E Orange County Five Pole Replacement Project (Poles P218783, P218782, P218781, P218780, and P815678), Pala, Orange County, California (ETS 7900). ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Survey Summary for the SDG&E Proposed Mount Woodson Project – ETS 7169, San Pasqual, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Records Search Summary for the SDG&E Proposed Mount Woodson Project – ETS 7169, San Pasqual, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Contributor to Garcia-Herbst & Laylander 2009, Class III Inventory of the Cultural Resources Along San Diego Gas & Electric Tie Line 6904 *for the* Wood to Steel Pole Replacement Project, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Contributor to Garcia-Herbst & Laylander 2009, Class III Inventory of the Cultural Resources Along San Diego Gas & Electric Tie Line 625 *for the* Wood to Steel Pole Replacement Project, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Contributor to Garcia-Herbst & Laylander 2009, Class III Inventory of the Cultural Resources Along San Diego Gas & Electric Tie Line 626 *for the* Wood to Steel Pole Replacement Project, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Contributor to Garcia-Herbst & Laylander 2009, Class III Inventory of the Cultural Resources Along San Diego Gas & Electric Tie Line 629 *for the* Wood to Steel Pole

Replacement Project, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Archaeological Monitoring for the SDG&E Orange County Two Pole Field Check (Poles P123353 and P123354), San Juan Capistrano, Orange County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Cultural Resources Survey for SDG&E Harrison Park Pole 717640 Replacement, Cuyamaca, San Diego County, California (ETS 7847). ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Cultural Resources Survey for the SDG&E Alpine Pole Replacement Project (Pole 275744), Cuyamaca, San Diego County, California (ETS 7732). ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Cultural Resources Survey Summary for the proposed SDG&E Jamul Pole 475598 Replacement Project - ETS 7751, Jamul, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Records Search Summary for the Proposed SDG&E La Jolla Project- ETS 7634, La Jolla, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2009 Archaeological Survey of 27 Proposed Pole Locations and Underground Conduit for the Featherstone Camp Project, San Diego County, California. ASM Affiliates. Submitted to San Diego Gas and Electric.

2008 Contributor to Noah & Gallegos 2008, Class III Archaeological Inventory for the SDG&E Sunrise Powerlink Project, San Diego and Imperial Counties, California. Gallegos and Associates. Submitted to USDI BLM. On file at South Coastal Information Center, San Diego State University.

2007 Contributor (Report Production) to Guerrero & Gallegos 2007, Cultural Resources Survey for the VCMWD South Village Project, Valley Center, California. Gallegos and Associates. Submitted to VCMWD. On file at South Coastal Information Center, San Diego State University.

2006 Coauthored (w/ Jason Raupp, Karson Winslow, and Agnes Milowka) Port Albert Archaeological Project: Report of Investigations. On file at Heritage Victory, Melbourne, AU.

Independent Research:

2007 Identity Aboard *Maple Leaf*: Variation and Group Identity During the American Civil War- Masters Thesis with Flinders University

Other:

2007 Coauthored (w/ Jason Raupp, Karson Winslow, and Agnes Milowka) "A View from Above: Archaeological Site Inspections in East Gippsland, Victoria" in J McKinnon and J Raupp (eds) A Year in Review: 2006 Program in Maritime Archaeology, Flinders University Maritime Archaeology Monograph Series, No. 13.

2006 "Port Albert Archaeological Project", in FUMAN (Flinders University Maritime Archaeology Newsletter).

Scott Wolf
Associate Archaeologist

Firm Name: ASM Affiliates, Inc., Carlsbad, California

Total Years of Experience: 10

Employment History:

2003-present	Associate Archaeologist, ASM Affiliates, Inc., Carlsbad, California
1997-1999	Associate Archaeologist, Brockington and Associates, Mount Pleasant, South Carolina

Education:

M.A.	In Progress/History/Norwich University
B.A.	1996/Anthropology/College of Charleston, South Carolina

Additional Training:

2007-2008	40-hour training HAZWOPER certified
2007-2008	Adult CPR and First Aid Training certified
2007-2008	Training Seminar for Aviation Archaeology Field, Lab, and Research Methods
1996	Paleontology/Paleoanthropology Field School, Red Desert Basin Project, Red Desert, Wyoming
1995-1996	Laboratory Internship at the Nathaniel Russell home, Charleston Museum, Charleston, South Carolina

Registrations: N/A

Professional Memberships:

Society for California Archaeology/member
Pacific Coast Archaeological Society/member
San Diego Archaeology Center/member
Historical Congress of San Diego/member

Other Capabilities: cartography, GPS data collection, historic artifact identification and analysis, and invertebrate marine shell speciation

Awards/Commendations: N/A

Clearances:

DoD clearance for Space and Naval Warfare Systems Command (SPAWAR)
DoD clearance for Navy Base Point Loma (NBPL)
DoD clearance for San Clemente Island (SCLI)

DoD clearance for Marine Corps Base Camp Pendleton (MCBCP)
DoD clearance for Edwards Air Force Base
DoD clearance for Twentynine Palms Marine Corps Air Ground Combat Center (MCAGCC)
Camp Pendleton Range Safety Officer (RSO), non-live fire range certified 2006-08
UXO safety training for 29 Palms MCAGCC and San Clemente Island (SCLI)
2007 Certification, Railroad Safety, North County Transit District

Citizenship: USA

Languages: N/A

Professional Profile:

Mr. Wolf has 10 years of experience in professional archaeology. He graduated from the College of Charleston with a B.A. in Anthropology in 1996 and has worked in the San Diego area since 2002. Mr. Wolf has been involved in survey, testing, data recovery, paleoecological studies, remote sensing, and construction monitoring throughout California. He is certified by the City of San Diego as an archaeological monitor and has security clearances for military installations in southern and central California, including San Clemente Island. Mr. Wolf specializes in historic artifact analysis and the analyses of invertebrate remains.

Project Experience:

Archaeological Resources Survey for the Melrose Station Market, Oceanside, San Diego County, California, 2007-2008. As Field Archaeologist, conducted pedestrian survey and wrote the initial project report. The proposed Melrose Station Market project would establish a commercial center and could ultimately impact any cultural resources within the property boundaries by grading and construction activities. Client Reference: Mr. Kerry Benton, Gatlin Development..

Site Survey, Site Record Evaluations, and Site Documentation Activities for SWATS 4 and 5 Site Documentation Project, Commander Navy Region Southwest, San Clemente Island (SCLI), California, 2007-ongoing. As Associate Archaeologist, participated in the archaeological site survey, site record evaluations, and site documentation activities on northern San Clemente Island. Client Reference: Andy Yatsko, Navy Region Southwest, (619) 532-2800

Archaeological Evaluation of the Otay Mesa Yamamoto Property, Kearny Real Estate Company, San Diego, San Diego County, California, 2007. As Field Director, conducted archaeological testing and evaluation of a portion of prehistoric site CA-SDI-7208/CA-SDI-7857. Client Reference: John Bragg, Kearny Real Estate Company

Archaeological Study for the South Lake Park Master Plan, Project Design Consultants, San Marcos, San Diego County, California, 2007. As Field Director, conducted cultural resources

survey for the South Lake Property. Client Reference: Patricia Trauth, Project Design Consultants

North County Transit District Bridge Replacement Project (NCTD BRP) Existing Conditions – Cultural and Historical Resources, North County Transit District, San Diego County, California, 2007. As Associate Archaeologist, participated in an evaluation of the existing conditions pertaining to cultural and historical resources for the proposed NCTD BRP. The project area is located within NCTD's right of way in the cities of Cardiff, Del Mar and the Sorrento Valley area of the City of San Diego. Client Reference: Patrick O'Neill, BRG Consulting, Inc., (619) 298-7127

Archaeological Site Survey, Site Record Evaluations, and Site Documentation Activities for the Infantry Operational Area (IOA) Site Documentation Project, Commander Navy Region Southwest, San Clemente Island (SCLI), California, 2006-2008. As Associate Archaeologist, participated in the archaeological site survey, site record evaluations, and site documentation activities on central and southern San Clemente Island. Client Reference: Andy Yatsko, Navy Region Southwest, (619) 532-2800

Cultural Resources Survey of the Tulloch Property, Greystone Environmental, Santa Ysabel, San Diego County, California, 2006. As Associate Archaeologist, conducted an intensive survey of the existing and the proposed SDG&E utility corridors on the Tulloch property. Client Reference: Gary Fink, Greystone Environmental,

Creekside Sewer Lateral Project, Carter Reese & Associates, San Diego, San Diego County, California, 2006. As Field Director, conducted cultural resources survey of the proposed Creekside Sewer Lateral to determine the presence or absence of potentially significant prehistoric and historic resources within both of the project boundaries. Client Reference: Ken Cluskey, Carter Reese & Associates

Yuma Pivot Point Survey Project, Yuma, Arizona, August 2006. As Associate Archaeologist, participated in the ground penetrating radar survey (GPR) search for archaeological remains of the Southern Pacific railroad bridge across the Colorado River. Prepared for the Yuma Crossing National Heritage Area.

Cultural and Paleontological Resource Study for the Towne Center Project, T&B Planning, City of Perris, Riverside County, California, September 2006. As Field Director, conducted cultural resource study to assess the presence or absence of potentially significant resources with in the project boundaries for CEQA compliance. Client Reference: Mr. Shawn Nevill, T&B Planning

Extended Phase I Testing at Prehistoric Sites CA-SDI-10879, CA-SDI-10880, and CA-SDI-12155 near Bonsall, San Diego County, California, 2006. As Associate Archaeologist, participated in the testing of four prehistoric archaeological sites along SR-76 to determine

whether or not intact subsurface archaeological deposits were present. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

Canyon Trails Cultural Resource Phase I and II Studies, T&B Planning, Hemet, Riverside County, California, 2006. As Field Director, supervised testing of 13 prehistoric sites located in Reinhardt Canyon. Client Reference: Adam Drudge, T&B Planning

Cultural Resources Monitoring for the Babbitt Parcel of the Amber 58 Project, California West Homes, Vista, San Diego County, California, 2006. As Cultural Resource Monitor, conducted archaeological monitoring of grading associated with the construction of residential units on the project property. Client Reference: Ryan Martin, California West Homes

Archaeological Investigations at University House, CA-SDI-4669 (SDM-W-12), University of California at San Diego, La Jolla, San Diego County, California, 2006- 2007. As Field Director, oversaw the geotechnical testing phase of the archaeological investigations, and participated in the Canine Forensic Investigation Phase of the University House Project. Client Reference: Cathy Presmyck, University of California San Diego, (858) 534-3860

Cultural Resource Survey of 683 Thunderbird Drive, Western Mutual Development Corporation, Oceanside, San Diego County, California, 2006. As Field Director, conducted archaeological survey of the residence located at 683 Thunderbird Drive in Oceanside. Client Reference: Ed Scarpelli, Western Mutual Development Corporation

Cultural Resource Inventory for the San Marcos Creek SPA Project, City of San Marcos, San Diego County, California, 2006. As Associate Archaeologist, participated in the cultural resources survey covering over a total of 262 acres conducted for the San Marcos Creek Project. Client Reference: Susan Vandrew-Rodriguez, City of San Marcos, (760) 744-1050, ext. 3237

Extended Phase I Testing for Prehistoric Site SDI-16498, Caltrans District 11, Bonsall, San Diego County, California, 2006. As Field Director, conducted extended Phase I testing undertaken at CA-SDI-16498 to determine whether or not an intact subsurface archaeological deposit was present. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

Records Search and Field Survey for Orienteering Course, Coronado, San Diego County, California, 2006. As Field Archaeologist, surveyed 71 orienteering points used by the U.S. Navy as part of a land navigation training exercise conducted by the Naval Special Warfare Center (NSWC) at Laguna Mountain Recreation Area (LMRA). Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Cultural Resources Inventory of Johnson Valley Off-Highway Vehicle (OHV) Recreational Use Area, Bureau of Land Management, San Diego County, California, 2006. As Field Archaeologist, conducted resource inventory survey of approximately 2 km^2 maintained by the Bureau of Land Management (BLM) for the Scripps Institutes Calico Fault Seismic Study, and

authored the subsequent technical report. Client Reference: Elizabeth Cochran, Bureau of Land Management,

Cultural Resources Monitoring for the Hotel Circle South Project, Caster Property Enterprises, San Diego County, California, 2006. As Cultural Resource Monitor, observed ground-disturbing activities for the Hotel Circle South Project. Client Reference: Mr. Tom Kearny, Caster Property Enterprises, (619) 287-8873

Archaeological Survey of the Morrison Advanced Mitigation Parcels near Bonsall, Caltrans District 11, San Diego County, California, 2006. As Field Archaeologist, conducted an archaeological resource inventory survey of the Morrison Advanced Mitigation Parcels. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

Archaeological Survey of the Singh Advanced Mitigation Parcel, Caltrans District 11, Oceanside, San Diego County, California, 2006. As Field Archaeologist, conducted an archaeological resource inventory survey of the Singh Advanced Mitigation Parcels. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

Archaeological Survey of the Groves Advanced Mitigation Parcels Near Bonsall, Caltrans District 11, San Diego County, California, 2006. As Field Archaeologist, conducted an archaeological resource inventory survey of the Groves Advanced Mitigation Parcels. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

SDI-10723 Data Recovery, Department of the Navy, MCB Camp Pendleton, San Diego County, California, 2006-ongoing. Assisted with identifying and organizing the artifact collection derived from data recovery of the prehistoric site SDI-10723. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-5090

Historic Mining Context for the Western Barry M. Goldwater Range and Archaeological Inventory of the Historic Fortuna Mine and Campsite, Yuma County, Arizona, 2006. As Associate Archaeologist, participated in the historic mining context survey, Class III archaeological survey, and recorded features using Trimble GPS technology. Client Reference: Jan Lawson, MCAS Yuma, (928) 269-6724

Archaeological Testing and Evaluation of Four Sites for the Dual Magnet High School Project, The Planning Center, Vista, San Diego County, California, March 2006. As Field Director, conducted the test evaluations of four sites (CA-SDI-17340, CA-SDI-17341, CA-SDI-16694, and VUSD/CGI-1) potentially impacted by the proposed development of the new Dual Magnet High School. In the lab, supervised the processing, cataloging, analysis, and curation of artifacts recovered during the testing; authored technical report. Client Reference: Andy Minton, The Planning Center, (714) 966-9220 ext 314

Archaeological Survey of the Ridge Creek Property, Fallbrook, San Diego County, California, 2006. As Field Director, conducted cultural resource survey of the Ridge Creek Property. The

project involves the subdivision of a 30.36-acre lot into 14 lots at a minimum of 2.0 acres per lot. Client Reference: Mr. James Leising, Leising Builders

Phase I Cultural Resource Survey of 2,500 Acres in Four Priority Areas at Edwards Air Force Base (EAFB), Earth Tech, Kern and Los Angles counties, California, 2006. As Associate Archaeologist, participated in the Phase I (Class III) cultural resources survey and inventory of approximately 2,500 acres in four "priority areas" (Priority 9-12) located on Mercury Boulevard at the center of EAFB and adjacent to the east/southeast margin of Rogers Dry Lake. Client Reference: Mr. Rick Norwood, Edwards Air Force Base, (661) 277-7077

Archaeological Data Recovery for the Hard Rock Hilton, 5th Rock LLC, Centre City Development Corporation, downtown San Diego, California, 2005. As Laboratory Assistant, assisted with organizing the artifact collection derived from data recovery of historic features identified during construction monitoring. Client Reference: Alkesh Patel, 5th Rock LLC,

Viejas Northwest Grade Evaluation Project, Viejas Band of Kumeyaay Indians, Viejas Indian Reservation, Alpine, San Diego County, California, 2006. As Field Archaeologist, conducted excavation of sites along the northwestern boundary of the Viejas Indian Reservation. Assisted with the collection and processing of artifacts. Client Reference: Lisa Haws, Viejas Band of Kumeyaay Indians, (619) 659-2341

Archaeological Survey of the Lee Lake Expansion Project, Dudek and Associates, Riverside County, California, 2005-2006. As Field Director, conducted archaeological survey of the Lee Lake Reservoir in Riverside County for the Lee Lake Water District. Coordinated with Principal Investigator and conducted an additional site visit accompanied by a member of the Pechanga Band of Mission Indians. Client Reference: Tricia Wotipka, Dudek and Associates, (760) 942-5147

Data Recovery Excavations at CA-SDI-16691, SVP Jackson Pendo Development Company, Escondido, San Diego County, California, 2005. As Field Archaeologist, conducted data recovery to mitigate impacts to site SDI-16691. Client Reference: David Gatzke, Jackson Pendo Development Company

Archaeological Testing and Evaluation of CA-SDI-16069 and CA-SDI-17526, BRG Consulting, Inc., San Diego County, California, 2005. As Field Archaeologist, Conducted archaeological evaluation to determine the extent and character of potentially significant prehistoric resources within the Viejas Indian Reservation on property owned in fee by the Viejas Indian Tribe. Client Reference: Ralph Kingery, BRG Consulting, Inc., (619) 298-7127

Testing and Evaluation of Site CA-SDI-11021 for the Proposed Tecolote Canyon Wetlands Mitigation Project, City of San Diego Metropolitan Wastewater Department, San Diego, San Diego County, California, 2005. As Field Archaeologist, conducted site evaluation to determine the extent and character of potentially significant prehistoric and historic resources

within the Tecolote Canyon Wetlands. Client Reference: Laura Ball, Metropolitan Wastewater Department, (858) 292-6417

Archaeological Monitoring for the Los Penasquitos North Wetland Creation Project, Metropolitan Wastewater Department, San Diego County, California, 2005. As Cultural Resource Monitor, observed ground-disturbing activities for the Los Penasquitos North Wetland Creation Project. Client Reference: Mr. Bill White, Metropolitan Wastewater Department, (858) 614-5789

Archaeological Monitoring of CA-SDI-10148, Caltrans District 11, Santee, San Diego County, California, 2005. As Cultural Resource Monitor, observed ground-disturbing activities near known archaeological sites partially contained within the Forester Creek Biological Mitigation Site. Client Reference: Chris White, Caltrans District 11, (619) 616-6611

Archaeological Testing and Evaluation at Two Sites, CA-SDI-222 (Monument Mesa Site) and CA-SDI-4281 (Lichty Mesa Site), California State Parks, Border Field State Park, San Diego County, California, December 2005. As Field Archaeologist, conducted archaeological testing to determine the extent and character of two potentially significant prehistoric resources. Client Reference: Therese Muranaka, California State Parks, (619) 778-2553

Archaeological Survey of MFH Site 8, Department of the Navy, MCAS Miramar, San Diego County, California, 2005. As Field Archaeologist, conducted an archaeological survey at the MFH Site 8 housing area and within areas proposed for development as an access road. The access road alignment had not been set, and the survey was used in a constraints analysis. Although a portion of the housing project area had been previously surveyed, the area was subsequently burned and the SHPO required additional surveying due to improved visibility. Client Reference: Danielle Page, NAVFAC Southwest, (619) 532-2090

Historical Resources Survey of Black Mountain Open Space Park, City of San Diego, San Diego County, California, 2005-2006. As Field Archaeologist, conducted a cultural resources inventory of this 1,314-acre city park. Assisted with extensive research on the Black Mountain Mine, located on the north slope of the mountain. The project is being conducted to prepare a National Register mining district nomination form for remnants of the mining operation still existing on-site. Client Reference: Samir Mahmalji, City of San Diego, (619) 236-7342

Cultural Resources Survey for a Fuel Reduction Project in the Julian Area, PBS&J, San Diego County, California, 2005. As Field Archaeologist, conducted a field survey along five major roadways near the town of Julian, California: State Route 79 from Julian to Lake Cuyamaca, State Route 78 from Santa Ysabel to Julian, State Route 78 Banner Grade/Whispering Pines, State Route 79 South, and Sunrise Highway. The project area consisted of a 200-ft. corridor on both public and private lands along both sides of these roads. Foresters marked trees that were proposed for removal; this information was provided on aerial photographs to the field personnel. Surveyed the areas where marked trees were located, and checked previously recorded sites within those areas. As a result of the inventory, four previously recorded sites

and 16 newly discovered sites were identified as being near or within areas proposed for tree removal. Client Reference: Amanda Lopez, PBS&J, (858) 514-1060

Archaeological Testing and Evaluation for the Tank Farm MILCON Project, Shaw Environmental, Navy Base Point Loma, San Diego County, California, 2005. As Field Archaeologist, assisted with delimiting, recording, and assessing the integrity of a prehistoric locus uncovered by erosion from heavy rains in 2004-2005. Helped to evaluate the integrity and National Register significance of the site in compliance with Section 106 of the National Historic Preservation Act. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Archaeological Survey of the Lakeland Reservoir, PBS&J, Riverside County, California, 2005. As Field Director, conducted survey of the project and identified five historic structures slated for demolition during the proposed project area including a private, ca. 1920s residence located at 17255 Encina Drive, the Adelfa Reservoir and Encina Pump Station, the Cottrell Reservoir, and the Cottrell Pump Station. Client Reference: Kevin Smith, PBS&J

Phase II Test Excavations at Six Sites in the Lavic Lake Training Area, MCAGCC, Twentynine Palms, San Bernardino County, California, 2005. As Field Archaeologist, conducted Phase II test excavations at and evaluation of five prehistoric habitation sites and one lithic quarry located south and east of Lavic Lake. Client Reference: Dr. Marie Cottrell, MCAGCC, Twentynine Palms, (760) 830-7396

Phase I Cultural Resources Survey of 2,000 Acres in the South Range, Epsilon Systems Solutions, China Lake Naval Air Weapons Station (NAWS), Ridgecrest, Inyo County, California, 2005. As Field Archaeologist, surveyed 2,000 acres in a rugged portion of the South Range at NAWS. Documented 21 archaeological sites, including prehistoric rockshelter habitations, lithic scatters, isolated rock features, and an historic fence. Client Reference: Greg Halsey, Epsilon Systems Solutions, (760) 446-6400

Phase I Cultural Resources Survey of 1,640 Acres in the Quackenbush Training Area, MCAGCC Twentynine Palms, San Bernardino County, California, 2005. As Field Archaeologist, conducted Class III survey of 1,640 acres in a relatively disturbed area of the Quackenbush training area. Documented three small lithic quarry sites. Client Reference: Dr. Marie Cottrell, MCAGCC Twentynine Palms, (760) 830-7396

Phase I Inventory of 1,100 Acres and Phase II Evaluation of Archaeological Sites along the Western and Northwestern Boundaries, Edwards Air Force Base, Kern County, California, 2005. As Field Archaeologist, conducted a Class III inventory of 1,100 acres. Documented 40 new archaeological sites, more than a dozen "submodern" refuse dumps, and a variety of isolate finds. Conducted excavations revealing that prehistoric sites are generally intact but have relatively low data potential, while historic sites have been lightly to heavily impacted by illegal activities but generally retain good data potential. Client Reference: Rick Norwood, Edwards Air Force Base, (661) 277-7077

All-American Canal Lining Project Survey, Imperial Irrigation District, Imperial County, 2004-2005. As Field Archaeologist, conducted a large-scale Class II and III inventory and random sample survey. Completed survey of the 4,200-acre right-of-way along approximately 23 miles of the All-American Canal. Conducted a 10 percent random sample survey that encompassed an additional 743 acres. This project was undertaken for use in planning the placement of quarrying and staging areas for the proposed canal lining project. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Archaeological Survey of the Miramontes Road Property, Helix Environmental, Jamul, San Diego County, California, 2005. As Field Director, conducted archaeological survey of the 19-acre project area. One large habitation site was identified during survey and documented. Prepared an ARMR-format report for submission to the County of San Diego. Client Reference: Dr. Stephen Neudecker, Helix Environmental, (619) 462-1515

San Vicente Emergency Storage Project Cultural Resources Survey, PBS&J, San Diego County, California, 2005. As Field Archaeologist, assisted with a cultural resources study of the San Vicente Reservoir, which the San Diego County Water Authority proposes to expand by adding height to the existing dam. The dam raise will result in the inundation of additional land around the perimeter of the reservoir. Compiled expanded field survey information for evaluation of the potential impacts to National Register-eligible sites within the project APE. Client Reference: Devon Muto, PBS&J, (858) 514-1023

Archaeological Monitoring for the Agua Hedionda Lagoon Bridge Replacement, North County Transit District, Carlsbad, San Diego County, California, 2005. As Archaeological Monitor, observed construction during replacement of the railroad bridge over Agua Hedionda Lagoon in Carlsbad. Coordinated with construction and railway personnel. Certified to survey along railways. Client Reference: Erich Lathers, BRG Consulting, Inc., (619) 298-7127

Evaluation of 30 Sites in the Quackenbush Range, TEC, Inc., Marine Corps Air Ground Combat Center, Twentynine Palms, San Bernardino County, California, 2005. As Field Archaeologist, conducted archaeological excavation of 30 sites within the Quackenbush training area. Assisted with mapping and surface collection of artifacts and artifact processing. Client Reference: Dr. Meg McDonald, Marine Corps Air Ground Combat Center, (760) 830-5717 x230

Pankey Ranch Test Excavations, Pardee Homes, San Diego County, California, 2004-2005. As Field Archaeologist, conducted archaeological excavation of an ethnohistoric village located near Bonsall in northeastern San Diego County. Observed the excavation of backhoe trenches for testing of the site. Client Reference: Rikki Schroeder, Pardee Homes, (760) 743-3156

Coachella Canal Data Recovery, Coachella Valley Water District, Riverside County, 2004-present. As Field Archaeologist, conducted data recovery on two prehistoric fish camp sites

located on the relic shoreline of ancient Lake Cahuilla that are expected to be impacted by the Coachella Canal Lining Project. Project conducted on lands administered by the USDI Bureau of Reclamation. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Caltrans TEA21 Rural Roadside Inventory, Caltrans District 11, San Diego County, California, 2004. As Field Archaeologist, participated in survey of 121 miles of rural roads in eastern San Diego County including State Routes 76, 78, and 79. Prepared field mapping and site forms. Thirty-five sites were recorded or updated during the survey. Client Reference: Chris White, Caltrans District 11, (858) 616-6611

Archaeological Monitoring for the Lillian Place Apartments, Wakeland Housing Development, downtown San Diego, California, 2004. As Archaeological Monitor, observed earthmoving activities for the demolition of three historic buildings and excavation for subsurface utilities at 13th and K Streets in downtown San Diego. Client Reference: Rebecca Davis, Wakeland Housing Development, (619) 235-2296 x313

Extended Phase I Investigations of Archaeological Sites along State Route 76, Caltrans District 11, Bonsall, San Diego County, California, 2004. As Field Archaeologist, investigated a series of prehistoric archaeological sites along the right-of-way between the Bonsall Bridge and Interstate 15. Conducted site survey, mapping, and testing in compliance with Section 106. Client Reference: Chris White, Caltrans District 11, (858) 616-6611

Naval Base Point Loma Site Recordation, Commander Navy Region Southwest, Point Loma, San Diego County, California, 2004. As Field Archaeologist, relocated 33 sites on Naval Base Point Loma. Reviewed site documentation and re-recorded sites that were improperly documented by past surveys. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Data Recovery of Locus O, Star Canyon Development, Palm Springs, Riverside County, California, 2004. As Field Archaeologist, conducted data recovery mitigation of an archaeological deposit and human remains near Tahquitz Canyon. Client Reference: Dr. Joe Nixon, Agua Caliente Band of Cahuilla Indians, (760) 883-1313

Cultural Resource Survey for a Fuel Reduction Project on Palomar Mountain, PBS&J, San Diego County, California, 2005. As Field Archaeologist, conducted survey along three roads on Palomar Mountain. Surveyed a 200-ft. corridor on both public and private lands along both sides of these roads. Foresters marked trees that were proposed for removal. Surveyed the areas where marked trees were located and checked previously recorded sites within those areas. Identified four previously recorded sites and one newly discovered site near or within areas proposed for tree removal. Client Reference: Amanda Lopez, PBS&J, (858) 514-1060

Coachella Canal Replacement Monitoring Program, Bureau of Reclamation and the Coachella Valley Water District, 2004-2005. As Cultural Resource Monitor, observed ground-disturbing

activities near known archaeological sites. Conducted two supplemental surveys, recorded newly found prehistoric sites, performed preliminary significance evaluations, and coordinated with contractors to avoid adverse impacts. Client Reference: Laureen Perry, USDI Bureau of Reclamation, (702) 293-8619

Las Pulgas Corridor Testing, Department of the Navy, MCB Camp Pendleton, California, 2004-2005. As Field Archaeologist, conducted test excavations of 22 hunter-gatherer archaeological sites. Mapped and documented prehistoric sites including shell middens, lithic scatters, and bedrock milling stations. Assisted with geotechnical coring of a prehistoric shell midden (SDI-812/H) to identify and examine previously recorded site boundaries. Documented coring. Client Reference: Stan Berryman, MCB Camp Pendleton, (760) 725-9738

Bishop's School Expansion Project, Rudolph and Sletten, La Jolla, San Diego County, California, 2004. As Cultural Resources Monitor, monitored construction of new buildings and facilities at an historic school located in downtown La Jolla. A number of historic trash deposits were identified and evaluated. Client Reference: Keith Whaley, Rudolph and Sletten, Inc., (858) 551-1542

Rose-Arizone, Clay, and Photo Drainage, and Road Improvement Surveys, Commander Navy Region Southwest, San Clemente Island, Los Angeles County, California, 2004. As Field Archaeologist, conducted archaeological surveys and assisted with the erection of protective signing on 750 sites. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

San Clemente Island Remote Sensing, Commander Navy Region Southwest, San Clemente Island, Los Angeles County, California, 2004. As GPS Assistant, helped with data collection and image rectification for a remote sensing project in the detection of archaeological sites on the base. Client Reference: Dr. Andy Yatsko, Commander Navy Region Southwest, (619) 532-2800

Eucalyptus Site Data Recovery Project, Caltrans District 11, Chula Vista, San Diego County, California, 2004. As Field Technician, participated in data recovery excavations of an early Archaic period site. Client Reference: Chris White, Caltrans District 11, (858) 616-6611

All-American Canal Lining Project Survey, Imperial Irrigation District, Imperial County, 2004-2007. As Field Archaeologist, conducted survey of the 4,200-acre right-of-way along approximately 23 miles of the All-American Canal. Task 2 involved a 10-percent random sample survey that encompassed an additional 743 acres. Client Reference: Laureen M. Perry, USDI Bureau of Reclamation, Lower Colorado Region, (760) 293-8619

Locus O Testing, Agua Caliente Band of Cahuilla Indians, Palm Springs, Riverside County, California, 2004. As Field Archaeologist, conducted data recovery excavations of three spatially distinct portions of the prehistoric site, including an intact cremation for proposed

housing development. Client Reference: Dr. Joe Nixon, Agua Caliente Band of Cahuilla Indians, (760) 883-1313

Salt Creek Ranch Data Recovery, McMillin Companies, Chula Vista, San Diego County, California, 2003. As Field Archaeologist, conducted testing and data recovery excavations of two historic sites and three prehistoric sites at a proposed housing development location. Documented and mapped historic sites and historic period features, including structural remains. Client Reference: Todd Galarneau, McMillin Companies, (619) 477-4117

Spangler Hills Survey Project, USDI Bureau of Land Management, Ridgecrest, San Bernardino County, California, 2003. As Field Archaeologist, participated in survey and inventory of approximately 10,000 acres of the Spangler Hills Area of Critical Environmental Concern. Client Reference: Judyth Reed, Bureau of Land Management, (760) 384-5422

Path 15 Survey, Steigers Corporation, Merced and Fresno counties, California, 2003. As Field Archaeologist, conducted archaeological survey of proposed transmission line. Identified two prehistoric lithic scatters and conducted preliminary subsurface testing of two additional lithic scatters. Recorded one historic period site. Client Reference: Hal Copeland, Steigers Corporation, (303) 799-3633

PF.Net AT&T Monitoring, Land Services, MCB Camp Pendleton, San Diego County, California, 2003. As Field Archaeologist, conducted archaeological monitoring for construction installation of over 10 linear miles of fiber optic line on MCB Camp Pendleton. Client Reference: Mile Takac, Land Services, (719) 481-1498

Publications: N/A

Independent Research: N/A

Teaching Experience: N/A

Laboratory Experience: Two internships with Martha Zienden and Ron Anthony of the Charleston Museum, Charleston, South Carolina

Other: N/A

Brad E. Comeau
Associate Archaeologist

Total Years of Experience: 7

Education:

B.A. 2004/Anthropology/University of Massachusetts Amherst
B.A 2004/Italian Studies/ University of Massachusetts Amherst

Professional Profile:

Brad Comeau is an Archaeologist who received his B.A. in Anthropology from the University of Massachusetts Amherst in 2004. He has conducted and directed survey, testing, and data recovery projects throughout southern California, primarily in San Diego and Riverside Counties, and is certified by the City of San Diego as an archaeological monitor. Mr. Comeau is proficient in field techniques including excavation of historic and prehistoric sites, mapping, soil profiles, plan views, theodolite/total station, and GPS hardware, specifically Garmin and Trimble units and TerraSync software. He has extensive experience monitoring linear trenching, construction excavations, mass grading projects, and directing controlled grading of significant archaeological sites.

Selected Project Experience:

Field Director/Crew Chief, 2009. Conducted a data recovery project in Lakeside, CA
Monitored construction for the Border Fence Project in California and Arizona, 2008, which required surveying and recording sites both individually and as a part of a small team. Archaeological Monitor.

UMASS Archaeological Services, 2004. Participated in multiple Phase I, II and III projects. Primary responsibilities included excavating shovel test pits and test units, site mapping, recording plan views and soil profiles, and various laboratory duties.
Field School in Archaeology, University of Massachusetts Amherst, 2003. Participated in site surveying and mapping using theodolite. · Instructed in and participated in excavation and laboratory methodology. · Participated in geophysical surveying.

APPENDIX F

Native American Coordination

Confidential

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
El Centro Field Office
1661 South 4th Street
El Centro, California 92243-4561

December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr Robert Pinto, Sr , Chairman
Ewiiaapaayp Band of Kumeyaay Indians
P.O. Box 2250
Alpine, CA 91903-2250

Dear Chairman Pinto,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004 The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map) The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land. Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

Under federal law, BLM is responsible for processing requests to authorize the projects, associated transmission lines, and other facilities to be constructed and operated on land it manages. In processing the applications, BLM must comply with the requirements of the National Environmental Policy Act (NEPA), which requires that federal agencies reviewing projects under their jurisdiction consider the environmental impacts associated with their construction and operation In the case of wind power projects such as the Tule Wind Project, this will be accomplished through preparation of Draft and Final Environmental Impact Statements (EIS). BLM will act as the lead federal agency responsible for meeting the consultation and documentation requirements for Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and Native American consultation, including Government to Government consultation.

The applicant, Iberdrola Renewables, Inc, has also applied for authorization from BLM to conduct additional meteorological testing within the project area to provide preliminary information to assist with permitting, site development, planning and preliminary engineering design of the Tule Wind Project. BLM is preparing an Environmental Assessment (EA) to analyze the environmental impacts that may be associated with the issuance of the Permit to conduct the meteorological testing. As stated above, Iberdrola has submitted a separate application to the BLM for the use of the land for future wind energy development, which will be the subject of a separate EIS; any authorization of meteorological site testing and monitoring does not automatically authorize the larger energy development project.

This letter serves to provide notification of both the proposed projects, explain the roles of the BLM, and offer an invitation to the tribe to enter into government-to-government consultation pursuant to the *Executive Memorandum of April 29, 1994* and other relevant laws and regulations We request your assistance in identifying any issues or concerns the Tribe might have about the project, including identifying sacred sites and places of traditional religious and cultural significance which might be affected by the proposed projects Currently, Tetra Tech Environmental Consultants, Inc. is undertaking the cultural resources record search and will be conducting a cultural resources inventory of the area of potential effect for the proposed meteorological towers They may be contacting you to gather additional information. If you provide sensitive information, a 1991 amendment to the national Historic Preservation Act allows the Bureau of Land Management to prevent the release of this information to the public if it may pose a risk to historic properties or traditional cultural properties.

Please do not hesitate to contact us if you have any comments, questions or would like to schedule a meeting. The BLM points of contact for this project are Thomas Zale, Associate Field Manager: (760) 337-4420, email: thomas_zale@ca.blm.gov; or Jenny Haggar, Archaeologist: (760) 337-4473, email: Jenny_Haggar@ca.blm.gov If you are aware of any other Tribes, individuals, or tribally-affiliated organizations that should be contacted regarding this project, please let us know A list of Tribal governments and other tribal contacts receiving a copy of this letter is enclosed for your reference. We would also appreciate some notice if the Tribe believes that the project lies outside its area of interest and does not wish to consult or be contacted about this in the future. You may contact us by letter, phone or email to let us know of your interest or preference for involvement in this project. The BLM truly appreciates your interest and concern for the public lands in San Diego County. We look forward to hearing from you.

Sincerely,

Vicki L. Wood

Vicki L. Wood
Field Manager

Attachments: Project area map
List of Tribal Governments and other tribal contacts

United States Department of the Interior

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December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Leroy J. Elliott, Chairman
Manzanita Band of Kumeyaay Indians
PO Box 1302
Boulevard, CA 91905

Dear Chairman Elliott,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County. The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004. The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map). The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land. Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility. A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

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Sincerely,

Vicki L. Wood

Vicki L. Wood
Field Manager

Attachments: Project area map
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December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Johnny Hernandez, Chairman
Santa Ysabel Band of Diegueno Indians
P.O. Box 130
Santa Ysabel, CA 92070

Dear Chairman Hernandez,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County. The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004. The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map). The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land. Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility. A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

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Sincerely,

Vicki L. Wood

Vicki L. Wood
Field Manager

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1661 South 4th Street
El Centro, California 92243-4561

December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Monique LaChappa, Chairperson
Campo Kumeyaay Nation
36190 Church Road, Suite 1
Campo, CA 91906

Dear Chairperson LaChappa,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County. The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004. The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map). The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land. Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility. A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

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Sincerely,

Vicki L. Wood
Field Manager

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BUREAU OF LAND MANAGEMENT
El Centro Field Office
1661 South 4th Street
El Centro, California 92243-4561

December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr Bobby Barrett, Chairman
Viejas Band of Kumeyaay Indians
P.O. Box 908
Alpine, CA 91903-0908

Dear Chairman Barrett,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004. The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map). The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility. A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

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Sincerely,

Vicki L. Wood

Vicki L. Wood
Field Manager

Attachments: Project area map
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United States Department of the Interior

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El Centro Field Office
1661 South 4th Street
El Centro, California 92243-4561

December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Gwendolyn Parada, Chairperson
La Posta Band of Kumeyaay Indians
P.O. Box 1120
Boulevard, CA 91905

Dear Chairperson Parada,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County. The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004. The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map). The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land. Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility. A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

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Sincerely,

Vicki L. Wood
Field Manager

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El Centro Field Office
1661 South 4th Street
El Centro, California 92243-4561

December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
PO Box 775
Pine Valley, CA 91962

Dear Ms. Lucas,

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Sincerely,

Vicki L. Wood

Vicki L. Wood
Field Manager

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December 19, 2008

In Reply Refer To: EIS CA-670-2008-040/ CACA-45248/ 8100 (P)
CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Ms. Rebecca Osuna, Chairperson
Inaja-Cosmit Band of Mission Indians
309 S. Maple Street
Escondido, CA 92025

Dear Chairperson Osuna,

Iberdrola Renewables Holdings, Inc has applied for authorization to develop a wind energy generating facility for its Tule Wind Project on Bureau of Land Management (BLM), El Centro Field Office federal land in eastern San Diego County. The applicant currently holds a right of way for testing and monitoring wind energy in the area, and two meteorological towers have been operating within the right of way area since 2004. The proposed project area is located 70 miles east of San Diego and north of Interstate 8 (see attached map). The entire right of way for monitoring and testing involves approximately 16,354 acres of federal land. Ground disturbing activities associated with this project would involve construction of access and/or utility roads, installation of meteorological testing towers and wind turbines, and a transmission line to a substation and maintenance facility. A final Plan of Development (POD) for the energy generating facility is in the process of being completed and will provide more detailed information on that project, and will outline the actual acreage of ground disturbance.

Under federal law, BLM is responsible for processing requests to authorize the projects, associated transmission lines, and other facilities to be constructed and operated on land it manages. In processing the applications, BLM must comply with the requirements of the National Environmental Policy Act (NEPA), which requires that federal agencies reviewing projects under their jurisdiction consider the environmental impacts associated with their construction and operation. In the case of wind power projects such as the Tule Wind Project, this will be accomplished through preparation of Draft and Final Environmental Impact Statements (EIS). BLM will act as the lead federal agency responsible for meeting the consultation and documentation requirements for Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and Native American consultation, including Government to Government consultation.

The applicant, Iberdrola Renewables, Inc, has also applied for authorization from BLM to conduct additional meteorological testing within the project area to provide preliminary information to assist with permitting, site development, planning and preliminary engineering design of the Tule Wind Project. BLM is preparing an Environmental Assessment (EA) to analyze the environmental impacts that may be associated with the issuance of the Permit to conduct the meteorological testing. As stated above, Iberdrola has submitted a separate application to the BLM for the use of the land for future wind energy development, which will be the subject of a separate EIS; any authorization of meteorological site testing and monitoring does not automatically authorize the larger energy development project.

This letter serves to provide notification of both the proposed projects, explain the roles of the BLM, and offer an invitation to the tribe to enter into government-to-government consultation pursuant to the *Executive Memorandum of April 29, 1994* and other relevant laws and regulations We request your assistance in identifying any issues or concerns the Tribe might have about the project, including identifying sacred sites and places of traditional religious and cultural significance which might be affected by the proposed projects Currently, Tetra Tech Environmental Consultants, Inc. is undertaking the cultural resources record search and will be conducting a cultural resources inventory of the area of potential effect for the proposed meteorological towers. They may be contacting you to gather additional information. If you provide sensitive information, a 1991 amendment to the national Historic Preservation Act allows the Bureau of Land Management to prevent the release of this information to the public if it may pose a risk to historic properties or traditional cultural properties.

Please do not hesitate to contact us if you have any comments, questions or would like to schedule a meeting. The BLM points of contact for this project are Thomas Zale, Associate Field Manager: (760) 337-4420, email: thomas_zale@ca.blm.gov; or Jenny Haggar, Archaeologist: (760) 337-4473, email: Jenny_Haggar@ca.blm.gov. If you are aware of any other Tribes, individuals, or tribally-affiliated organizations that should be contacted regarding this project, please let us know. A list of Tribal governments and other tribal contacts receiving a copy of this letter is enclosed for your reference. We would also appreciate some notice if the Tribe believes that the project lies outside its area of interest and does not wish to consult or be contacted about this in the future. You may contact us by letter, phone or email to let us know of your interest or preference for involvement in this project. The BLM truly appreciates your interest and concern for the public lands in San Diego County. We look forward to hearing from you.

Sincerely,

Vicki L. Wood
Field Manager

Attachments: Project area map
List of Tribal Governments and other tribal contacts

APPENDIX G

Records Search

Confidential

See separate Appendix G for records