APPENDIX E

Cultural Resources Report

CULTURAL RESOURCES REPORT

Campo Wind Project with Boulder Brush Facilities
San Diego County, California
PDS2019-MUP-19-002

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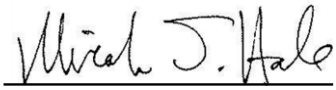

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October 2019

Cultural Resources Report Campo Wind Project with Boulder Brush Facilities, San Diego County, California

NATIONAL ARCHAEOLOGICAL DATABASE (NADB) INFORMATION

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Report Date: April 2019; Revised October 2019

Report Title: Cultural Resources Report Campo Wind Project with Boulder Brush Facilities, San Diego County, California

Project Number: PDS2019-MUP-19-002

Type of Study: Phase 1 Archaeological Survey and Phase II Archaeological Evaluation

Updated Sites: CA-SDI-4005; CA-SDI-6891; CA-SDI-7136; CA-SDI-7138; CA-SDI-7139; CA-SDI-7140; CA-SDI-7145; CA-SDI-7148; CA-SDI-7149; CA-SDI-7151; CA-SDI-7152; CA-SDI-7156; CA-SDI-7163; CA-SDI-7258; CA-SDI-8198; CA-SDI-8939; CA-SDI-8945; CA-SDI-8946; CA-SDI-8962; CA-SDI-8963; CA-SDI-8968; CA-SDI-8977; CA-SDI-8980; CA-SDI-8985; CA-SDI-8986; CA-SDI-9018; CA-SDI-9050; CA-SDI-9059; CA-SDI-17205; CA-SDI-SDI-18048; CA-SDI-18049; CA-SDI-19859; CA-SDI-20368; CA-SDI-20586; CA-SDI-20587; CA-SDI-20588; CA-SDI-20590; CA-SDI-20591; CA-SDI-20592; CA-SDI-20593; CA-SDI-20594 CA-SDI-20597; CA-SDI-20598; CA-SDI-20599; CA-SDI-20604; CA-SDI-20605; CA-SDI-20607; CA-SDI-20608; CA-SDI-20610; CA-SDI-20611; CA-SDI-21776; P-37-024023; P-37-025680

New Sites: CA-SDI-22564; CA-SDI-22565; CA-SDI-22566; CA-SDI-22567; CA-SDI-22568; CA-SDI-22569; CA-SDI-22570; CA-SDI-22571; CA-SDI-22572; CA-SDI-22573; CA-SDI-22574; CA-SDI-22575; CA-SDI-22576; CA-SDI-22577; CA-SDI-22578; CA-SDI-22579; CA-SDI-22580; CA-SDI-22581; CA-SDI-22582; CA-SDI-22583; CA-SDI-22584; CA-SDI-22585; CA-SDI-22586; CA-SDI-22587; CA-SDI-22588; CA-SDI-22589; CA-SDI-22590; CA-SDI-22595; CA-SDI-22596; CA-SDI-22597; CA-SDI-22598; CA-SDI-22599; CA-SDI-22600; CA-SDI-22601; CA-SDI-22602; CA-SDI-22603; CA-SDI-22674

Cultural Resources Report Campo Wind Project with Boulder Brush Facilities, San Diego County, California

Updated Isolates: P-37-032854

New Isolates: P-37-038179; P-37-038180; P-37-038181; P-37-038182; P-37-038183; P-37-038184; P-37-038185; P-37-038186; P-37-038187; P-37-038188; P-37-038189; P-37-038190; P-37-038191; P-37-038192; P-37-038193; P-37-038194; P-37-038195; P-37-038196; P-37-038197; P-37-038198; P-37-038199; P-37-038200; P-37-038201; P-37-038202; P-37-038203; P-37-038204; P-37-038205; P-37-038206; P-37-038207; P-37-038208; P-37-038209; P-37-038210; P-37-038211; P-37-038212; P-37-038213; P-37-038214; P-37-038215; P-37-038216; P-37-038217; P-37-038218; P-37-038219; P-37-038220; P-37-038221; P-37-038222; P-37-038223; P-37-038224; P-37-038225; P-37-038226; P-37-038227; P-37-038228; P-37-038229; P-37-038230; P-37-038231; P-37-038232; P-37-038233; P-37-038463; P-37-038280; P-37-038284, P-37-038285

USGS Quads: Township 17S, Range 6E, Sections 1, 3, 10-15, 17, 20–22, 27, 28, and 33–36; Township 18S, Range 6E, Sections 3, 4, 5, 8, 9, 10, 15, and 17; Township 16S, Range 7E, Sections 19, 20, and 29-32; Township 17S, Range 7E, Sections 5 and 6; Township 17S, Range 7E, Sections 7 and 8 on the Campo, Tierra Del Sol, Cameron Corners, and Live Oak Springs, CA 7.5′

Acreage: 2,937-acre Project APE

Permit Numbers: BIA/PRO-19-01-J54 (577) (ARPA)

Keywords: Phase I Inventory; Phase II Evaluation; Prehistoric; Historic; projectile point; groundstone; ceramic scatter; biface; millingstone; human remains; debitage; midden; habitation; ceramic scatter; artifact scatter; Obsidian Butte; chert; chalcedony; volcanic; quartz; brownware, buffware, bowl; historic refuse; cans; bottle; ranching; coral; Campo; Tribe; isolate; not eligible; not significant; bedrock milling; CRHR; CEQA; APE; ADI; STP; CSC; SSU; CU; CSC

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
ACHP	Advisory Council on Historic Preservation
amsl	above mean sea level
ADI	area of direct impact
APE	area of potential effects
APN	Assessor's Parcel Number
BFSA	Brian F. Smith and Associates
CCR	California Code of Regulations
CCS	cryptocrystalline silica
CCT	core/cobble tool
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CRHR	California Register of Historical Resources
cm	centimeters
County	County of San Diego
CSC	controlled surface collection
CU	control unit
Emax	Energy Maximizing
DPR	Department of Parks and Recreation
g	grams
GDP	General Development Plan
FFT	formed flake tool
JDAD	Jacumba Discontiguous Archaeological District
JVAD	Jacumba Valley Archaeological District
kg	kilograms
LDA	Limited Development Area
MLD	Most Likely Descendant
mm	millimeters
MSCP	Multiple Species Conservation Program
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
RPA	Register of Professional Archaeologists
RMP	Resource Management Plan
RPO	Resource Protection Ordinance
RTF	retouched flake tool
SCIC	South Coastal Information Center
SFT	simple flake tool
SHPO	State Historic Preservation Officer
SSU	shovel scrape unit
STP	shovel test pit

Acronym/Abbreviation	Definition
TCR	Tribal Cultural Resource
TMD	Table Mountain District
Tmin	Time Minimizing
USC	United States Code
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator

MANAGEMENT SUMMARY

This document presents the results of a Phase I archaeological inventory and a Phase II archaeological evaluation for the Campo Wind Project with Boulder Brush Facilities (Project). This report presents the results of Dudek's cultural resources inventory and evaluation for the Project, located on the Campo Band of Diegueño Mission Indians Reservation (Reservation) and adjacent private lands in southeastern San Diego County, California. Affiliates Terra-Gen Development Company LLC and Boulder Brush LLC are proposing to develop, construct, operate, maintain, and ultimately decommission the Project.

The Project is, in part, located on federally administered land, and it constitutes an undertaking under Section 106 of the National Historic Preservation Act (NHPA). The Area of Potential Effects for the Project (Project APE) consists of two parts: the approximately 2,174-acre Campo Corridor within the Reservation Boundary (Campo APE), and approximately 753 acres on privately owned lands (Boulder Brush APE) within which the 318-acre Boulder Brush Corridor and off-site road improvements are located. The maximum extent of disturbance from all the alternatives under consideration within the Project APE in which the Project would be constructed would ultimately be smaller than the Project APE; the Project area of direct impacts (Project ADI) consists of approximately 790 acres within the Campo Corridor (Campo ADI) and approximately 131 acres within the Boulder Brush Corridor (Boulder Brush ADI). The County of San Diego (County) is the lead agency for ensuring compliance with the California Environmental Quality Act (CEQA).

The Campo Corridor is located in Township 17S, Range 6E, Sections 1, 3, 10–15, 17, 20–22, 27, 28, and 33–36 and Township 18S, Range 6E, Sections 3, 4, 5, 8, 9, 10, 15, and 17. The Boulder Brush Corridor is located in Township 16S, Range 7E, Sections 19, 20, and 29–32 and Township 17S, Range 7E, Sections 5 and 6. The approximately 1-mile segment of Ribbonwood Road (outside the Boulder Brush Boundary) from Opalocka Road/Ribbonwood Road to the Boulder Brush Facilities site entrance off Ribbonwood Road that would be improved is located in Township 17S, Range 7E, Sections 7 and 8. These locations are depicted on the Campo, Tierra Del Sol, Cameron Corners, and Live Oak Springs, California 7.5 minute U.S. Geological Survey topographic maps.

This report documents both the inventory (Phase I) and evaluation (Phase II) for the Project in compliance with the County of San Diego Guidelines for Determining Significance, Cultural Resources: Archaeological and Historic Resources (County of San Diego 2007a); Report Format and Content Guidelines: Cultural Resources (County of San Diego 2007b); Section 21083.2 of the Public Resources Code; the CEQA Guidelines; and the County of San Diego CEQA Guidelines (San Diego County Board of Supervisors 2007).

A total of 1,478 acres of land within the Campo Corridor was previously surveyed by ASM Affiliates (Daniels and Schaefer 2013; Hale et al. 2013; see also Confidential Appendix B) and the results of those inventories are incorporated herein. The remaining 696 acres of the Campo Corridor was surveyed by Dudek, as that area had not been previously surveyed. The entire 753-acre Boulder Brush APE was surveyed by Dudek in 2017 and 2018.

As a result of the Dudek's 2017/2018 survey efforts and the prior surveys (Daniels and Schaefer 2013; Hale et al. 2013), a total of 87 archaeological sites, 4 built environment resources, and 67 isolates have been recorded within the APE. No evidence was found for nine previously recorded archaeological sites and one isolate and they are considered to no longer exist, including three sites outside of the Boulder Brush ADI (CA-SDI-4005, -7138, and -7149), five sites and one isolate in the Campo Wind APE but outside of the ADI (CA-SDI-7258, -8198, -8946, -8962, -8968, and -8980, and P-37-032854), and one site in the Campo wind ADI (CA-SDI-8962).

Considering just Boulder Brush, 40 sites and 55 isolates were identified, of which 10 archaeological sites and 10 isolates are within the Boulder Brush ADI. Six sites in the Boulder Brush APE partially overlapped the ADI (CA-SDI-7145/7146, -7163, -22565, -22575, -22576, and -22586); only the portions of these sites within the ADI were evaluated for significance. No archaeological sites or portions thereof that intersect the ADI were found to be eligible for listing in the CRHR or Local Register. None of the 57 isolates is considered eligible for listing in the CRHR or Local Register. One of the isolates (P-37-038463), a zoomorphic rock, was identified as a TCR.

The Campo Wind APE includes 38 archaeological sites and 11 isolates. The Campo Wind ADI includes 21 archaeological sites and two isolates. Eight sites in the Campo Wind APE partially overlapped the ADI (CA-SDI-8977, -9050, -9059, -20368, -20587, -20592, -20605, and -22602); only the portions of these sites within the ADI were evaluated for significance. No archaeological sites or portions thereof that intersect the ADI were found to be eligible for listing in the CRHR or Local Register, nor is the singular isolate significant.

One resource, Old Highway 80, was previously determined eligible for listing in the National Register of Historic Places (NRHP), and two (State Route 94 and the San Diego and Arizona Eastern Railway) were previously determined not eligible for listing in the NRHP. Two archaeological sites, CA-SDI-7151/7162 and CA-SDI-7156 were previously determined eligible for listing in the California Register of Historical Resources (CRHR) and significant under CEQA due to their data potential (BFSA 1998). Both CA-SDI-7151/7162 and CA-SDI-7156 have been avoided by Project design and they will be preserved in place. Eleven sites were recently evaluated under CEQA and County Guidelines by Dudek for another project (Comeau et al. 2019); two (CA-SDI-7140 and CA-SDI-22581) were found to be significant under CEQA and the RPO due to the

presence of human remains while the other nine were found to be not significant under CEQA and the RPO. All eleven were found to be not eligible for listing in the CRHR or local register. CA-SDI-7140 and CA-SDI-22581 have been avoided by Project design and will be preserved in place.

Human cremated remains were identified on the ground surface at two archaeological sites on the reservation (CA-SDI-8939 and CA-SDI-22596). The San Diego County (County) Coroner's Office Forensic Anthropologist was notified and, at the request of the Tribe, arrangements were made to examine all possible human remains. After numerous fragments were identified as positively human or likely human, the BIA was notified. The BIA determined that the Tribe is the responsible federal agency under the Native American Graves Protection and Repatriation Act (NAGPRA), and the Tribe was subsequently informed of their responsibility (see Confidential Appendix D). To date, the remains are undisturbed at each site. The transmission line and access roads in these areas have been redesigned to avoid disturbing the sites, per the Tribe's request.

Potential human remains were also identified at three sites on private lands land (CA-SDI-7140, CA-SDI-7151/7162, and CA-SDI-22581). The County's Forensic Anthropologist identified the remains at CA-SDI-7140, CA-SDI-7151/7162, and CA-SDI-22581 as positively human or likely or possibly human, and were therefore treated as human. Possible remains at CA-SDI-7156 were determined to be likely non-human (bird). The NAHC identified the Kumeyaay Cultural Repatriation Committee (KCRC) as the Most Likely Descendant (MLD). The Project was redesigned to avoid impacts to all four sites, per the request of the MLD and consulting Native American Tribes.

Project design considerations have taken into account possible disturbances to identified cultural resources as a first step. All isolates and sites located within the APE but outside the ADI have been avoided by Project design and will be preserved in place. The County of San Diego is the lead review agency for the Project. Sites deemed ineligible for federal, state, or local listing, or not significant under CEQA or the County RPO can be considered "important" under the County of San Diego Guidelines. Impacts to such sites can be mitigated to less than significant by documentation and evaluation, curation of recovered artifacts, and/or monitoring during construction. Potential inadvertent impacts to resources outside of, but within 50 feet of, the ADI can be mitigated through the installation of temporary fencing during construction.

Cultural materials collected as part of the study would be curated at the San Diego Archaeological Center or a culturally affiliated tribal curation facility, or may be repatriated to a culturally affiliated tribe. California Department of Parks and Recreation forms for each resource documented are provided as a confidential appendix to this report, and have been submitted to the SCIC of the California Historical Resources Information System at San Diego State University.

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1 INTRODUCTION

This report presents the results of Dudek's cultural resources inventory and evaluation for the Campo Wind Project with Boulder Brush Facilities (Project) located in southeastern San Diego County, California (Figure 1-1; all non-confidential figures are provided in Appendix E to this report). The Project's Campo Wind Facilities would be located on the Campo Band of Diegueño Mission Indians Reservation (Reservation), and the Project's Boulder Brush Facilities would be located on privately owned lands adjacent to a portion of the northeast Reservation Boundary. The Project falls in Township 17S, Range 6E, Sections 1, 3, 10–15, 17, 20–22, 27, 28, and 33–36; Township 18S, Range 6E, Sections 3, 4, 5, 8, 9, 10, 15, and 17; Township 16S, Range 7E, Sections 19, 20, and 29–32; Township 17S, Range 7E, Sections 5 and 6; Township 17S, Range 7E, Sections 7 and 8 on the Campo, Tierra Del Sol, Cameron Corners, and Live Oak Springs, California 7.5 minute U.S. Geological Survey (USGS) topographic maps (Figure 1-2 [all figures noted herein can be found in Appendix E]).

The County of San Diego (County) is the Lead Agency responsible for ensuring that this cultural resources study complies with cultural resources guidelines identified in the County of San Diego Guidelines for Determining Significance (County of San Diego 2007a), the County Resource Protection Ordinance (RPO), and Section 21083.2 of the Public Resources Code (the California Environmental Quality Act [CEQA]). This report meets the format and content guidelines established by the County Report Format and Content Guidelines (County of San Diego 2007b), as well as the requirements of the Archaeological Resource Management Report Format and Content Guidelines recommended by the California Office of Historic Preservation (OHP 1995).

All cultural resources personnel who participated in the Project exceeded the Secretary of Interior's standards for their respective roles, and the Principal Investigator, Micah Hale, PhD, is listed as an approved archaeological consultant with the County.

1.1 Project Description

1.1.1 Project Description

The Project consists of both the Campo Wind Facilities that would be located on land within the Reservation Boundary and the Boulder Brush Facilities that would be located on adjacent private lands within the Boulder Brush Boundary. Collectively, the Reservation Boundary and Boulder Brush Boundary compose the Project Area (see Figure 1-3). Throughout this document, the term "On-Reservation" refers to anything within the Reservation Boundary (or Campo Boundary), and the term "Off-Reservation" refers to anything outside of the Reservation Boundary.

The Campo Wind Facilities, which would consist of 60 wind turbines and associated infrastructure, would be located within a corridor of approximately 2,174 acres of land (Campo Corridor) within the approximately 16,000 acres of land under the jurisdiction of the Reservation. The Boulder Brush Facilities, which would consist of a portion of the Project generation transmission line (gen-tie line) and related facilities to connect energy generated by the Project to the existing San Diego Gas & Electric Company (SDG&E) Sunrise Powerlink, would be located within a corridor of approximately 318 acres of land (Boulder Brush Corridor) within the approximately 2,000 acres of Off-Reservation, private leased parcels adjacent to the northeast portion of the Reservation. These private parcels are under the land use and permitting jurisdiction of the County. Collectively, the Campo Corridor and the Boulder Brush Corridor compose the approximately 2,492-acre Project Site. The Project Site resides within the Project Area, which contains the approximately 16,000 acres of Reservation lands inside the Reservation Boundary and the approximately 2,000 acres of Off-Reservation, private leased parcels inside the Boulder Brush Boundary. Project disturbances associated with construction of the Campo Wind Facilities within the Campo Corridor are expected to be approximately 8,790 acres, and Project disturbances associated with the construction of the Boulder Brush Facilities within the Boulder Brush Corridor are expected to be approximately 131 acres.

The Boulder Brush Facilities would require at least one Major Use Permit (MUP) from the County of San Diego (County).The Bureau of Indian Affairs (BIA) is the lead agency for the Project under the National Environmental Policy Act (NEPA) and is preparing an Environmental Impact Statement (EIS) for the Project.

The Project as a whole would consist of the development, financing, construction, operation, maintenance and, ultimately the decommissioning of a renewable wind energy generation project consisting of 60 wind turbines, three permanent meteorological towers, six temporary meteorological towers, a temporary concrete batch plant for use during construction, a temporary equipment staging and parking area for use during construction, an operations and maintenance facility, water collection and septic systems, access roads, an electrical collection and communications system, an approximately 8.5-mile-long gen-tie line, a collector substation, a high-voltage substation, and a switchyard to interconnect the Project to the existing SDG&E Sunrise Powerlink. The Project would operate for more than 30 years, after which it would be decommissioned. See the Project Description in the Project's Environmental Impact Report (EIR), Section 1.2.1, Project Component Parts, for more detail.

1.1.2 Area of Potential Effects and Area of Direct Impacts

The Area of Potential Effects for the Project (Project APE) consists of the approximately 2,174-acre Campo Corridor within the Reservation Boundary (Campo APE) and 753 acres on private

lands (Boulder Brush APE), within which the 318-acre Boulder Brush Corridor is located. The maximum extent of disturbance from all the alternatives under consideration within the Project APE in which the Project would be constructed would ultimately be smaller than the Project APE; the Project area of direct impacts (Project ADI) consists of approximately 790 acres within the Campo Corridor (Campo ADI) and approximately 131 acres within the Boulder Brush Corridor (Boulder Brush ADI). Refer to Figure 1-4 (see Appendix E).

1.2 Existing Conditions

1.2.1 Environmental Setting

The Project Site is situated on a series of northwest-southeast trending mountain ridges and the valleys between the ridges. The ridges are generally steep-sloped, with numerous heavily weathered granite bedrock outcrops exposed at all elevations. Elevations range from approximately 4,200 feet above mean sea level (amsl) near the north end of the Project to 3,100 feet amsl near the southwest end.

The Project is located in the eastern portion of the Peninsular Range Geomorphic Province of Southern California. The Peninsular Range Geomorphic Province is typified by northwest to southeast trending mountain ranges that parallel the trace of the San Andreas and related regional fault system (Abbott 1999). The Peninsular Ranges are generally composed of the granitic Peninsular Ranges batholith and associated metamorphic rocks. West of the batholith, in the San Diego embayment, the Peninsular Range Geomorphic Province is composed of sedimentary rocks ranging from Late Cretaceous to Pleistocene in age (Abbott 1999).

The entirety of the Project Site is underlain by the Tonalite of La Posta (Todd 2004), a granitic formation produced by the subduction of the Farallon Plate beneath the North American Plate, approximately 95 million years ago (MA). The Tonalite of La Posta is characterized by the abundant white-weathering plagioclase feldspars.

The climate is classified as Mediterranean Hot Summer, or Csa in the Köppen classification (Pryde 2004). Rainfall is about 24 cm per year, based on rain gauge averages between 1963 and 2011, falling primarily between December and March. The average January daily minimum temperature is 2°C (36°F), and the average July daily maximum is 33°C (92°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. Typical plant species can include laurel sumac (*Rhus laurina*), black sage (*Salvia mellifera*), manzanita (*Arctostaphylos* spp.), redshank (*Adenostoma sparsifolium*), oak (*Quercus* spp.), chamise (*Adenostoma fasciculatum*), ceanothus (*Ceanothus* spp.), and Juniper tree (*Juniperus* spp.) along with various

grasses and legumes. Oak woodlands and riparian communities are also present in the canyons and major drainages (Dudek 2018). Numerous other vegetation communities are present on site such as big sagebrush, freshwater marshland, mulefat scrub, and non-native grassland (Dudek 2018).

Mammals, birds, and reptiles within these communities provided potential food resources to prehistoric inhabitants. In the general region, much of the natural vegetation in low-lying areas has been displaced by modern land uses for grazing and residential uses. However, the steep mountain slopes harbor relatively intact native vegetation communities supporting many animal species. These vegetation communities have been in place since the early Holocene when the climate became somewhat warmer and drier (Axelrod 1978).

Over 300 species of animal have been observed on the Reservation (Dudek 2018). Common animals in this area include coyote (*Canis latrans*), California ground squirrel (*Spermophilus beecheyi*), cottontail *(Sylvilagus audubonii)*, brush rabbit (*Sylvilagus bachmani*), red-tailed hawk (*Buteo jamaicensis*), western fence lizard (*Sceloporus occidentalis*), and common side-blotched lizard (*Uta stansburiana*), among many others (Dudek 2018).

Cultural Setting

Evidence for continuous human occupation in Southern California 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. The prehistoric sequence within the general Campo region is particularly complicated by potential overlap with aboriginal groups traveling west from the Colorado Desert and Imperial Valley. To overcome potential issues in the application of disparate cultural sequences, this research employs a common set of generalized terms used to describe chronological trends in assemblage composition: Paleoindian (pre-5500 BC), Archaic (8000 BC–AD 500), Late Prehistoric (AD 500–1769), and Ethnohistoric (post-AD 1769).

Paleoindian (pre-5500 BC)

Evidence for Paleoindian occupation in 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 CA-SDI-4669/W-12, in La Jolla. A human burial from CA-SDI-4669 was radiocarbon dated to 9,590–9,920 years before present (95.4% probability) (Hector 2006). 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 groundstone, battered cobbles, and expedient flake tools). Given the coastal bluff setting of this site, it is not surprising that its inhabitants made use of fish and shellfish taken through passive means (i.e., bone gorge and sinker fishing, shellfish gathering). There is no evidence at this site for economically significant exploitation of large game; rather, the assemblage is wholly consistent with what early researchers termed the "Millingstone Horizon" (Wallace 1955), or "La Jolla" culture (Warren 1964, 1968).

In the Jacumba region, SDG&E's East County (ECO) Substation uncovered more than a hundred roasting pits within loosely consolidated alluvium from the surface to more than 20 feet below the surface. Several such features had calibrated radiocarbon dates on charcoal that were older than 6,000 BC; one of these dated as old as 7,590-7,750 BC—squarely within the Paleoindian period, even by Great Basin standards (Williams et al. 2014). These early roasting pits rarely include artifacts other than burned rocks and the occasional piece of debitage and a recycled piece of groundstone. Noticeably absent from the ECO assemblage are those artifacts considered typical of Paleoindian toolkits, such as large projectile points or knives, and formed flake tools. Interestingly, the landform on which the old roasting pits were identified contained hundreds of roasting pits that spanned the Holocene in age with radiocarbon dates reaching to just prior to Ethnohistoric times (Williams et al. 2013). However, there is no significant variability in roasting pit structure, content, or associated artifactual assemblage throughout the deposit. Together with data from specialized ethnobotanical studies identified fragments of cactus seed, juniper seed, and yucca, the overall archaeological assemblage indicates the area was occupied for millennia to exploit locally and seasonally abundant plants including yucca or agave.

Aside from a few discoveries of Lake Mojave or Silver Lake projectile points, typical Paleoindian assemblages that include large stemmed projectile points, high proportions of formal lithic tools, bifacial lithic reduction strategies, and relatively small proportions of groundstone tools are not discernible in Southern California. For comparison, prime examples of "typical" pattern are sites that were studied by Emma Lou Davis (1978) on China Lake Naval Air Weapons Station 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 (CA-MNO-679)—a multicomponent fluted point site, and CA-MNO-680—a single component Great Basined Stemmed point site (Basgall et al. 2002). At CA-MNO-679 and CA-MNO-680, groundstone tools were rare while finely made projectile points were common.

Turning back to 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 BP) that submerged as much as 1.8 kilometers (1.1 miles) 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 CA-SDI-210 along Agua Hedionda Lagoon, contained stemmed points similar in form to Silver Lake and Lake Mojave projectile points (pre-8000 BP) that are commonly found at sites in California's high desert (Basgall and Hall 1990). CA-SDI-210 yielded one corrected radiocarbon date of 6520-7520 BC (8520–9520 BP; 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 (CA-SDI-149) is representative of typical Paleoindian occupation in the San Diego region that possibly dates between 8,365-6,200 BC (Warren et al. 2004, p. 26). Termed San Dieguito (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 (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 (Basgall and Hall 1990).

Indeed, the San Dieguito complex is the apex of easterly cultural sequences defined for the Colorado Desert and adjacent areas east of the Peninsular Range. Malcolm Rogers (1966) initially separated the San Dieguito complex into three phases that were based on an evolutionary concept that more refined tools are the result of cultures learning refined manufacture techniques and incorporating greater complexity through time. As a result, the San Dieguito complex portrayed early assemblages from simple (San Dieguito I) to complex (San Dieguito III), relative to one another. In Imperial County, the general lack of radiocarbon dates associated with perceived San Dieguito sites has stunted modern refinement of Roger's San Dieguito complex, both in terms of chronology and assemblage content. Cobble terraces exposed during the Pleistocene were available to both Paleoindian and later aboriginal groups. The ease of acquiring toolstone from desert pavements was probably attractive to hunter-gatherers traversing the region throughout prehistory, complicating definition of chronological variability in flakedstone reduction trajectories. As a result, speculation has emerged that the San Dieguito complex persisted for much of the Holocene, whether or not it changed in coastal regions or areas farther to the north.

Notwithstanding sample bias in trying to refine southern California Paleoindian sequences, including geomorphological transitions surrounding the Salton Trough that make discovery of well-preserved early surfaces in the western Colorado Desert near impossible, the early dates associated with strikingly Archaic-looking toolkits implies that little technological variability actually existed in the last 10,000 years (Hale 2010).

Archaic (8000 BC–AD 500)

The more than 1500-year overlap between the presumed age of Paleoindian occupations and the Archaic period (see Warren et al. 2004) highlights the difficulty in defining a cultural chronology in southern California desert region. If San Dieguito is the only recognized Paleoindian component, 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 connections between San Dieguito and the Lake Mojave complex of the Great Basin. Thus, the Archaic pattern is the earliest local socioeconomic adaptation to southern California coastal and desert/peninsular environments (Hale 2001, 2009).

The Archaic pattern is relatively easy 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 San Diego County, from the coast past the Peninsular Range, with little variability in tool composition. Low assemblage variability over time and space among Archaic sites has been equated with cultural conservatism (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 after around AD 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 groundstone 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, complimented only by the addition of the bow and ceramics.

Several cultural sequences that chronologically fit within southern California's "Archaic" period have been identified in the Mojave Desert, such as Deadman Lake, Pinto, and Gypsum periods (Sutton et al. 2007). However, these appear to be regionally specific and are generally not manifest south of the Transverse Ranges, particularly in San Diego and Imperial Counties other than isolated occurrences of time-sensitive projectile points. As with any time-sensitive artifact, its form can have strikingly different chronological placement by region such that a "Pinto" projectile point cannot be assumed to confer the same age estimates on an archaeological assemblage in say, San Diego or Imperial counties that it does in the Mojave Desert.

Reasons for the rapid and early development of a generalized processing economy have cited environmental deterioration or population growth as primary agents of change. Environmental deterioration cannot account for its development since southern California environments have had established plant communities for much of the last 15,000 years (Axelrod 1978; see Hale 2001) that varied mostly in vertical distribution. Indeed, the Pinto period seems to have thrived during the Archaic period, even if specific local manifestations are less obvious than others (Basgall et al. 2002). Population growth itself also presents a weak case as a primary agent of change since the archaeological record is either too incomplete to support such an analysis or because it implies a shift in mobility rather than population density. Archaic period sites reflect serial site occupation rather than either high residential mobility or sedentism (Basgall and True 1985; Hale 2001). Rather, the best explanation for the appearance and persistence of the Archaic pattern is that it represents a strongly stable socioeconomic strategy tailor-made for southern California with its rich crops of roots and tubers, seeds, and nuts and small animals.

Late Prehistoric (AD 500–1769)

The period of time following the Archaic and prior to Ethnohistoric times (AD 1769) is commonly referred to as the Late Prehistoric (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-AD 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 AD 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 and the presumed spread of Yuman-speaking groups into the Colorado Desert (Moriarty 1966, 1967). There, the Patayan pattern was defined to characterize the appearance of paddle and anvil pottery from Arizona sometime after the first-century AD (Rogers 1945; Waters 1992).

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 late complexes difficult, including the local Cuyamaca complex manifestation. 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 period 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 and 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 AD 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 AD 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 AD 1450. For southern San Diego County, the picture is less clear. The Cuyamaca Complex is most recognizable after AD 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.

Considering eastern influences from the Colorado Desert, early agricultural practices never gained traction in California, and western Colorado Desert evidence for aboriginal agriculture is virtually non-existent, absent early Ethnohistoric accounts of Fort Mojave Indians (Kroeber 1925). It is likely that the stable Archaic economy persisted into the Late Prehistoric era and absorbed the efficiencies of certain technological innovations including the bow and arrow and ceramics. Locally, however, Tizon Brownware ceramic vessels dominate archaeological assemblages; Colorado buffware fragments are relatively rare, and could have been obtained simply through trade. Aboriginal agriculture probably hit a socioeconomic brick wall in southern California where a stable economy focused on generalized but regular exploitation of locally abundant plant foods

was simply too efficient and socially reinforced to allow a labor intensive practice of agriculture take root (Bettinger 1999; Hale 2010).

Ethnohistoric (post-AD 1769)

The history of the Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the San Diego region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the San Diego region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century (Bean and Shipek 1978; Boscana 1846; Fages 1937; Geiger and Meighan 1976; Harrington 1934; Kroeber 1925; Laylander 2000; Sparkman 1908; White 1963). The principal intent of these researchers was to record the precontact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as "salvage ethnography," was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his "memory culture" approach (Lightfoot 2005:32) by recording languages and oral histories within the San Diego region. Ethnographic research by Dubois, Kroeber, Harrington, Spier, and others during the early twentieth century seemed to indicate that traditional cultural practices and beliefs survived among local Native American communities. These accounts supported, and were supported by, previous governmental decisions, which made San Diego County the location of more federally recognized tribes than anywhere else in the United States: 18 tribes on 18 reservations that cover more than 116,000 acres (CSP 2009).

It is important to note that even though there were many informants for these early ethnographies who were able to provide information from personal experiences about native life before the Europeans, a significantly large proportion of these informants were born after 1850 (Heizer and Nissen 1973); therefore, the documentation of pre-contact, aboriginal culture was being increasingly supplied by individuals born in California after considerable contact with Europeans. As Robert F. Heizer (1978) stated, this is an important issue to note when examining these ethnographies, since considerable culture change had undoubtedly occurred by 1850 among the Native American survivors of California.

The traditional cultural boundaries between the Luiseño and Kumeyaay Native American tribal groups have been well defined by anthropologist Florence C. Shipek (1993; as summarized in San Diego County Board of Supervisors 2007, p. 6):

> In 1769, the Kumeyaay national territory started at the coast about 100 miles south of the Mexican border (below Santo Tomas), thence north to the coast at the drainage divide south of the San Luis Rey River including its tributaries. Using the U.S. Geological Survey topographic maps, the boundary with the Luiseño then follows that divide inland. The boundary continues on the divide separating Valley Center from Escondido and then up along Bear Ridge to the 2240 contour line and then north across the divide between Valley Center and Woods Valley up to the 1880-foot peak, then curving around east along the divide above Woods Valley.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007). As the Project APE is located approximately 25 km south of the San Luis Rey River, the Native American inhabitants of the region spoke using the Ipai language subgroup of the Yuman language group. Ipai and Tipai, spoken respectively by the northern and southern Kumeyaay communities, are mutually intelligible. For this reason, these two are often treated as dialects of a larger Kumeyaay tribal group rather than as distinctive languages, though this has been debated (Luomala 1978; Laylander 2010).

Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative "time depth" of the speaking populations (Golla 2007:80). A large amount of variation within the language of a group represents a greater time depth then a group's language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla (2007:71) has observed that the "absolute chronology of the internal diversification within a language family" can be correlated with archaeological dates. This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences.

Golla suggests that there are two language families associated with Native American groups who traditionally lived throughout the San Diego County region. The northern San Diego tribes have traditionally spoken Takic languages that may be assigned to the larger Uto–Aztecan family (Golla 2007:74). These groups include the Luiseño, Cupeño, and Cahuilla. Golla has interpreted the amount of internal diversity within these language-speaking communities to reflect a time depth

of approximately 2,000 years. Other researchers have contended that Takic may have diverged from Uto–Aztecan ca. 2600 BC–AD 1, which was later followed by the diversification within the Takic speaking San Diego tribes, occurring approximately 1500 BC–AD 1000 (Laylander 2010). The majority of Native American tribal groups in southern San Diego region have traditionally spoken Yuman languages, a subgroup of the Hokan Phylum. Golla has suggested that the time depth of Hokan is approximately 8,000 years (Golla 200774). The Kumeyaay tribal communities share a common language group with the Cocopa, Quechan, Maricopa, Mojave, and others to east, and the Kiliwa to the south. The time depth for both the Ipai (north of the San Diego River, from Escondido to Lake Henshaw) and the Tipai (south of the San Diego River, the Laguna Mountains through Ensenada) is approximated to be 2,000 years at the most. Laylander has contended that previous research indicates a divergence between Ipai and Tipai to have occurred approximately AD 600–1200 (Laylander 1985). Despite the distinct linguistic differences between the Takic-speaking tribes to the north, the Ipai-speaking communities in central San Diego, and the Tipai southern Kumeyaay, attempts to illustrate the distinctions between these groups based solely on cultural material alone have had only limited success (Pigniolo 2004; True 1966).

The Kumeyaay generally lived in smaller family subgroups that would inhabit two or more locations over the course of the year. While less common, there is sufficient evidence that there were also permanently occupied villages, and that some members may have remained at these locations throughout the year (Owen 1965; Shipek 1982, 1985; Spier 1923). Each autonomous tribelet was internally socially stratified, commonly including higher status individuals such as a tribal head (*Kwaaypay*), shaman (*Kuseyaay*), and general members with various responsibilities and skills (Shipek 1982). Higher-status individuals tended to have greater rights to land resources, and owned more goods, such as shell money and beads, decorative items, and clothing. To some degree, titles were passed along family lines; however, tangible goods were generally ceremonially burned or destroyed following the deaths of their owners (Luomala 1978). Remains were cremated over a pyre and then relocated to a cremation ceramic vessel that was placed in a removed or hidden location. A broken metate was commonly placed at the location of the cremated remains, with the intent of providing aid and further use after death. At maturity, tribal members often left to other bands in order to find a partner. The families formed networks of communication and exchange around such partnerships.

Areas or regions, identified by known physical landmarks, could be recognized as band-specific territories that might be violently defended against use by other members of the Kumeyaay. Other areas or resources, such as water sources and other locations that were rich in natural resources, were generally understood as communal land to be shared amongst all the Kumeyaay (Luomala 1978). The coastal Kumeyaay exchanged a number of local goods, such as seafood, coastal plants, and various types of shell for items including acorns, agave, mesquite beans, gourds, and other

more inland plants of use (Luomala 1978). While evidence for limited marine resource use exists in inland areas, terrestrial animals and other resources would have provided a much larger portion of sustenance. Game animals consisted of rabbits, hares (*Leporidae*), birds, ground squirrels, woodrats (*Neotoma*), deer, bears, mountain lions (*Puma concolor*), bobcats (*Lynx rufus)*, coyotes (*Canis latrans*), and others. In lesser numbers, reptiles and amphibians may have been consumed.

A number of local plants were used for food and medicine. These were exploited seasonally, and were both traded between regional groups and gathered as a single tribelet moved between habitation areas. Some of the more common of these that might have been procured locally or obtained from the surrounding region would have included buckwheat (*Eriogonum fasciculatum*), *Agave*, *Yucca*, lemonade berry (*Rhus integrifolia*), sugar brush (*Rhus ovata*), sage scrub (*Artemisia californica*), yerba santa (*Eriodictyon*), sage (*Salvia*), *Ephedra*, prickly pear (*Opuntia*), mulefat (*Baccharis salicifolia*), chamise (*Adenostoma fasciculatum*), elderberry (*Sambucus nigra*), oak (*Quercus*), willow (Salix), and *Juncus* grass among many others (Wilken 2012).

The Historic Period (post-AD 1542)

European activity in the region began as early as AD 1542, when Juan Rodríguez Cabrillo landed in San Diego Bay. 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, by direct contacts either 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. 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). No land grants were established in the mountains of eastern San Diego County, leaving the local Kumeyaay relatively unaffected by the arrival of the Spanish and Mexican immigrants.

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. 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.

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.

The Campo–Jacumba region was under Kumeyaay control throughout the Spanish, Mexican, and early American periods until the arrival of American homesteaders such as the McCain family in 1868 (Wade et al. 2009). The Campo Indian Reservation rests partially on the lands negotiated in the Treaty of Santa Ysabel in 1852. The Treaty, along with the Treaty of Temecula, promised the indigenous nations of the region a Reservation of approximately 20% of the current land base of San Diego County in return for the balance of their traditional lands on the coast and in the desert. The Treaty was not ratified due to interference from the California legislature and starting in 1775, only scattered Reservations were created by Executive Order in various areas of the County. The Campo Indian Reservation was created in 1893 near an existing Kumeyaay village in the Cameron Corners area. It was expanded in the early twentieth century to accommodate several other communities of Kumeyaay who still did not have a land base.

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 (Wade et al. 2009). 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. 2009). In its heyday, cattle ranching associated with McCain Valley to the west spread as far south as the lower portions of northern Baja (Wade et al. 2009). 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 Kwaaymii 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. (2009) provide a region-wide overview of ranching in San Diego County including eligibility considerations.

Several railroad routes were planned to pass through the region but each was abandoned, until 1906, when John D. Spreckels incorporated the San Diego and Arizona Railroad. Construction on the railroad began in 1907 (Kimball 1985). The local population grew slowly during the construction of Morena Dam and the San Diego and Arizona Railroad. In the meantime, civil unrest was common across the border just to the south. The Mexican Revolution began in the fall of 1910, and by the following spring a Mexican rebel camp was located just 6 mi. from Campo. Refugees fled to Campo, which was partially protected by U.S. soldiers.

Finally, on November 16, 1919, the San Diego and Arizona Railroad was completed, and the first train passed through the Campo Valley, carrying prominent San Diego residents, including John D. Spreckels. While some residents felt that the new railroad line would ruin the beautiful landscape of San Diego County's backcountry, many others were strong advocates for the rail line, predicting that it would increase the economic capacity of the area by enabling the shipment of cattle and sheep as well as fruit, vegetables, and honey out of Campo (San Diego Union, 4 July 4 1915:7). The railroad finally provided a direct link for San Diego to the eastern United States.

1.2.2 Records Search Results

1.2.2.1 Records Search Results on the Reservation

South Coastal Information Center (SCIC) staff conducted a records search for Reservation land for the Campo APE and a 0.25 mile buffer surrounding the Campo APE on July 5, 2018. SCIC records indicate that 60 previous cultural resources studies have been performed within the records search area; of these, 37 have covered at least a portion of the Campo APE (Table 1-1). ASM also prepared two studies that are not on file at the SCIC, although the site records and GIS data are. Hale et al. (2013) performed the intensive pedestrian survey for a wind farm on the Reservation, and Daniels and Schaefer (2013) performed additional surveys as an addendum to Hale et al. 2013.

Hale et al. (2013)

In 2011 and 2012, ASM conducted an intensive pedestrian survey of 2,517 acres for the Shu'luuk Wind Project, which overlaps a substantial portion of the Campo APE. That survey (Hale et al. 2013) identified 73 archaeological sites and 63 isolates. Thirty-four of those sites are within the Campo APE, and are incorporated herein. No resources were evaluated as part of that study.

Daniels and Schaefer (2013)

ASM performed an intensive pedestrian survey of an additional 70 acres for the same project, and prepared an addendum report (Daniels and Schaefer 2013) to the original report (Hale et al. 2013). That study addressed additional acreage added to that project in an attempt to avoid impacting known resources. Five previously recorded archaeological sites and five newly identified isolates were documented at that time. No resources were evaluated as part of that study, as impacts to those sites were avoided at the time.

Table 1-1
Previous Studies Performed on the Reservation within 0.25 Miles of the Campo APE

Author	Year	SHPO ID	Title
Previous Studies Within the Campo APE			
Flower, Douglas, Darcy Ike, and Linda Roth	1980	SD-00642	Archaeological, Historical and Botanical Investigation of the Starr Property, Tierra del Sol, California
Leach, Larry	1978	SD-01147	An Archaeological Reconnaissance of a 60 Acre Parcel on the Campo Indian Reservation Near Live Oak Springs, San Diego County, California.
Johnson, Melissa J.	1979	SD-01266	An Archaeological Survey of the McCain Valley Ranch Property
Johnson, Melissa J.	1976	SD-01267	An Archaeological Inventory and Assessment of Corridor Segments 46 and 49, Preferred Southern Route, San Diego County.
Napton, L. Kyle and E.A. Greathouse	1988	SD-01315	Cultural Resource Assessment of the BIA Route 10 Improvement Project, Campo Indian Reservation, San Diego County, California
WESTEC Services, Inc.	1982	SD-01621	Final Report Campo Indian Reservation Cultural Resource Inventory
Napton, L. Kyle and Elizabeth A. Greathouse	1979	SD-01756	Archaeological Reconnaissance on the Campo Indian Reservation, San Diego County, California
Smith, Brian F.	1998	SD-03558	Results of an Archeological Study of SDI-7151/7162 and SDI-7156 at the Big Country Specific
Townsend, J.	1984	SD-03836	Southwest Powerlink Cultural Resources Management Plan
Rudolf, James L.	1992	SD-04219	Campo Solid Waste Management Project, Cultural Resources Located within in the Proposed Lease Area
Crouthamel, Steven J.	1995	SD-04255	An Archaeological Survey of the Campo Indian Reservation of Rental and Mutual Help Housing Projects
Stone, David and David McDowell	1993	SD-04294	Archaeological and Historical Significance Assessment for the Campo Solid Waste Management Project, Campo Indian Reservation, San Diego Campo
Taylor, Clifford	1982	SD-04365	Final Report & Campo Indian Reservation Cultural Resource Inventory
WESTEC Services, Inc.	1984	SD-04654	Draft Environmental Impact Report, Big Country Ranch Specific Plan, County of San Diego, EAD LOG#83-21-08
Rosen, Martin	2001	SD-08282	Historic Property Survey Report for Old Highway 80, County of San Diego, CA
Cook, John R.	1985	SD-08653	Archaeological Investigations at the Big Country Project in McCain Valley, California

Table 1-1
Previous Studies Performed on the Reservation within 0.25 Miles of the Campo APE

Author	Year	SHPO ID	Title
McGinnis, Patrick, Kathryn Bouscaren, and Michael Baksh	2004	SD-09456	Archaeological Survey Report for the Kumeyaay Wind Energy Project, San Diego County, California
McGinnis, Patrick	2005	SD-09467	Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California
Environmental Development Agency, County of San Diego	1975	SD-10066	Live Oak Springs Subregional Analysis and Draft Environmental Impact Report for TPM 10677, File No. 74-21-29201
McGinnis, Patrick and Michael Baksh	2006	SD-10107	Cultural Resources Survey Report for Five Homes Located on Campo Reservation, San Diego County, CA
Arrington, Cindy	2006	SD-10551	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California
McGinnis, Patrick	2007	SD-11203	Cultural Resources Survey Report for a Water Tank Replacement Project Located on Campo Indian Reservation, San Diego County, California
Zepeda-Herman, Carmen	2008	SD-11741	Cultural Resource Survey of the ETS 7018, Wood to Steel Pole TL6931, Boulevard Project, California
Hall, Dan and Jennifer Thomas	2008	SD-11934	A Cultural Resources Inventory of a Proposed Wild-Land Urban Interface Fuels Reduction of the Campo Indian Reservation, San Diego County, California
Cook, John R., Deborah Huntley and Sherri Andrews	2000	SD-12421	Final: A Cultural Resources Inventory of the Proposed AT&T PF. NET Fiber Conduit Ocotillo to San Diego, California
Garcia-Herbst, Arleen, David Iversen, Don Laylander and Brian Williams	2010	SD-12711	Final Inventory Report of the Cultural Resources within the Approved San Diego Gas & Electric Sunrise Powerlink Final Environmentally Superior Southern Route, San Diego and Imperial Counties, California
Lavris, Jennifer and Dan Hall	2012	SD-13837	A Cultural Resources Inventory of the 2012 Proposed Hazardous Fuels Reduction Project on the Campo Indian Reservation, San Diego County, California
Hale, Micah J.	2011	SD-14001	Management Plan for Archaeological Monitoring, Post-Review Discovery and Unanimated Effects for the Tule Wind Project, McCain Valley, San Diego County, California
Bowden-Renna, Cheryl	2011	SD-14175	Letter Report: ETS 21541- Cultural Resources Survey for 18 Pole Replacement/Improvement Locations and Two Staging Areas, Crestwood/Live Oaks Areas, San Diego County, California-IO 7011102
McGinnis, Patrick and Michael Baksh	2006	SD-14560	Cultural Resources Survey Report for Five Homes Located on Campo Indian Reservation, San Diego County, Reservation
McGinnis, Patrick and Hillary Murphy	2008	SD-14592	Cultural Resources Survey Report for the Campo Homes Project, Campo Reservation, California
McGinnis, Patrick	2005	SD-14601	Cultural Resources Survey Report for the Campo Homes Project, Campo Reservation, San Diego County, California
Blake, Michelle	2014	SD-15108	SR-94 Curve Correction Project

Table 1-1
Previous Studies Performed on the Reservation within 0.25 Miles of the Campo APE

Author	Year	SHPO ID	Title
Blake, Michelle	2014	SD-16078	Archaeological Survey Report for the State Route 94 Curve Realignment Project in Campo, San Diego County, California
Hale, Micah J. and Tony Quach	2011	SD-16221	Final Addendum Class III Cultural Resources Inventory Report for the Tule Wind Project, McCain Valley, San Diego County, California
Hale Micah	2011	SD-16223	Archaeological Testing and Evaluation of Site CA-SDI-4788, Tule Wind Project, McCain Valley, San Diego County, California
Previous Studies Within 0.25 Mile of the Campo APE			
Advanced Planning and Research Associates	1980	SD-00045	Drewe Lot Split Archaeology and Biology Survey Reports TPM 15840 EAD Log # 79-21-9 Tierra del Sol, California.
Cupples, Sue Ann	1975	SD-00529	An Archaeological Survey of Sanitation Facilities Project sites on Pala, Manzanita, Campo, and Old Campo Indian reservation, San Diego County, California
Flower, Douglas and Linda Roth	1983	SD-00640	Archaeological Survey Stage Coach Springs Project Live Oak Springs, California
Kirkish, Alex	1980	SD-00890	Draft Plan and Environmental Assessment for Thing Mountain Cooperative Vegetation Management Project
Flower, Douglas M., Darcy Ike, Linda Roth, and Susan Sapone	1979	SD-00922	Archaeological Investigation of the Millar Project San Diego County, California SDM-W-2235, SDM-W-2236
Johnson, Melissa J. and Roy E. Pettus	1978	SD-01256	An Archaeological Reconnaissance of a 60 Acres Parcel on the Campo Indian Reservation Near Live Oak Springs, San Diego County, California.
Smith, Brian F.	1989	SD-01419	An Archaeological Survey of the 700-Acre Balian Subdivision, County of San Diego
Ritter, Eric W.	1975	SD-01496	Archaeological Survey of NRL Parcel Adjoining Hill Valley
Taylor, Clifford V.F. and Richard L. Carrico	1980	SD-01548	Final Report Cultural Resource Inventory of Manzanita Indian Reservation Manzanita, California
Wirth Associates, Inc.	1981	SD-01588	Miguel to Mountain Springs Grade (Jade) Archaeological Survey Report
Smith, Brian F.	1980	SD-01687	A First Level Mitigation of Sites SDM-W-2724 (SDi-8234), SDM-W-2725 (SDi-8235), and SDM-W-2726 (SDi-8236) at the Drewe Lot Split Project Tierra Del Sol, California TPM 15840, Log #79-21-9
Advance Planning & Research Associates	1980	SD-02030	Drewe Lot Split Archaeology & Biology Survey Reports TPM 15840; EAD LOG #79-21-9; Tierra del Sol, California
Carrico, Richard	1980	SD-03260	Final Report: Cultural Resource Inventory of Manzanita Indian Reservation, Manzanita, CA
Crouthamel, Steven J.	1987	SD-05879	Archaeological Site Survey on Campo Indian Reservation, San Diego County, CA Proposed Housing Sites Project 80-46
Pigniolo, Andrew, John Dietlier, and Michael Baksh	2000	SD-07426	Archaeological Survey Report for the Manzanita Reservation Prescribed Burning Project, San Diego County, California
Caterino, David	2005	SD-09516	The Cemeteries and Gravestones of San Diego County: An Archaeological Study

Table 1-1
Previous Studies Performed on the Reservation within 0.25 Miles of the Campo APE

Author	Year	SHPO ID	Title
Smith, Brian F. and Craig Lorenz	1982	SD-09782	Archaeological Investigation of the Brooks Lot Split Project, Tierra Del Sol, California, TPM 16342, Log# 79-21-20
Polan, Keith	1980	SD-09784	Brooks lot Split Archaeology and Botany Survey Reports, TPM 16342, EAD Log#79-21-20; TPM 16343, EAD Log# 79-21-21, Tierra Del Sol
Bonner, Wayne H and Marnie Aislin-Kay	2008	SD-11869	Cultural Resources Records Search and Site Visit Results for DW Horizon, LLC Facility Candidate CA1018 (Outdoor World) San Diego County, California
White, Laura S.	2009	SD-12663	Negative Cultural Resources Survey Report: Outdoor World Wireless Telecommunication Facility
Thomas, Jennifer and Dan Hall	2010	SD-12686	Cultural Resources Inventory of the Phase II Southwest Fuels Reduction Project, Campo Indian Reservation San Diego County, CA
Baksh, Michael, Hillary Murphy, and Michael Connolly	2013	SD-14753	Archaeological Survey Report for the Campo Casino Wind Turbine Project, San Diego County, CA
Rinehart, Niels	2015	SD-16482	Archaeological Sensitivity Assessment Golden Acorn/Ensite #18864, 1800 Golden Acorn Way, Campo San Diego County, CA,EBI project #61144143

A total of 117 cultural resources were identified in the records search area on the Reservation. Of these, 38 resources have been recorded wholly or partially in the Campo APE (Table 1-2). Of the 38 previously recorded resources, 23 are prehistoric archaeological sites, three are multicomponent sites (containing both prehistoric and historic resources), four are historic built environment resources, six are historic archaeological sites, one is a prehistoric isolate, and one is an archaeological site of indeterminate age. The cultural resources not listed within Table 1-2 are included in the report with the records search results as Confidential Appendix A.

Table 1-2
Previously Recorded Resources on the Reservation within 0.25 Miles of the Campo APE

Resource Number	Period	Type	Dimensions
CA-SDI-6981	Historic	Highway	102 km (linear)
CA-SDI-7258	Indeterminate	Bedrock Milling	100 × 100 m
CA-SDI-8198	Prehistoric	Ceramic Scatter	10 × 15 m
CA-SDI-8939	Prehistoric	Habitation	150 × 150 m
CA-SDI-8946	Prehistoric	Bedrock Milling	50 × 50 m
CA-SDI-8962	Prehistoric	Bedrock Milling	7 × 5 m
CA-SDI-8963	Prehistoric	Bedrock Milling	115 × 120 m
CA-SDI-8968	Prehistoric	Bedrock Milling	2 × 2 m
CA-SDI-8977	Multi-component	Temporary Camp; Historic Residence	90 × 90 m
CA-SDI-8980	Prehistoric	Rock Shelter	4 × 2 m

Table 1-2
Previously Recorded Resources on the Reservation within 0.25 Miles of the Campo APE

Resource Number	Period	Type	Dimensions
CA-SDI-8985	Prehistoric	Bedrock Milling	3 × 2 m
CA-SDI-8986	Prehistoric	Bedrock Milling	1 × 1 m
CA-SDI-9018	Prehistoric	Ceramic Scatter	10 × 10 m
CA-SDI-9050	Historic	Government/Educational Building Remains	185 × 128 m
CA-SDI-9059	Historic	Historic Wagon Road	Linear
CA-SDI-17205	Historic	Refuse Scatter	15 × 15 m
CA-SDI-20368	Prehistoric	Habitation	210 × 95 m
CA-SDI-20586	Prehistoric	Lithic Scatter	40 × 30 m
CA-SDI-20587	Prehistoric	Artifact Scatter	220 × 85 m
CA-SDI-20588	Prehistoric	Lithic Scatter	30 × 10 m
CA-SDI-20590	Historic	Refuse Scatter	40 × 15 m
CA-SDI-20591	Multi-component	Groundstone Tool; Well/Cisterns	19 × 12 m
CA-SDI-20592	Prehistoric	Habitation	200 × 235 m
CA-SDI-20593	Prehistoric	Ceramic Scatter	3.5 × 3 m
CA-SDI-20594	Multi-component	Artifact Scatter; Historic Refuse Scatter	55 × 50 m
CA-SDI-20597	Prehistoric	Artifact Scatter	35 × 25 m
CA-SDI-20598	Prehistoric	Temporary Camp	60 × 50 m
CA-SDI-20599	Prehistoric	Bedrock Milling	20 × 20 m
CA-SDI-20604	Historic	Refuse Scatter	10 × 8 m
CA-SDI-20605	Prehistoric	Artifact Scatter	40 × 35 m
CA-SDI-20607	Prehistoric	Artifact Scatter	45 × 30 m
CA-SDI-20608	Prehistoric	Bedrock Milling	20 × 30 m
CA-SDI-20610	Historic	Refuse Scatter	12 × 12 m
CA-SDI-20611	Historic	Refuse Scatter	10 × 5 m
CA-SDI-21776	Prehistoric	Temporary Camp	30 × 50 m
P-37-024023	Historic	Road	Linear
P-37-025680	Historic	Railroad	Linear
P-37-032854	Prehistoric	Isolate- Lithic Flake	N/A

1.2.2.2 Record Search Results on Private Land

A records search was conducted by Dudek in 2017 using SCIC data for the private land within the Boulder Brush Boundary as well as a 1.0 mile buffer around it. The records search identified 31 studies that have been performed in the search area, including 11 that have covered at least part of the Boulder Brush APE (see Table 1-3). Due to the overlapping records search areas, some studies listed in Table 1-1 are repeated here. The entire Boulder Brush Boundary was surveyed in the early

1980s as part of a proposed lot split for residential development (Westec 1984). Westec's 1983 cultural resource study performed in support of the 1984 EIR for that project was not listed in the SCIC records, but is referenced in BFSA's 1998 study.

Table 1-3
Previous Studies Performed on Private Lands
Within 1 Mile of the Boulder Brush Boundary

Author	Year	SHPO ID	Title
Previous Studies within the Boulder Brush Boundary			
San Diego State University	1979	SD-01266	An Archaeological Survey of the Mc Cain Valley Ranch Property.
Brian F. Smith & Associates	1998	SD-03558	Results of An Archaeological Study of SDI-7151/7162 and SDI-7156 at the Big Country Specific Plan Project
Westec Services, Inc.	1984	SD-04654	Draft Environmental Impact Report Big Country Ranch Specific Plan, County of San Diego, EAD Log #83-21-08
Brian F. Smith & Associates	2002	SD-06697	Big Country Ranch – Review of SDI-7162 & 7146
ASM Affiliates	1985	SD-08653	Archaeological Investigations at the Big Country Ranch Project in McCain Valley, California
ASM Affiliates	2007	SD-11373	Archaeological Survey of Eastern San Diego County Roads, Trails, and Campgrounds
SWCA	2008	SD-11977	Final Cultural Resources Survey of Alternatives for the Sunrise Powerlink Project in Imperial, Orange, Riverside, and San Diego Counties, California
ASM Affiliates	2010	SD-12711	Final Inventory Report of the Cultural Resources within the Approved San Diego Gas & Electric Sunrise Powerlink Final Environmentally Superior Southern Route, San Diego and Imperial Counties, California.
ASM Affiliates	2011	SD-14001	Management Plan for Archaeological Monitoring, Post-Review, and Unanticipated Effects for the Tule Wind Project, McCain Valley, San Diego County, California
ASM Affiliates	2011	SD-16221	Final Addendum Class III Cultural Resources Inventory Report for the Tule Wind Project, McCain Valley, San Diego County, California
ASM Affiliates	2011	SD-16222	Final Class II and Class III Cultural Resources Inventory Report for the Tule Wind Project, McCain Valley, San Diego County, California
Previous Studies within 1.0 Mile of the Boulder Brush Boundary			
U.S.D.A. Forest Service, Cleveland National Forest	1980	SD-00890	Draft Plan and Environmental Assessment for Thing Mountain Cooperative Vegetation Management Project
Westec Services, Inc.	1980	SD-01548	Final Report Cultural Resource Inventory of Manzanita Indian Reservation Manzanita, California
Westec Services, Inc.	1982	SD-01621	Final Report Campo Indian Reservation Cultural Resource Inventory
ASM Affiliates	1981	SD-01990	The Archaeology of the McCain Valley Study Area in Eastern San Diego County, California: A Scientific Class II Cultural Resource Inventory
Brian F. Smith	1979	SD-03076	A first Level Mitigation of Archaeological Site SDI-5430 Rancho Boulevard Project, San Diego, California

Table 1-3
Previous Studies Performed on Private Lands
Within 1 Mile of the Boulder Brush Boundary

Author	Year	SHPO ID	Title
Westec Services, Inc.	1980	SD-03260	Final Report: Cultural Resource Inventory of Manzanita Indian Reservation, Manzanita, California
ASM Affiliates	1980	SD-03285	The Archaeology of the McCain Valley Study Area in Eastern San Diego County, California: A Scientific Class III Cultural Resource Inventory
Palomar College, American Indian Studies	1995	SD-04255	An Archaeological Survey of the Campo Indian Reservation Rental and Mutual Help Housing Projects
Westec Services, Inc.	1982	SD-04365	Final Report Campo Indian Reservation – Cultural Resource Inventory
Tierra Environmental Services	2000	SD-07426	Archaeological Survey Report for the Manzanita Reservation Prescribed Burning Project, San Diego County, California
Brian F. Smith & Associates	2002	SD-08711	an Archaeological Survey for the Proposed Emergency Access Trail Big Country Ranch
Tierra Environmental Services	2004	SD-09456	Archaeological Survey Report for the Kumeyaay Wind Energy Project, San Diego County, California
Tierra Environmental Services	2005	SD-09467	Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California
David Caterino	2005	SD-09516	The Cemeteries and Gravestones of San Diego County: An Archaeological Study
Brian F. Smith & Associates	2002	SD-09764	An Archaeological Survey for the Proposed Emergency Access Trail, Big County Ranch, County of San Diego, California
BLM	1982	SD-10689	Lark Canyon Motorcycle Trails and Trails and Trail Locations
Bureau of Indian Affairs	2008	SD-11934	A Cultural Resources Inventory of a Proposed Wildland-Urban Interface fuels Reduction on the Campo Indian Reservation – San Diego County, California
ASM Affiliates	2007	SD-12649	Eastern San Diego County Site Evaluations: CA-SDI-4010 AND CA-SDI-17817
Tierra Environmental Services	2005	SD-14601	Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California
Hale, Micah	2011	SD-16223	Archaeological Testing and Evaluation of Site CA-SDI-4788, Tule Wind Project, McCain Valley, San Diego County, California

The records search identified 162 cultural resources that have been identified within 1.0 mile of the Boulder Brush Boundary; 16 of these are within the Boulder Brush APE. The 16 resources in the Boulder Brush APE include 13 prehistoric archaeological sites, one historic-era archaeological site, and two sites with both historic and prehistoric components (Table 1-4). An additional 146 resources have been recorded within 1 mile of the Boulder Brush APE. Those resources are listed in Confidential Appendix A. Including both private and reservation land 36 prehistoric archaeological sites, five multi-component sites, seven historic-era archaeological sites, one isolate, four built environment resources, and one site of indeterminate age have been recorded in the APE.

Table 1-4
Previous Recorded Resources on Private Lands
Within 1 Mile of the Boulder Brush Boundary

Resource Number	Period	Type	Dimensions
Resources within the Boulder Brush APE			
CA-SDI-4005	Prehistoric	Rock Shelter	30 × 30 m
CA-SDI-7136	Prehistoric	Temporary Camp	30 × 30 m
CA-SDI-7138	Prehistoric	Rock Shelter	5 × 10 m
CA-SDI-7139	Multi-component	Ranching; Ceramic Scatter	100 × 100 m
CA-SDI-7140	Prehistoric	Temporary Camp	30 × 10 m
CA-SDI-7145	Prehistoric	Temporary Camp	30 × 60 m
CA-SDI-7146	Multi-component	Temporary Camp; Historic Refuse Dump	10 × 10 m
CA-SDI-7148	Prehistoric	Artifact Scatter	20 × 10
CA-SDI-7149	Prehistoric	Bedrock Milling	20 × 20 m
CA-SDI-7151/7162	Prehistoric	Habitation	500 × 400 m
CA-SDI-7152	Prehistoric	Temporary Camp	100 × 50 m
CA-SDI-7156	Prehistoric	Habitation	300 × 250 m
CA-SDI-7163	Prehistoric	Temporary Camp	20 × 20 m
CA-SDI-18048	Historic	Structure Remains	7 × 6 m
CA-SDI-18049	Prehistoric	Artifact Scatter	30 × 25 m
CA-SDI-19859	Prehistoric	Artifact Scatter	167 × 25 m

1.3 Applicable Regulations

Cultural resource regulations that apply to the Project are the County RPO, the local register, CEQA, and provisions for the California Register of Historical Resources (CRHR). Within this framework, historic and archaeological districts, sites, buildings, structures, and objects are assigned significance based on their exceptional value or quality in illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Federal regulations, including 36 Code of Federal Regulations (CFR), Part 800, Section 106 of the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act (NAGPRA), and the Archaeological Resource Protection Act are also applicable the Project. This report is included as Appendix E to the EIR that was prepared to address the requirements of CEQA.

1.3.1 State Level Regulations

CEQA

CEQA requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to historical resources. Historical resources are recognized as part of the environment under CEQA. The act defines historical resources as "any object, building, structure, site, area, or place that 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 an 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 an historical resource that convey its historical significance (i.e., its character-defining features) is considered to materially impair the resource's significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA. The CRHR includes resources listed in, or formally determined eligible for listing in, the National Register of Historic Places (NRHP) and some 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. CEQA significance criteria are modeled after those identified in Section 106.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (Public Resources Code Section 5024.1, Title 14 CCR, Section 4852), which consist of the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; or
- Is associated with the lives of persons important in our past; or

- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

In the event that Native American human remains or related cultural material are encountered, Section 15064.5(e) of the State CEQA Guidelines (as incorporated from Public Resources Code Section 5097.98) and Health and Safety Code Section 7050.5 define the subsequent protocol. In the event of the accidental discovery or recognition of any human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin. If the remains are determined to be of Native American origin, the Coroner shall contact the Native American Heritage Commission (NAHC) who would identify the Most Likely Descendant (MLD). The property owner or their representative is required to consult with the MLD to determine the proper treatment and disposition of the human remains. The MLD may make recommendations to the property owner or their representative, or the person responsible for the excavation work, for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98 (California Code of Regulations, Title 14; Chapter 3; Article 5; Section 15064.5(e)).

Native American Consultation (Assembly Bill 52)

California Assembly Bill (AB) 52, which took effect July 1, 2015, establishes a consultation process between California Native American Tribes and lead agencies to address tribal concerns regarding project impacts to "tribal cultural resources" (TCR) and mitigation for such impacts. Public Resources Code section 21074(a) defines TCR and states that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A TCR is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either:

- Listed or eligible for listing in the CRHR or a local register of historical resources, or
- Determined by a lead agency to be a TCR.

The County is in the process of conducting formal consultation with Native American tribes under AB 52 for this Project. The results of those consultation efforts will be included in subsequent drafts of this report.

1.3.2 San Diego County Local Register of Historical Resources

The County maintains a local register that was modeled after the CRHR. Significance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, or culture. Any resource that is significant at the national or state level is by definition also significant at the local level. The criteria for eligibility for the local register are comparable to the criteria for eligibility for the CRHR and NRHP, but significance is evaluated at the local level. Local register criteria include the following:

- Resources associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
- Resources associated with the lives of persons important to our past, including the history of San Diego and its communities;
- Resources that embody the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represent the work of an important creative individual, or possesses high artistic values; or
- Resources that have yielded or may be likely to yield, information important in prehistory or history.

Districts are significant resources if they are composed of integral parts of the environment that collectively (but not necessarily as individual elements) are exceptional or outstanding examples of prehistory or history.

The County also treats human remains as "highly sensitive." They are considered significant if interred outside a formal cemetery. Avoidance is the preferred treatment.

Under County Guidelines for determining significance of cultural and historical resources, any site that yields information or has the potential to yield information is considered a significant site (County of San Diego 2007a: 16). Unless a resource is determined to be "not significant" based on the criteria for eligibility described above, it would be considered a significant resource. If it is agreed to forego significance testing on cultural sites, the sites will be treated as significant resources and must be preserved through Project design (County of San Diego 2007a:19).

1.3.3 County Resource Protection Ordinance (RPO)

The County uses the CRHR criteria to evaluate the significance of cultural resources. In addition, other regulations must be considered during the evaluation of cultural resources. Specifically, the County of San Diego's RPO defines significant prehistoric and historic sites as follows:

1. Any prehistoric or historic district, site, interrelated collection of features or artifacts, building, structure, or object either:
    a. formally determined eligible or listed in the NRHP; or
    b. to which the Historic Resource (H designator) Special Area Regulations have been applied; or
2. One-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data or materials; and
3. Any location of past or current sacred religious or ceremonial observances which is either:
    a. protected under Public Law 95-341, the American Religious Freedom Act, or Public Resources Code Section 5097.9, such as burials, pictographs, petroglyphs, solstice observatory sites, sacred shrines, religious ground figures, or
    b. other formally designated and recognized sites which are of ritual, ceremonial, or sacred value to any prehistoric or historic ethnic group.

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2 GUIDELINES FOR DETERMINING IMPACT SIGNIFICANCE UNDER CEQA

2.1 CEQA Guidelines

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

- Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- The significance of an historical resource is materially impaired when a project:
- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Demolishes or materially alters in an adverse manner those physical characteristics of a tribal cultural resource that convey its cultural significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

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

- When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
- If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section,

Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

- If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

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

When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code Section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

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

Section 21074 applies to effects to tribal cultural resources. AB 52 creates a new category of environmental resources that must be considered under CEQA: “tribal cultural resources.” AB 52 is applicable to a project for which a Notice of Preparation is filed on or after July 2015. AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. “Tribal cultural resources” are defined as either (1) ”sites, features, places cultural landscapes, sacred places and objects with cultural value to a California Native American tribe” that are included in the state register of historical resources or a local register of historical resources, or that are determined to be eligible

for inclusion in the state register; or (2) resources determined by the lead agency, in its discretion, to be significant based on the criteria for listing in the state register.

2.2 County Guidelines

According to the County's Guidelines (County of San Diego 2007a: 21–22), any of the following will be considered a potentially significant impact to cultural resources:

1. The project causes a substantial adverse change in the significance of a historic resource as defined in Section 15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance or any alteration of characteristics or elements of a resource that cause it to be significant, in a manner not consistent with the Secretary of Interior Standards.
2. The project causes a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
3. The project disturbs any human remains, including those interred outside of formal cemeteries.
4. The project proposes activities or uses damaging to significant cultural resources as defined by the Resource Protection Ordinance and fails to preserve those resources.
5. The project proposes activities or uses damaging to significant causes a substantial adverse change in the significance of a tribal cultural resources as defined under CEQA Section 21074.

Guidelines 1 and 2 are derived directly from CEQA. Sections 21083.2 of CEQA and 15064.5 of the State CEQA Guidelines recommend evaluating historical and archaeological resources to determine whether or not a proposed action would have a significant effect on unique historical or archaeological resources. Guideline 3 is included because human remains must be treated with dignity and respect and CEQA requires consultation with the "Most Likely Descendant" as identified by the NAHC for any project in which human remains have been identified. Guideline 4 was selected because the Resource Protection Ordinance requires that cultural resources be considered when assessing environmental impacts.

Since the adoption of the County CEQA Guidelines, a new subject area has been added to CEQA – Tribal Cultural Resources. Guideline 5 is included because Tribal Cultural Resources are

important to local Native American communities and may include sacred sites and traditional use areas that have been used over multiple generations.

All discretionary projects are required to conform to applicable County standards related to cultural resources. These include the Zoning Ordinance, General Plan, and the Grading, Clearing and Watercourses Ordinance (Section 87.429). Non-compliance would result in a project that is inconsistent with County standards, which is itself a significant impact under CEQA.

3 RESEARCH DESIGN

The objective of the evaluation portion of this Project was to obtain archaeological assemblage data that could be used to evaluate historical significance under CEQA and County Guidelines. The following discussion identifies potential questions and appropriate archaeological evidence within a series of broad research themes that derive from theory about human behavior and ecology. General issues pertinent to the assessment of the sites include determination of the extent and integrity of cultural deposits, age, cultural affiliation, site function, and subsistence. Given the extensive research completed at archaeological sites in the local area, this research design has been developed to address the kinds of resources identified during the inventory completed for this Project, and to build on the extensive research completed at archaeological sites in the local area. Notably, this research design considers only the most basic historic themes since few historic refuse dumps or artifact scatters were identified in the Project ADI, and it is unlikely that they would be found inadvertently during excavations at prehistoric sites.

3.1 Integrity and Structure of Archaeological Deposits

To assess the research potential of an archaeological site, its horizontal distribution and vertical depth must be delineated. Of particular importance is the integrity of the deposits: whether or not features or surfaces are preserved and whether the potential exists for identifying horizontal and vertical spatial patterning in the evidence for prehistoric behavior.

A variety of post-depositional disturbances can greatly alter the original character of prehistoric sites (Gross and Robbins-Wade 2008; Schiffer 1987; Waters 1992). Formation processes such as alluvial deposition, erosion, bioturbation, and modern disturbance can considerably affect the integrity of archaeological sites. Here, attempts are made to identify and interpret the processes that formed the site, with particular attention given to the character of post- depositional processes and the extent to which they have affected the integrity of the archaeological deposits.

The testing program applied to archaeological deposits within the Project Area has been used to address the following issues:

- Does the horizontal and vertical extent of the archaeological record represent continuous or discrete occupation?
- Is it possible to discern depositional versus post-depositional processes that have contributed to the present condition of the archaeological record? In other words, what are the factors, both natural and anthropogenic, that have altered the position and condition of artifacts?

- What kinds of features have been preserved (e.g., hearths, earth ovens)? Are there features that are highly disrupted by postdepositional processes but still recognizable? Can these features be associated with particular functions?
- By examining spatial patterns in the horizontal distribution of artifacts, is it possible to discern areas that were associated with specific functions? Do patterns in the vertical distribution of artifacts tell us anything about changes in the function, materials exploited, or human activities through time?
- At historical archaeological sites, is there evidence of overlapping dump episodes, such as multiple points of concentration or concentration of artifacts of a certain age?

Investigating the integrity of archaeological deposits has at its core investigation of the structure of these deposits. Human occupation can sometimes result in the development of discrete occupation areas that take advantage of particularly convenient landforms, or patches of useful resources. Indeed, such a "mapping-on" strategy is common to residentially mobile hunter-gatherers who are thought to have inhabited the region for the entire Holocene, and oftentimes produced occupational loci of concentrated habitation debris. If loci can be defined, several questions arise as to their interrelatedness:

- Is there any discernable spatial patterning within and between loci that can be used to interpret overall human occupation of the landscape?
- How can identified loci be managed considering site boundary requirements of the local California Historical Resource Information System (CHRIS) information center, and thus facilitate agency management of the resources?

3.2 Chronological Placement

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 BC to AD 500) and Late Prehistoric periods (post-AD 500), and more recently, even to the Paleoindian period (pre-6000 BC) with a series of roasting pits identified at SDG&E's East County Substation radiocarbon dated as early as 9,700 years BP. Data recovery and monitoring efforts at site CA-SDI-7074 for the East County Substation project, located in southeastern San Diego County, documented more than 100 "thermal features" (e.g., earth ovens, roasting pits, hearths) having radiocarbon dates spanning much of the last 10,000 years of prehistory. The East County Subsection project documented assemblages with large numbers of crude flake and cobble tools with smaller frequencies of late Holocene markers such as arrow points and ceramics. Groundstone at that site is also somewhat common, represented by millingstones and handstones (rather than mortars and pestles). The

distribution of such artifacts was found to be widespread, but also occurred in recognizable clusters. Aside from arrow points and ceramics, the same basic toolkit of crude flake and cobble tools and groundstone characterized deposits identified more than 20 feet (7 m) deep. To be sure, thermal features were one of the most common site constituents identified on that project—these consisting mostly of a scatter of burned rock and ash-infused sediments with low frequencies of associate artifacts and virtually no faunal bone.

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 (i) food storage and cooking technology with the inception of ceramics, and (ii) 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 in limited quantities compared to handstones (Hale 2001, 2009; Hale et al. 2010). 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?

Chronological controls are essential to any archaeological investigation to develop an understanding of temporal trends in toolkits, artifact styles, and other material patterning that can inform on human behavior. When evaluating the significance of an archaeological resource, chronological control is provides the ability to place a resource in time and assess its value for contributing to local and regional patterns in prehistory. For this reason, 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? How well do they correlate in terms of the age estimates they provide (e.g., projectile point types vs. obsidian hydration dates; cans vs. bottles).
- Are there data indicating the presence of multiple occupation episodes at project sites?
- Do diagnostic 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?

Potential chronometric evidence from the Project includes radiocarbon dates, obsidian hydration measurements, and diagnostic artifact forms. Radiocarbon dates are generally the most precise and reliable form of chronometric evidence, and they provide the foundation for the region's prehistoric chronology. However, obsidian hydration measurements may have a more direct cultural interpretation as they are individually less expensive to run, and they can address very late prehistoric to protohistoric time periods that cannot be distinguished through radiocarbon dating. Chronologically diagnostic artifacts include various projectile point forms and pottery, although these only define very broad time periods. Specific types or attributes of buffware ceramics may have a potential to define somewhat more precise time ranges, but that potential is not yet well established.

For historic sites, time sensitive artifacts are usually limited to items with maker's marks, specific manufacture styles, or coins. However, it is common for particular artifact to have manufacture dates that are much broader than those for another artifact class. This makes, determining the age of consumption for any given class difficult, if not impossible. For this reason, the date of refuse disposal is more pertinent for refuse deposits that are not located at homesites; and this is usually determined by the early manufacture date on the youngest artifact for each dump event. Hale et al. (2010) document a widespread pattern of dumping items of mixed manufacture and consumption age as the result of homesite cleanup and off-site dumping. If refuse deposits are located at a homesite, assessing the age of consumption for historic artifacts is an approximation based on overlapping manufacture dates, taking into account the earliest and latest possible dates. Assemblages that cannot be securely placed chronologically would be less likely to possess a significant research potential. Of course, archival research can provide direct information on the date of construction and occupancy for historic homesites and lands used for agricultural, ranching, or mining.

3.3 Settlement and Site Function

Interpretation of the study sites depends upon an assessment of their places within the larger settlement-subsistence system of their occupants. Sites belonging to functional types that are relatively ubiquitous within the region would be less likely to be considered significant than unusual site types. Sites with evidence of multiple functions may possess richer information content than relatively simple sites; on the other hand, single-function sites may have a greater research potential than multiple-function sites if the residues from the various activities at the latter cannot be effectively differentiated.

Evidence for the functional uses represented by the site come from surface observations made during both the survey and testing phases, as well as through the results of subsurface excavations.

Interpretations of functions rest upon both the range and the relative and absolute frequencies of various classes of features, artifacts, and ecofacts.

Widespread and substantial occupation during the Late Prehistoric period has been documented in the vicinity of the APE and within the greater Peninsular Ranges (Cook 1985; Hale et al. 2010; Hector 1984; McDonald et al. 1993; Meighan 1959; Williams et al. 2014b), particularly during the last 1,000 years, based on large numbers of ceramic sherds. The Late Prehistoric is a time when significant shifts in settlement and subsistence may have occurred.

While several important prehistoric sites and ethnohistoric villages have been extensively studied in western San Diego County, the character of settlement and subsistence shifts have not been fully explored. A key variable in understanding social organization during this time is the kind of socioeconomic shifts that occurred after adoption of the bow and arrow and the subsequent widespread use of ceramics. Specific data requirements include information on arrow point manufacture, general patterns of lithic reduction, and raw material use, including the use of exotic stone. Questions to be considered include the following:

- Was arrow point production occurring at sites in the Project Area, or were points being 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 forms and functions, and their diversity, is also critical for determining whether residential occupation was brief or prolonged. For example, data regarding the function of a vessel may help to explain whether and to what extent plant foods were exploited (Eerkens 2001). Also, evidence of clay residues and other manufacturing residues, may indicate 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 within the Project Area can help clarify the nature of site occupation and settlement duration. Shaped 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).

The single most common identifying element of archaeological sites in the Project Area and surrounding region is lithic quarrying for stone tool manufacture. Therefore, data from the current Project investigation can be used to clarify local settlement. Boulders and cobbles derived from the nearby Santiago Peak Formation were quarried/collected from sites surrounding the Project Area. What was left behind can be as valuable for understanding prehistoric mobility as the lithic materials that were discarded at nearby non-quarry sites. A detailed lithic analysis of archaeological deposits within the Project ADI will help clarify local hunter-gatherer mobility.

These analyses can also benefit from comparison to extensive quarry studies completed for the Otay Mesa area (McDonald et al. 1993) as well as to the east near Jacumba (Comeau and Hale 2015), or for desert pavement quarries located in the southeastern Mojave near Twentynine Palms (Giambastiani et al. 2008).

Considering historical resources, the kinds of artifacts present, the activities they represent, and their overall proportions can give some indication of where refuse originated, and why it was abandoned at its place of discard. The main question for historical archaeological sites is:

- What is the nature of refuse at historic sites? Are proportions of consumptive, household, industrial, and other artifacts substantial enough to derive context of origin(s)?
- Are any maker's marks on historic artifacts indicative of specific places of manufacture?
- Do they provide any information about where particular goods might have been purchased or otherwise obtained?

These kinds of questions are relevant for understanding the nature of historical occupation, including at homesites or agricultural facilities (i.e., field worker residential areas). Archival research helps bolster field data by documenting past historical landowners, lease holders, or residents, and by documenting historical changes in the local landscape. While it is virtually impossible to tie historic refuse deposits to residential or agricultural sites, it is possible to identify potential sources of refuse and make informed assumptions about its origin.

3.4 Subsistence

The issues related to subsistence are interwoven with the previously discussed settlement, and this section complements the issues discussed previously. Unfortunately, animal remains and invertebrate remains were generally lacking in the Project ADI. However, plant and animal remains may be recovered for sites which have not been evaluated yet. Some questions that can be addressed with these materials include:

- Are floral and faunal remains present in archaeological deposits?
- Which specific resources were exploited?
- Can changes in the emphasis on specific resources be detected and are these changes related to changes in procurement?
- Do recovered resources provide indications of seasonal harvesting or occupation of the area?

To address these issues, floral remains could be recovered from flotation of feature or midden soils, should they be encountered. Subsistence is often assessed indirectly through technology. Groundstone

tools are a good indicator that plant processing occurred, while projectile points generally indicate animal exploitation. With such tools noticeably absent in the Project ADI, subsistence must be indirectly inferred from flake-based implements. Such inferences have been the norm in greater San Diego County since the earliest archaeological work was completed, and especially during the 1960s emphasis on investigating "Millingstone Horizon" assemblages with their abundant scraping tools (Kaldenberg 1982; Warren 1967). The robust archaeological literature compiled for the region in the decades since has helped refine assumptions about the purpose of cobble tools, making inferences about subsistence less tenuous (Buonasera 2013; Hale 2001; Kowta 1969).

As with prehistoric sites, the issues related to subsistence at historic sites are also interwoven with the previously discussed settlement organization, and this section complements the issues discussed previously.

The primary question to address at historic sites is:

- Are artifacts present that provide information on the kinds of foods consumed (e.g., food cans, glass bottles)?

The data necessary to address this issue is generally limited to the kinds of food containers and food processing items found at historical archaeological sites as well as potential food remains, such as butchered animal remains.

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4 ANALYSIS OF PROJECT EFFECTS

4.1 Methods

This section describes the techniques employed to identify and evaluate cultural resources within the Project APE. All methods exceed the Secretary of Interior's guidelines and County Guidelines, as do all Project personnel for their respective roles. As described in Chapter 1, prior to initiating fieldwork, pre-field research was completed consisting of records searches at the SCIC to obtain records for previously recorded cultural resources and any other relevant documentation including, but not limited to, previous cultural resources investigation reports and GIS data. The records search for Reservation land was performed with the permission of Campo Tribal Chairman Goff.

4.1.1 Field Methods

Phase I Inventory

Dudek conducted an intensive pedestrian survey of 1,453 acres of the Project APE from July 23, 2018 to September 14, 2019 for a total of 14 days (the remaining 1,474 acres were surveyed by ASM [Daniels and Schaefer 2013; Hale et al. 2013] and the results of those studies are incorporated herein). The survey was conducted by walking 15 m interval transects; however, actual survey transect spacing varied depending on ground visibility. Areas with dense vegetation utilized narrow 10 m transect spacing and areas with greater ground visibility at times allowed for the maximum transect width of 15 m. Road cuts, rodent burrows, and other areas of exposed ground were opportunistically examined for evidence of subsurface artifacts, midden soils, and other indications of potential buried materials. Bedrock outcrops were also targeted in order to identify milling features. All survey transects were oriented parallel to the long-axis of the APE, or to major topographic features. Transect spacing was kept using a combination of compasses, the Trimble GeoXT, and field tablets equipped with a mobile Esri GIS application with real-time locations plotted on aerials. The crew moved together as a team to ensure accurate transect spacing and to facilitate resource identification. Upon discovery of an artifact or feature, the entire crew stopped while the person who made the find determined what it was. At the same time, all other crew members closely inspected the area around their individual transects. Upon discovery of a site, 2-5 m interval transects were used to identify each artifact and feature.

When recording a site, visible artifacts were marked with pin flags to delineate the size and boundaries of its surface deposit. Once artifacts and features were identified, crew members completed the following tasks, irrespective of site type: fill out field versions of DPR resource forms; produce a site sketch map; make a detailed surface artifact inventory; fully describe any features; take high-resolution digital site photographs, including close-ups of important or

prominent features and diagnostic artifacts; record Universal Transverse Mercator (UTM) coordinates at the locations of formal artifacts, features, and the site boundary. Each site was assigned a resource identifier for tracking during post field data processing. No artifacts were collected during the inventory.

ASM's survey (Hale et al. 2013) and supplemental survey (Daniels and Schaefer 2013) used the same general field methods for survey and recordation.

Minimally, all identified resources were recorded with a real-time corrected Trimble GeoXT Global Positioning System (GPS) receiver with sub-meter accuracy. An Apple 3rd Generation iPad equipped with the Esri ArcGIS application was also used for mapping and navigation. Standard Department of Parks and Recreation (DPR) 523 series resource forms were used to document all resources, including updating previously recorded sites. Overall, documentation of cultural resources complied with the Office of Historic Preservation (OHP) and 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). DPR site forms for each resource are included in Appendix B.

Phase II Archaeological Evaluation

The Phase II evaluation was directed at sites located wholly or partially in the Project ADI, which comprises an area of approximately 921 acres. Approximately 790 acres of this total resides within the Campo ADI while the remaining approximately 131 acres resides within the Boulder Brush ADI. Of the 145 extant cultural resources found within the Project APE, 58 are located within the Project ADI (37 sites, 17 isolates, and 4 built environment resources). Three of the built environment resources (two roads and one railroad) and seven archaeological sites were evaluated for other projects; these resources are discussed below, but no further evaluation efforts were performed for this Project. Evaluation efforts were focused on the 30 archaeological sites within the Project ADI that have not yet been evaluated, as well as 1 historic road. None of the cultural resources located outside the Project ADI would be directly or indirectly impacted by the development. The resources evaluated herein consist of 2 historic sites, 19 prehistoric sites, 6 sites with both historic and prehistoric components, and 1 historic road. Archaeological testing efforts for each resource were focused on those portions of the site that fall within the Project ADI. Portions of cultural resources that fall outside the Project ADI were not evaluated because they would not be directly or indirectly impacted by the development. Thirteen of the newly recorded sites within the Project ADI were evaluated under CEQA and County Guidelines as part of a separate project (Comeau et al. 2019); detailed descriptions of the evaluation efforts can be found in that report, and are summarized in this document.

The methods used during this archaeological evaluation have been designed according to methods and procedures developed by Dudek and others over many years of archaeological study in Southern California, and they comply with federal and state guidelines regarding cultural resource evaluations and eligibility recommendations (Giambastiani and Basgall 2000; Hale and Becker 2006; Hale and Comeau 2010; Schaefer 1994, 2000a). Field methods and techniques are intended to maximize artifact recovery from sparse archaeological deposits, while at the same time allowing for the careful documentation, exposure, and removal of surface and subsurface features and affording a practical level of provenience control. Because many known cultural deposits consist primarily of surface manifestations, having only limited quantities of artifacts buried at shallow depths, recovery efforts must emphasize surface collection as much as subsurface testing to obtain artifact samples large enough for meaningful technological and statistical analyses. Artifact treatments focused on examining aspects of morphology, condition, technology, and function. Analytical interpretations are approached largely from a functional-materialist perspective, with patterns of artifact production, use, and discard being viewed within a framework of a socioeconomic adaptation with a utilitarian technological system.

Evaluation methods are essentially sampling methods geared toward recovering a reasonable-sized assemblage to estimate the density and diversity of the cultural deposit, and to expose enough of the site deposit to determine integrity. A general approach is described below, from surface inspection and collection to the various kinds of subsurface investigation. Considerations of site-specific methods are described next, with particular attention paid to excavation unit distribution relative to proposed areas of impact.

The first step in each site evaluation was to re-locate artifact concentrations, features, and landforms as described in the original site forms and inventory letter report. Each site was then subjected to an intensive surface survey with regular-interval (2 to 5 m) sweeps of the site surface, and pin-flagging of artifacts, concentrations, and features to confirm the originally mapped items and site boundaries. This phase was made more efficient with the use of color-coded pin flags representing diagnostic artifacts, features, etc. After the site was defined with pin-flags, the artifacts were collected and their positions were recorded with a decimeter-accurate Trimble GPS unit and an iPad equipped with georeferenced proposed Project maps.

Concentrations or areas where artifact density was relatively higher than other portions of the site were mapped and collected separately from any artifacts and materials collected at a non-specific site. Non-specific, site-wide surface collection was the minimal collection method conducted at every site where artifacts were still present. Controlled surface collection methods (CSC) were used to collect surface artifacts formal grids in order to compare surface density variations across a site. CSCs vary in size but typically measure 15 m by 15 m or 10 m by 10 m and were divided into individual 5 m by 5 m quadrants, where all cultural materials noted on the ground surface were collected by quadrant,

with close attention paid to any specific spatial distributions found within the CSC. CSCs were placed in areas identified as having higher concentrations of artifacts, and when possible, at least one CSC was placed in such concentrations.

Numerous types of units were used for field evaluations for the proposed Project. All units were excavated with square corners to enable their expansion to more thoroughly explore deposits. Shovel test pits (STPs) are small; 0.5 m × 0.25 m exploratory units excavated in 20 cm increments to depths of no more than 80 cm, and typically spaced at 10 to 20 m intervals or subjectively placed. It is Dudek's experience that excavation below 80 cm in an STP increases the probability of error in determining the depth of artifact recovery because of the extensive sidewall scraping that occurs to remove matrix at lower depths. STPs are typically used to explore the edges of cultural deposits, providing a positive-negative indication with little reliability in terms of estimating depth of cultural deposits or integrity.

In cases where surface artifacts were present but the STPs and other units excavated strongly suggested minimal sub-surface cultural deposits, surface scrape units (SSU), typically measuring 2 × 2 m to 3 × 3 m, excavated in one 10 cm level in an effort to collected the maximum artifact deposit with only minimal excavation locations where the potential for sediment accumulation was limited (e.g., areas of near-surface bedrock, or erosional surfaces). SSUs can provide plan views of shallow features not seen from the surface, as well as help determine whether surface materials are in fact a significant subsurface deposit. If substantial quantities of artifacts are uncovered and identified during STP or SSU excavation, a 1 m × 1 m control unit (CU) or 1 m × 0.5 m shovel test unit (STU) would be used to explore the feature. CUs would typically be excavated in standard 10 cm levels. STUs are excavated in 10 cm or 20 cm levels.

All excavated matrix, regardless of unit type, was screened through 1/8-inch (3 mm) mesh. Typically, most of the excavation at prehistoric sites terminated between 20 and 40 cm below the surface, when either subcultural compact sediments or bedrock was typically encountered. Sediment profiles from STPs were recorded and photographed where appropriate, with small sediment samples taken for Munsell color and constituent classification. Should CUs be used at any sites not yet excavated, then sediment profiles will be drawn and photographed, as these will provide a better understanding of site formation processes and disturbances.

The sites were mapped using a Trimble Pathfinder GPS receiver with real-time correction capabilities and down to 10 cm accuracy to plot all surface artifacts, excavation units (STPs, CSCs, SSUs, STUs, and CUs), and the boundaries of any defined loci, concentrations, and features. The GPS was also used to record site boundaries, landform edges, drainages, roads, and other relevant surface information. In addition to the mapping, a series of overview photographs were taken to

show the site landscape situation and condition. Photographs were also taken of features or other site attributes when appropriate.

Table 4-1 presents levels of field effort expended at the 30 sites that were subjected to excavation and/or additional field documentation during the evaluation phase. The variation in the numbers and kinds of excavation units per site was based on the differences in size and composition of each site. Twenty-two isolates in the Project ADI are not included below, as no field efforts were performed for those resources.

Table 4-1
Level of Effort for Evaluated Sites

Primary	Trinomial	Period	Dimensions (meters)	STP	CSC	SSU	STU
Previously Recorded Resources							
P-37-007139	CA-SDI-7139	Multi-component	100 × 100	3	0	0	0
P-37-008962	CA-SDI-8962	Prehistoric	7 × 5	3	0	0	0
P-37-008977	CA-SDI-8977	Multi-component	90 × 90	2	0	0	0
P-37-009018	CA-SDI-9018	Prehistoric	10 × 10	2	0	0	0
P-37-009050	CA-SDI-9050	Historic	185 × 125	6	0	0	1
P-37-025856	CA-SDI-17205	Historic	15 × 15	3	0	0	0
P-37-032166	CA-SDI-20368	Prehistoric	210 × 95	14	0	2	1
P-37-032441	CA-SDI-20587	Prehistoric	220 × 85	15	0	0	0
P-37-032442	CA-SDI-20588	Prehistoric	30 × 10	3	0	0	0
P-37-032444	CA-SDI-20590	Historic	40 × 15	3	0	0	0
P-37-032445	CA-SDI-20591	Multi-component	19 × 12	0	0	0	0
P-37-032446	CA-SDI-20592	Prehistoric	200 × 235	13	0	1	0
P-37-032447	CA-SDI-20593	Prehistoric	3.5 × 3	1	0	1	0
P-37-032451	CA-SDI-20597	Prehistoric	35 × 25	6	0	0	0
P-37-032458	CA-SDI-20604	Historic	10 × 8	1	0	0	0
P-37-032459	CA-SDI-20605	Prehistoric	40 × 35	2	0	0	0
P-37-032462	CA-SDI-20608	Prehistoric	20 × 30	3	0	0	0
Newly Identified Resources							
P-37-038240	CA-SDI-22570	Prehistoric	82 × 47	5	0	3	0
P-37-038245	CA-SDI-22575	Prehistoric	150 × 118	8	0	2	1
P-37-038246	CA-SDI-22576	Prehistoric	105 × 98	7	0	0	0
P-37-038250	CA-SDI-22580	Prehistoric	106 × 35	11	0	0	0
P-37-038253	CA-SDI-22583	Multi-component	95 × 20	5	0	0	0
P-37-038255	CA-SDI-22585	Prehistoric	53 × 17	3	0	0	0
P-37-038256	CA-SDI-22586	Multi-component	47 × 83	3	0	0	0
P-37028289	CA-SDI-22599	Multi-component	50 × 40	5	0	0	0
P-37-038290	CA-SDI-22600	Prehistoric	3 × 2	3	0	0	0

Table 4-1
Level of Effort for Evaluated Sites

Primary	Trinomial	Period	Dimensions (meters)	STP	CSC	SSU	STU
P-37-038291	CA-SDI-22601	Prehistoric	4 × 2	3	0	0	0
P-37-038292	CA-SDI-22602	Prehistoric	20 × 38	3	0	0	0
P-37-038293	CA-SDI-22603	Historic	22 × 114	4	0	0	0
P-37-038462	CA-SDI-22674	Prehistoric	60 × 30	10	0	0	0

STP = shovel test pit; CSC = controlled surface collection; SSU = shovel scrape unit; STU = shovel transect unit; N/A = not applicable

4.1.2 Laboratory and Cataloging Procedures

Initial lab procedures included cleaning (as appropriate), sorting, and cataloging of all items. Each item was individually examined and cataloged according to class, subclass, and material; counted (except for bulk invertebrate and vertebrate remains); and weighed on a digital scale. All coded data were entered into a Microsoft Access database. Data manipulation of a coded master catalog combining all sites was performed in Microsoft Excel.

The cultural material was sorted during cataloging into the following potential categories: 13 classes of prehistoric artifacts; two classes of ecofacts; ethnohistoric items, historic and modern items; and organic samples. The prehistoric artifact classes potentially included debitage, cores, core tools, simple flake tools, formal flake tools, retouched flakes, bifaces, percussing tools, groundstone, ceramics, bone artifacts, shell artifacts, and miscellaneous items.

When possible, cores were to be separated by platform variability into subclasses such as multidirectional, unidirectional, and bifacial types. Debitage, including both flakes and debris, were sorted by material type and cortical variation (primary, secondary, and interior) during cataloging. Length, width, and thickness measurements were to be taken for all tools and cores using a sliding caliper.

Percussing tools, potentially including hammers and abraders, were defined based on their morphology and the type of macroscopic use-wear they exhibit. Groundstone artifacts were classified by type, including millingstones and handstones. Length, width, and thickness measurements were taken on complete groundstone items.

Historic artifacts were cataloged and analyzed based on functional categories, such as household goods, consumable goods, and industrial materials. Maker's marks and other characteristics were identified, where possible, to identify dates of manufacture to establish chronological ranges for site occupation.

After preliminary cataloging of the material was completed, more detailed attribute analysis was performed. Stone artifacts (both flaked and ground) were individually analyzed for selected morphological and technological attributes, as well as material and condition, in an attempt to gain insight into the period of occupation and the range of activities undertaken. Specific analytical methods and tables are included in Confidential Appendix B. All artifacts, ecofacts, and samples were subject to appropriate conservation in the field and laboratory, including proper packaging and handling. Artifact catalogs are provided in Confidential Appendix C.

Artifact Conveyance

Materials recovered by Dudek from surveys were placed in 4 mm bags, along with artifact tags providing catalog number, artifact description, and provenience information. All artifacts were then placed in archival-quality boxes. At the completion of the Project, all materials will be turned over for permanent curation to the San Diego Archaeological Center or a culturally affiliated tribal curation facility or may be repatriated to a culturally affiliated tribe. All DPR forms and updates created by Dudek will be submitted to the SCIC at the completion of the Project, along with this report.

4.1.3 Native American Correspondence and Participation

The NAHC was contacted in January 8, 2019 for a search of its Sacred Lands File for data relating to the Project (Confidential Appendix D). The NAHC responded on January 14, 2019, stating that resources are listed in the Sacred Lands File for this area, but did not provide details on what the resource(s) are. The NAHC recommended contacting the Campo Band of Mission Indians and the Manzanita Band of Kumeyaay Nation for more information on the resource(s) and provided contact information for those tribes and other Native American tribes that may have additional information. Letters were sent to the identified tribes requesting information or concerns they may have related to the Project on January 15, 2019. One response has been received to date. On January 29, 2019, the Viejas Band of Kumeyaay Indians stated this area has cultural significance to Viejas. They requested that Native American monitors be present for ground-disturbing activities and that the tribe be kept informed of new developments such inadvertent discoveries.

Red Tail Monitoring and Research, Inc. provided Native American monitors during the inventory efforts on privately owned land in 2017. Red Tail monitors included Justin Linton and Gabe Kitchen. The Reservation provided monitors during survey and evaluation efforts in 2018 and 2019 on and off the Reservation. Monitors representing the Tribe included Monique LaChappa, Andrea Najera, Lewis Connelly, Phillip Paipa, Ron Cuero, Jon Jones, and Gerricho Dyche.

Marcus Cuero and Ron Cuero, also of the Tribe, participated in site visits to identify human remains on the Reservation. The KCRC, represented by Clint Linton, was identified as the Most Likely Descendant (MLD) for the human remains identified on privately owned land.

4.2 Results

This section describes the results of the overall cultural resources study completed for the Project. The inventory results are presented first, focusing on resources identified in the Project APE, but outside the Project ADI, first for Boulder Brush, then for Campo Wind. The subsequent section presents the inventory and evaluation of all sites wholly or partially in the ADI, first for Boulder Brush, then for Campo Wind.

4.2.1 Cultural Resources outside the Boulder Brush ADI (Inside Boulder Brush APE)

A total of seven archaeological sites are located outside the Boulder Brush ADI but inside the Boulder Brush APE; this does not include two sites listed in Table 4-2 that could not be relocated and are considered to no longer exist or to have been mismapped during previous investigations (Table 4-2). Confidential Appendix B contains site-specific information, including sketch maps and other relevant information on each site.

Table 4-2
Cultural Resources Identified in the Boulder Brush APE but Outside the ADI

Primary / Temporary ID	Trinomial	Period	Type	Dimensions (meters)	Relocated?
P-37-007138	CA-SDI-7138	Prehistoric	Rock Shelter	5 × 10	No
P-37-007140	CA-SDI-7140	Prehistoric	Temporary Camp	330 × 250	Yes
P-37-007148	CA-SDI-7148	Prehistoric	Artifact Scatter	20 × 10	Yes
P-37-007149	CA-SDI-7149	Prehistoric	Bedrock Milling	20 × 20	No
P-37-007156	CA-SDI-7156	Prehistoric	Habitation	300 × 250	Yes
P-37-031290	CA-SDI-19859	Prehistoric	Artifact Scatter	167 × 25	Yes
P-37-038238	CA-SDI-22568	Historic	Quarry		Yes
P-37-038247	CA-SDI-22577	Prehistoric	Temporary Camp	16 × 10	Yes
P-37-038252	CA-SDI-22582	Prehistoric	Lithic Scatter	58 × 38	Yes

CA-SDI-7138

CA-SDI-7138 was recorded in 1979 by M. Gonzales as a rock shelter with debitage and ceramic sherds covering a 5 × 10 m area. The initial survey identified seven brownware ceramic sherds, one

felsite flake, and one quartz flake. The mapped location of the site was revisited in 2006 by ASM, who was unable to find any evidence of the site. ASM presumed the site was mapped incorrectly, and was likely further off the existing dirt roads that they surveyed at the time. Dudek revisited the site in 2018 and was unable to relocate any evidence of the site at the mapped location. Based on the distances to the site from dirt roads and geographical landmarks included in the original site form, the site is likely located southwest of the mapped location, placing it outside the APE.

CA-SDI-7140

This site was first recorded in 1979 by M. Gonzalez and M. Johnson as a temporary camp covering a 30 × 10 m area. The site is located on the west side of McCain Valley. The initial survey identified bedrock milling containing six slicks, three mortars, two basins and 50+ ceramic sherds, and three flakes.

In 2017, Dudek revisited the site and found the site to be significantly larger than previously identified, expanding the site to cover a 330 × 250 m area. Dudek identified a moderately dense surface artifact scatter and a total of 17 granitic bedrock milling features. The site is situated between a drainage a series of small hills punctuated with numerous granite bedrock outcrops. A dirt road bisects the site into roughly equal halves. Vegetation at the site contains scrub oak, coast live oak (*Quercus agrifolia*), buckwheat, manzanita, chamise, yerba santa, and cholla. Sediments are composed predominantly of loose, light-brown, sandy silty loam alluvium, and decomposing granite.

A portion of the site was evaluated as part of a separate study (Comeau et al. 2019). The artifact density identified in the evaluated portion of CA-SDI-7140 is relatively low (Comeau et al. 2019). The depth and distribution of cultural materials recovered at subsurface testing reveals that most of the material is located within 20 cm of the surface. The absence of a midden deposits or substantial subsurface deposits suggests the site was not used for substantial habitation or occupation. Further excavation in this portion of the site would likely produce similar quantities and varieties of materials documented at this time and would not provide any additional information regarding aboriginal occupation of the site.

As a result of the evaluation efforts described by Comeau et al. (2019b), the evaluated portion of the site is recommended as not eligible for listing in the CRHR or local register due to lack of data potential. Human remains were identified in two adjacent excavation units during the evaluation. As a result, the site is considered significant under the RPO and CEQA. This Project was redesigned to avoid the entirety of the site.

The site is within 50 feet of the Boulder Brush ADI. Installation of temporary fencing during construction along the Boulder Brush ADI will reduce potential impacts to the site to less than significant.

CA-SDI-7148

Site CA-SDI-7148 was first recorded in 1979 by J. Underwood as a small artifact scatter. CA-SDI-7148 was located in a meadow and covers a 20 × 10 m area. Artifacts recorded at the site included 1 felsite core, 1 felsite flake, 2 quartz flakes, 12 Tizon brownware sherds, and 1 possible hammerstone. Vegetation at the site included redshank, chamise, manzanita, and coast live oak. Dudek revisited the portion of the site mapped in the Boulder Brush APE, but did not relocate any of the artifacts. No effort was made to relocate the site outside the Boulder Brush APE.

CA-SDI-7149

This prehistoric site was originally recorded by J. Underwood in 1979. The site measures 20 × 20 m. The site consists of a small bedrock milling feature with four milling slicks and one felsite lithic flake. The vegetation in the site includes annual grasses, prickly pear, cholla, Nuttall's scrub oak (*Quercus dumosa*), and buckwheat. The edge of the site boundary is mapped within the APE; however, neither the milling feature nor the flake were observed in the Boulder Brush APE during the survey. No effort was made to relocate the feature outside the Boulder Brush APE.

CA-SDI-7156

Site CA-SDI-7156 was first recorded in 1979 by J. Underwood and M. Johnson as a large prehistoric habitation site consisting of midden, three rock shelters, cremation, bedrock milling features, hammerstones, lithic cores, lithic flakes (obsidian, quartz, and chalcedony), three handstones, three milling fragments, and over 2000 Tizon brownware and Colorado River buffware ceramic sherds. The site was recorded as covering a 300 × 250 m area.

BFSA performed an excavation at the site in 1998 to determine where significant deposits are in the site and to delineate potential open space easements for a planned lot split and residential development (BFSA 1998). That study recommended that the majority of the site should be placed in open space. The BFSA report noted that prior additional studies in the early 1980s by WESTEC (1983) and ASM (1985) performed limited excavation and surface collection and recommended the site as significant.

In 2018, Dudek relocated the site and determined that the mapped location in SCIC records was inaccurate (Comeau et al. 2019). One previously recorded bedrock milling feature and a dispersed artifact scatter was found east of the mapped boundary, and a light scatter of artifacts was found north of the mapped boundary. These areas are included in the site sketch map included in BFSA's report (1998). The site boundary was revised to incorporate the recorded cultural materials, but the full site was not revisited or mapped.

Artifacts within these areas include 300+ brownware ceramic sherds, a few buffware ceramic sherds, 300+ pieces of debitage, three granitic millingstone fragments, one granitic hammerstone, one muller, two volcanic retouched flakes, one granitic handstone fragment, one quartz Desert Side-notched projectile point, and one calcined bone fragment. The County's Forensic Anthropologist evaluated the bone fragment and determined it to be likely non-human (bird). Vegetation at this site includes buckwheat, coast live oak, chamise, cholla, and mormon tea. Sediments at the site are primarily composed of decomposing granite and silt. A small midden deposit was identified immediately north of the milling feature. This site will be avoided by Project design.

CA-SDI-19859

Site CA-SDI-19859 was originally recorded by ASM Affiliates in 2009 as a lithic and ceramic scatter. The site was observed within and along a small seasonal drainage and covers a 167 × 55 m area. Artifacts include one handstone fragment, 24 ceramic sherds, 11 volcanic lithic flakes, and three quartz flakes. The artifacts are mainly concentrated in a seasonal wash that runs through the middle of the site. Vegetation at the site includes sage, oak, chamise, and buckwheat. In 2018, Dudek relocated the site and found the site to be in the same condition as previously recorded. Connection lines from the substation to Sunrise Powerlink will be strung over this site, but no work will occur within the site boundary.

CA-SDI-22568

This is an historic mining site with a few scattered cans within a 15 × 30 m area. The site is located within low-lying ridges opening up to the west into an open valley/grassland alluvial flood plain. Vegetation in the area includes sagebrush, ephedra, cholla, and manzanita. Sediments at the site are composed of sandy loam alluvium. The mine consists of an adit or mine pit cut into a quartz outcrop and a tailings pile, which extends downslope to the east. Three cans are present west of the pit across a dirt road.

Evaluation efforts performed for another project (Comeau et al. 2019) determined the site is not likely to yield any additional information regarding the prehistory of the region and was therefore recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA.

CA-SDI-22577

The prehistoric site was identified as a ceramic scatter during the survey phase of this project in 2018 by Dudek. Dudek identified nine brownware ceramic body fragments covering a 16 × 10 m area. Sediments at the site consist of brown silty sandy loam alluvium with decomposing granite. Vegetation includes oak trees south of the site, scrub oak, buckwheat, cholla, and ephedra.

CA-SDI-22582

This prehistoric site is a very sparse lithic scatter measuring approximately 58 × 38 m. Site constituents include a concentration of lithic materials including six lithic tools. The site is situated on a relatively flat landform. Sediments are composed of medium brown sandy loam. Vegetation at the site is moderately dense consisting mostly of scrub oak, large manzanita stands, chamise, sugar bush, cholla, buckwheat, and sporadic grasses.

4.2.2 Archaeological Sites within the Boulder Brush ADI

A total of 10 archaeological sites are located within the Boulder Brush ADI, including five prehistoric sites, two historic period site, and three multi-component sites (Table 4-3). Detailed site information, including sketch maps showing excavation units and artifact locations, and location maps, can be found in Confidential Appendix B.

Table 4-3
Archaeological Sites Identified in the Boulder Brush ADI

Resource ID/ Primary	Trinomial	Period	Type	Evaluation Reference
P-37-007145/7146	CA-SDI-7145/7146	Multi-component	Temporary Camp; Historic Refuse	Comeau et al. 2019
P-37-007163	CA-SDI-7163	Prehistoric	Temporary Camp	Comeau et al. 2019
P-37-038235	CA-SDI-22565	Historic	Ranching	Comeau et al. 2019
P-37-038245	CA-SDI-22575	Prehistoric	Temporary Camp	This Report
P-37-038246	CA-SDI-22576	Prehistoric	Temporary Camp	This Report
P-37-038248	CA-SDI-22578	Historic	Rock Alignment; Historic Refuse	Comeau et al. 2019
P-37-038249	CA-SDI-22579	Prehistoric	Bedrock Milling	Comeau et al. 2019
P-37-038253	CA-SDI-22583	Multi-component	Lithic Scatter and Refuse Scatter	This Report
P-37-038255	CA-SDI-22585	Prehistoric	Lithic Scatter	This Report
P-37-038256	CA-SDI-22586	Multi-component	Temporary Camp; Historic Refuse Scatter	This Report

CA-SDI-7145/ CA-SDI-7146

Site CA-SDI-7145/7146 was first recorded as two separate sites in 1979 by D. Dominici and J. Underwood. D. Dominici identified CA-SDI-7145 as a multicomponent site containing historic debris, three slicks on the north outcrop, four slicks on the south outcrop, one mortar, two quartz flakes, brownware ceramic sherds, an unifacial felsite flake scraper, a basalt core/hammerstone,

utilized flakes, one quartz hammerstone, one millingstone fragment, and one handstone. J. Underwood described CA-SDI-7146 as a multicomponent site containing historic debris, one mortar, angular quartz fragments, brownware ceramic sherds, and felsite and quartz flakes. The vegetation in the site includes annual grasses, prickly pear, cholla, Nuttall's scrub oak, and buckwheat.

Sites CA-SDI-7145 and CA-SDI-7146 were revisited during the survey phase of the Project in 2018 by Dudek. Dudek noted that previously undocumented bedrock milling features and prehistoric artifacts scattered on the ground surface spanned the void between the two sites, such that the two sites were combined to into a single site. During the survey a total of 10 bedrock milling features with a light artifact scatter covering a 347 × 127 m area was identified.

Only a small portion of the combined site is within the Boulder Brush ADI. Evaluation efforts described by Comeau et al. (2019b) determined that the portion of the site within the ADI has no data potential; therefore that portion of the site is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design. Installation of temporary fencing during construction along the Boulder Brush ADI will reduce potential impacts to the unevaluated portion of the site to less than significant.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-7163

Site CA-SDI-7163 was first recorded in by M. Gonzales in 1979. The site is situated on the east side of a dirt road, covering a 20 × 20 m area. Gonzales identified this site as a bedrock milling site containing 19 mortars and slicks, along with one Tizon brownware ceramic sherd, and one felsite scraper tool. Vegetation on this site included coast live oak, oak, and redshank. Sediments are composed of decomposing granite and sandy loam.

Dudek revisited the site and during the surface inventory identified only one volcanic debitage, one brownware ceramic body fragment and one milling feature. The bedrock milling feature and artifacts were relocated approximately 60 m south of the mapped location, but match the original site record sketch map.

Evaluation efforts performed for another project (Comeau et al. 2019) encompassed the entire Boulder Brush ADI. The evaluated portion of the site is not likely to yield any additional information regarding the prehistory of the region and is therefore recommended as not eligible

for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. The unevaluated portion of the site is outside the Boulder Brush ADI and will be avoided by Project design. That portion of the site is considered significant under County Guidelines and CEQA. Temporary fencing during Project construction will reduce potential impacts to that portion of the site to less than significant.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-22565

This site is a late historic ranching site. The site measures 90 × 170 m. Features recorded at this site include a large main coral, secondary fenced corals, one trash dump, and one debris dump composed of ranching machinery. Features at the site include Feature 1: a coral; Feature 2: refuse deposit; Feature 3: refuse deposit located along a shallow drainage, located west of main coral area; and Feature 4: refuse deposit. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of creosote brush scrub, chaparral, buckwheat, and grasses. Specifically dateable material is difficult to decipher, but the refuse appears to be from the 1960s and 1970s.

Evaluation efforts performed for another project (Comeau et al. 2019) encompassed the entire Boulder Brush ADI. The evaluated portion of the site is not likely to yield any additional information regarding the history of the region and was therefore recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. The unevaluated portion of the site is outside the Boulder Brush ADI and will be avoided by Project design. That portion of the site is considered significant under County Guidelines and CEQA. Temporary fencing during Project construction will reduce potential impacts to that portion of the site to less than significant.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-22575

This prehistoric site consists of a temporary habitation site covering a 150 × 118 m area. An OHV road runs north/south through the eastern most portion of the site. Artifacts at the site consist of 200+ brownware ceramic sherds, groundstone tools, flakes, and bedrock milling features.

Site Structure, Artifact Recovery, and Assemblage Composition

This site was resurveyed as part of the current evaluation effort, with no new additions to the site boundaries. The Boulder Brush ADI corridor passes through the site following the contour of an existing dirt road, which bisects the site. Only the portion of the site within the Boulder Brush ADI was tested.

Concentration 1 was characterized by a greater general surface density of flaked stone and ceramic materials compared to the rest of the site within the Boulder Brush ADI. Concentration 1 measures approximately 25 × 20 m and is located in the western portion of the site. A total of 345 surface artifacts were collected from Concentration 1, in the following proportions: 306 ceramic body sherds, 20 volcanic debitage, 16 ceramic rim sherds, one quartz debitage, and one volcanic hammerstone. STP 5 and SSU 2 were both placed within Concentration 1.

The general surface inventory (outside of the concentration) produced 91 artifacts, consisting of 65 ceramic body sherds, nine ceramic rim sherds, 16 volcanic debitage, and one crystalline quartz debitage.

A total of eight STPs were excavated within the Boulder Brush ADI, one of which yielded cultural material. STP 5 in Concentration 1 produced two ceramic body sherds and three pieces of debitage (two quartz and one CCS) from 0-20 cm. From 20 to 40 cm, STP 5 produced three pieces of debitage (two quartz and one CCS) and one ceramic body sherd.

Two SSUs were excavated at the site. SSU 1 was located in the eastern portion and produced a total of 12 artifacts, with SSU 2 producing a total of 83 (Table 4-4). SSU 1 measured 2 × 1 m for the initial 0 to 5 cm level. Levels 5 to 10 and 10 to 20 were continued only on the southern half (1 × 1 m). SSU 2 was excavated as a 2 × 1 m for the first 0 to 10 cm level, with the subsequent levels covering only the northern half (1 × 1 m).

Table 4-4
SSU Artifact Recovery by Unit

Unit	Level	Object	CT
SSU 1	0 - 5	Volcanic Debitage	2
		Quartz Crystal	2
	5–10	Body Sherd	1
		Quartz crystal	1
	10–20	Body Sherd	1
		Volcanic Debitage	4
		Granitic Fire-Affected Rock	1
SSU 2	0–10	Body Sherd	35
		Volcanic Debitage	2
		Quartz Debitage	2
		Rim Sherd	4
	10–20t	Body Sherd	18
	20 -30	Body Sherd	7
		Quartz Debitage	5
		Volcanic Debitage	5
	30 - 40	Body Sherd	2
		Quartz Debitage	3

Discussion and Site Summary

Given the limited subsurface deposit of artifacts, and sparse surface collection, the portion of the site in the Boulder Brush ADI is not likely to yield any additional information regarding either the prehistory or history of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design. Installation of temporary fencing during construction along the Boulder Brush ADI will reduce potential impacts to the unevaluated portion of the site to less than significant.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22576

This prehistoric site is temporary camp covering a 105 × 98 m area. During the survey the site was found to include 70+ ceramic fragments, 20+ flakes, and one bedrock milling feature with two mortars. Sediments at the site consist of brown silty sandy loam alluvial with decomposing granite. Vegetation at the site is moderate throughout the site and includes, scrub oak, buckwheat, cholla, and ephedra.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site consisted of a resurvey of the portion of the site in the Boulder Brush ADI, surface collection, and excavation of seven STPs. The resurvey delineated one concentration of 56 ceramic sherds, six volcanic flakes, and four quartz flakes in a 13 × 7 m area near the east end of the site. The rest of the surface collection within the Boulder Brush ADI included 70 ceramic body sherds, 14 volcanic debitage, six quartz debitage, two obsidian debitage, one volcanic hammerstone (A6), one granitic handstone (A2), one quartz core (A3), one granitic millingstone fragment (A5), and one FAR.

Seven STPs were excavated within the site to determine if there is any subsurface component to the site and investigate the site's integrity. STPs 1-6-were positive for subsurface artifacts (Table 4-5); STP 7 was negative. STP 1 was placed inside of Concentration 1; the remainder of the STPs were distributed throughout the rest of the ADI. Each STP terminated between 20 and 60 cm due to the presence of decomposing granite. Sediments encountered in the STPs consisted primarily loose, dark grayish brown (Munsell: 10 YR 4/2) sandy loam with gravel and decomposing granite. Rodent burrows and small amounts of charcoal were noted in most of the STPs.

Table 4-5
CA-SDI-22576 Subsurface Artifact Recovery

Unit	Depth (cm)	Artifacts Recovered	Count
STP 1	0–20	Ceramic body sherds	5
STP 2	0–20	Ceramic body sherds	1
		Volcanic flakes	1
STP 3	0–20	Quartz flakes	3
STP 4	20–40	Ceramic body sherds	1
STP 5	0–20	Ceramic body sherds	2
		Volcanic flakes	1
STP 6	0–20	Ceramic body sherds	1
		Volcanic flakes	1
		Total	**16**

Discussion and Site Summary

The site is a temporary or seasonal camp. The presence of groundstone tools and bedrock milling fragments indicate seeds and other plant materials were processed for food. The presence of prehistoric flakedstone tools and debitage is indicative of maintenance and tool processing. The presence of prehistoric pottery indicates that the site is associated with Late Prehistoric or ethnohistoric occupation, although no other dateable material was recovered which could refine the chronological association.

As a result of these evaluation efforts, the portion of the site in the Boulder Brush ADI is not likely to yield any additional information regarding either the prehistory or history of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design. Installation of temporary fencing during construction along the Boulder Brush ADI will reduce potential impacts to the unevaluated portion of the site to less than significant.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22578

This site is a small rock alignment with historic refuse scatter measuring approximately 47 × 15 m. Site constituents include historic irrigational and industrial debris. The site is situated on the edge of a small drainage. The rock alignment is a small rain water runoff diversion associated with an old dirt road/trail that runs through the center of the site. Sediments are composed of medium brown sandy loam. Vegetation at the site is consists mainly of scrub oak, large manzanita stands, chamise, sugar bush, cholla, buckwheat, and sporadic grasses.

Evaluation efforts performed for another project (Comeau et al. 2019) encompassed the entire Boulder Brush ADI. The site was determined not likely to yield any additional information regarding the history of the region and was therefore recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22579

This prehistoric temporary camp site was first recorded in 2018 by Dudek. The site is located 160 m east of CA-SDI-22578 with an OHV road running east to west through the site. The site consists of one bedrock milling feature and a light lithic scatter. Sediments at the site consist of brown silty sandy loam alluvial with decomposing granite. Vegetation includes oak trees south of the site, scrub oak, buckwheat, cholla, and ephedra. The milling feature contains a single, heavily weathered milling slick measuring 18 × 18 cm.

Evaluation efforts performed for another project (Comeau et al. 2019) encompassed the entire Boulder Brush ADI. The site was determined not likely to yield any additional information regarding the prehistory of the region and was therefore recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22583

This multi-component site was identified during the survey phase of this project as a very sparse lithic scatter and can scatter measuring approximately 95 × 20 m. Site constituents include three quartz flakes, and three volcanic flakes and five cans. The site is situated on a relatively flat landform in the McCain Valley. Two dirt trails are present within the site, indicating modern-era disturbances to the site. Sediments are composed of medium brown sandy loam. Vegetation at the site is moderately dense consisting mostly of scrub oak, large manzanita stands, chamise, sugar bush, cholla, buckwheat, and sporadic grasses.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation effort at the site included resurvey and surface collection of all artifacts and excavation of five STPs. The resurvey of the site was only able to relocated one volcanic flake and two quartz flakes. The five cans consist of single-serve sanitary food cans (likely fruit/vegetable cans); none of the cans were collected. Sediments in all five of the STPs consisted of decomposing granite; all five were negative. Although parts of the site extend outside the Boulder Brush ADI, the entire site was evaluated.

Discussion and Site Summary

The overall density of artifacts identified at the site is very low. Subsurface testing revealed that all of material is located on the surface, with no artifacts below ground. The low density of artifacts and absence of subsurface deposits in the evaluated portion of the site do not provide substantial information regarding the prehistory of the region. Therefore, the site is recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22585

This site is a sparse lithic scatter measuring approximately 53 × 17 m. Site constituents include two volcanic flakes and a possible volcanic retouched flake. The site is situated on a gentle south facing slope. Sediments are composed of light grayish-brown, loosely compacted sandy loam. Vegetation at the site is moderately dense consisting mostly of scrub oak, large manzanita stands, chamise, sugar bush, cholla, buckwheat, and sporadic grasses. This site will be avoided by Project design.

Site Structure, Artifact Recovery, and Assemblage Composition

During the evaluation phase, Dudek visited the site on 9/11/2018 and 10/1/2018, but was only able to identify two of the volcanic flakes; both were collected. Three STPs were excavated to test for the possibility of subsurface deposits; all three STPs were negative. Sediments encountered in the STPs consisted of sandy silt, gravel, and decomposing granite.

Discussion and Site Summary

The overall density of artifacts identified at the site is very low. Subsurface testing revealed that all of material is located on the surface, with no artifacts below ground. The low density of artifacts and absence of subsurface deposits in the evaluated portion of the site do not provide substantial information regarding the prehistory of the region. Therefore, the site is recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22586

This site was identified during the survey as a prehistoric temporary camp measuring approximately 47 × 83 m. Site constituents include one bedrock milling feature, 12 pieces of debitage and five ceramic fragments. The site is situated on a small knoll with a drainage running along the northern boundary and the western boundary of the site and a large bedrock outcrop in the western portion of the site. Site disturbances include a dirt bike trail along the eastern end. The site boundary was confined to within the study area and may extend further west, however, this area was not surveyed. Sediments are composed of grayish-brown, moderately compact sandy loam intermixed with decomposing granite. Vegetation at the site is moderately dense consisting mostly of scrub oak, yerba santa, yucca, chamise, cholla. Only the eastern portion of the site is located within the Boulder Brush ADI.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site consisted of a resurvey and collection of all artifacts in the eastern half of the site and excavation of three STPs. The surface collection identified six volcanic flakes and one ceramic body sherd. A light scatter of historic refuse was also noted during the evaluation, including five miscellaneous metal fragments, two metal nails, one shotgun shell primer, and nine glass fragments (colorless, aqua, and brown), all of which was collected. A portion of a stove was also noted but not collected. The three STPs were excavated to depths ranging from 10 to 40 cm, all of which contained light brown to brown (7.5 YR 3/4) loose, silty sand with decomposing granite and terminated at decomposing granite; all three were negative.

Discussion and Site Summary

The presence of the artifact scatter and bedrock milling suggests the prehistoric component of this site was a temporary camp or just a food production site with some tool maintenance also occurring. The historic component of the site consists of a very light scatter of disparate refuse that likely relates target shooting. No deposit is present, and all the artifacts are in a highly fragmented condition due having been used as targets. No dateable material was identified. The overall density of artifacts identified in the evaluated portion of the site is very low and the absence of subsurface artifacts indicates this part of the site does not have the potential to provide information important to history or prehistory.

The portion of the site within the ADI is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the ADI, including the milling feature, has not been evaluated and will be avoided by Project design. Installation of temporary fencing during construction along the ADI will reduce potential impacts to the unevaluated portion of the site to less than significant.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

4.2.3 Archaeological Sites Outside the Boulder Brush APE

A total of 24 sites are located outside the Boulder Brush APE on private lands. These 24 sites (Table 4-6) were in the APE in previous iterations of the APE/ADI, and are discussed below to formally document survey and evaluation efforts at each site. All 24 sites will be avoided by Project design and preserved in place.

Table 4-6
Sites Outside the Boulder Brush APE on Private Lands

Primary / Temporary ID	Trinomial	Period	Type	Avoided
P-37-004005	CA-SDI-4005	Prehistoric	Rock Shelter	Yes
P-37-007136	CA-SDI-7136	Prehistoric	Temporary Camp	Yes
P-37-007139	CA-SDI-7139	Multi-component	Ranching; Ceramic Scatter	Yes
P-37-007151	CA-SDI-7151/7162	Prehistoric	Temporary Camp	Yes
P-37-007152	CA-SDI-7152	Prehistoric	Temporary Camp	Yes
P-37-027787	CA-SDI-18048	Historic	Structure Remains	Yes
P-37-027788	CA-SDI-18049	Prehistoric	Artifact Scatter	Yes
P-37-038186	-	Historic	Ranching	Yes
P-37-038234	CA-SDI-22564	Prehistoric	Temporary Camp	Yes
P-37-038236	CA-SDI-22566	Prehistoric	Bedrock Milling	Yes
P-37-038237	CA-SDI-22567	Historic	Refuse Deposit	Yes
P-37-038239	CA-SDI-22569	Prehistoric	Lithic Scatter	Yes
P-37-038240	CA-SDI-22570	Prehistoric	Temporary Camp	Yes
P-37-038241	CA-SDI-22571	Prehistoric	Temporary Camp	Yes
P-37-038242	CA-SDI-22572	Prehistoric	Lithic Scatter	Yes
P-37-038243	CA-SDI-22573	Prehistoric	Temporary Camp	Yes
P-37-038244	CA-SDI-22574	Prehistoric	Temporary Camp	Yes
P-37-038250	CA-SDI-22580	Prehistoric	Temporary Camp	Yes
P-37-038251	CA-SDI-22581	Prehistoric	Temporary Camp	Yes

Table 4-6
Sites Outside the Boulder Brush APE on Private Lands

Primary / Temporary ID	Trinomial	Period	Type	Avoided
P-37-038254	CA-SDI-22584	Prehistoric	Lithic Scatter	Yes
P-37-038257	CA-SDI-22587	Prehistoric	Artifact Scatter	Yes
P-37-038258	CA-SDI-22588	Prehistoric	Temporary Camp	Yes
P-37-038259	CA-SDI-22589	Prehistoric	Ceramic Scatter	Yes
P-37-038260	CA-SDI-22590	Prehistoric	Bedrock Milling	Yes

CA-SDI-4005

CA-SDI-4005 was first recorded in 1975 as a prehistoric site containing rock shelters, bedrock milling, a milling fragment, and a lithic and ceramic scatter. ASM Affiliates attempted to relocate the site in 2006 during a pedestrian survey for an SDG&E project. Archaeologists identified a natural rock shelter but no associated artifacts. ASM Affiliate revisited the mapped location of site in 2009 and did not relocate the site. In 2018, Dudek revisited the site and was unable to identify the site. It is likely the site was mapped incorrectly.

CA-SDI-7136

CA-SDI-7136 was first recorded in 1979 as a bedrock milling feature and artifact scatter covering a 30 × 30 m area. This site is located on the edge of the valley on the west side of Tule Creek. The initial survey identified bedrock milling, 100 + ceramics, 100+ quartz flakes, 2 felsite flakes, 1 utilized felsite flake, 1 felsite tool, 1 cryptocrystalline blade tool, 1 basalt utilized flake, 1 handstone fragment, and 1 milling fragment.

In 2018, Dudek revisited the site and identified three bedrock milling features and a sparse artifact scatter expanding the site to a 74 × 75 m area. The mapped location was found to be south of the actual location, so the site was remapped. Feature 1, which was noted on the original sketch map, is located at the east end of the site and contains two mortars. Feature 2 is located on top of a knoll at the west end of the site. It contains at least four slicks and four slick remnants on a heavily weathered outcrop. Feature 3 is a small boulder south of Feature 2 that contains a single mortar. The artifact scatter includes quartz and volcanic debitage, one retouched flake, one core, brownware ceramics, three handstones, and one millingstone. Vegetation at this site includes chamise, cholla, buckwheat, Mormon tea, and mountain mahogany. This site is outside the Boulder Brush APE and will be avoided by Project design.

CA-SDI-7139

This site was originally recorded by M. Johnson in 1979 as a multi-component site with historic rock alignments, historic refuse scatter, concrete slab, and a light scatter of Tizon brownware in a 100 × 100 m area. The site was updated in 2005 by ASM and expanded north and east. At that time, the historic refuse scatter was found to be more dispersed than previously reported. An historic water trough, fence lines, and cow pens were also recorded outside the original site boundary. The Tizon brownware sherds were not relocated at that time.

The site was revisited by Dudek in 2018. The mapped site boundary was found to be inaccurate, and was revised to reflect more accurately the observed artifacts and features. The vast majority of the site was outside the Boulder Brush APE at that time; it is now entirely outside the APE. Vegetation at this site included sumac, buckwheat, chamise, Nuttall's scrub oak, coast live oak, yucca, cheesebush, and agave.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a resurvey of the portion of the site and excavation of three STPs. The resurvey of the site did not identify any artifacts within the evaluated portion of the site. STP 1 produced one historic window glass fragment from level 0 to 20 cm and was not collected, while STPs 2 and 3 were sterile. STPs 1 and 2 were excavated to a depth of 40 cm; STP 3 was excavated to a depth of 37 cm. Sediments in all three STPs consisted of loose, light brown, sandy decomposing granite with a slight increase in compaction with depth.

Discussion and Site Summary

CA-SDI-7139 is a multi-component site consisting of historic ranching refuse and a light prehistoric ceramic scatter. Only a single piece of colorless window glass was identified during the evaluation in the eastern end of the site. The lack of associated subsurface material collections, diagnostic artifacts or feature elements indicate that the evaluated portion of the site lacks sufficient cultural material to provide information important to history or prehistory of the region.

The evaluated portion of the site is not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. All sites are important under County Guidelines; the importance of sites can be mitigated through the evaluation and recordation efforts described herein, as well as monitoring during construction. The unevaluated portion of the site is presumed significant. The entirety of this site will be avoided by Project design.

CA-SDI-7151/ CA-SDI-7162

This is a large habitation site originally recorded in 1979. It contains multiple rock shelters, bedrock milling, midden deposits, flakedstone tools, groundstone tools, ceramics, and a *Hakataya* figurine in a 500 × 400 m area. Possible cremations were also noted at that time. The site was revisited in 2006 and 2010 by ASM, with no substantial changes noted. In 2006 ASM noted that the site may have been evaluated for listing in the NRHP, but no report or site record update attesting to that fact was available at the time.

Westec combined site CA-SDI-7151 with site CA-SDI-7162 in 1983 while evaluating site. Westec (1983) determined the site was significant, but did not provide a site record update. According to BFSA (1998), the evaluation lacked sufficient mapping and did not excavate a sufficient number of STPs or control units to properly delineate site/locus boundaries and significant deposits.

BFSA performed an evaluation at the site under CEQA, the County of San Diego guidelines, and the County's RPO in 1998 to determine where significant deposits are in the site and to delineate potential open space easements for a planned lot split and residential development (BFSA 1998). That study delineated four loci (A-D) within the site and determined four areas of significant deposits that should be placed in open space. Significant areas of the site were determined based on the presence of sensitive features (such as rock shelters) or subsurface deposits of two or more artifacts in an STP or 1 × 1 m unit.

The entirety of the site is outside the Boulder Brush APE, including large areas on BLM land. During the current survey, the site was revisited and an expansion to the site was documented. Six loci, arbitrarily delineated based on topographic features, were documented, in order to facilitate recordation. Each locus is situated along a dirt bike track, which was used as a partial locus boundary for each locus. The newly delineated Locus 2 corresponds to the site previously recorded as CA-SDI-7162, which was mapped incorrectly in SCIC records (CA-SDI-7162 was already combined in to CA-SDI-7151 by Westec in 1983). The entire site was not revisited or mapped at this time: field efforts focused on the APE at that time, and a sufficient area to define the site boundary. Upon review of the field data and the BFSA report, the mapped site boundary was determined to be slightly offset to the east. Five of the new loci (except Locus 4) are updates/expansions to the BFSA loci; the new locus 4 was evaluated by BFSA but was not mapped as part of the site.

Westec (1983) and BFSA (1998) determined that this site is significant under CEQA and eligible for listing in the CRHR under Criterion 4 (data potential). BFSA (1998) also identified the site as significant under the County RPO based on the presence of multiple rock shelters. The site is also considered significant under the County RPO due to the discovery of human remains at BFSA

Locus C (Locus 3 as delineated by Dudek) during this study. Four loci within the site were identified which contain significant deposits/features and/or human remains that contribute to the significance of the site; all four of these areas were outside the Boulder Brush ADI design at the time fieldwork was performed. Additional excavation efforts were requested by the MLD which were performed for another project and were documented in a separate report (Comeau et al. 2019). Subsequent to those efforts, this Project was redesigned to avoid impacts to the entirety of the site.

CA-SDI-7152

Site CA-SDI-7152 was first recorded in 1979 by M. Johnson as concentrated artifact scatter. The site initially measured a 100 × 50 m area and is covering two small knolls bisected by a drainage. The site contains chert, felsite, basalt, obsidian, and chalcedony flakes, one large chopping tool or core, one ceramic bowl, one millingstone, one handstone, and burned animal bone. Vegetation included manzanita, artemisia, Nuttall's scrub oak, prunus, and buckwheat. The sediment is composed of decomposing granite.

Dudek revisited the site in 2018 and relocated the artifact scatter, one possible rock shelter (Feature 1) and a bedrock milling outcrop with two milling slicks (Feature 2). A dirt bike trail runs north-south through the site on the eastern edge of the western knoll. The possible rock shelter consists of one large granite boulder with a small concavity on the north side. A smaller boulder sits in from of the concavity, providing a wind and sun break. No evidence of midden soils or thermal features were noted in the concavity. One ceramic bowl fragment (A1), and a few small sherds, were noted adjacent to the concavity.

Evaluation efforts were performed for another project (Comeau et al. 2019) for a portion of the site. The evaluated portion of the site was determined not likely to yield any additional information regarding the prehistory of the region and is therefore recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. The unevaluated portion of the site is considered significant under County Guidelines and CEQA. As a result of redesign efforts related to sites CA-SDI-7151/6162 and CA-SDI-22581, this site is now outside the Boulder Brush APE and will be avoided by Project design.

CA-SDI-18048

CA-SDI-18048 was originally recorded as a historic site containing a collapsed structure and a concrete foundation by ASM Affiliates in 2006. The structure measures 15 × 12 feet. Modern refuse consisting of beer cans, broken glass dating to primarily to the 1970s and 1980s were observed on the surface. The site is located on a high ridge between Lost Valley and McCain Valley. Modern OHV trails pass on the east side of the structure. In 2018, Dudek returned to the

site and found it in the same location and condition as previously reported. This site is outside the Boulder Brush APE and will be avoided by Project design.

CA-SDI-18049

CA-SDI-18049 was first recorded in 2006 by ASM Affiliates and is located approximately 100 m southwest of CA-SDI-18048 on top of a granite-outcrop-covered knoll. ASM identified the site as a lithic and ceramic scatter consisting of 7 lithic flakes and 10 brownware sherds in a 25 × 30 m area. ASM also noted that an OHV trail passes through the site.

In 2018, Dudek revisited the site and relocated the previously recorded artifacts. Additionally, Dudek recorded a small concentration of artifacts located approximately 30 m north of the originally mapped site. The originally mapped site was designated Locus A, and the newly identified artifacts were designated Locus B. As a result of the update, the site was expanded to cover an 84 × 34 m area. Artifacts noted at Locus B include one quartz Elko projectile point, one quartz biface thinning flake, one quartz secondary flake, three quartz interior flakes, and two volcanic interior flakes. Vegetation at this site includes chamise, scrub oak, buckwheat, and cholla. This site is outside the Boulder Brush APE and will be avoided by Project design.

CA-SDI-22564

This site is a sparse artifact scatter and bedrock milling features over an approximately 230 × 110 m area. Site constituents include three secondary volcanic flakes, 33 interior volcanic flakes, three secondary volcanic flakes, two obsidian flakes, 18 ceramic body sherds, 12 quartz flakes, and two ceramic rim sherds. Additionally, several tools were identified within the site including one bifacial core, two handstone fragments, one milling stone fragment, one metavolcanic core, one quartz core, one quartz biface, and one scraper. Bedrock milling features include one milling slick on a large granitic outcrop and two milling slicks on a separate large granitic outcrop. Vegetation within the site is moderately dense and consists mainly of manzanita, and scrub brush. This site is outside the Boulder Brush APE and will be avoided by Project design.

CA-SDI-22566

CA-SDI-22566 was identified as a bedrock milling site with one heavily exfoliated slick. The 15 cm diameter slick sits on a 1.5 × 1.5 m granite boulder situated on a low-lying ridge opening up to the west into an open grassland alluvial flood plain. The landscape is dotted with large granite bedrock boulders. Vegetation at the site consists of scrub oak, chamise, sugar bush, cholla, and buckwheat.

Evaluation efforts performed for another project (Comeau et al. 2019) determined the site is not likely to yield any additional information regarding the prehistory of the region and was therefore recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance. This site will be avoided by Project design.

CA-SDI-22567

This site consists of a two historic refuse dumps. The site covers a 20 × 40 m area. Vegetation in the area includes sagebrush, ephedra, cholla, and manzanita. Sediments at the site are composed of sandy loam alluvium and decomposing granite. Refuse dump 1 (Feature 1) contains 10 multi-serve sanitary cans, 10 hole-in-cap single-serve cans, four meat tins, 50+ can fragments, one transfer-print whiteware ceramic bowl sherd, and a colorless glass bottle made by the Southern Glass Company. The Southern Glass Company bottle dates to ca. 1916-1931 (glassbottlemarks.com 2008). Feature 2 contains 200+ glass fragments (aqua, brown, colorless, amethyst), 15 condensed-milk cans, a battery, and 20 transfer-print ceramics. This site will be avoided by Project design.

CA-SDI-22569

This prehistoric site consists of a small lithic scatter with site dimensions measuring 45 × 96 m. The site is situated on a small, western facing, gentle slope. The sediments are primarily decomposing granite. Vegetation includes chamise, redshank, cholla, buckwheat, butterfly bust, and scrub oak. The lithic scatter contains 8 interior volcanic flakes, 1 primary volcanic flake, 10+ volcanic shatter, and 1 volcanic core. This site will be avoided by Project design.

CA-SDI-22570

CA-SDI-22570 was identified as a temporary camp with debitage, ceramics, flakedstone tools, groundstone tools, and bedrock milling. The site is situated on a wide terrace above the valley floor with an OHV trail running north-south through the site. Sediments at the site are composed of decomposing granite and silty sandy loam.

During the survey Dudek identified 73 volcanic debitage, 14 quartz debitage, 13 brownware sherds, three millingstones, five handstones, a chert projectile point fragment, five cores, two hammerstones, three bedrock milling features, and in an 82 × 47 m area. A deep, narrow drainage

runs along the southern boundary of the site. The three milling features contain a total of six slicks. Numerous heavily weathered granite boulders and outcrops are present along the western end of the site that may have contained additional milling features. The entire site is outside the APE; however, under an early Project design, impacts to the site would have consisted of an access road that ran through the middle of the site. Therefore that portion of the site was evaluated.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a general surface collection and excavation of 3 SSUs and 5 STPs within the prior ADI. During the resurvey of the site, 27 surface artifacts were recorded and collected, including four tools and 25 pieces of debitage. About half (n=12) of the debitage were recovered from the southeast quarter of the evaluated area, with the rest roughly evenly distributed through the remainder of the evaluated area. The four tools included one volcanic hammerstone (Artifact 13), two granitic handstones (Artifact 14 and 15), and one volcanic retouched flake tool (Artifact 18).

SSU 1 was excavated within the densest scatter of surface artifacts to a depth of 10 cm, producing one debitage fragment. The sediment in SSU 1 consisted of grayish brown, fine grain sand with gravel inclusions. Both SSU 2 and 3 were sterile. SSU 2 was excavated to a depth of 10 cm and consisted of loosely compacted, brown (Munsell: 7.5 YR 4/2) sandy silt. The SSU 3 was excavated to a depth of 20 cm and consisted of a loosely compacted, dark gray (Munsell: 7.5 YR 4/1) sandy silt with decomposing granite.

Five STPs were excavated to a depth of 40 cm. STP 1 produced one piece of volcanic debitage from 0 to 20 cm and two pieces of debitage from 20 to 40 cm. From 0 to 5 cm the sediment consisted of light brown, loosely compact silty sand. From 5 to 20 cm the sediment consisted of loosely compacted, medium brown silty sand. From 20 to 40 cm the sediment consisted of compact, dark brown sandy silt with root and vegetation disturbances, and was terminated at 40 due to the presence of decomposing granite. STPs 2, 3, 4, and 5 contained loose to moderately compact light brown sandy silt, and were all sterile.

Discussion and Site Summary

CA-SDI-22570 is a temporary camp with a light to moderately dense surface scatter of artifacts and bedrock milling features. Within the evaluated area, a total of 27 pieces volcanic and quartz debitage, one flakedstone tool, one hammerstone, and two handstones were identified. Lithic debitage consists almost entirely of small to medium sized interior flakes (n=20) and interior shatter (n=6) indicating production and re-sharpening of retouched flakes and non-biface derived tools. Based on the lack of subsurface deposits on minimal artifact recovery overall, the evaluated

portion of the site has limited data potential. No dateable materials were recovered from this portion of the site, although a general Late Prehistoric or Ethnohistoric period designation for the overall site can be determined based on the presence of ceramics. Unfortunately the chert projectile point is only a medial fragment, so it cannot be used to help date the site.

The evaluated portion of the site is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The remainder of the site has not been evaluated.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance. The entirety of the site will be avoided by Project design.

CA-SDI-22571

Site CA-SDI-22571 was first recorded in 2017 by Dudek and is located approximately 80 m northwest of CA-SDI-7140 and 100 m due west of an OHV trail. The site measures 25 × 73 m. Dudek identified the site as having two bedrock milling features at least one flake. Sediments at the site consists of loose, light brown, sandy silty loam alluvium, and decomposing granite. Vegetation includes chamise, sugar bush, cholla, and buckwheat. This site will be avoided by Project design.

CA-SDI-22572

This prehistoric lithic scatter site was identified during the survey phase by Dudek in 2018. The site measures approximately 83 × 33 m. The site consists of two loci; Locus A includes five volcanic flakes, and Locus B includes two volcanic flakes and four quartz flakes. One volcanic test cobble, volcanic core, and volcanic flake were identified outside of the loci. Sediments at the site are composed predominantly of loose, light-brown, sandy silty loam alluvium, and decomposing granite. Vegetation at the site is moderately dense consisting of chamise, sugar bush, cholla, and buckwheat. This site will be avoided by Project design.

CA-SDI-22573

This prehistoric site was identified during the survey phase of this project as a temporary camp covering a 69 × 32 m area. The site consists of one bedrock milling feature at the east end of the site and a sparse lithic scatter to the west. Artifacts observed include two volcanic secondary flakes, five volcanic interior flakes, and one quartz interior flake. Ground visibility is high with sediments composed predominantly of loose, light brown, sandy silty loam alluvium, and decomposing

granite. Vegetation at the site is sparse consisting of chamise, sugar bush, cholla, and buckwheat. Only the milling features is located within the impact area of the project. This site will be avoided by Project design.

CA-SDI-22574

This site is a habitation site consisting of a rock shelter, three bedrock milling features, a large but sparse lithic scatter, and a modern/historic mining adit. This site is located on the eastern side of a north-south running drainage and covers a 103 × 130 m area. The rock shelter is situated on the west slope of a small knoll, with a flat terrace extending from the rock shelter to the drainage.

The rock shelter (Feature 4) is formed of two upright granite boulders with a third boulder that has fallen down to form a roof. The shelter has two entrances, the western facing entrance measures 2.2 m in height and 2.7 m in width. The eastern entrance measures 1.7 m in height and 2 m in width. Inside the rock shelter is a granite bedrock milling feature (Feature 3) with two milling slicks. Artifacts observed inside the rock shelter include at least six volcanic flakes and three brownware ceramic sherds. Also observed inside the rock shelter were two probable camp fire locations with large soot stains on the ceiling above them. Sediments inside the rock shelter consist of decomposing granite and coarse sand. A pack rat midden is also inside the shelter.

Artifacts are scattered east, south, and west of the rock shelter. Artifacts observed to the east of the shelter on the knoll include 1 volcanic core, 1 granite handstone, 15 volcanic flakes, 4 volcanic shatter, 6 quartz flakes, 2 quartz shatter, and 7 brownware ceramic sherds. Artifacts identified to the west of the shelter on the terrace include 16 volcanic flakes, 3 volcanic shatter, 1 quartz core fragment, a medial fragment of a quartz projectile point, 18 quartz flakes, and 10 quartz shatter. Feature 1, a granite bedrock milling feature with one slick, is located approximately 60 m to the southeast of the rock shelter.

Feature 2, a granite bedrock milling feature with three mortars is located 46 m south of the rock shelter. Artifacts surrounding Feature 2 include 26 volcanic flakes, 7 quartz flakes, 1 quartz core fragment, 1 volcanic retouched flake, 16 brownware body sherds, and 1 granitic millingstone fragment. Sediments at the site are composed of coarse, light-brown, silty sand, decomposing granite, and reddish-brown silty sand. Vegetation at the site, which includes redshank, manzanita, chamise, cholla, buckwheat, chia, and yucca, was moderately dense overall. The terrace west of the rock shelter and the knoll to the east are generally devoid of vegetation. This site will be avoided by Project design.

CA-SDI-22580

This prehistoric site is a temporary camp consisting of three bedrock milling features and a light artifact scatter covering a 106 × 35 m area. The site is situated on a granite outcrop covered knoll in the east side of McCain Valley, just north of a narrow, deeply incised drainage. A north-south trending dirt bike trail runs through the site. Sediments at the site consist of brown silty sandy loam alluvial with decomposing granite. Numerous rodent burrows are present throughout the site. Vegetation includes oak trees south of the site, scrub oak, buckwheat, cholla, and ephedra.

Bedrock milling features at the site include: Feature 1, a granite outcrop with one slick, located on the northwest site of the knoll; Feature 2, a granite outcrop with four milling slicks on a small, low-lying, highly weathered boulder; and Feature 3, a granite outcrop with two milling slicks near the eastern boundary of the site.

During the survey a low-density concentration of ceramics and debitage including eight metavolcanic interior flakes, one quartz interior flake, one obsidian interior flake, and 16 brownware ceramic sherds were noted in the south half of the site. The concentration is located along the dirt bike track south of Feature 2. Two groundstone tools located outside of the artifact concentration including a granitic unifacial millingstone and a quartz bifacial handstone.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a surface collection of all artifacts and excavation of 11 STPs. During the resurvey, a general surface collection recovered 22 ceramic sherds, 16 volcanic debitage fragments, one quartz biface fragment, one granitic millingstone fragment (A1), and one quartz handstone (A2); all but the handstone and millingstone were recovered from within the concentration Fresh dirt bike tracks were noted on the west side of the dirt bike trail, which churned the sediment and leaf litter on the ground surface, ultimately hindering attempts at relocating the artifacts.

Eleven STPs were excavated within the site to determine if there is any subsurface component to the site and investigate the site's integrity. The STPs were generally excavated to a minimal depth of 40 cm and generally terminated upon encountering decomposing granite. Of the 11 STPs, only three produced artifacts (STPs 1, 3, and 5). The sediment in STP 1 from 0 to 40 cm consisted of loosely compacted, medium brown loam. From 40 to 60 cm the sediment consisted of loosely compacted, light brown loam with concentration small amount of charcoal. One ceramic sherd and one piece of volcanic debitage were recovered from 0 to 20 cm, while one piece of quartz debitage was recovered from 20 to 40 cm. The sediment in STP 3 from 0 to 40 cm consisted of loosely to moderately compacted, grayish brown with moderate concentration of gravel. One ceramic sherd was recovered from 0 to 20 cm and one piece of quartz debitage was recovered from 20 to 40 cm.

STP 5 produced eight ceramic body sherds from 0 to 20 cm and eleven ceramic body sherds from 20 to 40 cm. The sediment in STP 5 consisted of grayish brown sandy loam with some gravel and increasing compaction with depth, and terminated at decomposing granite. The eight of the remaining STPs were sterile and contained similar sediments consisting of loosely to moderately compacted, light to medium brown sandy silt. Rodent burrows were present in each STP.

Discussion and Site Summary

The site is a temporary or seasonal camp. The presence of groundstone tools and bedrock milling slicks indicate seeds and other plant materials were processed for food. The absence of mortars indicates acorns were not processed here, even though oak trees are present in and surrounding the site. The presence of prehistoric flakedstone tools and debitage is indicative of maintenance, as almost all of the debitage is small interior flakes, and non-cortical shatter. The presence of prehistoric pottery indicates that the site is associated with Late Prehistoric or ethnohistoric occupation, although no other dateable material was recovered which could refine the chronological association.

The low density of artifacts, absence of midden soils, and limited subsurface recovery do not provide substantial information regarding the prehistory of the region. Therefore, the site is recommended as not eligible for listing in the CRHR or local register, and not significant under the County RPO or CEQA.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities. This site will be avoided by Project design.

CA-SDI-22581

This site is a large temporary camp situated on three adjacent knolls, separated by east-west trending drainages. Each knoll was delineated as a distinct locus for recordation purposes, and do not necessarily reflect variations in activity areas or chronology/occupation. Vegetation at the site consists primarily of chamise, buckwheat, sugar bush, redshank, and cholla. Sediments at the site consist of silty sandy loam and decomposing granite. Heavily weathered granite bedrock outcrops are present throughout the site – more milling features that were recorded during the survey likely are, or at least were, present but could not be identified at this time.

Due to the presence of human remains, the MLD requested a subsurface excavation program to be performed to determine if any additional remains may be present. This effort was performed with evaluation efforts at the site for another project and was documented in a separate report (Comeau

et al. 2019). No human remains were identified during those efforts (Comeau et al 2019b). This Project was subsequently redesigned to avoid all impacts to the site.

CA-SDI-22584

This site is a very sparse lithic scatter measuring approximately 20 × 21 m. Site constituents include one volcanic simple flake tool, one quartz flake, and one volcanic flake. The site is situated on a relatively flat landform. Sediments are composed of light brown/yellow, loosely compacted silty sand. Vegetation at the site is relatively sparse consisting mostly of scrub oak, chamise, sugar bush, cholla, buckwheat, and sporadic grasses. This site will be avoided by Project design.

CA-SDI-22587

This prehistoric site is a sparse artifact scatter measuring approximately 30 × 47 m. Artifacts identified include five volcanic flakes and two ceramic brownware sherds. Three of the flakes were found placed on a bedrock possibly from a local hiker or looter. The site situated on a generally flat landform, slight slope facing south, immediately north of an ephemeral drainage and a dirt bike trail and located just south of a large bedrock outcrop within McCain Valley. There is also a small granite outcrop on the west site of the site. Sediments are composed of grayish-brown, moderately compact sandy loam intermixed with decomposing granite. Vegetation at the site is moderately dense, consisting mainly of sagebrush, buckwheat, and manzanita. A large manzanita stand on the east side of the site has created a large amount of leaf litter in this area, obstructing ground visibility. This site will be avoided by Project design.

CA-SDI-22588

This prehistoric site is a temporary camp covering a 50 × 13 m area that consists of two bedrock milling features and a sparse artifact scatter. The site is located on relatively flat terrain, just south of a series of ephemeral drainages and a dirt bike trail. Sediments are composed of grayish-brown, moderately compact sandy loam intermixed with decomposing granite. Vegetation at the site is moderately dense consisting mostly of scrub oak, chamise, sugar bush, cholla, buckwheat, and sporadic grasses. This site will be avoided by Project design.

CA-SDI-22589

This prehistoric site is a dense ceramic scatter on a flat landform measuring 18 × 12 m. Site constituents include 51 brownware ceramic body sherds and three brownware ceramic rim sherds which are concentrated in the center and southwest corner of the site. Sediments are composed of grayish-brown, moderately compact sandy loam intermixed with decomposing granite. Vegetation

at the site consists mostly of scrub oak, chamise, sugar bush, cholla, buckwheat, and sporadic grasses. This site will be avoided by Project design.

CA-SDI-22590

This prehistoric site consists of one bedrock milling feature and one artifact covering a 22 × 16 m area. The site is situated on a granite outcrop west of a dirt bike track trending north-south. Vegetation at the site consists of scrub oak, grass, and buckwheat. Feature 1 is located on southeast of the site and contains one slick that is exfoliated and weathered. The bedrock milling feature measures 2 × 1 m with one oval slick milling surface 35 × 20 cm. One volcanic interior flake located approximately 15 m north of the feature. This site will be avoided by Project design.

P-37-038186

This resource is a historic ranching site with a water trough, well pipe, and refuse dump. The trough is approximately 7 × 7 feet and 3 feet high, with 4-inch-thick walls. The well pipe consists only of the steel pipe partially sticking out of the ground, immediately north of the trough. The refuse dump consists of a tire, concrete rubble, and excess slurry. The site covers a 5 × 5 m area. Sediments at the site are composed of alluvial silty sandy loam and decomposing granite. This site will be avoided by Project design.

4.2.4 Cultural Resources Outside the Campo Wind ADI (Inside Campo Wind APE)

A total of 17 archaeological sites were identified outside the Project ADI but within the Project APE; this does not include five sites listed in Table 4-7 that could not be relocated and are considered to no longer exist or to have been mismapped during previous investigations (Table 4-6; Figure 4-1, Confidential Appendix B) Some of these sites were evaluated as part of another project; any site that has not been evaluated by this or other projects are presumed significant under CEQA. All of the resources outside the Project ADI are being avoided in place by Project design. A site description for each resource is listed below. Eight of the sites were not relocated are either mapped incorrectly or no longer exist.

Table 4-7
Cultural Resources Identified in the Campo Wind APE but outside the ADI

Primary / Temporary ID	Trinomial	Period	Type	Dimensions (meters)	Relocated?
P-37-007258	CA-SDI-7258	Indeterminate	Bedrock Milling	30 × 30	No
P-37-008198	CA-SDI-8198	Prehistoric	Ceramic Scatter	10 × 15	No
P-37-008939	CA-SDI-8939	Prehistoric	Habitation	100 × 100	Yes

Table 4-7
Cultural Resources Identified in the Campo Wind APE but outside the ADI

Primary / Temporary ID	Trinomial	Period	Type	Dimensions (meters)	Relocated?
P-37-008945	CA-SDI-8945	Prehistoric	Rock Circle; Artifact Scatter	3 × 3.5	Yes
P-37-008946	CA-SDI-8946	Prehistoric	Bedrock Milling	50 × 50	No
P-37-008963	CA-SDI-8963	Prehistoric	Bedrock Milling	115 × 120	Yes
P-37-008968	CA-SDI-8968	Prehistoric	Bedrock Milling	2 × 2	No
P-37-008980	CA-SDI-8980	Prehistoric	Rock Shelter	4 × 2	No
P-37-008985	CA-SDI-8985	Prehistoric	Bedrock Milling	3 × 2	Yes
P-37-008986	CA-SDI-8986	Prehistoric	Bedrock Milling	1 × 1	Yes
P-37-032440	CA-SDI-20586	Prehistoric	Lithic Scatter	40 × 30	Yes
P-37-032448	CA-SDI-20594	Multi-component	Artifact Scatter; Refuse Scatter	55 × 50	Yes
P-37-032452	CA-SDI-20598	Prehistoric	Temporary Camp	60 × 50	Yes
P-37-032453	CA-SDI-20599	Prehistoric	Bedrock Milling	20 × 20	Yes
P-37-032461	CA-SDI-20607	Prehistoric	Artifact Scatter	45 × 30	Yes
P-37-032464	CA-SDI-20610	Historic	Refuse Scatter	12 × 12	Yes
P-37-032465	CA-SDI-20611	Historic	Refuse Scatter	10 × 5	Yes
P-37-035283	CA-SDI-21776	Prehistoric	Temporary Camp	30 × 50	Yes
P-37-038279	CA-SDI-22595	Prehistoric	Habitation	92 × 30	Yes
P-37-038281	CA-SDI-22596	Multi-component	Ceramic Scatter; Human Remains; Refuse Scatter	35 × 40	Yes
P-37-038282	CA-SDI-22597	Historic	Refuse Scatter	12 × 15	Yes
P-37-038288	CA-SDI-22598	Historic	Refuse Scatter	22 × 28	Yes

CA-SDI-7258

This 30 × 30 m site is an assortment of reactivated or "recent"-use milling features and tools found within the vicinity of the Mary Ann Cuero home and may no longer be extant. Vegetation at the site consists of introduced garden flora, oaks, and chamise. Alluvium and eroded hillside sedimentary deposits were observed. In 1979, Greathouse recorded two bedrock mortars, two handstones, and one granite pestle and suggested the items were used by the residents of the Cuero home. At the time, it was unknown if the mortars and groundstone tools were repurposed features and artifacts, or if they were of modern origin. This site could not be relocated within the Campo APE in 2012 by ASM.

CA-SDI-8198

A surface scatter of prehistoric ceramics composes this site. Red shank chaparral vegetation dominates the landscape. Flower, Ike, and Roth recorded the site in 1980 as a 10 × 15 m scatter of nine brownware potsherds. The location and sketch maps in the site record indicate that site is off the Reservation, although the mapped location in the SCIC records show part of the site on the Reservation. Artifacts were not observed within the Campo APE at the mapped location; the site appears to be off the reservation, as originally mapped.

CA-SDI-8939

This is a large prehistoric habitation site, east of a water tower, south of a covered spring, and interrupted by a Reservation fence and the branches of a dirt road. Riparian woodland vegetation consisting of oak, rye, and unknown grasses characterizes the site and surrounding area. C. Taylor recorded the site in 1975 and noted 18 basins, eight mortars, and 24 slicks at five outcrops over a roughly 100 × 100 m area. Artifacts recorded include 125+ flakes, 200+ potsherds, and one blade. A fire/trash pit of unknown temporal affiliation was also noted by Taylor. Three of the features were mapped off the Reservation and two were mapped within the Reservation.

Dudek relocated the site in 2018. The mapped site boundary on file at the SCIC was found to be smaller than the originally mapped boundary, and was updated to reflect more accurately the original mapping as well as the artifact scatter and features as observed at this time. One new feature was identified in the eastern part of the site, which contains three mortars. The artifact scatter is generally the same as previously described, although fewer artifacts were observed at this time, as vegetation in the area was very thick. A probable midden deposit was noted north of the milling features.

In 2019, Dudek revisited the site and found a light density artifact scatter spreading east of the site, primarily north of the dirt road that bisects the site. One core, 13 flakes (quartz and volcanic, and 40 brownware ceramic sherds were identified at that time, extending the site some 80 m to the east and 30 m to the north of the prior site boundary. One piece of possible cremated human remains was also identified at that time. On February 15, 2019, Dr. Hinkes of the San Diego County Coroner's Office visited the site and to make the formal identification. Seven additional bones were identified at that time; one was determined to be human, and seven were determined to be likely or possibly human. A proposed access road has been redesigned to avoid impacts to the entirety of this site.

CA-SDI-8945

This site was originally recorded by C. Taylor in 1981 to contain a single rock circle located on a flat, granite bedrock outcrop. The rock circle was reported to measure 3 × 3.5 m and was composed of 27 rocks. Chamise, yucca, manzanita, and lilac were noted in the vicinity.

Dudek revisited the vicinity of the site in 2018. The rock circle is mapped outside the Campo APE and was not relocated at this time, although no effort was made to search outside the Campo APE. Four pieces of debitage (one volcanic primary flake, two volcanic interior flakes, and one piece of quartz shatter) were observed along the Campo APE adjacent to the site boundary, and were recorded as an update to the site. Three of the flakes were observed in the Campo APE, and one was noted outside the Campo APE.

CA-SDI-8946

This 50 × 50 m site is a milling station situated in a boulder outcrop originally recorded by C. Taylor in 1981. It rests on a small creek beneath a knoll in a narrow, oak-filled drainage that opens into a valley. Riparian woodland flora consisting of oak, buckwheat, elderberry, wild lilac, and unknown grasses characterize the site and surrounds. The site consists of three milling features containing six slicks. In 2012, ASM Affiliates revisited the location but did not relocate any of the features. It was determined at that time that the site was incorrectly mapped, and should have been mapped in one of the drainages to either the east or west of the site, which are outside the Campo APE.

CA-SDI-8963

This site was originally recorded in 1981 by C. Taylor as three bedrock milling features containing a total of nine slicks. ASM Affiliates updated the site boundary, shifting it north of the previously mapped location, and recorded an additional milling feature containing one slick. The site lies in a copse of boulders situated on both sides of a seasonal drainage, 60 m east of a stream. Riparian woodland vegetation consisting of wild lilac, oak, grasses, and redshank and sandy loam sediment characterizes the landscape. The site was relocated by Dudek and found to be in the same condition as reported by ASM. The site boundary was found to extend south and include the originally mapped area, which does not contain any features or artifacts. As a result, the site boundary was revised again to encompass only the extant features.

CA-SDI-8968

C. Taylor recorded this site in 1981 as a single milling station. It is situated within a drainage on the eastern edge of Diabold Canyon, 50 m south of a spring. Riparian woodland vegetation such as live oak, redshank, and mountain mahogany as well as humic and sandy soils dominate the landscape.

The 2 × 2 m site consists of a single boulder containing three slicks. The portion of the mapped site boundary was revisited by Dudek in 2018, but the feature was not relocated. It is likely that the feature is outside the Campo APE, but no effort was made to examine the area outside the APE.

CA-SDI-8980

This site is a rock shelter with one core, which was originally recorded by C. Taylor in 1981. ASM revisited the site in 2011 and was unable to relocate it. It was determined at that time to have been mismapped, and should have be located 270 m to the southeast, outside the Campo APE.

CA-SDI-8985

C. Taylor originally recorded this site in 1981 as a bedrock mortar on a 3 × 2 m granite outcrop. It is situated in a copse of boulders at the base of a rocky hillside, south of a fence line and meadow and 275 m southwest of a house. Sandy loam sediment and vegetation such as live oak, squaw bush, coffee berry, and valley grasses characterize the landscape. The portion of the site mapped within the Campo APE was revisited by Dudek in 2018, but the mortar was not relocated. It is likely the mortar is outside the Campo APE.

CA-SDI-8986

This prehistoric site was first recorded in 1981 by C. Taylor to contain one bedrock milling station, two millingstones, and a rock enclosure. Riparian woodland vegetation including live oak and sandy loam sediment characterize the landscape. Based on the sketch map, the rock enclosure appears to be a semi-circular natural rock formation, with the opening obscured by a stacked rock wall. As mapped, the site measures 65 × 45 m, but accurate dimensions were not included in the site record.

Dudek revisited the site in 2018, identifying the milling feature outside the Campo APE. The rock enclosure was not observed. One previously unrecorded ceramic sherd was observed at the south end of the site, within the Campo APE.

CA-SDI-20586

This site is a sparse scatter of lithic debitage and groundstone originally recorded in 2011 by ASM. The 32 × 36 m site is situated in relatively flat terrain of exposed, weatherworn bedrock outcrops. Chaparral vegetation composed of chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, and unknown grasses was observed. Artifacts at the site include 13 flakes, 1 unifacial granitic millingstone, and 1 retouched flake.

CA-SDI-20594

This multi-component site consists of a prehistoric pottery scatter and historic period refuse scatter covering a 55 × 50 m area. It lies in a relatively flat, moderately vegetated landscape punctuated by highly exfoliated granite boulders and surrounded by low-lying hills and mountains. Chaparral vegetation, including chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, and unidentified grasses, populate the area. Sediment in the area is composed of decomposing granite.

The prehistoric potsherds are divided into two primary concentrations. The first concentration contains 20+ brownware ceramic potsherds from at least two different vessels. Five pieces of unidentified burned large mammal bone were located within the concentration. The second concentration consists of five brownware sherds. An additional four brownware ceramic sherds decorated with red paint were noted north of Concentration 1. Historic site constituents include five purple solarized glass shards, four milk glass shards, one of which is solarized, whiteware sherds, one sherd of transferware with decorative floral pattern, metal buttons, one metal shovel head, and barbed wire. The historic-era artifacts and materials suggest an early 1900s period of deposition.

Dudek and a representative from Campo revisited the site in 2018 to relocate the burned bone to determine if it was potentially human. No faunal remains were identified, and the red painted brownware were not relocated.

CA-SDI-20598

This site is a prehistoric temporary camp. It is located on a prominent ridge punctuated by highly exfoliated granitic boulder outcrops on the southern side of a steep drainage. The highly vegetated landscape hosts chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, oak trees, scrub oak, and unidentified grasses. Decomposing granite composes the sediment in the area. The 60 × 50 m site hosts three features, a lithic and ceramic artifact concentration, and a midden soil deposit in the northern segment of the site, as well as a moderately dense scatter of lithics and ceramics outside the concentration. Feature 1 contains 12 milling slicks and 2 basins on a granite outcrop. Feature 2 contains one slick, three saucer mortars, and one conical mortar. Feature 3 contains three slicks. Six millingstones arranged in a semi-circular pattern were observed on Feature 3. Artifacts at the site include 30+ quartz flakes, 1 obsidian fragment, and 50+ buffware ceramic sherds, some of which were burnt. In total, the site contained seven nearly complete millingstones, one millingstone fragment, and two handstones.

Dudek revisited the site in 2018 and found additional pieces of debitage and ceramics to the northeast of the previously mapped boundary. The site boundary was expanded to cover a 66 × 75 m area.

CA-SDI-20599

This site is composed of two prehistoric bedrock milling features. It is situated north of a seasonal wash, on one of many exposed, exfoliated granitic outcrops in a mountainous landscape. Vegetation observed includes chaparral, chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, oak trees, scrub oak, and grasses. Soil in the area consists of decomposing granite and loam. Feature 1 contains two mortars, and Feature 2 contains two slicks. Dudek revisited the site in 2018 and relocated both of the features within the Campo APE. No changes to the condition of the site were noted.

CA-SDI-20607

This 45 × 30 m site consists of a sparse scatter of lithics and ceramics located on relatively flat terrain surrounded by low-lying hills. The landscape consists of mixed chaparral vegetation including buckwheat, chamise and unidentified grasses, and sediments of decomposing granite. One piece of volcanic debitage, four brownware ceramic potsherds, and a drilled brownware ceramic fragment, were observed. This site as revisited by Dudek in 2018 and is was determined that the site is located outside of the Campo APE.

CA-SDI-20610

This historic refuse scatter covers a 12 × 12 m area. It is located on flat terrain, containing exposed, weatherworn granite boulder outcrops, and rimmed by low-lying hills. Chaparral vegetation including chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, scrub oak, oak trees, and unidentified grasses populate the area. Solder-dot milk cans constitute the majority of the historic refuse present. Historic ceramic sherds, milk glass shards, a shovel head, and various kitchen items were also observed. Dudek revisited the site in 2018 and found the site in the same condition as previously recorded.

CA-SDI-20611

This 10 × 5 m site is a historic refuse scatter located on flat terrain punctuated by highly degraded granite boulder outcrops. The site is interlaced by numerous ephemeral drainages. Mixed chaparral vegetation including chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, scrub oak, oak trees, and grasses was observed. Artifacts present include a small scatter of 10 historic cans, including seven sanitary church-key opened beverage cans, and three hole-punched solder-dot milk cans. Unidentifiable colorless and brown bottle glass fragments were also observed. Dudek revisited the site in 2018 and found the site in the same condition as previously recorded.

CA-SDI-21776

The site was originally recorded by Patrick McGinnis and Hillary Murphy of Tierra Environmental as a prehistoric temporary camp situated in a copse of boulders on a steep slope. Minimal manzanita and mixed chaparral vegetation characterize the surrounding landscape. Feature 1 consists of five mortars on a single 4 × 3 m, highly exfoliated boulder. Two volcanic flakes, one green and one grey, one yellow volcanic shatter fragment, and a green volcanic hammerstone are present south of the milling feature. Overall, the site covers a 10 × 15 m area. Dudek revisited the site in 2018. Five volcanic and quartz flakes were identified, but the mortars were difficult to discern due to the continued exfoliation of the rock. The site boundary was expanded to incorporate the newly identified flakes.

CA-SDI-22595

This is a prehistoric habitation site, which contains an artifact scatter and midden deposit. The site is bisected by a regularly maintained dirt road known as Williams Road. Midden soil and artifacts were identified on the north and south sides of the road and along the eroding sidewalls of the road. Artifacts at the site include two volcanic flakes, one quartz interior, 19 brownware ceramic body sherds, and two granite groundstone fragments. One bedrock milling station containing one mortar was observed outside and adjacent to the Campo APE. Only the portions of the site located within the Campo APE were recorded at this time, so the full extent of the site has not been delineated. Currently, the site measures approximately 92 × 30 m. Sediments at the site consist of sandy loam with decomposing granite. Vegetation mainly consists of chamise, oak trees, buckwheat, and grasses.

CA-SDI-22596

This multi-component site consists of a prehistoric and historic artifact scatter and human remains. The site measures approximately 35 × 40 m. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of chamise, manzanita, buckwheat, cholla, and grasses.

This site contains four small artifact concentrations, three prehistoric and one historic. Concentration 1 artifacts include seven stoneware bottle fragments, five food tins, two transfer print ceramic fragments, more than 10 crushed food cans, three crushed fuel cans, one metal spoon, one metal shovel head, barbed-wire fragments, and over 50 unidentified metal fragments. Concentration 2 artifacts include 72 brownware ceramic body sherds located within a small north-southeast seasonal wash.

Concentration 3 artifacts include 26 brownware ceramic body sherds and one brownware rim sherd located within a small north-southeast seasonal wash. Concentration 4 artifacts include 26 brownware ceramic body sherds, three brownware rim sherds, one brownware ceramic cup fragment, one volcanic biface, one metal spoon, one historic shell button, and 47 calcined bone fragments.

On September 27, 2018, forensic anthropologist Dr. Madeleine J. Hinkes visited the site with one Dudek archaeologist and four Campo Tribal members and formally examined the bone fragments. Dr. Hinkes identified all 47 fragments as likely human bone; six of which are cranial fragments and 41 are long bone fragments.

Surface artifacts not located within the concentrations at the site include 30+ brownware ceramic body sherds, 100+ white glass fragments, two crushed oil cans, 15 whiteware ceramic fragments, 10 purple glass fragments, 15 barbed wire fragments, three brown glass fragments, two bottle finish fragments, and 100+ unidentified metal fragments. The Project was redesigned to avoid impacts to this site.

CA-SDI-22597

This historic site consists of an historic refuse scatter. Artifacts at the site include 40+ condensed milk cans (all crushed), 20+ knifed-opened sanitary cans, 12 glass soda bottles, five colorless glass bottle bases, unidentifiable glass fragments, and a few historic ceramic fragments. The site measures approximately 12 × 15 m. No evidence of a subsurface deposit was observed. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of chamise, buckwheat, cholla, and grasses.

CA-SDI-22598

This historic site consists of an historic refuse scatter mixed with modern refuse. Artifacts at the site include approximately 50 cans consisting of paint thinner cans, rotary-opened fruit/vegetable cans, bi-metal beverage cans, and multi-serve church-key opened sanitary cans. The site measures approximately 22 × 28 m. No evidence of a subsurface deposit was observed. Sediments at the site consist of loose, sandy loam with decomposing granite. Vegetation consists mainly of chamise, buckwheat, and grasses.

4.2.5 Archaeological Sites within the Campo Wind ADI

A total of 21 archaeological sites are located within the Campo Wind ADI, including 13 prehistoric sites, five historic period sites, and three multi-component sites (Table 4-8; Figure 4-1, Confidential Appendix B). This excludes site CA-SDI-8962 which could not be relocated. Sketch maps for each site showing excavation units, surface artifacts, and features, are included in Confidential Appendix B.

Table 4-8
Archaeological Sites Identified in the Campo Wind ADI

Resource ID/ Primary	Trinomial	Period	Type	Evaluation Reference
P-37-008962	CA-SDI-8962	Prehistoric	Bedrock Milling	This Report
P-37-008977	CA-SDI-8977	Multi-component	Temporary Camp; Historic Residence	This Report
P-37-009018	CA-SDI-9018	Prehistoric	Ceramic Scatter	This Report
P-37-009050	CA-SDI-9050	Historic	Government/Educational Building Remains	This Report
P-37-025856	CA-SDI-17205	Historic	Refuse Scatter	This Report
P-37-032166	CA-SDI-20368	Prehistoric	Habitation	This Report
P-37-032441	CA-SDI-20587	Prehistoric	Habitation	This Report
P-37-032442	CA-SDI-20588	Prehistoric	Lithic Scatter	This Report
P-37-032444	CA-SDI-20590	Historic	Refuse Scatter	This Report
P-37-032445	CA-SDI-20591	Multi-component	Historic Feature; Groundstone Tool	This Report
P-37-032446	CA-SDI-20592	Prehistoric	Habitation	This Report
P-37-032447	CA-SDI-20593	Prehistoric	Ceramic Scatter	This Report
P-37-032451	CA-SDI-20597	Prehistoric	Artifact Scatter	This Report
P-37-032458	CA-SDI-20604	Historic	Refuse Scatter	This Report
P-37-032459	CA-SDI-20605	Prehistoric	Artifact Scatter	This Report
P-37-032462	CA-SDI-20608	Prehistoric	Bedrock Milling	This Report
P-37-038289	CA-SDI-22599	Multi-component	Refuse Scatter; Artifact Scatter	This Report
P-37-038290	CA-SDI-22600	Prehistoric	Bedrock Milling	This Report
P-37-038291	CA-SDI-22601	Prehistoric	Bedrock Milling	This Report
P-37-038292	CA-SDI-22602	Prehistoric	Artifact Scatter	This Report
P-37-038293	CA-SDI-22603	Historic	Refuse Scatter	This Report
P-37-038462	CA-SDI-22674	Prehistoric	Temporary Camp	This Report

CA-SDI-8962

This site is a bedrock milling station with one basin. It is located on 7 × 5 m boulder outcrop on a ridge top 200 m east of a drainage. Vegetation inside of and surrounding the site includes wild cherry, ribbonwood, buckwheat, lilac, live oak, and prickly pear. The site was revisited by Dudek in 2018 but could not be relocated. It appears that either alluvial sediments and/or vegetation obscured the feature, or the feature was mapped inaccurately.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a resurvey and excavation of three STPs. The resurvey of the site did not identify any artifacts. The previously recorded bedrock milling feature was not relocated at this time. A highly exfoliated, granite outcrop was located in the site boundary within the ADI; it was noted that the milling element likely eroded away in the intervening years. STPs were placed within the site boundary adjacent to the granite outcrop.

Three STPs were excavated within the site to determine if there is any subsurface component to the site and investigate the site's integrity. All of the STPs were sterile, and were terminated between 25 and 30 cm below surface due to encountering decomposing granite or bedrock. All of the STPs contained loosely compacted, very dark brown to brown, damp, coarse loamy sand with increasing compaction with depth.

Discussion and Site Summary

CA-SDI-8962 is a prehistoric site reported to contain one bedrock milling feature. The presence of the bedrock milling feature noted in the original site record, indicates a limited amount of food processing occurred here. The prehistoric bedrock milling feature noted in the original site form was not relocated and no artifacts were recovered subsurface during the evaluation phase of the Project. The overall absence of artifacts and features identified in the evaluated portion of the site does not provide substantial information regarding the prehistory of the region.

Due to the absence of extant features and artifacts, the site is not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. All sites are important under County Guidelines; the importance of sites can be mitigated through the evaluation and recordation efforts described herein, as well as monitoring during construction.

CA-SDI-8977

This multi-component site contains a prehistoric temporary camp and an historic residential site. The site is located north of Campo Creek and is bisected by a dirt road. Riparian woodland vegetation such as oak, sagebrush, buckwheat, and unknown grasses populate the site and surrounding landscape. Decomposing granite and loam constitute sediments at and surrounding the site. The site was first recorded in 1981 by C. Taylor as a 30 × 60 m site with four bedrock milling features and an associated lithic and ceramic surface scatter. The milling features contain six slicks and two mortars. Artifacts at the site include five ceramic sherds and one piece of lithic debitage.

Subsequent visits to the site by Terri Jacques in 1981 and ASM in 2011 expanded it to a 90 × 90 m area. Historic period residential components of the site include a granite house foundation, a dam, an historic roadway, a refuse scatter inclusive of bottles dating to the 1940s, and the text "J.H. 1947" carved into bedrock north of the house foundation. ASM identified a previously unrecorded millingstone fragment and one additional volcanic flake. Although a very small portion of the site boundary overlaps the Campo APE, no artifacts or features are located within the Campo APE.

Site Structure, Artifact Recovery, and Assemblage Composition

Only the most north western portion of the site was revisited for the evaluation phase of this project, as the vast majority of the site is located outside the Campo ADI. Evaluation efforts at the site included a resurvey and excavation of two STPs within the Campo ADI. The resurvey identified two volcanic debitage, one burnt faunal (non-human) bone fragment, and one fragment of historic glass. The bedrock milling features recorded in the original site form is located outside the Campo ADI.

Two STPs were excavated within the site boundary and Campo ADI to determine if there is any subsurface component to the site and investigate the site's integrity. STP 1 and STP 2 were both excavated to a depth of 40 cm. The sediments in STP 1 consisted of a light brown to brown sandy decomposing granite loam with decomposing granite cobbles. The sediment in STP 2 consisted of very dark grayish brown sand clay loam with less than 5% gravels. Both STPs were sterile.

Discussion and Site Summary

CA-SDI-8977 is a multicomponent site contains bedrock milling features, light prehistoric artifact scatter, and historic refuse. Within the Campo ADI, only two debitage, one faunal bone fragment, and one historic glass fragment were recovered. The paucity of surface artifacts and lack of associated subsurface material, diagnostic artifacts, or feature elements indicate that the portion of the site within the Campo ADI lacks sufficient cultural material to provide information important to history or prehistory of the region. The portion outside of the Campo ADI consists of a prehistoric temporary camp and historic residential site containing bedrock milling features and a light artifact scatter.

The presence of prehistoric pottery provides evidence the site is associated with Late Prehistoric or ethnohistoric occupation; however, there is a lack of subsurface cultural deposits in the Campo ADI that would provide any additional information regarding the length or continuity of the occupation. The presence of debitage noted in the original site record is indicative of tool maintenance and tool processing. The presence of the bedrock milling feature noted in the original site record, suggests some degree of food processing occurred here.

The portion of the site within the Campo ADI is not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. All sites are important under County Guidelines; the importance of sites can be mitigated through the evaluation and recordation efforts described herein, as well as monitoring during construction. The portion of the site outside the Campo ADI was not evaluated and is presumed significant. All sites are important under County Guidelines; the importance of sites can be mitigated through the evaluation and recordation efforts described herein, as well as monitoring during construction.

CA-SDI-9018

This site is a small, light density ceramic scatter that covers a 10 × 10 m area. It was recorded in 1981 by C. Taylor on the north side of a 1958 wagon road (CA-SDI-9059), and lies 300 m east of a valley containing a seasonal creek. The site and surrounding landscape is composed of decomposing granite sediments and populated by chamise, red shank, buckwheat, lilac, rabbit brush, manzanita, and Mojave yucca. The ceramic scatter includes approximately 10 brownware sherds. ASM revisited the site in 2011 and was only able to relocate a single ceramic rim sherd on the south side of the extant dirt road. It was noted at the time that the dirt road had been graded and widened, likely destroying or at least displacing the site.

Site Structure, Artifact Recovery, and Assemblage Composition

The entire site is located within the Campo ADI and was evaluated at this time. Evaluation efforts at the site included a resurvey and excavation of two STPs. The resurvey of the entire site did not identify any artifacts on ground surface.

Two STPs were excavated to a minimal depth of 40 cm. STP 1 and STP 2 both contained loosely compacted, brown sand-loam with up to 10% sub-angular gravels. Both STPs were sterile.

Discussion and Site Summary

CA-SDI-9018 is a small ceramic scatter, as recorded in the original site form. The ceramic scatter was not relocated during the evaluation phase of this project.

While the presence of prehistoric pottery provides evidence that the site is associated with a Late Prehistoric or ethnohistoric occupation, there is an absence of other materials or features that could provide additional information regarding the length of and continuity of occupation. The absence of substantial subsurface deposits in the evaluated portion of the site do not provide substantial information regarding the prehistory of the region. Therefore, based on the limited data potential, site CA-SDI-9018 is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. All sites are important under County Guidelines; the

importance of sites can be mitigated through the evaluation and recordation efforts described herein, as well as monitoring during construction.

CA-SDI-9050

This site consists of the historic Campo Indian Agency/school house complex. The site consists of a chained/fenced area, ramada rubble piles, dirt roads, artifact scatters, and refuse deposits first documented by Terri Jacques in 1981. The location and contents of the site were reconfirmed by ASM Affiliates in 2011. The site is located south of Campo Creek, in a landscape dominated by oak, elm, maple, unknown grasses, and sandy loam sediments. According to Jacques, historic documents show the Agency complex was built in 1911 and used through 1933, with discontiguous use of the site through 1981 including the construction and utilization of fiesta facilities.

Eight features and several additional site components (ramada rubble piles, electric line, concrete fixtures, a chained area, a granite rock scatter/possible house foundation) constitute the roughly rectangular 185 × 128 m site, whose northwestern quadrant also hosts a network of old dirt roads. Six ramada rubble piles are dispersed throughout the features. An electric line sits in the northwest corner of the site. Two concrete fixtures – one square measuring 60 × 60 inches and one rectangle measuring 48 × 20 inches, are located in the north central segment of the site. A chained area is situated in the northeast quadrant of the site and a scatter of granite rocks/possible foundation lies along the south-central site boundary. A single round, concrete water tank measuring 40 × 11 feet is present south of the main road, on a small hill. Each of the features was documented extensively in the initial recordation. Jacques (1981) indicated that the site is potentially significant, but did not evaluate the site at that time.

Site Structure, Artifact Recovery, and Assemblage Composition

Only the western portion of the site is located within the Campo ADI. It was found that Feature A (recorded as such in both this report and the original recording), a historic cobble structure, straddles the Campo ADI boundary. It was documented extensively in the initial recordation and was updated as part of this resurvey. The northern wall, measures approximately 59 inches in width, by 111 inches in height, and a variable 24-32 inches in thickness. The door on the eastern wall has a cement frame that measures 2 inches thick. This structure is composed of granite cobbles and concrete mortar.

Surface artifacts collected included seven glass fragments, one historic ceramic fragment, and materials samples collected from the Feature A itself. These samples included a brick, mortar and concrete casing fragment.

Subsurface testing consisted of five STPs, and one STU. STP 2, 4 and 5 were positive, while STPs 1, 3 and 6 were negative. STP 2 encountered seven glass fragment and three ceramic fragment in level 0-20, with level 20-40 yielding a total of 13 artifacts; three ceramic, four glass, and six metal. It was at 40cm below surface that three cobbles were encountered with a small clay layer adjacent on the western side. STU 1 was placed on the adjoining western wall to chase the possible feature. STU 1 yielded one glass and one metal fragment in the 0-20 level. The 20-40 level produced eight glass fragments (one milk glass, vessel glass), three ceramic fragments, and four metal fragments. The cobbles did not extend from STP 2 and into STU 1, thus, do not constitute a feature. STP 4 was immediately to the west of Feature A. level 0-20 produced one glass and one metal fragment.

Discussion and Site Summary

The subsurface excavation at this site shows only a shallow deposit of historic materials up to a depth of 40 cm. As a result of this evaluation effort, the portion of the site within the Campo ADI is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-17205

This historic site consists of a large refuse scatter, originally recorded by Tierra Environmental in 2004. Artifacts at the site include over 600 cans, more than 100 bottles, historic ceramic fragments, a bed frame, and springs. Based on the bottles, the refuse scatter dates from the 1920s to the 1950s. Sediment at the site consist of loose sandy soil. The vegetation includes live oak, manzanita, sugar bush, white sage, scrub oak, yucca, and grasses. ASM Affiliates relocated the site in 2012 and revised the site boundary to an approximately 43 × 20 m area. ASM noted that the site is in the same general conditional as previously recorded. Dudek revisited the site in 2018 and observed the site in the same condition and location as reported by ASM.

Site Structure, Artifact Recovery, and Assemblage Composition

The site is primarily located outside the Campo ADI, with only its southern portion overlapping. The site was resurveyed as part of the current effort. During this effort three trash concentrations were identified, two of which were previously identified by ASM. The third concentration is identified a small dump on the eastern side of the unnamed road. Overall, this addition did not alter

the basic description of the site's constituents. Surface artifacts noted at each concentration are included in Table 4-9. Each concentration consists primarily of consumables, with food cans, condiment bottle fragments, and soda/beverage bottles the most abundant. Fuel and oil cans round out the assemblage. A dirt road has been graded through the site. Concentrations 1 and 3 appear to have been redeposited by the grading into their current locations; this material likely originated with Concentration 2, which appears intact, given its location further off the road.

Table 4-9
Surface Artifacts in Concentrations 1-3

Conc.	Type	Side Seam	Opening	Size	Label	Function	Ct.
1	Sanitary	Crimped	Knife Cut	4 1/4" × 6 3/4"	N/A	Oil can	10+
1	Kerosene	Crimped	Screw Cap	11" × 14"	Brayco	Kerosene	1
1	Flat rectangle	Crimped	Screw Cap	5 1/2" × 8 1/2" × 10"	N/A	Solvent	1
1	Sanitary	Crimped	Church Key	4 1/2" × 3 1/8"	N/A	Potted meat	1
1	Sanitary	Crimped	Church Key	2 1/2" × 4"	N/A	Unknown	1
1	Sanitary	Crimped	Rotary	6 1/2" × 7"	N/A	Coffee	1
1	Flat Top	Crimped	Church Key	4 13/16 × 2 9/16"	N/A	Beverage	1
1	Sanitary	Crimped	Knife Cut	3 3/4 × 2 1/8" × 3 1/4"	N/A	Potted meat	1
1	Flat Top	Crimped	Church Key	6 1/8" × 2 5/8"	N/A	Tallboy Beverage	1
1	Hole in top	Crimped	Knife Cut	4 1/4" × 3 1/8"	N/A	Unknown	1
1	Bi-metal	Crimped	Pull tab	4 3/4" × 2 9/16"	N/A	Beverage	1
1	Cone-top	Crimped	Screw Cap	5 1/2" × 2 3/4"	N/A	Beverage	1
1	Sanitary	Crimped	Rotary	4 3/8" × 3 1/16"	N/A	Food	1
1	Oil	Crimped	Church Key	5 1/2" × 4 "	N/A	Unknown	1
1	Fuel	Crimped	Screw Cap	10 3/8" × 8 1/2" × 5 9/16"	N/A	Raylube Motor oil can	1
1	Automatic Machined	Colorless	Beverage	Dr. Pepper	white and red label	Soda	1
1	Automatic Machined	Colorless	Wine	whole	N/A	Wine	20+
1	Automatic Machined	Colorless	Apple sauce	whole	N/A	Apple sauce	20+
1	Automatic Machined	Colorless	Ketchup	fragment	N/A	Condiment	20+
1	Automatic Machined	Colorless	Vinegar	whole	N/A	Condiment	10+
2	Automatic Machined	Colorless	Beverage	Owens-Illinois	N/A	Soda	1
2	Automatic Machined	Colorless	Condiment Bottle	N/A	Condiment	1	2

Table 4-9
Surface Artifacts in Concentrations 1-3

Conc.	Type	Side Seam	Opening	Size	Label	Function	Ct.
2	Automatic Machined	Colorless	Small Beverage Bottle	N/A	Unknown	1	2
2	Flat Top	Crimped	Church Key	4 1/16" × 2 9/16"	N/A	Hamms Beer	20+
2	Flat Top	Crimped	Church Key	4 1/16" × 2 9/16"	N/A	Beverage	10
2	Sanitary	Crimped	Rotary	4 5/16" × 3 1/8"	N/A	Food	10
3	Oblong	Crimped	Rotary	10 3/8" × 7 1/4" × 4 3/4"	N/A	Canned ham	1
3	Sanitary	Crimped	Knife Cut	10 3/4" × 4" × 4"	N/A	Potted meat	1
3	Sanitary	Crimped	Rotary	6 7/8" × 6 1/16"	N/A	Food	1
3	Sanitary	Crimped	Rotary	6" × 4"	N/A	Milk	1
3	Hole in top	Crimped	Knife Cut	3 7/8" × 2 7/8"	N/A	Food	50+
3	Bi-metal	Crimped	Church Key	Crushed	N/A	Food	1
3	Sanitary	Crimped	Tear tab	1 3/4" × 3 1/4"	N/A	Tuna	1
						Total	**44**

A total of four STPs were placed within the site to test for subsurface deposits. All STPs tested negative. STP 1 was excavated in an area of low disturbance on the eastern side of the dirt road, and STP 2, 3 and 4 placed in the concentrations. Sediments encountered in the STPs consisted of 18 to 20 cm of loose, dark grey brown to black sandy loam overlying compact brown coarse clayey sand. STPs were excavated to depths ranging from 33 to 40 cm; all were negative.

Discussion and Site Summary

The site consists of refuse dump that was likely used multiple times and has subsequently been disturbed by more recent activity in the area. Although artifacts at the site have been pushed around, no subsurface deposit is present at the site. The evaluated portion of the site is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20368

This multi-component site was originally recorded in 2010 by ASM Affiliates as a prehistoric habitation site spread over three loci and one historic well feature. In 2011, ASM expanded the site to include additional flakes and ceramic sherds. The site is situated in a landscape of low-lying hills and bedrock outcrops. Vegetation present includes buckwheat, black oaks, and grass. Two drainages and a road bisect the site. Overall, the site covers a 190 × 137 m area.

Site Structure, Artifact Recovery, and Assemblage Composition

The Campo ADI runs a north/south path through the eastern portion of the site. Only the portion within the Campo ADI was tested. The Campo ADI path follows a dirt road running in the same alignment through the site.

The site had a general surface collection in two parts (Locus A on the west side of the road, and Locus B on the east). These collections produced a total of 31artifacts following. Locus A produced a total of 12 artifacts: 9 ceramic body sherds and 3 rim sherds. Locus B consisted of 19 artifacts in the following proportions; 15 ceramic body sherds, 2 ceramic rim sherds, and 2 debitage (1 quartz, and 1 volcanic).

The subsurface testing at this site consisted of 14 STPs, two SSUs and one STU. Only STP 9, located in Locus B, and the two SSUs were positive. STP 9 yielded two ceramic body sherds from 0 to 20 cm. SSU 1 was located on the east side of the road and measured 0.3 × 5 m, oriented east–west. This unit was excavated to 3 cm below the surface, yielding one ceramic body sherd. SSU 1 was terminated upon exposing decomposing granite. SSU 2 (0.5 × 2 m) was placed on the western side of the road between STPs 5 and 6. This unit produced one ceramic body sherd and one CCS debitage from 0 to 5 cm.

Sediments observed at this site showed that most of the site has shallow alluvial sandy clay loam deposits with decomposing granite bedrock observed in spots as shallow as 18 cm.

Discussion and Site Summary

The portion of the site within the ADI is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20587

This site was originally recorded by ASM as a 220 × 85 m sparse scatter of prehistoric lithic debitage, tools and groundstone. It is located on the south slope of a gently sloping ridgeline. One drainage bisects the site and another forms its eastern boundary. Mixed chaparral vegetation types including chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei,* and unidentified grasses punctuated by highly exfoliated granitic boulders characterize the landscape. Sediment in the area consists of decomposing granite.

The site was reported to contain a moderately dense lithic scatter that includes 60+ lithic flakes, two handstones, one pestle fragment, two early-stage quartz biface fragments, two retouched flakes, one flake with battering, and one volcanic scraper. Dense vegetative cover and correspondingly poor ground visibility means additional cultural constituents are likely present.

The site was revisited by Dudek and expanded south and west; the site now covers a 423 × 138 m area. A light density scatter of debitage, brownware ceramics, multiple cores, and a hammerstone were observed in the expanded site area. Additional artifacts were also noted to extend east off the reservation boundary, but were not recorded at this time.

Site Structure, Artifact Recovery, and Assemblage Composition

The site and the Campo ADI overlap in two areas. These areas were identified as the North portion and the South portion. The north portion constitutes the far north end of the site; the south portion consists of a small sliver along the western edge of the site, near the south end. The surface inventory produced a total of 51 artifacts. These included five point provenience tool artifacts, one CCS simple flake tool, one volcanic retouched edge tool, 40 volcanic debitage, three quartz debitage, and one CCS debitage. The point collected tool artifacts are as follows: one volcanic core (A1), volcanic hammerstone (A2), granitic handstone fragment (A3), granitic millingstone (A5), and one CCS core. There was an item identified as A4 that was initially collected, but later deaccessioned as non-cultural.

A total of 15 STPs were excavated throughout the site; all were negative for subsurface deposits. The soil profile in the area is characterized by loamy sands for the upper 30 cm, with loosely compacted decomposing granite sands below; much of the northern end is composed of in situ decomposing granite bedrock.

Discussion and Site Summary

The two portions of the site evaluated at this time consist of light density lithic scatters that are confined to the surface. The quantity and variety of artifacts at the site is fairly limited; combined

with the absence of subsurface deposits and features, this portion of the site is unlikely to provide information important to prehistory, other than what has been documented herein. As a result of the evaluation efforts described here, the portions of the site within the Campo ADI are recommended as not significant under CEQA or the RPO, and as not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20588

This site is a sparse scatter of prehistoric lithic debitage and one hammerstone spread over a 38 × 10 m area. It is situated near the center of a broad, north-south trending ridge, in an undulating landscape punctuated by granite bedrock outcrops. The landscape is characterized by chaparral vegetation, such as chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, and unidentified grasses, and decomposed granite sediments.

Site Structure, Artifact Recovery, and Assemblage Composition

This site was resurveyed as part of the evaluation phase. This survey found the totality of the site within the Campo ADI. Only two total artifacts were recovered from the surface inventory: one volcanic debitage, and one CCS retouched edge tool (A2). The tool was also point collected.

Testing consisted of three STPs along the length of the site. None produced subsurface artifacts. The soils observed showed decomposing granite to exist at a variable 30 to 50 cm below surface, with an alluvial sandy loam upper layer.

Discussion and Site Summary

Due to the paucity of artifacts and absence of subsurface deposit, this site does not have the potential to provide information important to prehistory. Based on the results of the current evaluation effort, the site is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20590

ASM recorded this site as a historic refuse scatter located on the southern edge of a dirt road. Chaparral vegetation types such as chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, and unidentified grasses populate the site. The scatter includes 40+ historic cans and two glass bottle fragments in a 38 × 12 m area. The presence of a Mayfield Glass maker's mark and condensed milk can measurements indicate the refuse was deposited in the 1950s.

Site Structure, Artifact Recovery, and Assemblage Composition

The evaluation process included a resurvey of the site and excavation of three STPs. The surface inventory produced a total of ten artifacts in the following proportions: four miscellaneous metal fragments, three glass fragments, two ceramic fragments, and one complete metal can. A total of 64 artifacts were observed on site but not collected (Table 4-10). Identifiable artifacts are all consumables, with the exception of a single belt buckle and few pieces of a white wear ceramic vessel. Only one dateable makers mark was identified, a Maywood Glass bottle base which broadly dates from ca. 1930-1961. The remaining artifacts all have broad manufacture dates dating from the early 1900s through modern times.

All three STPs contained sandy loam with decomposing granite gravels to a depth of 40 cm, with STP 1 encountering brown sandy loam from 40-50 cm. All three STPs were negative.

Table 4-10
Surface Artifacts at CA-SDI-20590

Count	Type	Size (L × W × H) or (D × H)	Description
28	Sanitary can	4 5/16" × 3 2/16"	Single serve standard sanitary can, rotary open
15	Milk can	2.5" × 2.5"	Soldered dot milk can, hole punch
3	Sanitary can	4" × 4"	Multi serve san can
1	Buckle Belt		
4	Sanitary can	4 5/16" × 3 2/16"	Standard single-serve knife open
1	Solder-dot	3 14/16" × 3"	Solder-dot beverage can
2	Square tin		Potted meat
1	Brown glass	Fragments	Bottle base, possibly bleach (L) 17 embossed
1	Mason Jar	Base	
1	Alcohol Bottle		Colorless Base
1	Oval glass		Colorless Maywood Glass Co. base (ca 1930-1961)
5	Ceramics		White ware
1	Hinge top tin		Tobacco tin

Discussion and Site Summary

The artifact assemblage of the site consists of generic food and beverage containers, with a few household gods mixed in. The site is likely a single episode dump produced through homesite cleanup. The site lacks unique material or other indicators of who specifically dumped the material, other than to say it was likely a family on the reservation, given the it must have been dumped sometime after 1930 and the reservation was established long before then, and given the paucity of material, the site lacks the potential to provide information important to prehistory. Given the current evaluation results the site is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20591

This site is a historic water trough containing an unsassociated prehistoric groundstone tool. It is located in an undulating field clear of vegetation, west of a dirt road. Mixed chaparral vegetation characterizes the surrounding landscape. The historic trough's exterior measures 19 × 12 × 4 feet tall. "C.C.C.I.D. MAR 31, 1938" is inscribed in the trough cement – indicating the trough is associated with the Civilian Conservation Corps (CCC) Indian Division (1933-1942). The trough is constructed of cement and rock, with an interior of smoothed cement. A depression at the top of the north wall separates the primary water storage area from the lower trough from which animals would drink. A single bifacial millingstone fragment was found in the trough.

With the nature of this site consisting of above ground construction, no subsurface investigations were done. A thorough resurvey yielded no additional artifacts or features, including the millingstone. The trough was thoroughly photographed and documented through profile and plan drawings). This type of feature is ubiquitous in rural areas, particularly were ranching occurred. As a utilitarian type of feature, it is not architecturally unique or associated with any persons or events important in history, and has not potential to provide information important to history. Therefore, the site is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20592

This is a habitation site previously documented to contain one bedrock milling feature, a midden deposit, and three concentrations of lithics, ceramics, groundstone, and charcoal. After the survey phase of the project, redesign efforts were made to limit the potential impacts to the site. The revised access roads in the area were modified to provide access to adjacent turbines, which required additional survey; this survey was performed in conjunction with the evaluation efforts where the roads intersect the margins of the site in multiple locations. The additional survey efforts outside the site boundary identified two new loci (Locus A and B) and a single milling feature outside any defined locus or concentration.

Site Structure, Artifact Recovery, and Assemblage Composition

Locus A is approximately 30 m west of the previously mapped site boundary and contains two milling features, a concentration of ceramics (Concentration 4), and a light scatter of lithic debitage, ceramics, and groundstone. Surface collections from Concentration 4 totaled 19 ceramics (18 body sherds and one rim sherd). Four volcanic flakes and nine ceramic sherds were collected from Locus A outside concentration 4. The two milling features are highly weathered granite outcrops; the smaller outcrop contains eight slicks; the larger feature immediately west cantinas on one very heavily weathered slick which is composed of only a few polished high spots.

Locus B was identified south of site, and is composed of one milling feature and three groundstone tools. The milling feature is situated at the edge of small drainage and contains ten slicks.

Surface collections from Concentration 3 (as delineated in the prior surveys) consisted of 36 total artifacts in the following proportions: 27 ceramic body sherds, one rim sherd, two quartz debitage, and six volcanic debitage. One milling feature was also recorded east of Concentration 3, outside the ADI. It consisted of a single slick on a low-lying granite boulder. One handstone (A108) was noted on the feature, but was not collected as this area will not be disturbed.

A general surface collection (SC2) was done at the southeast corner of the site where the site intersects the Campo ADI, which yielded five quartz debitage, three volcanic debitage, one volcanic simple flake tool, and one ceramic body sherd.

Eleven point collected tool artifacts were collected from the site, and one (A108) was recorded but not collected (Table 4-11).

Table 4-11
Point Collected Surface Artifacts from CA-SDI-20592

Location	Field ID	Artifact Description
Locus A	A-100	Granitic Handstone
Locus A	A-101	Granitic Millingstone
Locus A	A-102	Granitic Millingstone
Locus A	A-103	Granitic Millingstone
Locus A	A-104	Granitic Millingstone
Locus A	A-105	Granitic Handstone
Locus A	A-106	Granitic Millingstone
Concentration 3	A-107	Granitic Millingstone
Locus B	A-109	Granitic Millingstone
Locus B	A-110	Granitic Handstone
Locus B	A-111	Granitic Handstone

A total of 13 STP were placed in the portions of the site that intersect the ADI. STPs 1, 2 and 6, all in Locus A, were positive for artifacts in the 0-20 cm level. STP 1, in concentration 4 produced two ceramic body sherds. STP 2 produced only one quartz debitage. STP 6 had the highest yield two quartz debitage and one volcanic hammerstone fragment, before terminating at 28 cm upon encountering bedrock.

One SSU was also excavated to test the subsurface density of Concentration 1. SSU 1 measured 1 × 1 m and was excavated to 2 cm below surface. The SSU produced three ceramic body sherds.

The sediment throughout the site from 0 to 20 cm consisted of loosely compacted, dark brown, moist, sandy silty loam. From 20 to 40 cm the sediment consisted of moderately compact, light brown, sandy silty loam with approximately 25% gravel. Decomposing granite bedrock had variable depths with the lowest exposure at 15 cm.

Discussion and Site Summary

The portions of the site within the Campo ADI are composed of limited use activity areas for food processing and the manufacture of retouched flakes and other simple flakedstone tools. Concentration 4 likely represents a single broken pot. No midden deposits or other features indicative of longer-term occupation were identified in the Campo ADI. Although other portions of the site outside the Campo ADI have such deposits, the outlying portions of the site in the Campo ADI represent more ephemeral use. Given the limited quantity of artifacts, and very limited subsurface recovery, these portions of the site are unlikely to provide information important to

prehistory. Per the evaluation efforts described here, the portion of the site within the Campo ADI is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20593

This site is a 3 × 3 m scatter of prehistoric brownware sherds. It is located in a natural clearing in a densely vegetated, undulating landscape. Surrounding vegetation includes chaparral types such as chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, and unidentified grasses. The scatter includes 19 brownware potsherds, which likely originate from a single vessel.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a resurvey and excavation of one SSU and one STP. The resurvey of the site relocated all 19 sherds which were collected as one sample. SSU 1 was excavated within the scatter to a depth of 2 cm, producing two sherds. The sediment in the SSU consisted of loosely compacted, dark brown, moist sandy silty loam.

One STP was excavated within the SSU to determine if there is any subsurface component to the site and investigate the site's integrity. STP 1 was excavated to a depth of 27 cm, terminating at decomposing granite. One brownware ceramic body sherd was recovered from 2 to 20 cm. The sediment from 2 to 20 cm consisted of loosely compacted, dark brown, moist, sandy silty loam. From 20 to 27 cm the sediment consisted of moderately compact, light brown, sandy silty loam with approximately 25% gravel.

Discussion and Site Summary

The prehistoric site consists of a ceramic pot drop which is likely from the one vessel. The presence of prehistoric pottery indicates that the site is associated with Late Prehistoric or ethnohistoric occupation, although no other dateable material was recovered which could refine the chronological association. The low density of artifacts and lack of substantial subsurface deposits in the evaluated portion of the site do not provide substantial information regarding the prehistory of the region. The site is therefore recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20597

This site was originally recorded by ASM as a sparse scatter of prehistoric lithics and brownware ceramic sherds in a 35 × 25 m area. It is located south of a seasonal drainage in an undulating, heavily vegetated landscape punctuated by exposed, weatherworn boulder outcrops. Mixed chaparral vegetation inclusive of chemise, buckwheat, cholla, Mojave yucca, *Yucca whipplei*, and unidentified grasses characterize the landscape. Decomposing granite sediment characterizes the site and surrounds. The 35 × 25 m site contains eight brownware ceramic sherds, one interior volcanic flake, one petrified wood flake fragment, and one quartz crystal sided-notched projectile point. Dudek revisited the site in 2018 and expanded the boundary to cover a 65 × 32 m area. Newly recorded artifacts include a concentration of debitage at the south end of the site, and a few scattered pieces of debitage east of the originally mapped boundary.

Site Structure, Artifact Recovery, and Assemblage Composition

The general surface collection produced eight ceramic body sherds. There were two volcanic and four quartz debitage recovered. This site was tested with six STPs. Results of these yielded only two positive STPs, each with a single volcanic debitage in the upper 0–20 cm level.

The sediments observed indicated that this area has a homogeneous matrix of very loose sandy silt loam with 25% pebbles from 0 to 40 cm.

Discussion and Site Summary

The presence of prehistoric pottery indicates that the site is associated with Late Prehistoric or ethnohistoric occupation, although no other dateable material was recovered which could refine the chronological association. The low density of artifacts and lack of substantial subsurface deposits in the evaluated portion of the site do not provide substantial information regarding the prehistory of the region. The site is therefore recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20604

This 10 × 8 m site is a scatter of modern and historic refuse. Vegetation consists of chaparral, including such as chamise, buckwheat, cholla, Mohave yucca, *Yucca whipplei*, scrub oak, oak trees, and unidentified grasses. Historic material includes bottle fragments and bases of green, brown, and colorless glass. Modern items include car parts, bi-metal cans, fragments of unidentified metal, and glass bottles. Dudek revisited the site in 2018 and found the site in the same condition as previously recorded.

Site Structure, Artifact Recovery, and Assemblage Composition

The surface of the site showed multiple dumping events, with modern trash deposited on top of older deposits. To investigate the age and depositional order, STP 1 was placed in the center of the densest area. The STP recovered a total of 81 historic artifacts, listed in Table 4-7. The deposit showed evidence of multiple dump episodes at the site. Stratum I, the upper 25 cm, and Stratum III, from 35 to 52 cm, contain a similar artifact assemblage of consumable goods mixed with tableware and a few household goods (Table 4-12). Stratum II appears to be a fill layer or dark brown sandy loam. This stratum appears to have been dumped on Stratum II in an attempt to cover the trash associated with Stratum III, as if to obscure it and prevent other people from dumping trash there. Although not collected, many small pieces of plastic trash bags were noted throughout each stratum. Although different episodes can be delineated vertically, all of the material is consistent throughout the deposit, with the exception of minimal quantities of very recent material at the surface.

Numerous maker's marks on bottles (specifically Owen's Illinois), provide an approximate range of 1936 to 1967 for the site. More recent beer bottles, such as Michelob, and pull-tab bi-metal beer cans clearly show dumping occurring into the 1970s and 1980s. Artifacts recovered from the STP are highly fragmentary and are predominantly unidentifiable as to their purpose.

Table 4-12
STP 1 Recovery by Level

Unit	Level	Description	CT
STP 1	0–20	Green glass fragments	3
		Brown glass fragments	2
		White milk glass; base fragment	1
		Miscellaneous metal fragments	2
		Metal-wire mesh	3
		1 intact can top; multiple can fragments	13
		Ceramic base, approximately 60% complete	1

Table 4-12
STP 1 Recovery by Level

Unit	Level	Description	CT
		Possibly plastic	1
		Colorless, mostly fragments but also one tip	15
	20–40	Miscellaneous metal fragment	1
		Composite shingle fragments	3
		1945 copper penny	1
		One nearly intact can; two can bases; multiple metal fragments	12
		Green glass fragments	2
		White ware fragments	1
		Brown glass fragments	2
		Colorless glass fragments	9
	40–57	Brown glass fragments	1
		Composite shingle fragment	1
		Miscellaneous fragments	3
		Charcoal, cut wood	1
		Colorless glass fragments	3

Discussion and Site Summary

This historic and modern dump site consists of predominantly consumable and household goods that seem to be opportunistically dumped while traveling one of the main roads to the Manzanita reservation. Situated at the top of as small drainage, the site was likely used by numerous people or families from Campo, Manzanita, and/or Live Oak Springs to discard daily household waste instead of taking it to a landfill or burning it. Although a deposit has developed due to likely numerous episodes of dumping, highly fragmentary nature of the deposit limits identification of the majority of materials. What information potential may exist at the site, it would be nearly impossible to relate the materials to specific households to provide the necessary historical context to the artifacts and any such data potential. Documentation herein has recovered a sufficient sample to characterize the deposit; additional efforts would only produce redundant data. The site is therefore recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20605

This 40 × 35 m site is a scatter of prehistoric lithics and ceramics, located 120 m south of a creek in fairly flat, vegetated terrain punctuated by highly exfoliated granite boulder outcrops. Chaparral vegetation including chamise, buckwheat, cholla, Mojave yucca, *Yucca whipplei,* and unidentified grasses characterize the area. Sediment at the site is consists of decomposing granite. Two brownware ceramic body sherds, one interior obsidian flake, and five volcanic flakes were observed. Only a small portion of the site is within the Campo ADI.

Site Structure, Artifact Recovery, and Assemblage Composition

This site was resurveyed at the time of evaluation testing. The surface inventory was quite sparse at this site. This resurvey identified one volcanic hammerstone (A1) and one volcanic debitage.

Two STPs were placed to test for subsurface cultural deposits, however both were negative and encountered bedrock at 17 cm and 30 cm respectively. The upper layer was a very dark brown with light compaction and approximately 5% subangular gravels.

Discussion and Site Summary

Only the eastern most portion of the site is within the Campo ADI. Testing only occurred in this area. The portion of the site within the Campo ADI is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-20608

This 20 × 10 m site consists of two prehistoric bedrock milling features. It is located on flat, sparsely vegetated terrain punctuated by weatherworn outcrops of granitic boulders. Chaparral landscape vegetation including chamise, buckwheat, cholla, Mohave yucca, *Yucca whipplei*, oak trees, scrub oak, and unidentified grasses were noted. Decomposing granite and loam sediments were present. Feature 1 consists of one exfoliated saucer mortar on a 3.5 × 1.5 m granite boulder. Feature 2 is an exfoliated conical mortar on a 3.5 × 2 m boulder. No artifacts were observed at the site. Dudek revisited the site in 2018 and found the site in the same condition as previously recorded. Feature 2 was not relocated due to the presence of a downed oak tree on the bedrock outcrop.

Site Structure, Artifact Recovery, and Assemblage Composition

This site is partially within the Campo ADI, with only the northern tip containing the bedrock milling feature outside the Campo ADI. The milling feature was termed Feature 1. The boulder was extremely exfoliated and no grinding surface was observed.

A total of three STPs were placed in the Campo ADI to test for a subsurface cultural deposit. Neither surface nor subsurface artifacts were recovered. The soil profile from 0 to 40 cm consisted of loosely compacted brown sand and decomposing granite loam.

Discussion and Site Summary

Given the dearth of surface and subsurface cultural deposit, the site is not likely to yield any additional information regarding either the prehistory or history of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22599

This multicomponent site consists of an historic artifact scatter with two prehistoric artifacts in a 50 × 40 m area. The historic artifact scatter contains one ceramic enameled pot and approximately 25 cans consisting of church-key opened sanitary beverage cans, condensed milk cans, and fuel cans. Prehistoric artifacts at the site include one brownware ceramic body sherd and one interior volcanic flake. No evidence of a subsurface deposit was observed. The site is located at the base of an eastern facing slope and is bisected by an east–west dirt road. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of chamise, buckwheat, and grasses.

Site Structure, Artifact Recovery, and Assemblage Composition

The majority of the site falls within the Campo ADI, and, as such, testing included the whole site. The surface inventory identified four multi-serve sanitary food cans (likely beans), two cooking oil cans, five crushed single-serve sanitary food cans (fruit/vegetable), one 3-gallon oil can, two sanitary coffee cans, and one pail, and one condensed milk can. The brownware ceramic body sherd was relocated and collected, but the flake was not. Five STPs were excavated across the site. The soil profile observed showed a sandy loam, of a dark brown color with angular gravels up to 25% from 0 to 20 cm. From 20 to 40 cm there was no significant change observed aside from a well-sorted decrease in gravels.

Discussion and Site Summary

Based on the absence of a subsurface deposit and the minimal quantity and variety of artifacts, the site likely represents a single dumping episode of consumable goods from a nearby homesite. The brownware sherd and the flake likely have no relation to the dumping activity, and on their own would qualify only as an isolate. Site CA-SDI-22599 is not likely to yield any additional information regarding the prehistory of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22600

This prehistoric site consists of a single granitic bedrock milling feature measuring 3.2 × 2.4 m. The feature contains a single conical mortar measuring 12.5 × 12.5 × 4 cm. No artifacts were observed at the site. The milling feature is heavily weathered and covered with lichen. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of sagebrush, chamise, buckwheat, and grasses.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a resurvey and excavation of three STPs. The resurvey of the site identified the previously recorded bedrock milling feature with one saucer mortar, and did not identify any artifacts. Three STPs (STPs 1, 2, and 3) were excavated within the site to determine if there is any subsurface component to the site and investigate the site's integrity. All of the STPs were sterile and excavated to a depth of 40 cm. All of the STPs contained of lightly compacted, brown, sandy loam with decomposing granite.

Discussion and Site Summary

The presence of the bedrock milling feature indicates this was a limited use food processing site. The overall absence of artifacts identified in the evaluated portion of the site means that the site has no data potential.

Based on the results of this evaluation, site CA-SDI-22600 is not likely to yield any additional information regarding the prehistory of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO Guidelines, and not significant under CEQA. All sites are considered important under County Guidelines; however,

impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22601

This prehistoric site consists of a single, heavily weathered, granitic bedrock milling feature measuring 3.6 × 1.5 m. The feature contains one basin measuring 23 × 23 × 5 cm. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of chamise, buckwheat, and grasses.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a resurvey and excavation of three STPs. The resurvey of the site identified the previously recorded bedrock milling feature with one saucer mortar, and did not identify any artifacts. Three STPs (STPs 1, 2, and 3) were excavated within the site to determine if there is any subsurface component to the site and investigate the site's integrity. All of the STPs were sterile (except for modern trash in STP 2) and excavated to a depth of 40 cm. All of the STPs contained of lightly compacted, dark brown to brown, damp, coarse loamy sand.

Discussion and Site Summary

The presence of the bedrock milling feature indicates this was a limited use food processing site. The overall absence of artifacts identified in the evaluated portion of the site means that the site has no data potential.

Based on the results of this evaluation, site CA-SDI-22601 is not likely to yield any additional information regarding the prehistory of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO Guidelines, and not significant under CEQA. All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22602

This prehistoric site consists of a light density artifact scatter measuring 20 × 38 m. Artifacts at the site include four brownware ceramic body sherds, two volcanic interior flakes, and one quartz interior flake. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of chamise, buckwheat, and grasses.

Site Structure, Artifact Recovery, and Assemblage Composition

The southern third of this site falls within the Campo ADI. Resurvey of this area as part of the current evaluation effort was unable to relocate any of the previously identified artifacts in the Campo ADI. Multiple rainstorms in the intervening months likely moved the loose ground sediments, obscuring the artifacts. The three STPs placed in the Campo ADI were all negative for subsurface materials. The soils observed in these STPs was a fairly well sorted brown coarse sand with 40%–50% decomposing granite gravels with low compaction.

Discussion and Site Summary

Based on the absence of cultural material in the Campo ADI, this portion of the site is not likely to yield any additional information regarding the prehistory of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO guidelines, and not significant under CEQA. The portion of the site outside the impact area has not been evaluated and will be avoided by Project design.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22603

This historic site consists of a historic refuse scatter mixed with modern refuse. Historic artifacts at the site include one large rectangular fuel can; two small, rectangular fuel cans; one large, round fuel can; one church-key opened oil can; four knife-opened fuel cans; two five gallon buckets, nine internal friction coffee cans, church-key opened beverage cans, and three pieces of unidentified metal fragments. The site measures approximately 22 × 114 m. Sediments at the site consist of loose sandy loam with decomposing granite. Vegetation mainly consists of creosote brush scrub, chaparral, buckwheat, and grasses.

Site Structure, Artifact Recovery, and Assemblage Composition

The whole site is within the Campo ADI. The surface inventory confirmed the previously recorded types and counts of cans and bottles. No surface artifacts were collected. A total of four STPs were placed in and around the trash scatter. All of the STPs were negative for subsurface deposits. The soils observed in the units were consistently dark brown coarse loamy sand, loosely compacted with less than 30% gravels.

Discussion and Site Summary

The site consists of consumable goods and fuel cans. Based on the evaluation results described herein, there is no evidence for subsurface deposits. The limited assemblage does not contain any specifically datable material, other than a broadly dated post-1935 estimate based on the presence of church-key opened cans. The site likely represents a multiple episode dump site, with modern refuse dumped on top of an older dump episode. Site CA-SDI-22603 is not likely to yield any additional information regarding the prehistory of the region and is thus recommended as not eligible for listing in the CRHR or local register, not significant under County RPO Guidelines, and not significant under CEQA. All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

CA-SDI-22674

CA-SDI-22674 was identified as a temporary camp with one bedrock milling feature (Feature 1), a light lithic and ceramic scatter and a possible rock blind/shelter feature (Feature 2). Sediments at the site are composed of decomposing granite and silty sandy loam. Vegetation mainly consist of oak trees, scrub oak, buckwheat, cholla, and ephedra. Overall, the site covers a 60 × 30 m area.

Site Structure, Artifact Recovery, and Assemblage Composition

Evaluation efforts at the site included a surface collection of all artifacts and excavation of 10 STPs. Concentration 1, located within the south and southeast portion of the site, immediately adjacent to the large rock outcrop and Feature 2, was characterized by a greater general surface density of flaked stone and ceramic materials compared to the rest of the site. A total of 36 surface artifacts were collected from Concentration 1, in the following proportions: 26 ceramic body sherds, four ceramic rim sherds, and six quartz debitage fragments.

The general surface inventory (outside of the concentration) produced 15 artifacts, consisting of one granitic millingstone fragment (A1), five ceramic body sherds, two ceramic rim sherds, one obsidian debitage, five quartz debitage fragments, and one quartz retouched edge tool. All surface artifacts were identified within the eastern portion of the site; scattered and down slope of Feature 1 and 2.

A total of 10 STPs were excavated within the site, three of which yielded cultural material. STP 2, located in Concentration 1 produced three ceramic body sherds from 0 to 20 cm and one ceramic rim sherd from 20 to 30 cm. STP 4, also located in Concentration 1, produced two ceramic body sherds from 20 to 30 cm. STP 10 was excavated within the possible shelter and produced one

volcanic debitage in 20 to 40 cm and one quartz debitage in 40 to 55 cm. All three of these STPs contained loosely to moderately compacted, light- to medium-brown sandy silt. The seven remaining STPs were sterile and contained similar sediments consisting of loosely to moderately compacted, light- to medium-brown sandy silt.

Ceramic sherds at the site are all Tizon brownware. At least four types of lips are present, indicating at least four individual vessels. Soot/charcoal is present on a few sherds of similar paste and size, indicating it may have been a cooking pot. Other rim sherds with direct lips are more likely bowls, based on their diameter; however, the some of the rims are too small to accurately determine the type of vessels from which they originate.

During the resurvey and evaluation of the site, the dense vegetation that obscured the view to the entrance of the possible rock shelter was cleared. The rock shelter is formed from large to medium granitic boulders, oriented in a roughly semi-circular shape (facing east) with the semi-circle located adjacent to a large vertical outcrop boulder overlooking the entire site. The semi-circle of boulders are naturally occurring, not stacked. The large vertical boulder provides some shelter as there is a slight overhang of rock that is located approximately 2.5 m above ground level; however, the shelter is not fully enclosed. The area within the rock feature measures approximately 4 to 5 square meters. The opening to the rock shelter measures 1.6 m. One small body sherd of Tizon brownware ceramic was collected from the surface within the feature. No evidence of any burning of interior walls from campfire was observed, and no midden spoil was identified in the STP. It is likely that the possible rock shelter was used as a hunting blind or wind break.

Discussion and Site Summary

The site is a temporary or seasonal camp. One millingstone, 43 Tizon brownware ceramic sherds, one retouched quartz flake, one Obsidian Butte interior flake, two volcanic flakes, and 12 quartz flakes were recovered, primarily from the ground surface, with only three ceramic sherds and two pieces of debitage recovered from below 20 cm below surface. The presence of the millingstone indicates seeds and other plant materials were processed for food; the mortar indicates acorns were processed here. The debitage at the site is primarily chunky pieces of interior shatter, with a few interior flakes and cortical shatter also present. These are generally consistent with cobble-core reduction of low-quality materials. The site likely dates to the Late Prehistoric or ethnohistoric period based on the presence of prehistoric pottery and the Obsidian Butte flake.

The entire site was evaluated. The low density of artifacts, absence of midden soils, and limited subsurface recovery do not provide substantial information regarding the prehistory of the region. Therefore, the site is recommended as not eligible for listing in the CRHR or local register, and not significant under the County RPO or CEQA.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and evaluation efforts described herein, as well as through curation or repatriation of artifacts, and monitoring of ground-disturbing activities.

4.2.6 Isolates within the Boulder Brush and Campo Wind APE and ADI

The Project would not result in significant effects on isolated cultural resources. Twelve isolates were identified within the Project ADI and would be impacted by the Project (P-37-038189, P-37-038190, P-37-038204, P-37-038206, P-37-038211, P-37-038212, P-37-038213, P-37-038229, P-37-038230, P-37-038232, P-37-038280, and P-37-038285); another 55 are located in the Project APE but outside the Project ADI or outside the APE and would not be impacted (Table 4-13). One previously recorded isolate (P-37-032854) was not relocated. None of the isolates meet the County Guidelines for Significance (County of San Diego 2007) nor are they eligible for listing in the CRHR or the local register. None are significant under CEQA or the RPO. One resource (P-37-038463), listed below with the isolates, is a zoomorphic rock formation identified by Native American consultants during a site visit as part of the AB 52 process. This resource was documented on a DPR form and was noted as being a TCR. As such this resource is significant under CEQA. P-37-038463 is located just along the margin of, and outside, the Boulder Brush APE, but is included herein to ensure its documentation and consideration in the planning process. It will be avoided by Project design. All isolates outside the ADI will be avoided and preserved in place.

Table 4-13
Isolates Recorded in the Boulder Brush and Campo Wind APE and ADI

Primary Number	Temporary ID/Name	Period	Type	Description	Location
Newly Recorded Isolates					
P-37-038179	ECWEP-I-001	Prehistoric	Debitage	One course-grained volcanic Interior flake	Outside Boulder Brush APE
P-37-038180	ECWEP-I-006	Prehistoric	Ceramic	Six brownware sherds (one rim, five body)	Outside Boulder Brush APE
P-37-038181	ECWEP-I-008	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038182	ECWEP-I-009	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038183	ECWEP-I-012	Prehistoric	Ceramic	Five brownware body sherds	Outside Boulder Brush APE
P-37-038184	ECWEP-I-013	Prehistoric	Ceramic	One volcanic secondary flake	Boulder Brush APE
P-37-038185	ECWEP-I-014	Prehistoric	Ceramic	One brownware sherd	Outside Boulder Brush APE

Table 4-13
Isolates Recorded in the Boulder Brush and Campo Wind APE and ADI

Primary Number	Temporary ID/Name	Period	Type	Description	Location
P-37-038187	ECWEP-I-016	Prehistoric	Groundstone and Debitage	One groundstone fragment, one volcanic interior flake	Boulder Brush APE
P-37-038188	ECWEP-I-017	Prehistoric	Handstone and Debitage	One handstone and two volcanic flakes	Boulder Brush APE
P-37-038189*	ECWEP-I-018	Prehistoric	Debitage	One millingstone fragment and one volcanic flake	Boulder Brush ADI
P-37-038190*	ECWEP-I-020	Prehistoric	Projectile Point	One quartz Desert Side-Notched point	Boulder Brush ADI
P-37-038191	ECWEP-I-025	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038192	ECWEP-I-028	Prehistoric	Ceramic	One brownware body sherd	Outside Boulder Brush APE
P-37-038193	ECWEP-I-029	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038194	ECWEP-I-030	Prehistoric	Debitage	One volcanic biface thinning flake	Outside Boulder Brush APE
P-37-038195	TW-I-001	Prehistoric	Ceramic	One brownware body sherd	Boulder Brush APE
P-37-038196	TW-I-002	Prehistoric	Ceramic	One brownware body sherd	Boulder Brush APE
P-37-038197	TW-I-003	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038198	TW-I-004	Prehistoric	Ceramic	Three brownware body sherd	Outside Boulder Brush APE
P-37-038199	TW-I-005	Prehistoric	Debitage	Two volcanic flakes	Outside Boulder Brush APE
P-37-038200	TW-I-006	Prehistoric	Debitage	Two volcanic flakes	Outside Boulder Brush APE
P-37-038201	TW-I-007	Prehistoric	Biface	Rhyolite biface fragment	Outside Boulder Brush APE
P-37-038202	TW-I-008	Historic	Pail	One metal pail	Outside Boulder Brush APE
P-37-038203	TW-I-014	Prehistoric	Biface	Volcanic early stage biface fragment	Boulder Brush APE
P-37-038204*	TW-I-015	Prehistoric	Debitage	One quartz interior flake	Boulder Brush ADI
P-37-038205	TW-I-016	Prehistoric	Core	One volcanic core fragment	Boulder Brush APE
P-37-038206*	TW-I-017	Prehistoric	Debitage	One quartz flake	Boulder Brush ADI
P-37-038207	TW-I-018	Prehistoric	Debitage	One volcanic interior flake	Boulder Brush APE
P-37-038208	TW-I-019	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038209	TW-I-020	Prehistoric	Debitage	Two volcanic interior flakes	Boulder Brush APE
P-37-038210	TW-I-021	Prehistoric	Ceramic and Debitage	Two brownware sherds, two volcanic flakes	Boulder Brush APE

Table 4-13
Isolates Recorded in the Boulder Brush and Campo Wind APE and ADI

Primary Number	Temporary ID/Name	Period	Type	Description	Location
P-37-038211*	TW-I-022	Prehistoric	Ceramic	One brownware body sherd	Boulder Brush ADI
P-37-038212*	TW-I-023	Prehistoric	Ceramic	One brownware body sherd	Boulder Brush ADI
P-37-038213*	TW-I-024	Prehistoric	Core	One volcanic core	Boulder Brush ADI
P-37-038214	TW-I-025	Prehistoric	Ceramic	Six brownware sherds (one rim, five body)	Boulder Brush APE
P-37-038215	TW-I-026	Prehistoric	Debitage	One volcanic interior flake	Boulder Brush APE
P-37-038216	TW-I-027	Prehistoric	Debitage	One chert interior flake	Outside Boulder Brush APE
P-37-038217	TW-I-028	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038218	TW-I-029	Prehistoric	Debitage	Tow volcanic flakes	Outside Boulder Brush APE
P-37-038219	TW-I-030	Prehistoric	Retouched Flake	One volcanic retouched interior flake	Outside Boulder Brush APE
P-37-038220	TW-I-031	Prehistoric	Ceramic	Three brownware body sherds	Outside Boulder Brush APE
P-37-038221	TW-I-033	Prehistoric	Ceramic	23 brownware body sherds from one vessel	Outside Boulder Brush APE
P-37-038222	TW-I-039	Prehistoric	Debitage	One volcanic secondary flake	Outside Boulder Brush APE
P-37-038223	TW-I-040	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038224	TW-I-041	Prehistoric	Percussing Tool	One volcanic hammerstone/core	Outside Boulder Brush APE
P-37-038225	TW-I-042	Prehistoric	Debitage	One volcanic primary flake	Outside Boulder Brush APE
P-37-038226	TW-I-043	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038227	TW-I-045	Prehistoric	Debitage	One volcanic interior flake	Outside Boulder Brush APE
P-37-038228	TW-I-046	Prehistoric	Debitage	One volcanic secondary flake	Outside Boulder Brush APE
P-37-038229*	TW-I-047	Prehistoric	Debitage	One volcanic interior flake	Boulder Brush ADI
P-37-038230*	TW-I-050	Prehistoric	Debitage	One volcanic interior flake	Boulder Brush ADI
P-37-038231	TW-I-051	Prehistoric	Debitage	One volcanic flake	Outside Boulder Brush APE
P-37-038232*	TW-I-052	Prehistoric	Debitage	One volcanic interior flake	Boulder Brush ADI
P-37-038233	TW-I-054	Prehistoric	Millingstone	One millingstone	Outside Boulder Brush APE
P-37-038274	CWA-I-001	Prehistoric	Ceramic	One brownware body sherd	Campo Wind APE
P-37-038275	CWA-I-002	Prehistoric	Debitage	One quartz shatter	Campo Wind APE

Table 4-13
Isolates Recorded in the Boulder Brush and Campo Wind APE and ADI

Primary Number	Temporary ID/Name	Period	Type	Description	Location
P-37-038276	CWA-I-003	Prehistoric	Debitage	One volcanic interior flake	Campo Wind APE
P-37-038277	CWA-I-004	Prehistoric	Debitage	One volcanic interior flake; one volcanic shatter	Campo Wind APE
P-37-038278	CWA-I-005	Prehistoric	Ceramic	Four brownware ceramic body sherds	Campo Wind APE
P-37-038283	CWS-I-006	Prehistoric	Ceramic	One brownware ceramic body sherd	Campo Wind APE
P-37-038284	CWS-I-008	Prehistoric	Ceramic and Debitage	One volcanic interior flake, one brownware rim sherd, one quartz shatter – in secondary context due to earthwork disturbances	Campo Wind APE
P-37-038285*	CWS-I-009	Prehistoric	Core	One multidirectional volcanic core	Campo Wind ADI
P-37-038286	CWS-I-010	Prehistoric	Ceramic	One brownware body sherd	Campo Wind APE
P-37-038287	CWS-I-011	Prehistoric	Core	One volcanic core	Campo Wind APE
P-37-038280*	CWA-S-002	Prehistoric	Ceramic	Five ceramic sherds from one vessel	Campo Wind ADI
P-37-038463	TW-I-055	Prehistoric	Zoomorphic Rock	Zoomorphic Rock Outcrop; "Dog Rock"	Boulder Brush APE
Previously Recorded Isolates					
P-37-032854	CWA Isolate 1	Prehistoric	Debitage	Two gray volcanic interior flakes; not relocated in 2018	Campo Wind APE

Note:
* identifies isolates located within the ADI that will be impacted.

4.2.7 Built Environment Resources in the Campo Wind ADI

Four built environment resources are present in the Campo Wind ADI (no built environment resources are located in the Boulder Brush ADI) (Table 4-14), three of which have been previously evaluated (CA-SDI-6891, P-37-024023, and P-37-025680). CA-SDI-9059 was evaluated as part of this Project. All four are discussed below.

Table 4-14
Built Environment Resources in the Project ADI

Resource ID/ Primary	Trinomial	Period	Type	Evaluation Reference	ADI
P-37-006891	CA-SDI-6891	Historic	Road	Caltrans 2011	Campo Wind
P-37-009059	CA-SDI-9059	Historic	Road	This Report	Campo Wind

Table 4-14
Built Environment Resources in the Project ADI

Resource ID/ Primary	Trinomial	Period	Type	Evaluation Reference	ADI
P-37-024023	—	Historic	Road	Caltrans 2000	Campo Wind
P-37-025680	—	Historic	Railroad	JRP Consulting 2000	Campo Wind

CA-SDI-6891

This resource is a two-lane state highway (SR-94) constructed and paved between 1911 and 1930 that connects east San Diego to communities throughout southeast San Diego County. The highway routes through predominantly rural low-lying hills and mountains. Known as "Campo Road" and "Old Route 200," it roughly follows the paths of previous prehistoric trails, telegraph lines, wagon, and stage roads. The highway was paved in the late 1920s, repaved between 1981 and 2011, and has been altered and updated through modern times. The road was evaluated by Caltrans in 2011 and determined not be not eligible for listing in the NRHP or the CRHR as it no longer retains sufficient integrity to it period of significance due to numerous alterations and upgrades over the years. During the current survey, the road was found to be in the same condition as most recently reported. Although this resource intersects the Campo ADI, no grading or other disturbances are planned in the road right-of-way; the resource will be avoided by design, therefore there will be no impact to the resource.

CA-SDI-9059

CA-SDI-9059 is a historic wagon road, first recorded by Terri Jacques in 1981. The road was included in the 1848 government map. In 20011 ASM Affiliates revisited the "Lazy M Lane" and noted the portion of it that extends to the west of its intersection with BIA-15 has been repeatedly graded. The grading appears to have also widened the road, beyond the 6 to 7 feet as initially recorded by Jacques.

Due to repeated grading the integrity of this site is minimized. The site, therefore, possesses little data recovery potential. The portion of the site within the ADI is recommended as not significant under CEQA or the RPO, and is not eligible for listing in the CRHR or local register.

All sites are considered important under County Guidelines; however, impacts to the importance of the site can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

P-37-024023

This resource is the Imperial Highway, also referred to as U.S. 80 and Old Highway 80. The highway has been thoroughly documented and evaluated by Caltrans in 2000, which determined the highway to be eligible for listing in the NRHP. U.S. 80 is one of 10 transcontinental national highways, and one of the nation's earliest. It extends from San Diego, California, to Savannah, Georgia, through variegated terrain in a variety of southerly climates. The highway was constructed to promote tourism, draw commerce, and support the expansion of San Diego, as well as to take advantage of Southern California's relatively temperate climate, which allows roadways to remain open throughout the year. Construction of the highway occurred from 1911 to 1918, followed by a period of rehabilitation and upgrades from 1918 to 1933. Modifications and updates to the resource continue through the present. As the road is eligible for listing in the NRHP, it is automatically considered eligible for listing in the CRHR and is significant under CEQA. Although this resource intersects the Campo ADI, no grading or other disturbances are planned in the road right-of-way; the resource will be avoided by design, therefore there will be no impact to the resource.

P-37-025680

This resource is the Union Pacific Railroad, also referred to as the San Diego and Arizona Eastern Railway. It was originally recorded by JRP Consulting in 2000, who determined the resource was not eligible for NRHP listing, although it was not formally evaluated for significance under CEQA. ASM Affiliates revisited a segment of the resource in 2013 and confirmed that finding. The railway was constructed between 1907 and 1919, extending from El Centro to San Diego, California. It was one of the last major railroads constructed in the United States. ASM Affiliates noted the resource is in good condition and retains many of its original tracks, railroad ties, and stations. The railroad intersects the Project in three locations (an access road, an underground collector line, and one turbine pad); Project activities in these locations could damage or destroy the resource, which would be a significant impact (Impact-CR-4). The access road is the existing BIA Road 15, a dirt road that currently crosses the railroad. The Project has been designed such that it will not alter the road (other than maintaining it for active use). The collector line would be installed either by spanning the railroad overhead, or by directional drilling underground below the railroad berm; both methods would avoid damage to the resource. One turbine work pad extends into the right-of-way (ROW) of the railroad. This pad would be reduced in size and temporary fencing would be installed along the ROW. Therefore, the resource will be avoided by design and there will be no impact to the resource.

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5 INTERPRETATION OF RESOURCE IMPORTANCE AND IMPACT IDENTIFICATION

This section summarizes the results and interpretation of the inventory and evaluation of cultural resources for the Project, provides eligibility recommendations for evaluated sites, and discusses potential impacts. This analysis draws heavily from another study recently performed by Dudek in the Boulder Brush Boundary (Comeau et al. 2019), as the general themes and even results are overwhelmingly similar.

5.1 Resource Importance and Management Concerns

The primary goals of this study were to identify cultural resources that have the potential to be significantly impacted by future development plans within the Project APE, to provide an evaluation of the resources to identify their historical significance, and to identify impacts to those resources specifically within the Boulder Brush APE. The current investigation identified 158 resources in the overall APE for Boulder Brush and Campo Wind, including 87 archaeological sites, four built environment resources, and 67 isolates. No evidence was found for nine previously recorded archaeological sites and one isolate and they are considered to no longer exist, including three sites outside of the Boulder Brush ADI (CA-SDI-4005, -7138, and -7149),five sites and one isolate in the Campo Wind APE but outside of the ADI (CA-SDI-7258, -8198, -8946, -8968, and -8980, and P-37-032854), and one site in the Campo Wind ADI (CA-SDI-8962).

Considering just Boulder Brush, 40 sites and 55 isolates were identified, of which 10 archaeological sites and 10 isolates are within the Boulder Brush ADI (Table 5-1). Six sites in the Boulder Brush APE partially overlapped the ADI (CA-SDI-7145/7146, -7163, -22565, -22575, -22576, and -22586); only the portions of these sites within the ADI were evaluated for significance. No archaeological sites or portions thereof that intersect the ADI were found to be eligible for listing in the CRHR or Local Register. None of the 57 isolates is considered eligible for listing in the CRHR or Local Register. One of the isolates (P-37-038463) was identified as a TCR.

The Campo Wind APE includes 38 archaeological sites and 11 isolates (Table 5-1). The Campo Wind ADI includes 21 archaeological sites and two isolates. Eight sites in the Campo Wind APE partially overlapped the ADI (CA-SDI-8977, -9050, -9059, -20368, -20587, -20592, -20605, and -22602); only the portions of these sites within the ADI were evaluated for significance. No archaeological sites or portions thereof that intersect the ADI were found to be eligible for listing in the CRHR or Local Register, nor is the singular isolate significant.

While sites may be recommended as eligible or not eligible for listing on the CRHR, under the County Guidelines, all sites are considered "important." Although all sites are considered

important under the County Guidelines, the "importance" of sites recommended as "not eligible" for listing on the CRHR can be exhausted through recordation, testing, the conveyance of artifacts (curation or repatriation, if recovered), and archaeological monitoring.

Table 5-1
Frequency of Cultural Resources in the Boulder Brush and Campo Wind APE and ADI

	Boulder Brush	Campo Wind	Total
Sites in the ADI			
CRHR Eligible	0	0	0
Not CRHR Eligible	10	21	31
Subtotal	*10*	*21*	*31*
Sites out of ADI			
CRHR Eligible	4	2	6
Not CRHR Eligible	6	0	6
Not Evaluated	20	15	35
Subtotal	*30*	*17*	*47*
Sites Total	**40**	**38**	**78**
Isolates in the ADI	10	2	12
Isolates out of ADI	45	9	54
Isolates Total	**55**	**11**	**66**
Built Environment Resources in the ADI	0	4	4
Built Environment Resources in the APE but out of the ADI	0	0	0
Grand Total*	**95**	**53**	**148**

* Table excludes sites not relocated.

Evaluation of significance requires the development of an understanding of each identified resource in such a way that its historical significance can be assessed. CEQA requires lead agencies to consider the historical significance of a resource so as to gauge whether it has the potential to be listed on the CRHR. Criteria 1–4 of CEQA are a set of standards for determining whether a particular resource is eligible for listing on the CRHR. These criteria were discussed in Chapters 1 and 2.

The following eligibility recommendations are based primarily on Criterion 4 of CEQA for archaeological values, since the data generated during the evaluation program can be used to judge whether a particular cultural resource has yielded or may be likely to yield information important in prehistory or history. Data potential is represented by general archaeological characteristics such as assemblage integrity, size, diversity, defined chronology, and the potential for buried deposits. The majority of the historic period sites do not contain the types of features that could be used to identify them through archival research in such a way that information could have been used to evaluate the sites under CEQA criteria 1-3; instead these historic period sites could be evaluated only under Criterion 4.

Based on the results of the current investigation, the evaluated cultural resources in the Project ADI are recommended as not significant under CEQA and the RPO, and as not eligible for listing in the CRHR or the local register.

CA-SDI-7151/7162 was previously determined to be significant under CEQA and the RPO, and eligible for listing in the CRHR and local register for its data potential. Two locations of human remains were also identified at the site. The entirety of the site has been avoided by project redesign would not be impacted by grading or other construction activities, as it is outside the ADI for Campo Wind and Boulder Brush. As such, it will be preserved in place. All sites are considered important under County Guidelines; however, the monitoring, curation or repatriation, and documentation of the resource described herein would reduce the impacts to the importance of the site to a less than significant level.

Sites CA-SDI-7140 and CA-SDI-22581 are located in the Boulder Brush APE and were previously evaluated and determined not to be eligible for listing in the CRHR and local register. These sites were determined to be significant under the RPO and CEQA as they contain human remains. Sites CA-SDI-8939 (Boulder Brush APE) and CA-SDI-22596 (Campo Wind APE) were not evaluated but were determined to be significant under CEQA and the RPO due to the presence of human remains. The entirety of all four sites have been avoided by Project redesign, and will be preserved in place. Sites CA-SDI-7140 is within 50 feet of the Boulder Brush ADI and CA-SDI-22596 is within 50 feet of the Campo Wind ADI. CA-SDI-7140 will require temporary fencing during construction to prevent inadvertent impacts. Impacts to the importance of CA-SDI-22596 can be reduced to less than significant through the recording and previous evaluation efforts described, curation or repatriation of recovered materials, and monitoring of Project-related ground disturbance.

CA-SDI-7156 was previously determined to be significant under CEQA and eligible for listing in the CRHR and local register for its data potential. It is not known if the site was evaluated for significance under the RPO. The entirety of the site has been avoided by project redesign would not be impacted by grading or other construction activities, as it is outside the ADI for Campo Wind and Boulder Brush. As such, it will be preserved in place.

One historic road, P-37-024023, located in the APE for Campo Wind, was previously determined eligible for listing in the NRHP, and is therefore automatically eligible for listing in the CRHR and is significant under CEQA. Project-related activities have been designed to avoid damaging, destroying, or altering the road and its significant components where the road intersects the Campo ADI. Therefore, the entire road will be preserved in place.

5.1.1 Integrity

Integrity is an important factor in the evaluation of historical resources. Integrity fundamentally affects associations that are critical for understanding behavioral relationships in site formation and design for prehistoric and historical archaeological sites. All of the evaluated archaeological sites maintain good integrity, as the distribution of artifacts on the surface was generally good, with some areas more impacted by post depositional disturbance than others. Impacts are generally minimal, consisting of dirt road/OHV travel, animal burrowing, and various other minimal modern activities. Ranching activities have certainly had some impact to the ground surface, predominantly trampling by animals and installation of water troughs/conveyance features. Large-scale earthwork is generally absent on private lands, other than the installation of culverts under dirt roads in some drainages, and construction of an earthen dam (outside the APE). On the Reservation, development is more substantial, but within the Campo ADI is primarily limited to the construction of paved and graded roads, electric distribution and transmission lines. Other substantial disturbances on the Reservation, such as an OHV track, a quarry, residences, and commercial developments, are outside the Campo APE or are located in areas where cultural resources were not identified. Overall, cultural resources were demonstrated to be surficial deposits that retain horizontal integrity but lack any subsurface deposits.

Notably lacking from the majority of current evaluated sites (or portions thereof) are other forms of cultural deposits such as midden soils or features (such as house pits, hearths, roasting pits, etc.). Midden deposits are present at a few sites in in the Project APE, indicating some habitation did occur, however these are mostly located outside the Project ADI and were not investigated in detail. Previous excavations at those sites determined that the midden deposits are shallow, and more likely representative of short-term or season occupation, rather than residential bases, such as villages. Numerous other habitation sites are well documented east of the Project area within McCain Valley and on the Reservation, but outside the Project ADI.

An abundance of bedrock milling features are present throughout the area. These features predominantly contain a variety of slicks and mortars, with a few basins also present. Most of the features are small, with only a few milling elements each, although many more were likely present in the past and have been lost through natural erosion/decomposition of the bedrock. Most of the slicks and basins do not indicate extensive use (highly polished) or re-sharpening over time (i.e., pecking). These features indicate seeds of locally available plants were most likely exploited at their source, rather than being transported back to camps or villages for processing, The presence of mortars at numerous site indicates that acorn processing occurred there in addition to locally available seeds; mortars are almost exclusively located at sites within oak tree stands, indicating inhabitants of the valley were processing acorns at their source, rather than collecting them whole for processing at base camps or habitation sites.

Overall, the lack of buried deposits at most of the prehistoric archaeological sites in the current Project area reduces the opportunity for drawing more meaningful or data-laden associations between assemblage constituents, despite relatively strong integrity overall of surface manifestations. Thus, integrity alone is not a determining factor when deciding historical significance of an archaeological resource.

Turning to historic period resources, these sites primarily contain the remains of ranching related activities (corals, limited refuse scatters/deposits, and water conveyance/storage features). In terms of structural integrity, most retained enough integrity to discern the original intent or function of each resource, such as the corral which was obviously used for livestock retention. Considering the lack of information on historic period resources, all historic-period sites considered not significant and not eligible under any of the CEQA or County criteria.

5.1.2 Chronology

With strong integrity of archaeological deposits, chronological associations can add much value to archaeological interpretation. For this reason, archaeological sites that yield chronological information are typically deemed to hold higher scientific value. It is not uncommon for topical evaluations of prehistoric sites to conclude that a particular deposit could be considered significant because of the presence of time-sensitive artifacts or the presence of archaeological deposits that carry the promise of producing radiocarbon dates. The rarity of intact, dateable archaeological deposits has somewhat inflated the importance of chronological data when evaluating the historical significance of an archaeological site. Such deposits are critical to evaluation efforts; however, the ability to place a resource in time should not itself qualify the resource as significant.

Chronological information at prehistoric sites in the Project evaluated at this time was also somewhat rare, limited only to a few time-sensitive artifacts. The only projectile point recovered from the evaluated sites is a Desert Side-Notched arrow point. Very few solid radiocarbon dates have been obtained in the region to refine the local chronology of any arrow point forms. However, radical increases in their assemblage frequency suggest that they became economically significant after about AD 900 (Hale 2009). Such a date is consistent with the availability of Obsidian Buttes source after 940 BC (Schmitt et al. 2013), which is the sole source of all recovered obsidian artifacts.

Tizon Brownware is the predominant aboriginal ceramic type in coastal and inland/mountain areas of San Diego County, with lower frequencies of buffware from Imperial Valley. These types of ceramics are generally thought to be Late Prehistoric period time markers, although the wide time span marking the availability of these artifacts in the southern California and Baja Mexico regions reduces their ability to refine site-specific chronology. Tizon brownware sherds were collected from many sites in the Project ADI, indicating most of the occupation of the Project Area occurred

after about AD 500. Overall, age estimates for Project sites based on time-sensitive artifacts (projectile point and ceramic sherds) generally fit within established chronological schemes for the region; none are capable of refining local prehistoric patterns.

The absence of thermal features or other features with dateable remains at evaluated sites precludes further refinement of the chronological placement of these sites through radiocarbon, thermoluminescence, or other analytical techniques. A few charcoal samples were collected. However, they were all recovered from the general sediments so it is not possible to determine if they are result of human activities or natural processes (i.e., wildfires).

Chronological information for historic period archaeological sites is limited to maker's marks and other characteristics of manufacturing at refuse deposits. Most of these dateable items were identified at sites on the Reservation, and provide wide date ranges (e.g., post-1902 for sanitary cans, post-1935 for church-key opened cans, and 1931-1960 for Maywood Glass Co. bottles). These sites likely represent homesite cleanup, wherein a variety of refuse was likely dumped in a single episode. More precise manufacturing dates for consumable goods were predominantly recovered from one site, CA-SDI-20604, although the site contained a variety of items from the 1930s through modern times. This site appears to be opportunistic dumping of household trash, as the site is located along the site of a road. The lack of such material off-Reservation is likely due to the fact that that part of McCain Valley was predominantly used for ranching, with homesites located to the east and south.

5.1.3 Settlement and Site Function

As with any archaeological evaluation, research issues postulated in advance of fieldwork have mixed success in their applicability to the recovered assemblage, particularly in terms of the kinds of data that could be generated and attendant questions that can be addressed. There is no departure from this pattern with current Project sites that yielded only a few handfuls of artifacts that can be leveraged to speak to major settlement and subsistence questions.

With respect to lithic production, the prehistoric assemblage from the current Project sites is dominated by lithic reduction debris (i.e., debitage and cores) with modest amounts of simple flake tools and retouched flakes present at some of the larger temporary camps. Fewer quantities of bifaces, projectile points, and formed flake tools were recovered. Consistent with sites throughout McCain Valley and the Jacumba area, the vast majority of lithic material exploited for tool production consists of quartz and poor-quality volcanics (basalt). Numerous quartz outcrops were noted throughout the Project APE, which may have provided the source material, although no clear evidence of prehistoric quarrying or processing was noted at the outcrops. If these areas were the

sources for quartz tool production, then aboriginal inhabitants appear to have collected unmodified cobbles/nodules and transported them back to habitation sites and temporary camps for reduction.

Volcanic outcrops are absent from the Project Area, but are well known in the Jacumba region, particularly at Table Mountain and near Jade Peak, with other source areas throughout the Peninsular Range. If the volcanic material in the Project Area was procured from the Jacumba area, it likely came from the outcrops west of Border Peak or Table Mountain, as the outcrop to the west was exploited for local use of predominantly large cobble cutting tools (choppers) and not for production of cores for transport (Comeau and Hale 2015). Whatever the source, the few (n=6) volcanic cores recovered from the evaluated sites indicates that flakedstone tools were likely produced from flakes that were transported to the area, rather than cobbles. Debitage analysis confirms this, as the majority of volcanic debitage are early interior flakes (53%) and interior shatter (29%), virtually identical to the assemblage recovered by Comeau et al. (2019) in the same area. Only three biface thinning flakes were recovered from the entirety of the assemblage, which is not surprising as only one biface and one projectile point were recovered at these sites.

Only three obsidian and four CCS pieces of debitage were recovered. This sample size is too small to say anything meaningful about past behaviors, other than that all of the obsidian from Obsidian Butte in Imperial County, and the chert likely originates there too.

The stone tool analysis indicates that discernable stone tools include unmodified flakes (simple flake tools; [n=3]) and minimally retouched flakes (n=3) with only the one biface and one projectile point. Cobble based chopping tools are absent. Hammer stones were used to reduce the cores and flakes completing a picture of a lithic toolkit intended for the production of flakes for immediate local use.

Expedient lithic tool production and use defines the San Diego region for the entire Holocene (Hale 2009; McDonald et al. 1993). The same pattern is mimicked at other, more distant quarries, including in the Jacumba Valley Archaeological District (JVAD), where recent research identified a very similar pattern of lithic reduction, including more expansive exposures of naturally occurring basalt (Williams et al. 2014b). Cobble exposures in the northern part of San Diego County are virtually identical in reduction sequence, exhibiting a debitage profile dominated by minimally modified early interior flakes (Hale and Becker 2006). Locally, extensive research on Otay Mesa essentially formalized the common conception of cobble-core reduction (Flenniken et al. 2004; Byrd et al. 1993; McDonald et al. 1993). Otay Mesa has long been known to harbor a “green-gray” fine grained basalt that was extensively used during the first half of the Holocene (i.e., 10,000–5,000 years ago), but was also expediently used in more recent prehistoric times (Warren et al. 2004). Comeau et al. (2015) identified deposits at the mouth of the Otay River floodplain that are associated with the ethnohistoric Village of La Punta mapped by the Spanish in

1782. The green-gray basalt that outcrops in the Jacumba region was also found at the La Punta sites, indicating that late aboriginal occupants either visited the local region or scavenged older lithic raw material. CCS materials (chert, chalcedony) are a typically fine-grained and more suitable to more refined manufacture (e.g., bifaces and projectile points), although little can be said for those due to the limited sample size.

The National Parks Service (NPS) allows individual archaeological sites on federally administered lands to be considered for historical significance as a district, or a group of sites (NPS 1997). Districts are inherently a tool for managing the important elements of historic properties while landscapes are the contexts within which the districts are considered for evaluation of significance. Thus, archaeological sites can be managed as a district, if warranted, to better weigh the significance of impacts if much is known about the cultural landscape. The following discussion topically considers the current set of evaluated prehistoric sites within a larger dataset generated to better integrate themes related to aboriginal occupation.

While a portion of this Project is proposed on lands under the jurisdiction of San Diego County, guidance for defining and evaluating archaeological districts is best understood and detailed by the NPS. Given the similarity of Section 106 of the NHPA, CEQA, and San Diego County Guidelines for Cultural Resources, the regulatory underpinnings are assumed to carry over to County Guidelines for the purposes of this Project.

Archaeological districts are defined as groups of individual sites (termed elements) within a geographically circumscribed area that "are linked historically by function, theme, or physical development" (NPS 1997). Moreover, most archaeological districts are considered discontinuous because sites are each spatially discrete and not physically linked, if the space between sites does not have significance. The importance of a district is considered over multiple sites/elements such that the district becomes the property under consideration for historical significance, and the level at which the significance of impacts is measured. Historical significance of a district typically draws on a broader (i.e., regional) cultural context to better understand the cultural themes that give the district its importance.

Numerous archaeological studies have been completed in the region. The Tule Wind project is one such project with a 26,000-acre ROW situated to the north and east of the current project. The theme of aboriginal settlement and subsistence during the late Prehistoric period (A.D. 500-1,500) links prehistoric sites in the Project and Tule Wind project areas; both projects are situated in an area that was a convenient stopover for groups traveling to the coast or a seasonal habitation area for groups residing in eastern deserts for much of the year. The general lack of strong chronological control limits further delineation of the cultural context and thereby, diminishes the relative importance of any district that can be defined.

A total of 7,649 acres of the Tule Wind ROW was intensively surveyed, resulting in the documentation of 220 archaeological sites, 171 of which are prehistoric in age (Hale and Quach 2011). Portions of one site, CA-SDI-4788 were evaluated to assess the potential for significant deposits that could be eligible for NRHP listing; none were found and those portions of the site were recommended not eligible (Hale 2011). Overall, the Tule Wind dataset is a strong foundation for understanding the kinds of individual prehistoric archaeological sites in the region, including large and small habitation sites, processing sites (bedrock milling), lithic scatters, and ceramic scatters. Large and small habitation sites are defined by higher assemblage diversity and the presence of midden soils, but some also contain rock shelters (see Hale and Quach 2011). Processing sites, lithic scatters, and ceramic scatters are substantially less diverse than habitation sites and tend to include a single artifact class (i.e., debitage at lithic scatters, ceramic sherds at ceramic scatters). Hale and Quach (2011) surmise that several of the large habitation sites (CA-SDI-4010, CA-SDI-19001/19003, and CA-SDI-20071) probably represent serial occupation by multiple families during the spring (based on surface observations); that is, these are probably seasonal villages. In contrast, processing sites, lithic scatters, and ceramic scatters are substantially smaller on average than habitation sites and they have much less cultural material, suggesting transient occupation by one or a few individuals to take advantage of immediately available foods (Hale et al. 2010; Hale and Quach 2011). The disparity in size and assemblage content between habitation sites and other limited activity locales may also suggest that the small sites are satellites to the habitations, representing task-specific forays away from the main camp.

The Tule Wind sample of prehistoric archaeological sites does not have strong chronological information, other than general late Prehistoric time markers (i.e., Cottonwood and Desert Side-Notch arrow points and ceramics—each artifact class were common during the last 1,000 years). One reason for the lack of chronological control is that a single site was excavated to evaluate its significance (CA-SDI-4788); the rest were documented during an inventory (notwithstanding results of archaeological evaluations conducted during construction of the Tule Wind project, which were not available at the time of drafting this document). Nevertheless, the generally low assemblage diversity and common tool profiles across most non-village sites suggests that McCain Valley was occupied for similar subsistence pursuits over different time periods. This possibility indicates that many of the sites identified in the Tule Wind project area have moderate to high data potential when considered collectively, a conclusion that warranted the BLM to require an NRHP archaeological district evaluation as a mitigation measure for implementation of the Tule Wind project (see BLM 2011). The BLM archaeological district study was not available at the time the current report was drafted. However, given the limited assemblages and lack of subsurface deposits at many of the Tule Wind project sites, it is anticipated that formal evaluation of individual sites would exhaust their data potential. Sites exhausted through formal evaluation would not be

considered contributing elements to the significance of the district. Nevertheless, management of all prehistoric sites as a district forces consideration of landscape-level themes.

For the Rugged Solar project, situated between the Project and Tule Wind, archaeological evaluation of 35 prehistoric deposits were tested for significance, including 25 sites with only prehistoric deposits, and 10 sites that had both prehistoric and historic deposits (historic materials are not considered here) (Giacinto et al. 2013). These 35 prehistoric deposits consisted of light density artifact scatters, bedrock milling features, and at some sites, a limited amount of midden soil. None of the sites is unique from a regional perspective; all consist of elements that are common to sites in region, as defined by the Tule Wind project. In fact, assemblages from all of the sites evaluated for the Rugged Solar project do not encapsulate the variability found at some individual sites on the Tule Wind project, such as CA-SDI-19001/19003 (see Hale and Quach 2011). Rather, evaluated Rugged Solar sites are mostly light manifestations of singular activities common to Tule Wind sites, such as lithic tool production, incipient vegetal processing, or a pot-drop. Considered in a broader aboriginal landscape, the evaluated Rugged Solar sites represent either task-specific forays away from the large habitations a short distance to the north (e.g., CA-SDI-4010), or low-intensity transient occupation of a seasonal nature.

Looking further east, the archaeological record of the Jacumba region is somewhat different, owing to slight physiographic and geologic differences. Vegetation in the Jacumba region is dominated by more xerophytic vegetation, characterized by more yucca and creosote and less conifers that is seen at the higher elevations of Tule Wind and Rugged Solar. Geologically, basalt knolls dot the landscape of Jacumba, exposing stone suitable for making flaked stone implements, whereas McCain Valley is dominated by granitic outcrops. Indeed, the large majority of toolstone identified on Tule Wind and Rugged Solar likely derived from the basalt outcrops in Jacumba. The Jacumba Solar project (Comeau et al. 2015) documented one such lithic quarry where basalt cobbles were reduced in mass with large flakes or smaller cobble masses were transported away from the quarry (see Comeau et al. 2015). Prehistoric sites situated near the quarry contained small numbers of simple flake tools (low investment in form) and cobble tools manufactured at the quarry for extraction and processing of local plants. Ceramic fragments were present but in low densities, indicating several episodes of discarded broken vessels, and thermal features consisting of ash and burned rock were relatively common. Less than a kilometer to the northeast, more than a dozen thermal features were found between five and twenty feet below the surface with four of the deepest features returning radiocarbon dates of more than 9,000 years old (see Williams et al. 2013).

Turning to the Project, most sites in the Project APE are on a par with those evaluated for Rugged Solar and Torrey Wind, although sites encountered at the Project are less diverse, lacking midden development and rock shelters. Prehistoric sites within Rugged Solar and the Project APE are similar in that they consist primarily of food procurement and processing locations that are situated

at a higher elevation on ridgelines and terraces above the valley (Giacinto et al. 2013, Hale et al. 2010). Occupants of these sites coalesced in a few large habitations sites surrounded by dozens of small procurement sites which were exploited on a short term basis (such as CA-SDI-4010 identified on the Tule Wind project; see Hale and Quach 2011). Prehistoric site evaluations did not result in the identification of any new archaeological patterns, but confirmed an existing understanding of local lithic reduction and resource procurement. The lack of intensive lithic reduction and a suitable, immediately local toolstone source in the Project Site stands in contrast to the Jacumba Solar project that zeroed in on one such basalt quarry, further linking the Project's archaeological sites to others in McCain Valley.

The absence of large habitation sites in the Project APE (including Campo Wind and Boulder Brush) may be explained by its configuration that avoided large habitation sites, or that there were no preferred locations for longer term inhabitation that would produce large, deep midden deposits over time in this area. Interestingly, all of the projectile points and bifaces and almost all of the non-local lithic materials (obsidian and CCS) that have been recovered from in the APE were collected identified at four largest temporary camps in McCain Valley (CA-SDI-7140, CA-SDI-7151/7162, CA-SDI-7152, and CA-SDI-22581). The low assemblage diversity at sites in the Project APE is similar to those identified on Rugged Solar and Tule Wind, excluding the few large habitation sites identified in the Project APE. These similarities, then, indicate the aboriginal landscape was defined by transient and/or seasonal occupation of the broader McCain Valley region. These short term occupations inhibited the development of numerous, archaeologically diverse deposits, instead producing a high frequency of small deposits low in diversity and density.

Considering the Project archaeological sites in a landscape context, it is clear that evaluated sites on this Project easily fit into the broader McCain Valley aboriginal landscape, being defined by short term, transient occupation. Indeed, research questions that regard settlement, subsistence, chronology, and the like return similar conclusions. As stated earlier, a landscape perspective is the context for considering archaeological significance of a set of resources, traditionally referred to as an archaeological district. While it is beyond the scope of the Project to define an archaeological district, site significance can be considered in terms of the contribution of Project archaeological sites to a broader region.

The potential significance of a larger district is based primarily on Criterion D of the NRHP and Criterion 4 of CEQA wherein the contribution of a site is based on its assemblage composition and density. In this view, the data potential of Project sites has been exhausted because evaluation fieldwork resulted in near complete surface collection, extensive feature recordation, and the determination that no significant subsurface deposits are present in the Project APE. Thus, none of the evaluated Project sites are considered contributing elements to a larger district combined with Tule Wind and Rugged Solar prehistoric archaeological sites. Additional research into the

current set of evaluated sites can still occur with the curation of collected assemblages, and if portions of sites avoided by the Project APE are impacted and require investigation.

Considering other significance criteria, such as significant events (Criterion 1), significant persons (Criterion 2), or the work of a master (Criterion 3), no archaeological data was obtained that could add significance to any of the resources individually or in a landscape context. Tribal values can add value under any of these three criteria, but consultation to date has not produced any such information. Excluding human remains, archaeological items that could add significance are beads or ornaments that indicate religious ceremonies (Criterion 1) or display artistic value (Criterion 3). However, none of these items were identified during the Project evaluations, and thus do not contribute significance to a landscape context.

5.2 Resource Importance and Evaluation of Tested Sites

Of the 30 archaeological sites and one built environment resource evaluated for this Project, none are considered significant under CEQA, the RPO, or the County Significance Guidelines, and none are recommended as eligible for listing in the CRHR or local register based on CEQA Criterion 4 (Table 5-1). This includes 8 archaeological sites located in the Boulder Brush ADI and 22 archaeological sites and one built environment resource located in the Campo Wind ADI. Moreover, none of those 31 resources is recommended as eligible for listing in the CRHR based on Criteria 1-3 as no resource constituents are present which could connect the site through archival research to historically important persons or events; nor do the sites embody distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important individual nor it possess high artistic value. All other resources in the Boulder Brush ADI and Campo Wind ADI were previously evaluated and determined not significant under any criteria.

Under the County Guidelines all sites are considered "important." Although all sites are considered important under the County Guidelines the "importance" of the sites recommended as not eligible for listing in the CRHR would be considered mitigated through testing, documentation, disposition of archaeological materials (curation/repatriation), and archaeological monitoring of ground disturbance for the entire Project Area.

Evaluated prehistoric sites are predominantly defined as diffuse lithic scatters characterized by low densities of flaked lithic debris deriving from locally available stone (i.e., debitage, cores, simple flake tools, and cobble tools), and small amounts of groundstone and ceramic sherds. A few sites consist of bedrock milling features with minimal to no artifactual remains. Temporary camps, consisting of denser artifact scatters with bedrock milling stations, are also scattered throughout the APE, predominantly adjacent to drainages. Historic resources are predominantly defined by limited concrete features, ranching debris, and small refuse dumps.

No additional information can be gleaned from the evaluated archaeological sites (or evaluated portions thereof) in the Project ADI, including Campo Wind and Boulder Brush ADI, because of their limited diversity and low density of artifacts. For these reasons, these sites are not considered historically significant, they are not eligible for listing in the CRHR or local register, and, they do not possess attributes that would make them significant under the RPO or CEQA. Under the County's guidelines for determining significance, the sites are considered important. Significant impacts to the sites are considered mitigated through the current evaluation effort, curation or repatriation of collected materials, documentation, and archaeological monitoring of ground disturbance during construction for the entire Project Area to control for unanticipated discoveries.

Five sites in the APE, but outside the ADI contain human remains, and are therefore significant under CEQA and the RPO. Sites CA-SDI-7140, CA-SDI-7151/7162, and CA-SDI-22581 are located in the Boulder Brush APE, and sites CA-SDI-8939 and CA-SDI-22596 are located in the Campo Wind APE. These five sites will be avoided by Project design and preserved in place.

One resource (P-37-038463) is a zoomorphic rock formation identified by Native American consultants during a site visit as part of the AB 52 process. This resource was documented on a DPR form and was noted as being a TCR. P-37-038463 is located just along the margin of, and outside, the Boulder Brush APE and will be avoided by Project design and preserved in place

5.3 Impact Identification

The Project would conduct mass grading of the ground surface. Project implementation in the Boulder Brush ADI would directly impact 10 archaeological sites and 10 isolates. Project implementation in the Campo Wind ADI would directly impact 22 archaeological sites, one built environment resource, and two isolates. All but one, a historic highway, are not eligible for listing in the CRHR or local register, are not significant resource under CEQA or under the RPO. As such, impacts to each of these resources as a result of Project implementation would not be considered significant.

One historic road, P-37-024023, was previously determined to eligible for listing in the NRHP, and is therefore automatically eligible for listing in the CRHR and is significant under CEQA. Project-related activities have been designed to avoid damaging, destroying, or altering the road and its significant components where the road intersects the Campo ADI. Therefore, the entire road will be preserved in place.

All cultural resources are considered important under County of San Diego Guidelines for Determining Significance (County of San Diego 2007a). Together with the evaluations

documented in this report, conveyance of archaeological assemblages and documentation, and monitoring of earth-disturbing activities in the area of each evaluated site would reduce the impacts to the importance of these resources to less than significant under County Guidelines. Fifteen of the evaluated sites would only be partially impacted. The non-impacted portions of these sites were not evaluated and are therefore presumed and treated as significant. The unevaluated portions of these sites would be avoided by Project design and preserved in place. Temporary fencing would be placed around the sites within the Boulder Brush ADI to protect them from inadvertent impacts during construction.

6 MANAGEMENT CONSIDERATIONS—MITIGATION MEASURES AND DESIGN CONSIDERATIONS

6.1 Unavoidable Impacts

There are no significant and unavoidable impacts to cultural resources resulting from the Project. Based on the foregoing analysis, the Project may cause a significant effect to five CEQA and RPO significant resources (CA-SDI-7140, CA-SDI-7151/7162, and CA-SDI-22581 are located in the Boulder Brush APE but outside of the ADI, and CA-SDI-8939 and CA-SDI-22596 are located in the Campo Wind APE but outside of its ADI). These sites all contain human remains, which trigger the RPO and CEQA significance. CA-SDI-7151/7162 is also significant under CEQA and is eligible for listing in the CRHR and local register, based on previous archaeological studies (BFSA 1998; Westec 1983). A sixth site, CA-SDI-7156 was previously recommended as eligible for listing in the CRHR and as significant under CEQA. The Project has been redesigned to avoid impacts to all six sites. All six of the sites are outside of the ADI and will be avoided by Project design and preserved in place. Temporary fencing will be installed during construction along the ADI adjacent to CA-SDI-7140 and CA-SDI-22596 to prevent inadvertent impacts to the sites.

To the extent the evaluated cultural resources on site are considered "important" by the County, impacts to these resources can be mitigated through standard data collection processes and monitoring during construction. Thus, there are no significant unavoidable impacts to these resources associated with the Project.

P-37-024023, Old Highway 80, passes through the Campo ADI. The Project would be designed to minimize any construction-related damage or alteration to the road; therefore there will be less than significant impact to this resource.

A search of the Sacred Lands File by the NAHC did identify resources in the area, but no information regarding the details or such resources were provided, and it is unclear if such resources would qualify as TCRs. To date, formal consultation between the County and Kumeyaay tribes has identified TCRs in the Project APE, including CA-SDI-7140, CA-SDI-7151/CA-SDI-7162, CA-SDI-8939, CA-SDI-22581, CA-SDI-22596, and P-37-038463 that are located outside the Boulder Brush ADI. These resources will be avoided by Project design. Thus, there are no significant unavoidable impacts to TCRs associated with the Project.

6.2 Mitigatable Impacts

Thirty-one archaeological sites and three built environment resources within the ADI (10 archaeological sites in the Boulder Brush ADI; 22 sites and three built environment resources in the

Campo Wind ADI) have been evaluated during the current investigation or in previous project investigations and were determined to be not significant under CEQA or the County RPO, and not eligible for listing in the CRHR or the local register (County of San Diego 2007a) (Tables 6-1 and 6-2). However, under County Guidelines, all archaeological sites are considered important. Impacts to the importance of the sites is mitigated through application of measures that include curation or repatriation of all collected artifacts and documentation; construction monitoring; erection of temporary fencing around non-impacted portions of the 13 sites (CA-SDI-7145/7146, CA-SDI-7163, CA-SDI-8977, CA-SDI-9050, CA-SDI-20368, CA-SDI-20587, CA-SDI-20592, CA-SDI-20605, CA-SDI-22565, CA-SDI-22575, CA-SDI-22576, CA-SDI-22586, CA-SDI-22602), to prevent direct and indirect impacts during Project construction; and temporary fencing along the Project ADI limits where sites are within 50 feet of the Project ADI (CA-SDI-7140, CA-SDI-19859, CA-SDI-20586, CA-SDI-20598, CA-SDI-20611, CA-SDI-22577, CA-SDI-22595, CA-SDI-22596, CA-SDI-22598, and P-37-038463). During O&M and decommissioning of the Project, all activities associated with the Project will be required to occur within the Project ADI in order to ensure no inadvertent impacts to unevaluated resources (or the unevaluated portions of sites).

The artifacts collected during the current testing program would be curated at the San Diego Archaeological Center or a culturally affiliated tribal curation facility or alternatively may be repatriated to a culturally affiliated tribe. Implementation of mitigation measures would reduce impacts to these sites to a less than significant level and are provided below.

TCRs have been identified within the Project APE; these resources will be avoided; therefore there are no direct impacts to TCRs and no mitigation is required. Sites CA-SDI-7140, CA-SDI-22596, and P-37-038463 are within 50 feet of the ADI, therefore, as stated above, temporary fencing will be installed during construction to prevent inadvertent impacts to the TCRs. Should additional TCRs be identified during tribal consultation, then this report would be revised to address potential impacts and mitigation of such impacts.

The following mitigation measures will reduce impacts to cultural resources to a less than significant level. These measures are required for all earth-disturbing activities on County-jurisdiction properties. Although the County cannot enforce these measures on Tribal lands, they are included herein nevertheless as a recommendation.

Archaeological Monitoring

- Pre-Construction
    - Pre-construction meeting to be attended by the Project Archaeologist and Kumeyaay Native American monitor(s) to explain the monitoring requirements.

- Construction
  - Monitoring. Both the Project Archaeologist and Kumeyaay Native American monitor(s) are to be on site during earth disturbing activities. The frequency and location of monitoring of native soils will be determined by the Project Archaeologist in consultation with the Kumeyaay Native American monitor(s). Both the Project Archaeologist and Kumeyaay Native American monitor(s) will evaluate fill soils to ensure that they are negative for cultural resources
  - If cultural resources are identified:
    - Both the Project Archaeologist and Kumeyaay Native American monitor(s) have the authority to divert or temporarily halt ground disturbance operations in the area of the discovery.
    - The Project Archaeologist shall contact the County Archaeologist.
    - The Project Archaeologist in consultation with the County Archaeologist and Kumeyaay Native American monitor(s) shall determine the significance of discovered resources.
    - Construction activities will be allowed to resume after the County Archaeologist has concurred with the significance evaluation.
    - Isolates and non-significant deposits shall be minimally documented in the field. Should the isolates and non-significant deposits not be collected by the Project Archaeologist, the Kumeyaay Native American monitor(s) may collect the cultural material for transfer to a Tribal curation facility or repatriation program.
    - If cultural resources are determined to be significant, a Research Design and Data Recovery Program shall be prepared by the Project Archaeologist in consultation with the Kumeyaay Native American monitor(s) and approved by the County Archaeologist. The program shall include reasonable efforts to preserve (avoid) unique cultural resources of Sacred Sites; the capping of identified Sacred Sites or unique cultural resources and placement of development over the cap if avoidance is infeasible; and data recovery for non-unique cultural resources. The preferred option is preservation (avoidance).
  - Human Remains.
    - The Property Owner or their representative shall contact the County Coroner and the County Planning and Development Services (PDS) Staff Archaeologist.
    - Upon identification of human remains, no further disturbance shall occur in the area of the find until the County Coroner has made the necessary findings as to origin.

Should the human remains need to be taken offsite for evaluation, they shall be accompanied by a Kumeyaay Native American monitor.

- If the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the Native American Heritage Commission (NAHC), shall be contacted by the Property Owner or their representative in order to determine proper treatment and disposition of the remains.
- The immediate vicinity where the Native American human remains are located is not to be damaged or disturbed by further development activity until consultation with the MLD regarding their recommendations as required by Public Resources Code Section 5097.98 has been conducted.
- Public Resources Code §5097.98, CEQA §15064.5 and Health & Safety Code §7050.5 shall be followed in the event that human remains are discovered.

- Rough Grading
  - Upon completion of Rough Grading, a monitoring report shall be prepared identifying whether resources were encountered. A copy of the monitoring report shall be provided to any culturally affiliated tribe who requests a copy.
- Final Grading
  - A final report shall be prepared substantiating that earth-disturbing activities are completed and whether cultural resources were encountered. A copy of the final report shall be submitted to the South Coastal Information Center, and any culturally affiliated tribe who requests a copy.
  - Cultural Material Conveyance
    - The final report shall include evidence that all prehistoric materials have been curated at a San Diego curation facility or Tribal curation facility that meets federal standards per 36 CFR Part 79, or alternatively have been repatriated to a culturally affiliated tribe.
    - The final report shall include evidence that all historic materials have been curated at a San Diego curation facility that meets federal standards per 36 CFR Part 79.

Cultural Resources Treatment Agreement and Preservation Plan

- Prior to the Approval of any Plan and Issuance of Any Permit
  - Enter into a Cultural Resources Treatment Agreement and Preservation Plan with the Tribe.

- A single Cultural Resources Treatment Agreement and Preservation Plan shall be developed between the applicant or their representative and the Tribe. The Cultural Resources Treatment Agreement and Preservation Plan shall be reviewed and agreed to by the County prior to final signature and authorization. The Cultural Resources Treatment Agreement and Preservation Plan shall include but is not limited to the following:
  - Parties entering into the agreement and contact information.
  - Responsibilities of the Property Owner or their representative, Principal Investigator, archaeological monitors, Kumeyaay Native American monitors, and the Tribe.
  - Requirements of the Archaeological Monitoring Program including unanticipated discoveries. The requirements shall address grading and grubbing requirements including controlled grading and controlled vegetation removal in areas of cultural sensitivity, analysis of identified cultural materials, and onsite storage of cultural materials.
  - Treatment of identified Native American cultural materials.
  - Treatment of Native American human remains and associated grave goods.
  - Requirements for Temporary Fencing for 23 sites that partially intersect or are within 50 feet of the Project ADI (CA-SDI-7140, CA-SDI-7145/7146, CA-SDI-7163, CA-SDI-8977, CA-SDI-9050, CA-SDI-19859, CA-SDI-20368, CA-SDI-20586, CA-SDI-20587, CA-SDI-20592, CA-SDI-20598, CA-SDI-20605, CA-SDI-22565, CA-SDI-22575, CA-SDI-22576, CA-SDI-22577, CA-SDI-22586, CA-SDI-22595, CA-SDI-22596, CA-SDI-22598, CA-SDI-22602, CA-SDI-20611, and P-37-038463).
  - Confidentiality of cultural information including location and data.
  - Negotiation of disagreements should they arise during the implementation of the Agreement and Preservation Plan.
  - Regulations that apply to cultural resources that have been identified or may be identified during project construction.

Long-Term Preservation of Resources

All O&M and decommissioning activities will be performed within the Project ADI – no ground-disturbing activities shall occur outside the Project ADI. Employees and contractors performing O&M and decommissioning activities will receive training or instructions regarding the

archaeological and cultural sensitivity of the Project Area to ensure no inadvertent impacts occur to the 25 potentially significant sites (or portions thereof) that are located within 50 feet of the Project ADI but were not evaluated (including the 15 sites that were partially tested and the 10 that were not evaluated). Temporary fencing will be installed during decommissioning activities to delineate the ADI.

6.3 Effects Found Not to Be Significant

A total of 47 sites and 54 isolates have been recorded outside of the Project ADI (see Table 6-1). None of these resources would be impacted by Project implementation and would be preserved in place. Ten avoided resources within 50 feet of the Project ADI would be protected by establishment of an ESA boundary and exclusionary fencing. Therefore, no significant impacts would occur to avoided resources.

Table 6-1
Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
Resources Completely or Partially Intersecting the Boulder Brush ADI					
CA-SDI-7145/7146	Multi-component	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-7163	Multi-component	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant

Table 6-1
Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-22565	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-22575	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-22576	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-22578	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Avoided/ Not Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22579	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22583	Multi-component	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22585	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant

Table 6-1
Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-22586	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
P-37-038189	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038190	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038204	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038206	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038211	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038212	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038213	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038229	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant

Table 6-1
Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
P-37-038230	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038232	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
Resources Outside the Boulder Brush ADI					
CA-SDI-4005	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-7136	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-7138	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-7139	Multi-component	County: Important; (Evaluated Portion: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Unevaluated Portion:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-7140	Prehistoric	County: Important; CEQA: Significant; RPO: Significant; CRHR: Not Eligible; Local Register: Not Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-7148	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-7149	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-7151/7162	Prehistoric	County: Important; CEQA: Significant; RPO: Significant; CRHR: Eligible; Local Register: Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant

Table 6-1
Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-7152	Prehistoric	County: Important; (Evaluated Portion: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Unevaluated Portion:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-7156	Prehistoric	County: Important; CEQA: Significant; CRHR: Eligible; RPO: Not Evaluated; Local Register: Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-18048	Historic	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-18049	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-19859	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-22564	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring;	Not Significant
CA-SDI-22566	Prehistoric	County: Important; (Evaluated Portion: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Unevaluated Portion:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-22567	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22568	Multi-component	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Avoided/ Not Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22569	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22570	Prehistoric	County: Important; (Evaluated Portion: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Unevaluated Portion:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22571	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22572	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22573	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22574	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-22577	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-22580	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Avoided/ Not Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22581	Prehistoric	County: Important; CEQA: Significant; RPO: Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring;	Not Significant
CA-SDI-22582	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22584	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22587	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22588	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
CA-SDI-22589	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-22590	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
P-37-038186	Historic	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Not Significant
P-37-038179	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038180	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038181	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038182	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038183	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038184	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038185	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038187	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant

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Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
P-37-038188	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038191	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038192	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038193	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038194	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038195	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038196	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038197	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038198	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038199	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant

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Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
P-37-038200	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038201	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038202	Historic	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038203	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038205	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038207	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038208	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038209	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038210	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038214	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant

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Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
P-37-038215	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038216	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038217	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038218	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038219	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038220	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038221	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038222	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038223	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038224	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
P-37-038225	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038226	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038227	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038228	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038231	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038233	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038463	Prehistoric	County: Important; CEQA: Significant; RPO: Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Not Significant	N/A	Not Significant
Resources Intersecting the Campo Wind ADI					
CA-SDI-8962	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-6891	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	Avoidance – Preserve in Place	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-8977	Multi-component	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-9018	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-9050	Historic	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-9059	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Avoidance (Outside ADI); Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-17205	Historic	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	(Avoidance (Outside ADI); Evaluation, Research, Collection, Curation or Repatriation, Monitoring; Temporary Fencing	Less Than Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-20368	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-20587	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Less Than Significant
CA-SDI-20588	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-20590	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-20591	Multi-component	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-20592	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring; Temporary Fencing	Not Significant
CA-SDI-20593	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-20597	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-20604	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-20605	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring; Temporary Fencing	Not Significant
CA-SDI-20608	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22599	Multi-component	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22600	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22601	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22602	Prehistoric	County: Important; (Within ADI: CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible; *Outside ADI:* CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible)	Avoided/ Not Significant	Avoidance (Outside ADI), Evaluation, Research, Collection, Curation or Repatriation, Monitoring; Temporary Fencing	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-22603	Historic	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
CA-SDI-22674	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Significant	Evaluation, Research, Collection, Curation or Repatriation, Monitoring	Less Than Significant
P-37-024023	Historic	CEQA: Significant; RPO: Not Significant; CRHR: Eligible; Local Register: Eligible	Significant	Avoidance by Project Design	Less Than Significant
P-37-025680	Historic	CEQA: Not Evaluated; RPO: Not Evaluated; CRHR: Not Evaluated; Local Register: Not Evaluated	Significant	Avoidance by Project Design; Directional Drilling or Overhead Lines; Reduced Work Area; Limit work on BIA Road 15	Less Than Significant
P-37-038280	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038285	Prehistoric	County: Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
Resources Outside the Campo Wind ADI					
CA-SDI-7258	Indeterminate	Not relocated	Not Significant	N/A	Not Significant
CA-SDI-8198	Prehistoric	Not relocated	Not Significant	N/A	Not Significant
CA-SDI-8939	Prehistoric	County: Important; CEQA: Significant; RPO: Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring;	Not Significant
CA-SDI-8945	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-8946	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-8963	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-8968	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-8980	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant
CA-SDI-8985	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-8986	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-20586	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-20594	Multi-component	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-20598	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-20599	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant

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Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
CA-SDI-20607	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-20610	Historic	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-20611	Historic	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-21776	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-22595	Prehistoric	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-22596	Multi-component	County: Important; CEQA: Significant; RPO: Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
CA-SDI-22597	Historic	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring,	Not Significant
CA-SDI-22598	Historic	County: Important; CEQA: Not Evaluated; RPO: Potentially Significant; CRHR: Potentially Eligible; Local Register: Potentially Eligible	Avoided/ Not Significant	Avoidance, Evaluation, Research, Collection, Curation or Repatriation, Monitoring, Temporary Fencing	Not Significant
P-37-032854	Prehistoric	Not Relocated	Not Significant	N/A	Not Significant

Table 6-1
Management Summary

Resource Number	Period	Significance/ Eligibility Status	Impact	Recommendations/ Mitigation Measures	Impact Significance After Mitigation
P-37-038274	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038275	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038276	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038277	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038278	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038283	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038284	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038286	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant
P-37-038287	Prehistoric	County: Not Important; CEQA: Not Significant; RPO: Not Significant; CRHR: Not Eligible; Local Register: Not Eligible	Not Significant	N/A	Not Significant

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8 LIST OF PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

Micah Hale (Dudek): Acted as Project Manager and approved the technical report.

Brad Comeau (Dudek): Acted as Principal Investigator, directed and performed laboratory analysis, and authored the technical report.

Scott Wolf and **William Burns** (Dudek): Acted as Field Directors and authored the technical report. Mr. Wolf also performed artifact analysis.

Angela Pham (Dudek): Performed artifact analysis and acted as lab crew.

Patrick Hadel, William Burns, Melissa Jenkins, Zachary Lefevre, Thomas Stanley, Javier Hernandez, David Faith, Jessica Colston, Andrew Stolzer, Kellie Kandybowicz, and **Juliette Meling** (Dudek): Acted as field and laboratory crew.

Gabe Kitchen, Phillip Pena, and **Justin Linton** (Red Tail): Acted as Native American monitors during fieldwork.

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9 RESOURCE MITIGATION MEASURES

Boulder Brush Impacted Resources (Includes Portions of Sites Intersecting ADI)	
Site Numbers	*Mitigation Measures*
CA-SDI-7145/7146 (outside ADI); CA-SDI-7163 (outside ADI); CA-SDI-22565 (Outside ADI); CA-SDI-22575 (outside ADI); CA-SDI-22576 (outside ADI); CA-SDI-22586 (outside ADI);	Avoidance by Project Design and Preservation in Place
CA-SDI-7145/7146; CA-SDI-7163; CA-SDI-22565; CA-SDI-22575; CA-SDI-22576; CA-SDI-22578; CA-SDI-22579; CA-SDI-22583; CA-SDI-22585; CA-SDI-22586	Evaluation
CA-SDI-7145/7146; CA-SDI-7163; CA-SDI-22565; CA-SDI-22575; CA-SDI-22576; CA-SDI-22578; CA-SDI-22579; CA-SDI-22583; CA-SDI-22585; CA-SDI-22586	Research
CA-SDI-7145/7146; CA-SDI-7163; CA-SDI-22565; CA-SDI-22575; CA-SDI-22576; CA-SDI-22578; CA-SDI-22579; CA-SDI-22583; CA-SDI-22585; CA-SDI-22586	Curation or Repatriation
CA-SDI-7145/7146; CA-SDI-7163; CA-SDI-22565; CA-SDI-22575; CA-SDI-22576; CA-SDI-22578; CA-SDI-22579; CA-SDI-22583; CA-SDI-22585; CA-SDI-22586	Monitoring
CA-SDI-7145/7146 (outside ADI); CA-SDI-7163 (outside ADI); CA-SDI-22565 (outside ADI); CA-SDI-22575 (outside ADI); CA-SDI-22576 (outside ADI); CA-SDI-22586 (outside ADI);	Temporary Fencing
P-37-038189; P-37-038190; P-37-038204; P-37-038206; P-37-038211; P-37-038212; P-37-038213; P-37-038229; P-37-038230; P-37-038232;	None – Isolate or Resource Does Not Exist
Boulder Brush Avoided Resources (Outside the ADI)	
Site Numbers	*Mitigation Measures*
CA-SDI-7136; CA-SDI-7139; CA-SDI-7140; CA-SDI-7151/7162; CA-SDI-7152; CA-SDI-7156; CA-SDI-18048; CA-SDI-18049; CA-SDI-19859; CA-SDI-22564; CA-SDI-22566; CA-SDI-22567; CA-SDI-22568; CA-SDI-22569; CA-SDI-22570; CA-SDI-22571; CA-SDI-22572; CA-SDI-22573; CA-SDI-22574; CA-SDI-22577; CA-SDI-22580; CA-SDI-22581; CA-SDI-22582; CA-SDI-22584; CA-SDI-22587; CA-SDI-22588; CA-SDI-22589; CA-SDI-22590; P-37-038186;	Avoided - Preservation In Place
CA-SDI-7136; CA-SDI-7139; CA-SDI-7140; CA-SDI-7151/7162; CA-SDI-7152; CA-SDI-7156; CA-SDI-18048; CA-SDI-18049; CA-SDI-19859; CA-SDI-22564; CA-SDI-22566; CA-SDI-22567; CA-SDI-22568; CA-SDI-22569; CA-SDI-22570; CA-SDI-22571; CA-SDI-22572; CA-SDI-22573; CA-SDI-22574; CA-SDI-22577; CA-SDI-22580; CA-SDI-22581; CA-SDI-22582; CA-SDI-22584; CA-SDI-22587; CA-SDI-22588; CA-SDI-22589; CA-SDI-22590; P-37-038186;	Evaluation

CA-SDI-7136; CA-SDI-7139; CA-SDI-7140; CA-SDI-7151/7162; CA-SDI-7152; CA-SDI-7156; CA-SDI-18048; CA-SDI-18049; CA-SDI-19859; CA-SDI-22564; CA-SDI-22566; CA-SDI-22567; CA-SDI-22568; CA-SDI-22569; CA-SDI-22570; CA-SDI-22571; CA-SDI-22572; CA-SDI-22573; CA-SDI-22574; CA-SDI-22577; CA-SDI-22580; CA-SDI-22581; CA-SDI-22582; CA-SDI-22584; CA-SDI-22587; CA-SDI-22588; CA-SDI-22589; CA-SDI-22590; P-37-038186;	Research
CA-SDI-7136; CA-SDI-7139; CA-SDI-7140; CA-SDI-7151/7162; CA-SDI-7152; CA-SDI-7156; CA-SDI-18048; CA-SDI-18049; CA-SDI-19859; CA-SDI-22564; CA-SDI-22566; CA-SDI-22567; CA-SDI-22568; CA-SDI-22569; CA-SDI-22570; CA-SDI-22571; CA-SDI-22572; CA-SDI-22573; CA-SDI-22574; CA-SDI-22577; CA-SDI-22580; CA-SDI-22581; CA-SDI-22582; CA-SDI-22584; CA-SDI-22587; CA-SDI-22588; CA-SDI-22589; CA-SDI-22590; P-37-038186;	Curation or Repatriation
CA-SDI-7136; CA-SDI-7139; CA-SDI-7140; CA-SDI-7151/7162; CA-SDI-7152; CA-SDI-7156; CA-SDI-18048; CA-SDI-18049; CA-SDI-19859; CA-SDI-22564; CA-SDI-22566; CA-SDI-22567; CA-SDI-22568; CA-SDI-22569; CA-SDI-22570; CA-SDI-22571; CA-SDI-22572; CA-SDI-22573; CA-SDI-22574; CA-SDI-22577; CA-SDI-22580; CA-SDI-22581; CA-SDI-22582; CA-SDI-22584; CA-SDI-22587; CA-SDI-22588; CA-SDI-22589; CA-SDI-22590; P-37-038186;	Monitoring
CA-SDI-7140; CA-SDI-19859; CA-SDI-22577	Temporary Fencing
CA-SDI-4005; CA-SDI-7138; CA-SDI-7148; CA-SDI-7149; P-37-038179; P-37-038180; P-37--038181; P-37-038182; P-37--038183; P-37-038184; P-37-038195; P-37--38187; P-37--038188; P-37-I-038191; P-37--038192; P-37--038193; P-37--038194; P-37--038195; P-37--038196; P-37--038197; P-37--038198; P-37--038199; P-37--038200; P-37--038201; P-37--038202; P-37--038203; P-37--038205; P-37--038207; P-37--038208; P-37--038209; P-37--038210; P-37--038214; P-37--038215; P-37--038216; P-37--038217; P-37--038218; P-37-038219; P-37--038220; P-37--038221; P-37--038222; P-37-038223, P-37--038224; P-37--038225; P-37--038226; P-37--038227; P-37--038228; P-37-038231; P-37-038233, P-37-038463	None – Isolate or Resource Does Not Exist
Campo Wind Impacted Resources (Includes Portions of Sites Intersecting ADI)	
Site Numbers	*Mitigation Measures*
CA-SDI-6891; CA-SDI-8977 (outside ADI); CA-SDI-9050 (outside ADI); CA-SDI-9059 (outside ADI); CA-SDI-17205 (Outside ADI); CA- CA-SDI-20368 (outside ADI); CA-SDI-20587 (outside ADI); CA-SDI-20592 (outside ADI); CA-SDI-20605 (outside); CA-SDI-22602 (outside ADI); P-37-024023 (outside ADI); P-37-025680 (outside ADI)	Avoidance by Project Design and Preserved in Place

CA-SDI-8977; CA-SDI-9018; CA-SDI-9050; CA-SDI-9059; CA-SDI-17205; CA-SDI-20368; CA-SDI-20587; CA-SDI-20588; CA-SDI-20590; CA-SDI-20591; CA-SDI-20592; CA-SDI-20593; CA-SDI-20597; CA-SDI-20604; CA-SDI-20605; CA-SDI-20608; CA-SDI-22599; CA-SDI-22600; CA-SDI-22601; CA-SDI-22602; CA-SDI-22603; CA-SDI-22674; P-37-024023; P-37-025680	Evaluation
CA-SDI-8977; CA-SDI-9018; CA-SDI-9050; CA-SDI-9059; CA-SDI-17205; CA-SDI-20368; CA-SDI-20587; CA-SDI-20588; CA-SDI-20590; CA-SDI-20591; CA-SDI-20592; CA-SDI-20593; CA-SDI-20597; CA-SDI-20604; CA-SDI-20605; CA-SDI-20608; CA-SDI-22599; CA-SDI-22600; CA-SDI-22601 CA-SDI-22602; CA-SDI-22603; CA-SDI-22674; P-37-024023; P-37-025680	Research
CA-SDI-8977; CA-SDI-9018; CA-SDI-9050; CA-SDI-9059; CA-SDI-17205; CA-SDI-20368; CA-SDI-20587; CA-SDI-20588; CA-SDI-20590; CA-SDI-20591; CA-SDI-20592; CA-SDI-20593; CA-SDI-20597; CA-SDI-20604; CA-SDI-20605; CA-SDI-20608; CA-SDI-22599; CA-SDI-22600; CA-SDI-22601 CA-SDI-22602; CA-SDI-22603; CA-SDI-22674;	Curation or Repatriation
CA-SDI-8977; CA-SDI-9018; CA-SDI-9050; CA-SDI-9059; CA-SDI-17205; CA-SDI-20368; CA-SDI-20587; CA-SDI-20588; CA-SDI-20590; CA-SDI-20591; CA-SDI-20592; CA-SDI-20593; CA-SDI-20597; CA-SDI-20604; CA-SDI-20605; CA-SDI-20608; CA-SDI-22599; CA-SDI-22600; CA-SDI-22601 CA-SDI-22602; CA-SDI-22603; CA-SDI-22674;	Monitoring
CA-SDI-8962; P-37-038280; P-37-038285	None – Isolate or Resource Does Not Exist
P-37-024023	Avoidance – No Modification of existing road allowed
P-37-025680	Directional Drilling and/or Overhead Collector Lines; Reduced Turbine Pad; Limit Modifications of BIA Road 15
Campo Wind Avoided Resources (Outside ADI)	
Site Numbers	*Mitigation Measures*
CA-SDI-8939; CA-SDI-8945; CA-SDI-8963; CA-SDI-8985; CA-SDI-8986; CA-SDI-20586; CA-SDI-20594; CA-SDI-20598; CA-SDI-20599; CA-SDI-20607; CA-SDI-20610; CA-SDI-20611; CA-SDI-21776; CA-SDI-22595; CA-SDI-22596; CA-SDI-22597; CA-SDI-22598;	Avoided - Preserved in Place
CA-SDI-8939; CA-SDI-8945; CA-SDI-8963; CA-SDI-8985; CA-SDI-8986; CA-SDI-20586; CA-SDI-20594; CA-SDI-20598; CA-SDI-20599; CA-SDI-20607; CA-SDI-20610; CA-SDI-20611; CA-SDI-21776; CA-SDI-22595; CA-SDI-22596; CA-SDI-22597; CA-SDI-22598;	Evaluation
CA-SDI-8939; CA-SDI-8945; CA-SDI-8963; CA-SDI-8985; CA-SDI-8986; CA-SDI-20586; CA-SDI-20594; CA-SDI-20598; CA-SDI-20599; CA-SDI-20607; CA-SDI-20610; CA-SDI-20611; CA-SDI-21776; CA-SDI-22595; CA-SDI-22596; CA-SDI-22597; CA-SDI-22598;	Research

CA-SDI-8939; CA-SDI-8945; CA-SDI-8963; CA-SDI-8985; CA-SDI-8986; CA-SDI-20586; CA-SDI-20594; CA-SDI-20598; CA-SDI-20599; CA-SDI-20607; CA-SDI-20610; CA-SDI-20611; CA-SDI-21776; CA-SDI-22595; CA-SDI-22596; CA-SDI-22597; CA-SDI-22598;	Curation or Repatriation
CA-SDI-8939; CA-SDI-8945; CA-SDI-8963; CA-SDI-8985; CA-SDI-8986; CA-SDI-20586; CA-SDI-20594; CA-SDI-20598; CA-SDI-20599; CA-SDI-20607; CA-SDI-20610; CA-SDI-20611; CA-SDI-21776; CA-SDI-22595; CA-SDI-22596; CA-SDI-22597; CA-SDI-22598;	Monitoring
CA-SDI-7258; CA-SDI-8198; CA-SDI-8946; CA-SDI-8968; CA-SDI-8980; P-37-032854; P-37-038274; P-37-038275; P-37-038276; P-37-038277; P-37-038278; P-37-038283; P-37-038284; P-37-038286; P-37-038287	None – Isolate or Resource Does Not Exist

APPENDIX A – CONFIDENTIAL

Records Search Results

APPENDIX B – CONFIDENTIAL

Resource Location Maps and DPR Forms

APPENDIX C – CONFIDENTIAL

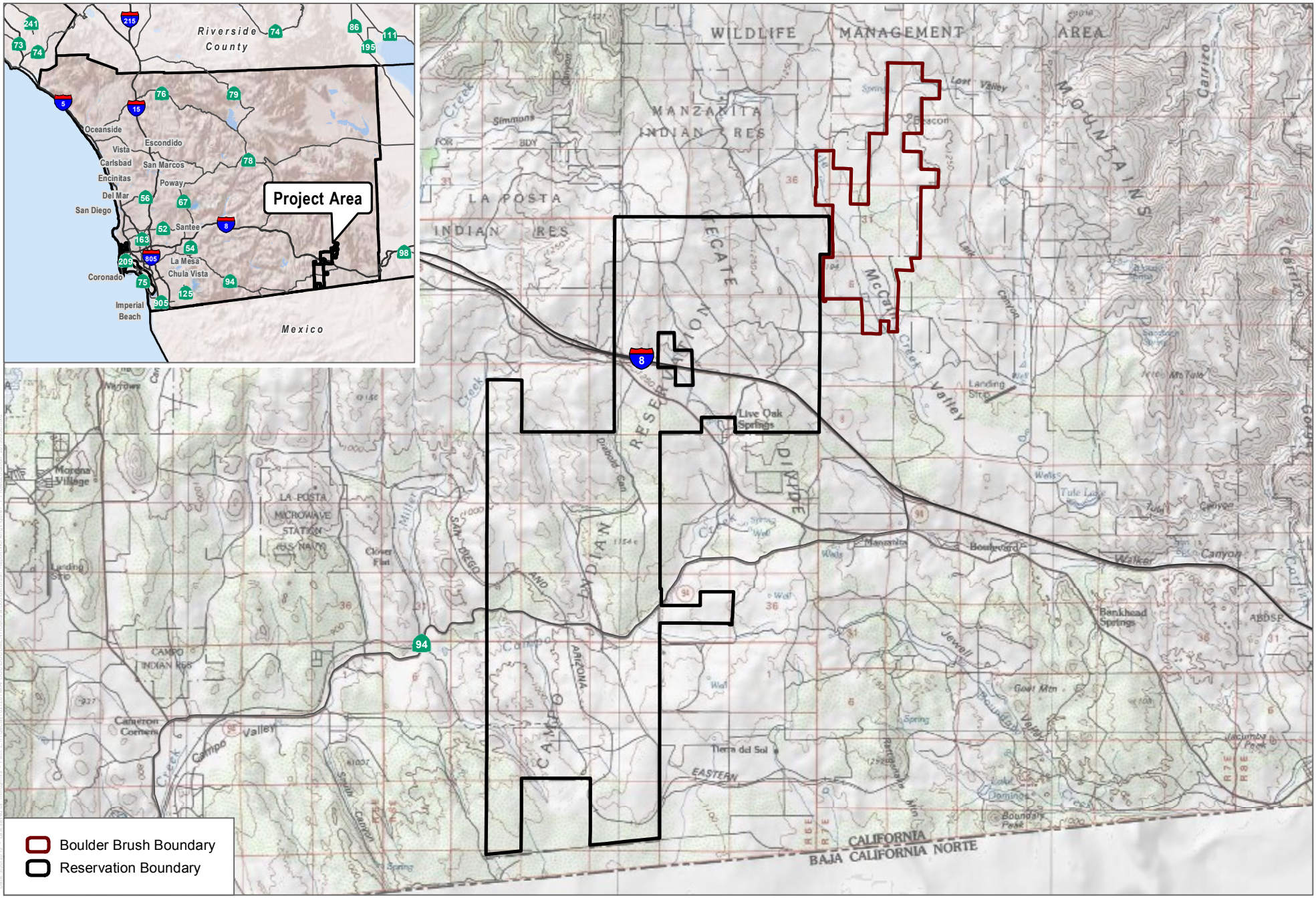
Artifact Catalog and Analysis Tables

APPENDIX D – CONFIDENTIAL

Tribal Documentation

APPENDIX E

Report Figures



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

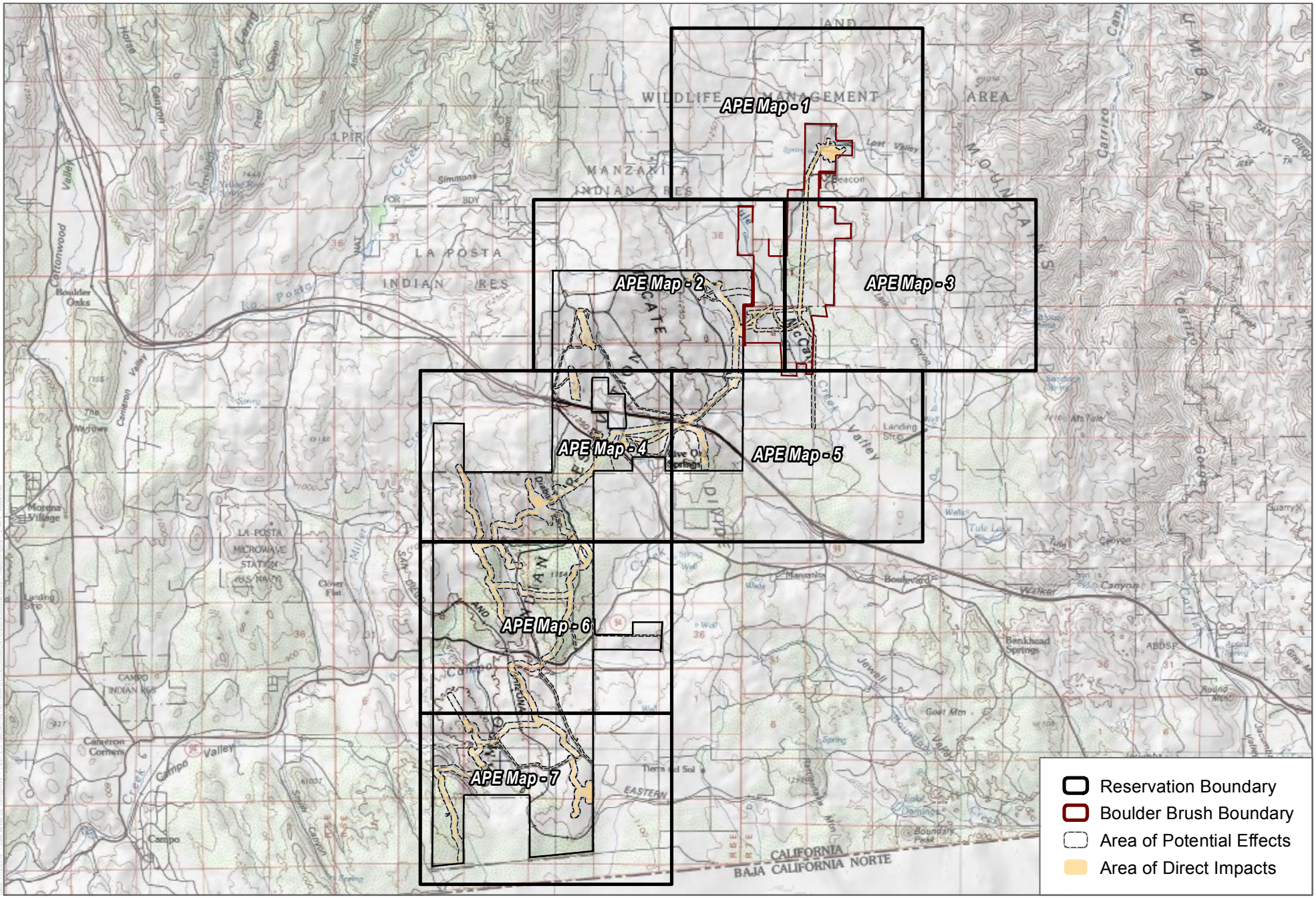
0 5,000 10,000 Feet

0 1,400 2,800 Meters

FIGURE 1-1

Project Location

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

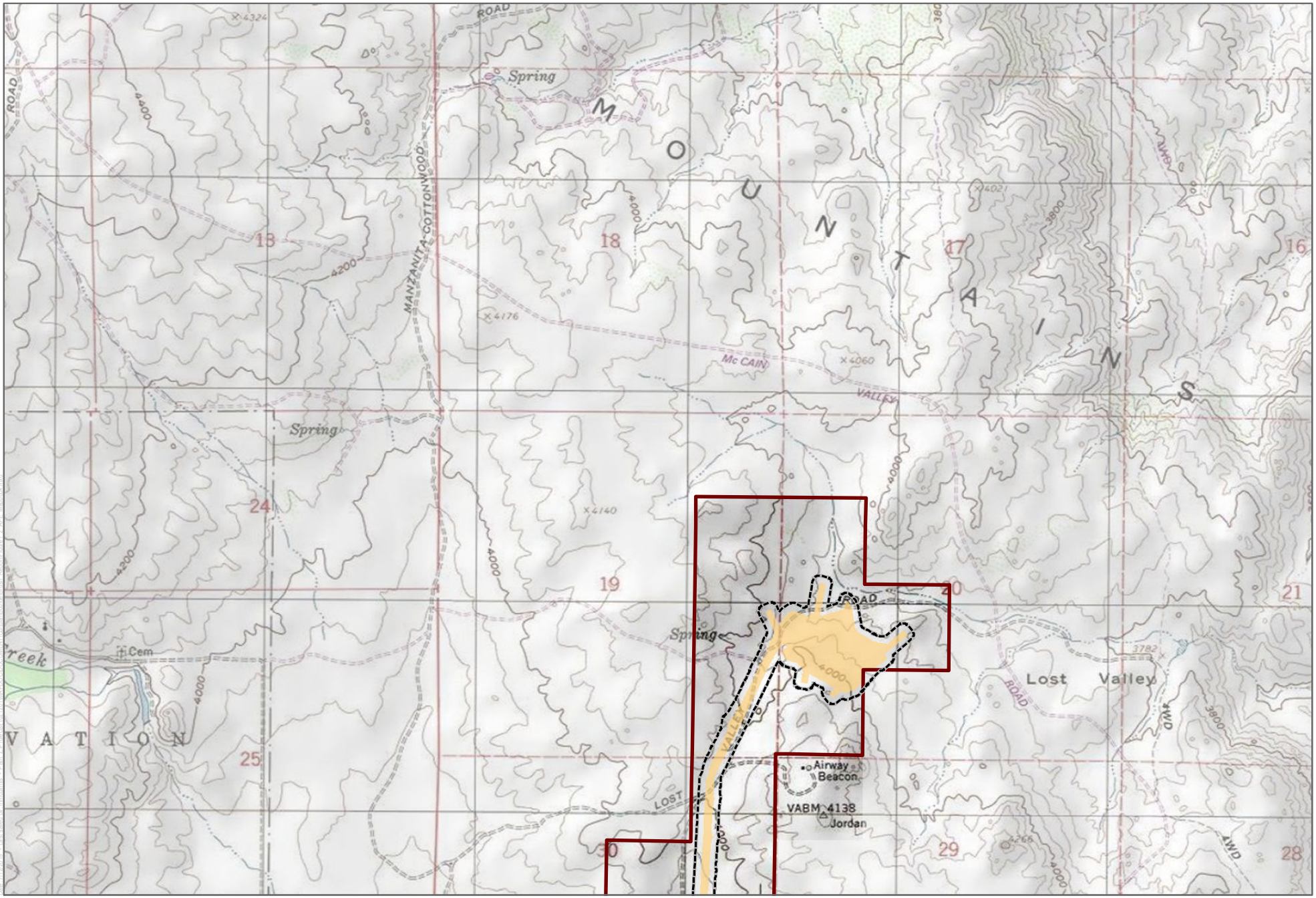
DUDEK

0 5,000 10,000 Feet
0 1,500 3,000 Meters

FIGURE 1-2

APE Index Map

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

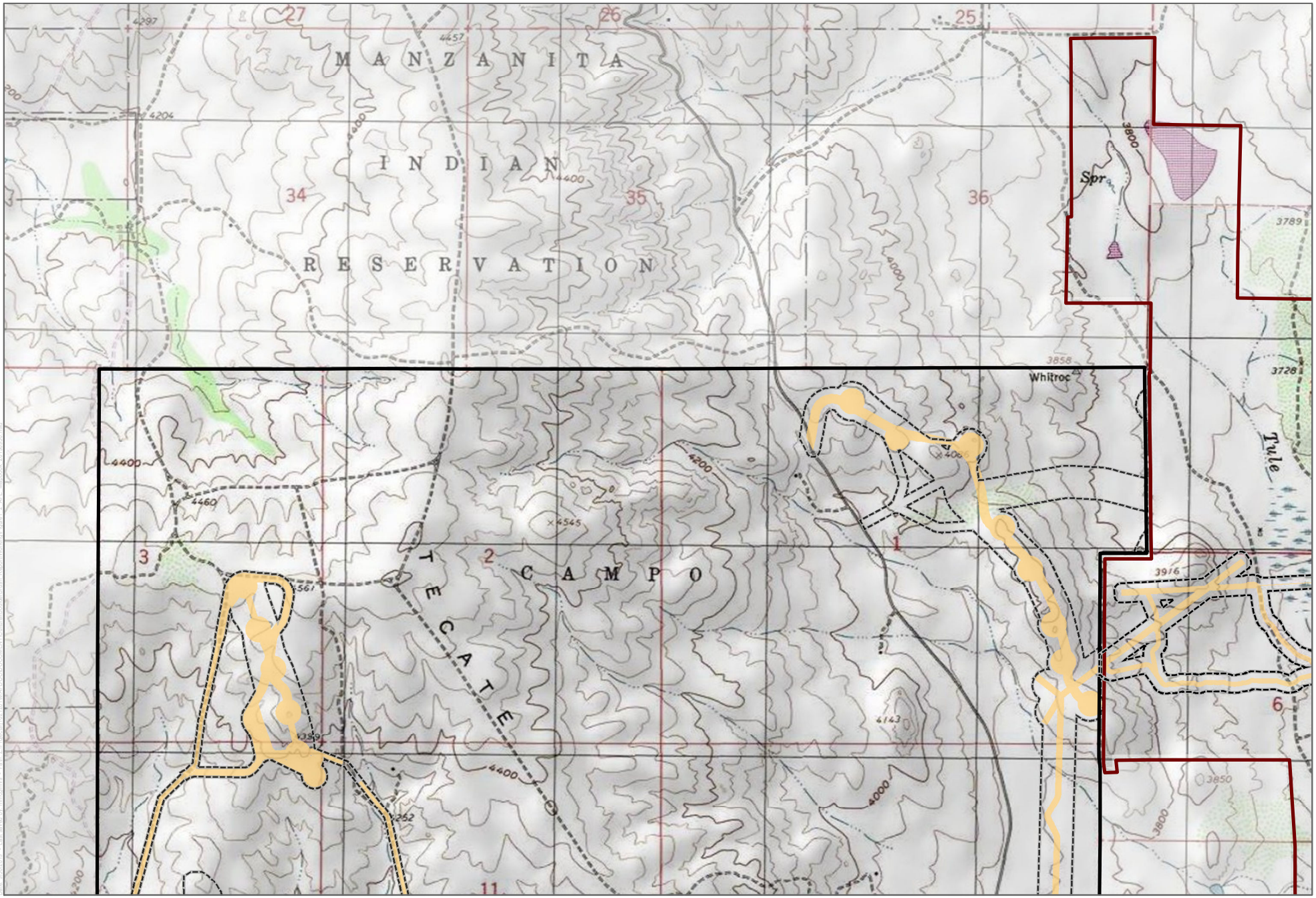
0 1,000 2,000 Feet

Reservation Boundary
Boulder Brush Boundary
Area of Potential Effects
Area of Direct Impacts

FIGURE 1-2

APE Map - 1

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

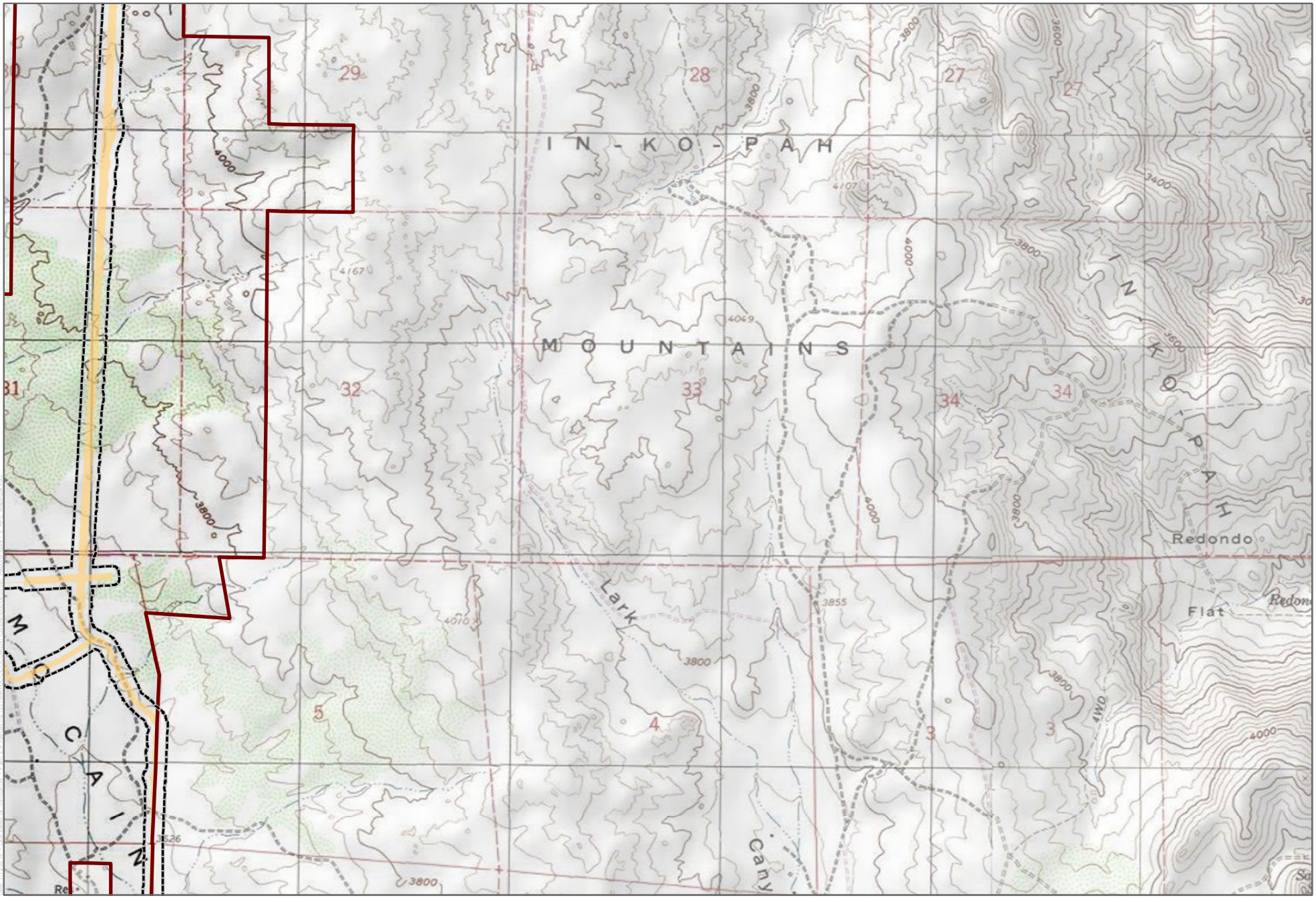
0 1,000 2,000 Feet

Reservation Boundary
Boulder Brush Boundary
Area of Potential Effects
Area of Direct Impacts

FIGURE 1-2

APE Map - 2

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

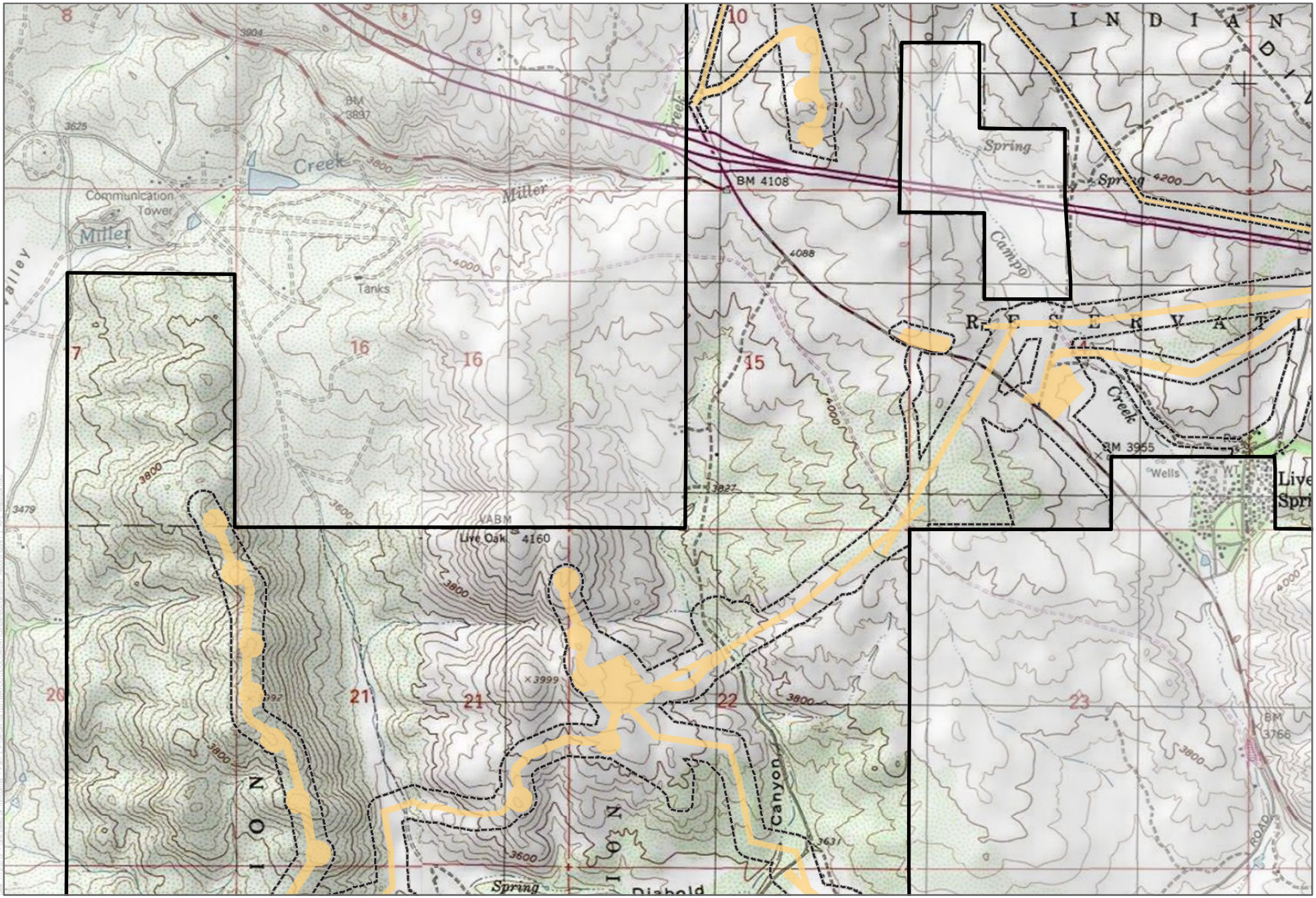
0 1,000 2,000 Feet

Reservation Boundary
Boulder Brush Boundary
Area of Potential Effects
Area of Direct Impacts

FIGURE 1-2

APE Map - 3

Campo Wind Project with Boulder Brush Facilities

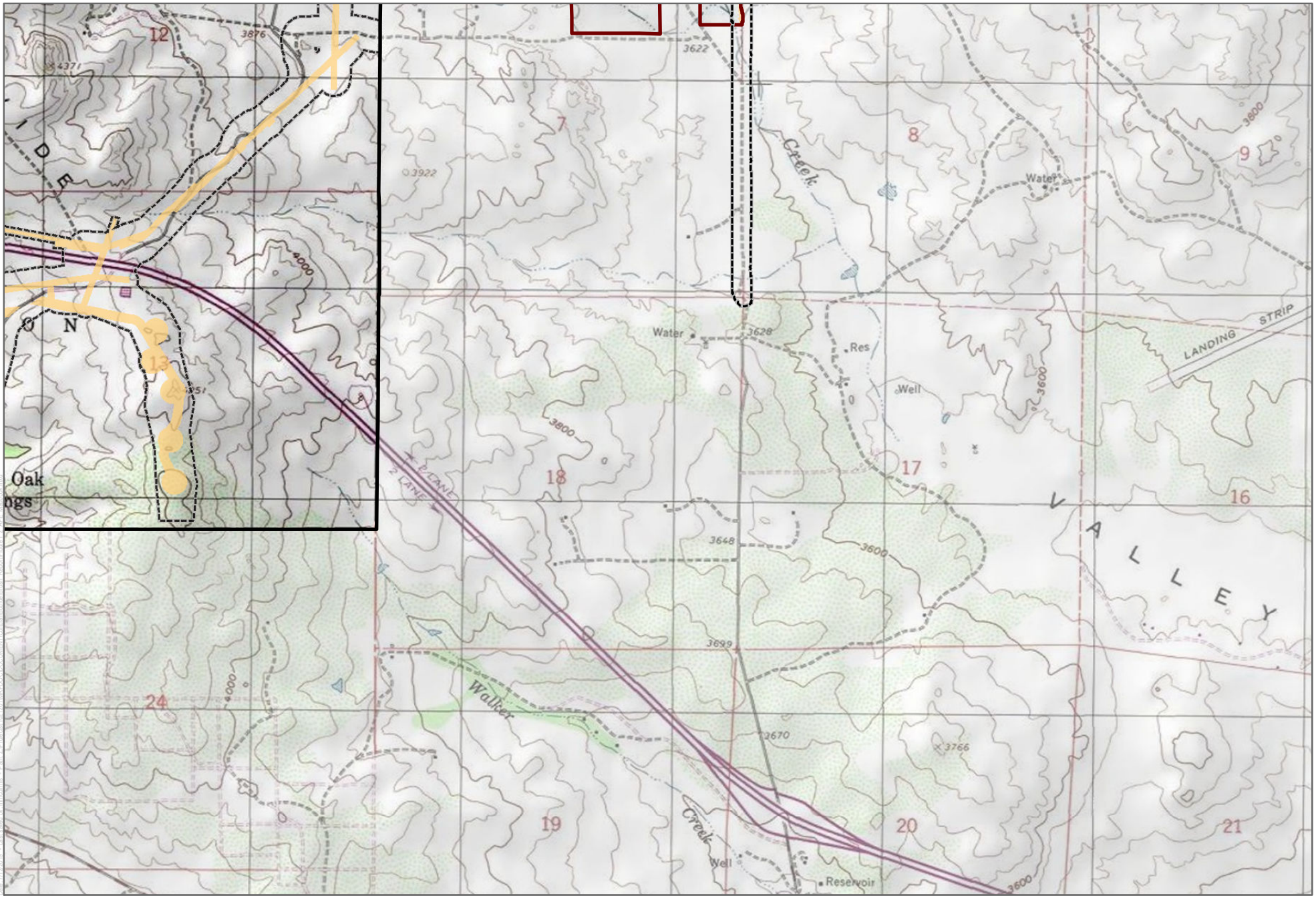


DUDEK

FIGURE 1-2

APE Map - 4

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

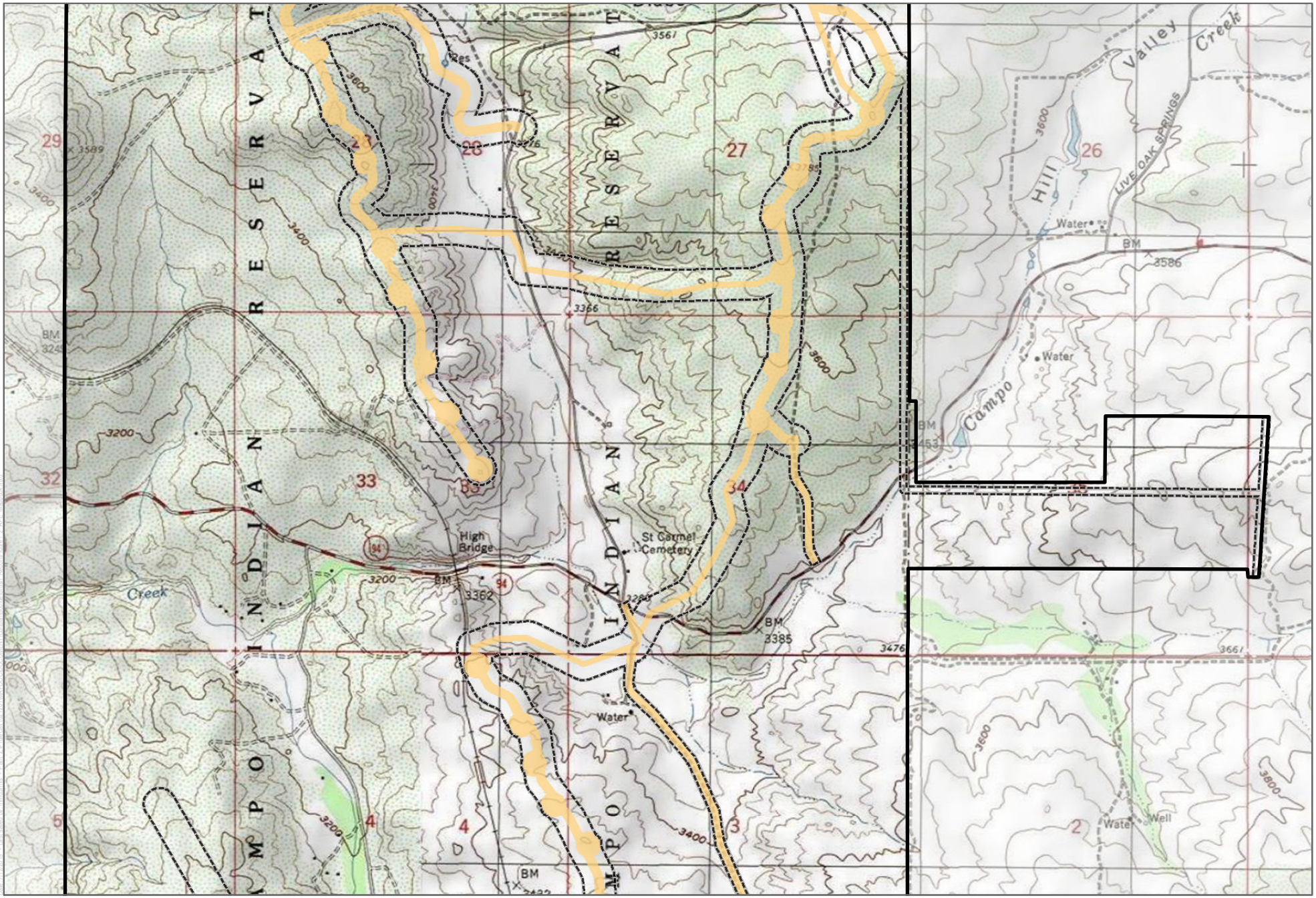
0 1,000 2,000 Feet

Reservation Boundary
Boulder Brush Boundary
Area of Potential Effects
Area of Direct Impacts

FIGURE 1-2

APE Map - 5

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

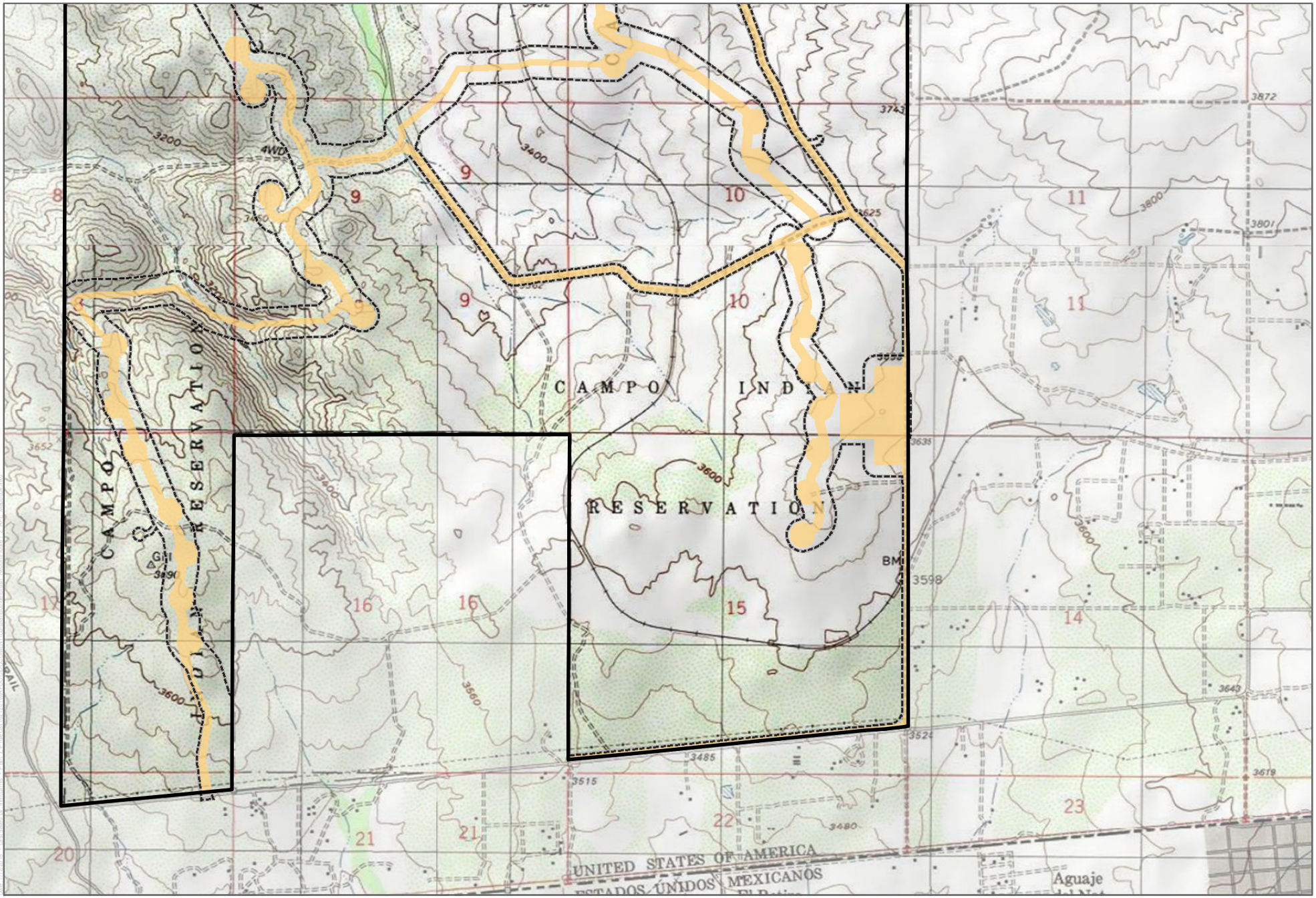
0 1,000 2,000 Feet

Reservation Boundary
Boulder Brush Boundary
Area of Potential Effects
Area of Direct Impacts

FIGURE 1-2

APE Map - 6

Campo Wind Project with Boulder Brush Facilities



SOURCE: USGS 7.5-minute Quadrangle

DUDEK

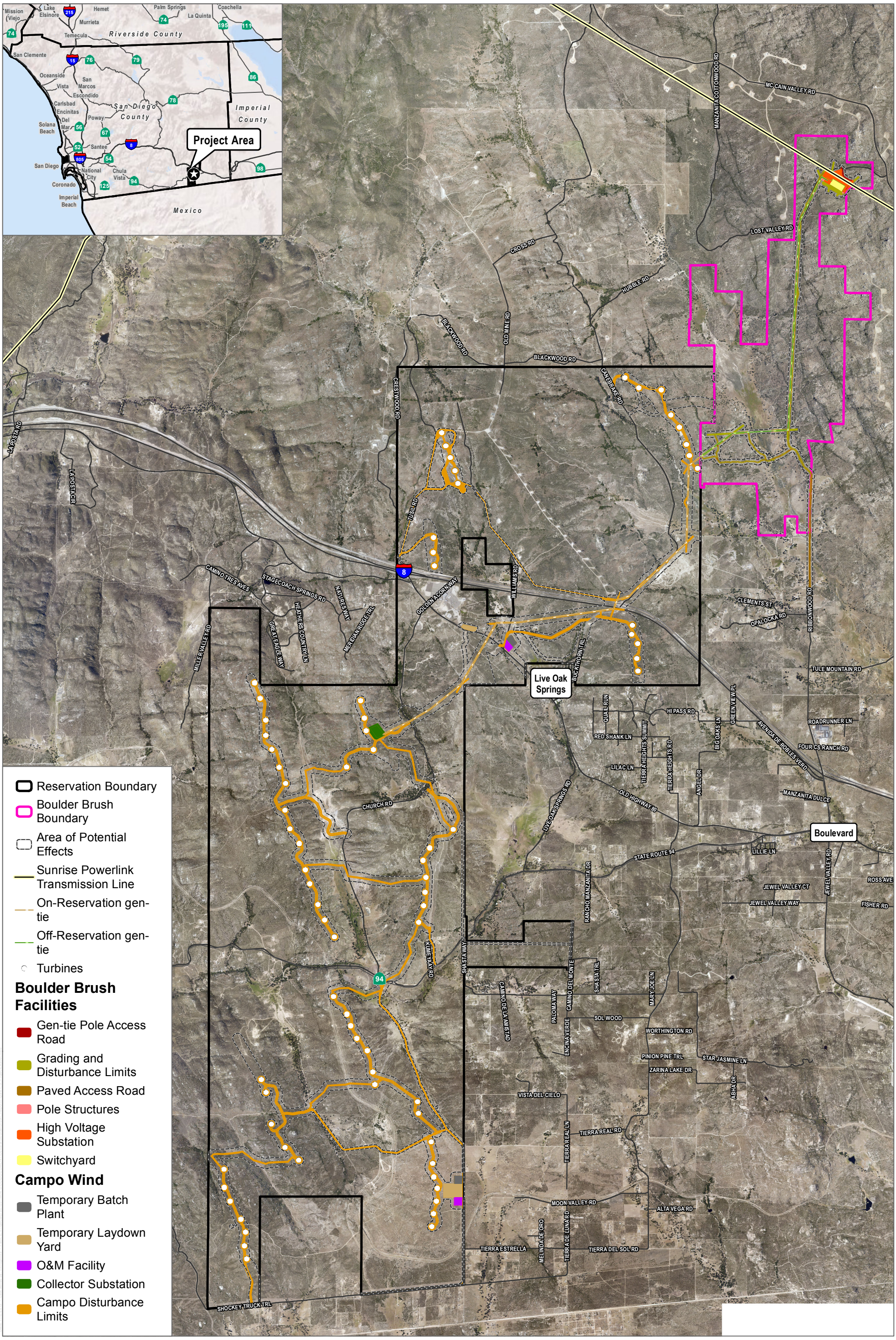
0 1,000 2,000 Feet

Reservation Boundary
Boulder Brush Boundary
Area of Potential Effects
Area of Direct Impacts

FIGURE 1-2

APE Map - 7

Campo Wind Project with Boulder Brush Facilities



SOURCE: SANGIS 2017

DUDEK

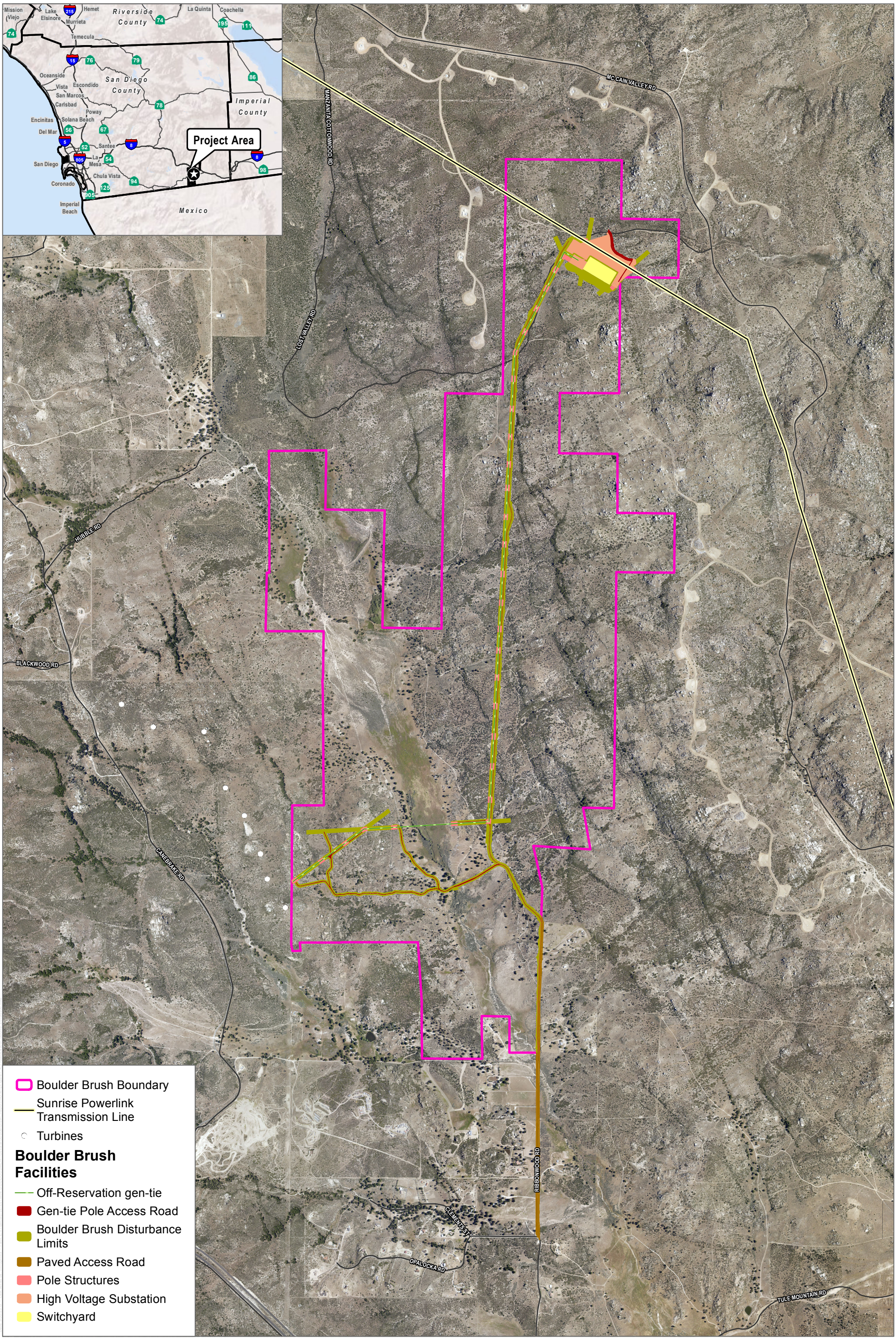
0 1,950 3,900 Feet

0 550 1,100 Meters

FIGURE 1-3

Project Layout

Campo Wind Project with Boulder Brush Facilities



SOURCE: SANGIS 2017

DUDEK

0 875 1,750 Feet

0 245 490 Meters

FIGURE 1-4

Project Layout - Boulder Brush Facilities

Campo Wind Project with Boulder Brush Facilities