

**APPENDIX I**

**CULTURAL RESOURCES TECHNICAL REPORT**

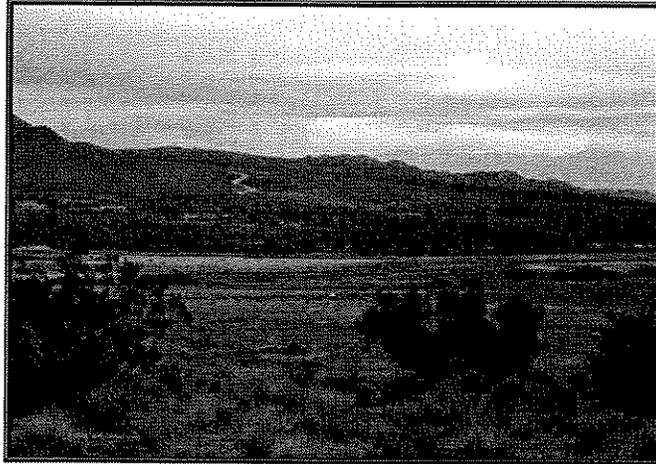






**Draft Cultural Resource Assessment Report  
Victorville 2 Hybrid Power Project  
San Bernardino County, California**

Partial Disclosure: For Purposes of Confidentiality, Site Location Data Have Been Removed  
From This Report



Prepared for:

ENSR Corporation  
1220 Avenida Acaso  
Camarillo, CA 93012

Prepared by:



William Self Associates, Inc.  
P.O. Box 2192  
Orinda, CA 94563  
(925) 253-9070

**DRAFT**

February 2007







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Prepared for:

ENSR Corporation  
1220 Avenida Acaso  
Camarillo, CA 93012

Prepared by:

Allen Estes, Thomas Young, Nazih Fino, Aimee Arrigoni, Eric Strother, and James Allan  
William Self Associates, Inc.  
P.O. Box 2192  
Orinda, CA 94563  
(925) 253-9070

February 2007







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## MANAGEMENT REVIEW

William Self Associates, Inc. (WSA) has been contracted by ENSR Corporation (ENSR) to perform a cultural resource assessment for the Victorville 2 Hybrid Power Project (VV 2 Project or Project) in Victorville, California. The Project will involve construction of a new hybrid power plant (a combination of natural-gas fired combined-cycle power generation technology and solar thermal power generation technology), along with associated transmission lines, and natural gas fuel, water supply, and sanitary wastewater pipelines. The surveyed area included the main plant site, two laydown areas adjacent to the plant site, and the Project's linear features, i.e., transmission, water/wastewater and natural gas line corridors.

Record searches at the San Bernardino Archaeological Information Center, San Bernardino County Museum (SBAIC) indicated the presence of recorded historic and Native American sites within a ¼-mile radius of all Project components. The record search also included a search within a 1-mile radius of the VV 2 main plant site area in order to comply with the California Energy Commission's (CEC) guidelines. Seven previously recorded historic sites were located in the immediate Project area. Results of the additional record search indicated that there are no significant cultural resources in the expanded buffer whose setting might be impacted by the project. The Native American Heritage Commission had no additional information regarding sacred sites in the area. An archaeological survey of the Project area resulted in the identification of previously unrecorded historic and prehistoric resources.

During a series of pedestrian surveys of the Project area, WSA recorded 44 sites, none of which are considered significant cultural resources according to CEQA criteria. The proposed construction of the power plant and associated linear features will pose no significant impacts to any known resources in the Project area. However, buried features of many kinds can remain undetected until being discovered during construction. At that time they must be evaluated and a determination made as to their significance. Should any resources be discovered during construction, their significance would have to be determined in terms of the criteria for eligibility for inclusion in the California Register of Historical Resources (CRHR).

All materials compiled in preparation for this assessment report, including copies of archival materials obtained from the SBAIC, field survey notes, and photographs, will be stored at the corporate office of William Self Associates, Inc., P.O. Box 2192, Orinda, CA 94563.







## **PROJECT DESCRIPTION AND LOCATION**

The proposed Victorville 2 Hybrid Power Project (VV 2 Project or Project) involves construction of a new power plant in Victorville, California, along with associated transmission lines (T-Lines), a natural gas supply pipeline, a water supply pipeline, and a sanitary wastewater pipeline. The proposed new power plant is a hybrid facility with a total output of 570MW, including natural gas-fired, combined cycle generation equipment integrated with 50 MW of solar thermal generating equipment.

The Project plant site is located approximately 1 mile north of the Southern California Logistics Airport (SCLA), which occupies the historic George Air Force Base, within San Bernardino County (see Figure 1). It is within Township 6 North, Range 5 West, Sections 24, 13, 12, 11 and 2 (Victorville, Victorville NW and Helendale 7.5-minute USGS Topographic Quads), and Township 7 North, Range 5 West, Section 35 (Helendale and Victorville NW 7.5-minute USGS Topographic Quads) (Figures 2 and 3).

ENSR Corporation (ENSR) has contracted William Self Associates, Inc. (WSA) to perform a cultural resource assessment of the proposed Project. In accordance with our contract, WSA implemented a complete record search of a ¼-mile radius surrounding all proposed Project construction locations, conducted an intensive pedestrian field survey, and prepared an impact assessment of the proposed Project. The record search area for the Project was expanded to cover a 1-mile radius around the VV 2 main plant site area in order to comply with California Energy Commission's (CEC) guidelines.

The Project's transmission line is divided into three segments. Segment 1 involves 4.3 miles of new 230 kV T-line extending south from the power plant site in a new Right of Way (ROW). It also involves modifications to the power transmission system in existing Southern California Edison (SCE) Rights of Way (ROW) between the location approximately 1.5 miles south of the existing High Desert Power Project (HDPP) where the Project's new T-Line connects with the existing transmission grid, and the existing Lugo substation further to the south in Hesperia, California. The 5.7-mile reach between the tie-in point and the existing Victor Substation (T-Line, Segment 2) primarily will require adding power lines to existing transmission towers in the existing SCE ROW; at three locations where power lines belonging to another utility organization cross the ROW that will be used by the VV 2 Project, new under-crossing towers will be required for the Project. The approximately 11-mile section between the Victor Substation and the Lugo Substation (T-Line, Segment 3) will require new transmission tower and lines to be added. For most of T-Line, Segment 3, new transmission towers will be constructed in locations that currently contain 115 kV towers; approximately 6½ miles of relocated 115 kV line will be installed on new poles approximately 200 feet to the east in the same ROW. The disturbance created by the construction of the VV 2 Project 230-kV towers

will be limited to the locations of the current 115 kV towers. Over the final 1-mile stretch of SCE ROW leading to the Lugo substation at the southernmost end of the segment, new transmission towers will be built along the alignment in locations not previously occupied by towers. WSA conducted cultural resource pedestrian surveys in all areas of potential VV 2 Project disturbance.

## **NATURAL AND CULTURAL SETTING**

### ***Environmental Setting***

The Mojave Desert is a vast basin situated between two major fault lines – the Garlock Fault on the north (bounded by the Tehachapi Mountains) and the San Andreas Fault on the west (bounded by the San Gabriel Mountains). The desert extends eastward into Nevada and Arizona, with the San Bernardino, Little San Bernardino, and Eagle Mountains forming its southern margin. Mountain ranges are visible throughout the Mojave, and extensive valleys are found on its margin. The floor of the Mojave is primarily alluvial fill – sands and gravels that have eroded from the surrounding mountains (Schoenherr 1995:411). The average elevation of the Mojave Desert is 3,500 ft. above sea level (Schoenherr 1995:13).

Fluctuations in temperature, moisture variation, and seasonality through time have altered vegetation zones, which developed in response to climatic conditions. In moister times, vegetation zones in the valleys and basins developed down slope. When the climate became drier, the vegetation zones developed up the slopes of the mountains, leaving the lower lands with sparser, arid-adapted vegetation. The impact of changes in climate and vegetation on the prehistoric populations of the Mojave Desert cannot be overemphasized.

### **Pleistocene**

During the latter part of the Pleistocene (25,000-10,000 years ago), temperatures in California were cool and moist, causing widespread glaciations and the creation of numerous deep pluvial lakes (Antevs 1953a, 1955). Worldwide, so much water was trapped in glacial ice that sea levels were lower than they are today, exposing a portion of the California coast that is now inundated. In the lower elevations of the California interior, there was considerable rainfall (Chartkoff and Chartkoff 1984:59). Pluvial lakes were common within the Mojave Desert and were an essential source of food and water for the earliest inhabitants of the desert.

### **Holocene**

During the Holocene, or recent epoch (10,000 years ago to present day), the temperatures in interior California rose, bringing warmer conditions to the desert valleys and less precipitation to the surrounding mountains (Chartkoff and Chartkoff 1984:68). Antevs

(1953a, 1953b, 1955) has divided the recent epoch into three distinct intervals: the Anathermal (9,000-7,000 years ago), the Altithermal (7,000-4,000 years ago) and the Medithermal (4,000 years ago to present day). The details of Antevs' model are not universally accepted, and continued research is providing new and more reliable information about regional conditions and fluctuations throughout the western states. However, his concept provides a framework within which to view the prehistoric climate and landscape of interior California.

Antevs' model for the Great Basin (the immense area formed by the Sierra Nevada, Columbia Plateau and Rocky Mountains) hypothesizes a climate at the beginning of the Anathermal period that was similar to the climate of the 20<sup>th</sup> century. However, a warming trend began during the Anathermal that led to subhumid and semiarid conditions and a rise in lake levels. During the Altithermal, the warming trend accelerated until the conditions were more arid than those existing at present. Antevs suggests that the glaciers and ice sheets completely melted, and the pluvial lakes in the low-lying basins disappeared. In some instances, the arid conditions lasted for so long that the accumulated salts in the lake beds were completely blown away or buried. During the following Medithermal, moister conditions prevailed, even though the Great Basin remained arid to semiarid. During this time, beginning about 4,000 years ago, the glaciers and ice sheets reformed and the basins refilled, forming lakes. The Medithermal is characterized by fluctuations in temperature and climate – some bringing extreme drought conditions. Lake levels rose shortly after the onset of the Altithermal, as temperatures began to rise toward the levels found today.

### **Modern**

Topographic differences between basins and adjacent mountain ranges create climatic variations. The Mojave Desert can experience blistering summer heat: maximum daytime temperatures above 100° F (37.7° C) are frequent. The range of temperatures during the summer can vary by as much as 30-40° F, because of hot days and cool nights. Winter temperatures are mild with little rain and abundant sunshine. They generally reach a daytime maximum of 50-70° F (10-21° C). Polar air masses or passage of a cyclonic storm can cause major temperature variations in the desert. Winter nocturnal temperatures are often well below freezing. Winds, which blow especially strong in spring and winter, are characteristic features of the Mojave climate (Lantis, Steiner, and Karinen 1989:48-51). Although thunderstorms occasionally occur in summer, most precipitation usually falls in winter. Rainfall is sparse throughout the Mojave Desert, averaging about 4 inches annually (Schoenherr 1995:406).

The average minimum winter temperature in Victorville is 30° F and in Barstow (approximately 30 miles north of Victorville) 33° F (0.5° C). The average maximum summer temperature is 97° F (36.1° C), with the highest temperature of 116° F (46.6° C)

recorded at Barstow (United States Department of Agriculture 1986:4). The annual precipitation in Victorville is 5 inches, and in Barstow it is 4 inches. Thirty percent of the annual precipitation falls between April and September. Thunderstorms occur about three days of each year, mostly during the summer. Intense rainstorms accelerate sheet and gully erosion (United States Department of Agriculture 1986:125). Sand is lifted and carried by winds that reach speeds greater than 12 mph. The windiest times of the year are March through June. Wind speeds that exceed 12 mph have been recorded 22 percent of the year at SCLA in Victorville. Wind direction on the Mojave varies with location, but at SCLA the most erosive winds come from the south and west (United States Department of Agriculture 1986:5, 6).

Alkali soils devoid of vegetation are characteristic of the lowest elevations in the Mojave Desert. Vegetation is sparse consisting mostly of desert shrubs and an intermittent understory of annual and perennial grasses and herbs (United States Department of Agriculture 1986:126). The vegetation is predominately Shadscale Scrub and, at slightly higher elevations, Creosote bush scrub. As the elevation increases, Blackbrush may flourish. Where elevations are sufficient for the soils to be both coarse and nonalkaline, and where there may be winter snowfall, the dominant vegetation is the Joshua tree, as well as other leaf succulent yuccas. Piñon pines grow in elevations above the Joshua tree zone, and Desert Willows and Honey Mesquite may be found along washes (Schoenherr 1995:410-413). Although most of the Mojave Desert is extremely arid, some areas, such as Antelope Valley, support limited farming.

### ***Cultural Setting***

#### **Prehistory**

Although the Mojave Desert is an area believed to have had limited prehistoric food resources and surface water, it supported a long and occasionally dense human population, particularly in Antelope Valley (Moseley and Smith 1962). Recorded archaeological sites document the evidence for villages and camps, burials, quarries, rock features, and bedrock mortars. Sites may be readily visible on the valley floor, a function of sparse vegetation and continual erosion. This has resulted in the loss of these cultural resources when they lie near populated areas because of illegal collection and site looting. These sites may contain evidence of a lengthy prehistoric time span. Although early archaeological remains are not found frequently, when they are, they are usually located along the margins of pluvial lakes or in areas of dune deflation. Conversely, artifacts on the desert floor may be sparse, widely scattered, and not easily recognized among the desert pavement. Archaeologists have reached a broad consensus regarding the region's basic cultural chronology, basing this on an observed sequence of assemblages that are identified predominantly by their distinctive types of projectile points (Bamforth 1990:72).

*Paleoindian Period (12,000-7,000 years ago)*

The earliest documented evidence of human occupation in the Mojave Desert comes from the Paleoindian period, a cultural expression referred to as the Western Pluvial Lakes Tradition (WPLT). The WPLT occurred in the western Great Basin and covered an area that stretched from the currently arid lands of southern California to Oregon. A cultural adaptation to pluvial conditions – lakes, marshes, and grasslands – flourished for several millennia after around 9000 B.C., but then disappeared during the warmer and more arid Altithermal climatic period (Moratto 1984:90-91).

The exact place and origin of the WPLT in the history of western North America is unclear. Moratto (1984:93) suggests that the WPLT may have developed from an earlier Fluted-Point Tradition by becoming a highly specialized adaptation to the shallow lake and marsh habitats that prevailed around 11,000 years ago. Comparisons to the Fluted-Point Tradition (once believed common only to the Great Plains) show that it is distinguished from the WPLT only by its “*presumed* greater age, local adaptation to cold steppe and savanna lands, and *perhaps*, a stronger emphasis on hunting” (Moratto 1984:93, emphasis original). That these two traditions were related, both technically and economically, is clearly shown in the repeated recovery of fluted points on fossil lakeshores, along with ovate points, crescents, and other artifacts associated with the WPLT. Eventually, scholars may find that these two traditions should be merged into a single “Early Western Tradition,” or they may decide that the Great Plains Fluted-Point Tradition is a precursor of the WPLT (Moratto 1984:93).

Although located more than 100 miles from the project area, the former shoreline of Tulare Lake, situated in the southern San Joaquin Valley, has yielded over 200 fluted projectile points. Similar tools are known to exist along the shorelines of now-extinct lakes in the Mojave Desert near Victorville (West et al. 1991). Thirty Clovis-like points recovered by D. Witt from this area were primarily manufactured of variously colored chert and exhibit fine horizontal flaking. Moratto (1984:81) reports that various scrapers, chipped crescents, Lake Mojave-type points, and other artifact attributes of the Great Plains Fluted-Point or Western Pluvial Lakes Traditions were also recovered by Witt. These artifacts were found near, but not clearly associated with, skeletal remains from now-extinct megafauna: bison (*Bison antiquus*), horse (*Equus occidentalis* and *Equus conversidens*), mammoth (*Mammuthus columbi*), and ground sloth (*Glossotherium harlani*). An association with extinct fauna would be indicative of their early age (Fenenga 1991). On typological grounds, the lanceolate, concave-base points are thought to be earlier than 11,000 years ago (Moratto 1984:81-82).

One of the most well-known expressions of the WPLT is the Lake Mojave Complex. Although the exact boundaries of the Lake Mojave Complex have not been defined, available evidence suggests it may have covered a vast area, which included parts of the

southwestern Great Basin and the Mojave Desert, and may have reached as far south as the San Diego area.

Artifacts belonging to the Lake Mojave Complex were initially recovered from sites situated on shoreline strands alongside the former lake bed of Pleistocene Lake Mojave. Lake Mojave encompassed the Soda Lake and Silver Lake Playas, which are located about 40 miles northeast of Victorville. Artifacts indicative of the Lake Mojave Complex include foliated points and knives, Lake Mojave points, Silver Lake points, and flaked-stone crescents. The investigations of several scholars, (Antevs 1953a, 1953b; Warren and DeCosta 1962; Warren and Ore 1978) indicate that an age of 10,000-8,000 years ago is a reasonable chronological range for the Lake Mojave Complex. Similar artifacts have subsequently been recorded along the shoreline of many other pluvial lakes in the Mojave Desert. Additionally, strong similarities have been noted between artifacts and radiocarbon dates recovered at the C. W. Harris site on the San Dieguito River, which is situated to the north of San Diego (24 km inland) and the Lake Mojave Complex (Moratto 1984:93-97; Warren 1967).

Although the cultural chronology for the desert region has undergone major changes since it was first developed in the 1920s and 1930s (compare Campbell 1931, 1935; Campbell and Campbell 1935; Campbell et al. 1936, Rogers 1929, 1938) and absolute dates are uncertain, a relative cultural sequence is now fairly well established (Bettinger and Taylor 1974; Warren 1980; Warren and Crabtree 1972). The sequence consists of the Pinto, Gypsum, Saratoga Springs, and Protohistoric periods.

*Pinto Period (7,000-4,000 years ago)*

The Pinto Period dates to the end of the Pleistocene, when the severe and dramatic environmental change from pluvial to arid conditions began. Rivers and lakes dried up, and animal and plant life changed. In the Mojave Desert, humans either adapted to this change or journeyed to areas with more favorable environmental conditions.

The interpreters of the Pinto point series are divided into two camps: supporters of a short chronology and proponents of a longer chronology. The supporters of the short chronology (Donnan 1964; Kowta 1969; Wallace 1962; Wallace and Wallace 1977) suggest there was a cultural hiatus of over 1,000 years in much of the Mojave Desert between 7,000 and 5,000 years ago due to the warm, dry climate. Other archaeologists (Susia 1963; Tuohy 1974; Warren 1980) do not see a break. Instead, they recognize a continual development of the Pinto assemblages out of the earlier Lake Mojave Complex assemblages (Moratto 1984:411).

Sites that contain elements of the Pinto Period are small and often limited to surface deposits. They may have been temporary or perhaps seasonal occupations by small groups.

Moratto (1984:414) postulates that the Pinto Basin Period developed from the small hunting complexes of the Lake Mojave Complex; it represents a small population dependent upon hunting and gathering, but lacking in well-developed milling technology. Glennan (1971) advocated a "Pinto Age" assemblage for the western Mojave Desert. He based this on observations during an extensive surface collection at the Sweetser site (CA-KER-302) in Antelope Valley, as well as several other sites in the area. Glennan (1971) identified a Rhyolite Tradition, which consisted primarily of knives, choppers, scrapers, cores, and some milling stones.

*Gypsum Period (4,000-1,500 years ago)*

The presence of Humboldt Concave Base, Gypsum Cave, Elko Eared, or Elko corner-notched points are indicative of the Gypsum Period, which has been radiocarbon dated from 4,000 to 1,500 years ago. In addition to the diagnostic projectile points, the cultural assemblage at Gypsum Period sites includes leaf-shaped points, rectangular-based knives, flake scrapers, T-shaped drills, and occasionally large scraper-planes, choppers, and hammerstones. Use of milling stones and manos became fairly common during this period, and the mortar and pestle were introduced. Additional artifacts include shaft-smoothers; incised slate and sandstone tablets and pendants; fragments of drilled slate tubes; *Haliotis* rings, beads and ornaments of the "Middle Horizon" type found in California's Central Valley; *Olivella* shell beads; and bone awls.

The beginning of the Gypsum Period coincides with the beginning of the Little Pluvial Climatic Period (about 4,000 years ago) – during Antev's Medithermal period – and continues into the following arid period. Apparently, the moist conditions present at the beginning of the Gypsum Period allowed for more intensive occupation of the Mojave Desert.

*Saratoga Springs Period (1,500-800 years ago)*

The Saratoga Springs Period in the Mojave Desert exhibited cultural diversification, with the development of distinctive regional traits. The presence of Rose Spring points are indication of the Saratoga Springs period in the Antelope Valley (located approximately 14 miles south of Victorville and ½-mile south of the Project boundary). According to Sutton (1980:217), the people occupying Antelope Valley during this period lived in large permanent or seasonally occupied villages, in addition to a variety of smaller, special-purpose sites that were also seasonally based. Sutton suggests that the presence of large villages with cemeteries, along with the large number and complexity of other sites, imply that the Antelope Valley supported a large population during the late prehistoric period. Besides village sites, smaller sites included rock rings, lithic scatters, and milling stations. Artifacts from these sites include shell beads, ornaments, and steatite from the southern California coast, as well as projectile points of the Rose Spring and Cottonwood types.

Grave goods from cemeteries dating to this period – some of which may be attributed to the Serrano or the neighboring Kitanemuk Indians – show the disparity in the distribution of wealth that existed among these populations. Sutton points to this as evidence that systems of prestige and status were in place. This would indicate a more complex socio-political organization than that usually attributed to the inhabitants of the Mojave Desert. He sees the social complexity as the result of intensive participation in a trade network, where the Antelope Valley inhabitants functioned as the conveyers of goods between the coastal and interior populations (Sutton 1980:221). Moratto (1984:391) agrees that the large villages and systems of status and prestige may represent a strong regional development that set Antelope Valley apart from the other areas of the Mojave Desert.

*Protohistoric Period (800 years ago to the time of European contact)*

The historic aboriginal people of the California deserts are clearly the descendants of the prehistoric inhabitants, although some movements of peoples have occurred during historic times. The regional cultural developments, which were established during the Saratoga Springs Period, continued with some modifications. Later occupations in the Antelope Valley are identified by small triangular projectile points of rhyolite and obsidian and late shell bead types.

During the Protohistoric Period, the tradition of the Southern Desert moved northward and probably reached the project area. There is little doubt that late sites along the Mojave River are the prehistoric remains of the Serrano of the historic period. The Serrano appear to be similar to the Yuman people of the Colorado River; this similarity is attributable to a Mojave River trade route that, for centuries, brought the Serrano into contact with the cultural developments of the lower Colorado River. Because of the ongoing trade, there were undoubtedly opportunities to obtain relatively great amounts of wealth and to develop more complex socio-economic and political organization.

The major occupation of Antelope Valley appears to have ended by 300 years ago, after which the valley became a marginal area, as reflected in the ethnographic record. Although the exact reason for the decline is unknown, Sutton (1980:221) suggests that one possible explanation was a disruption in the trade network.

***Ethnography***

*Vanyume*

Little is known about the Vanyume, who are believed to have become culturally extinct by 1900. The Vanyume, a subgroup of the Serrano, lived along the Mojave River, although their exact territorial boundaries are only vaguely known (Figure 4). The diary of Spanish explorer Francisco Garcés (1775) places the Vanyume “some few Spanish leagues east of the ‘sink’ of Mojave River, perhaps a third of the way from it to the Providence Mountains

[near the Nevada border]” (Kroeber 1925:614). The boundary between Serrano and Vanyume territory was apparently south of Victorville. The Vanyume population, although never very large, dwindled rapidly between 1820 and 1834, as the Spanish gathered the southern California Indians into various missions and *asistencias*. Garcés mentions observing one village of 25 people, a second village that was abandoned, a third village, below Victorville, where he encountered 40 people, and a fourth unidentified village.

### *Serrano*

The Serrano territory included the San Bernardino Mountains, east of Cajon Pass, as well as the desert area that lies immediately south of Victorville, extending east as far as Twenty-nine Palms and south as far as Yucaipa Valley (refer to Figure 4).

The Serrano were primarily hunters and gatherers. Vegetal staples varied with village locality: acorns and piñon nuts in the foothills; mesquite, yucca roots, cacti fruits, and piñon nuts in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Bean and Smith 1978:571). An increased yield of herbaceous plants was created by periodic burning. Communal gathering expeditions, involving several lineages under one leader's authority, were not uncommon (Benedict 1924:391-392; Drucker 1937; Bean and Smith 1978:571). Deer, mountain sheep, antelope, rabbits, and other small rodents were among the principal animals hunted. Various game birds were also hunted – quail being the most important. The bow and arrow was used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally game was hunted communally, especially during annual mourning ceremonies (Benedict 1924:391-392; Drucker 1937; Bean and Smith 1978:571).

Individual family dwellings were occupied by a husband, wife, their unmarried female children, sometimes the husband's parents, and occasionally a widowed aunt or uncle. The Serrano lived in circular, domed structures that were constructed of willow frames and covered with tule thatch. These structures were utilized primarily as sleeping and storage areas, with most Serrano activities taking place outside or under a shade structure consisting simply of four posts and a roof. On occasion, an individual would erect a separate house for private use (Drucker 1937; Benedict 1924; Kroeber 1925).

Technologically, the Serrano were quite prolific and produced a vast array of articles. Their manufactured goods included baskets, pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats, bags, storage pouches, and nets (Bean and Smith 1978:571). Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1929; Drucker 1937; Benedict 1924).

The Serrano were organized into exogamous clans. Each of these, in turn, was affiliated with one of two exogamous moieties (Strong 1929). Although the exact nature of these clans, including their structure, function, and number is unknown, Strong (1929) determined that the clan was the largest autonomous political and landholding unit of the Serrano. The clan was patrilineal: all the male members recognized descent from a common male ancestor. The descendants and wives of these men were also regarded as clan members. When women married, however, they retained their own lineage names and participated in ceremonies of their natal lineage (Strong 1929:17).

Every clan had a headman or chief, which was a hereditary position passed from father to son. Under unusual circumstances, this could pass to the wife of the previous headman (Strong, 1929; Gifford, 1918). Duties of the head of the clan included determining when and where to collect or hunt, as well as conducting religious and other ceremonies. An assistant (also a hereditary post passing from father to son) aided the head or chief in these ceremonies. The assistant's duties included taking charge of the sacred bundle (which contained ceremonial paraphernalia), notification of the time and location of the ceremonies, carrying shell money between groups for ceremonial purposes, and attending to the division of shell money and food at ceremonies (Bean and Smith 1978:572).

Like other California Indian groups, the Serrano had a shaman who acquired his various powers through datura-enhanced<sup>1</sup> dreaming (Strong 1929). Shamans were mainly curers, who healed their patients through administering herbal remedies and sucking out disease-causing agents (Benedict 1924).

### ***Regional and Local History***

The availability of water, which in historic times was supplied to the desert regions by shipment in tanks and barrels, was a critical factor in the settlement of the Mojave Desert. Much of the 15,000-square-mile desert is uninhabitable in the hot summer months; however, its sporadic settlement was prompted by the desert's close proximity to Los Angeles, in addition to its valuable mineral deposits. It also served as a crossing point for people traveling west during the period of exploration and settlement.

### ***Spanish Period***

Spanish explorer Francisco Garcés' route west in 1771 followed an ancient Indian trail into the San Bernardino Mountains. The trail passed by the Barstow area, which is located about 45 miles north of the proposed project area. The Pedro Fages (1772) trail, initially referred to as the Old Spanish Trail, and later as the Salt Lake Road or Mormon Trail, is the earliest known in the project region. It travels south within the proposed project area before

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<sup>1</sup> Datura (Genus: *Datura*) are strong-scented herbs, shrubs, or trees of the nightshade family.

ultimately reaching the coast. Francisco Garcés took this trail in 1776, and Jedediah Smith traveled it in 1826 and 1827 (Kyle 1990:304).

#### *American Period*

New Yorker Jedediah Strong Smith made two trips into California's desert region, and he probably followed the Old Spanish Trail into the San Bernardino Valley (Kyle 1990:304). He first crossed the Mojave River in 1826, christening it the "Inconstant River," probably due to its intermittent, partially underground flow (Pierson 1970). The route passed an Indian village on the Mojave Desert named *Otangallavil*, located near Hesperia (Pierson 1970:87). In April 1844, while searching for the Old Spanish Trail, General Fremont also recorded the "clear, bold stream" of the Mojave River (Pierson 1970:67). He heard it called the "Rio de las Animas" by the Spaniards, but on his map he named it the "Mohave River" (Pierson 1970:68). In 1853, Lieutenant R. S. Williamson was sent by the U.S. Government to map one of the routes for a possible railroad between the Mississippi River and the Pacific Coast. From the San Joaquin Valley, Williamson headed south to the Mojave Desert via the northern slope of the San Gabriel Mountains. When he reached the Mojave River, he traveled along the river to its mouth at Soda Lake (Keeling 1976).

As mentioned above, the first trail in the region was established at an unknown (early) date by Indians and was referred to as the Old Indian Trail (Steele 1975:21). By 1830, at least a portion of this trail was called the Old Spanish Trail, which was founded as a trade route for American goods shipped from Santa Fe, and for Mexican horses and mules from Los Angeles (Latta 1932). This trail extended from Santa Fe to Los Angeles across the Cajon Pass and represented a continuation of the Santa Fe Trail, which linked Mexican outposts in New Mexico and California (Lantis, Steiner, and Karinen 1989:46). The Mojave River portion of the Old Indian Trail, located on the banks of the intermittent river, was also a landmark to the vast number of migrants across the desert. Later, part of the trail became the Wolfskill Passage from Santa Fe and set the course across the Mojave Desert for emigrants from the 1820s to the 1850s. This later route was known as the Santa Fe, the Salt Lake, the Spanish or the Mojave Road.

Construction of a railroad to link the San Joaquin Valley to Los Angeles across the Mojave took place in the 1870s, traversing the western edge of the desert. The Mojave line also included a 20-day (round trip) rail route that extended over 165 miles of mountains and desert, running from the Harmony Borax Works in Death Valley (Inyo County) to the railroad loading dock in Mojave (Kyle 1990:129).

Mining in the Mojave Desert led to increased settlement during the latter half of the 19<sup>th</sup> century. The town of Mojave was the rail terminus for the 20-mule-team borax wagons that operated from Death Valley between the years 1884 and 1889 (Kyle 1990:129). The United States Borax and Chemical Company (formerly the Pacific Coast Borax Company)

developed sodium borate mining at Boron, about 30 miles north of Victorville. Gold was discovered at Standard Hill (about 45 miles west of Victorville) in 1894, and the nearby Cactus Queen Mine produced the largest quantity of silver ore in California until World War II (Kyle 1990:130). All of this activity led to the formation of small towns and the development of agriculture in the Victorville vicinity. The town of Victorville was established in 1886 as a railway stop on the Santa Fe Railroad.

The military has played an important role in the modern history of the Mojave Desert. In 1933, Rogers Dry Lake (located between Barstow and Boron) was used as a gunnery and bombing range. In 1942, the first U.S. jet airplane was tested at Muroc Army Airfield. This installation became Muroc Air Force Base in 1948 and was renamed Edwards Air Force Base in 1981 (Kyle 1990:131-132). George Air Force Base was initially founded as the Victorville Army Flight Training School in 1941, and with 10,000 trainees, led to the rapid growth of the area surrounding Victorville. The base was decommissioned in 1992, and in 1994, the SCLA opened at the site on 2,300 acres that were leased from the U.S. Air Force.

## **RESEARCH DESIGN**

Any discovery, whether prehistoric, historic, or multi-component that is evaluated as “significant” under CEQA guidelines and cannot be avoided by the way the project is designed, would be subject to mitigation to reduce project-related impacts to a less-than-significant level. Such mitigation requires a research design to guide the mitigation program.

### ***Prehistoric Resources***

The types of research topics that may be addressed, given the nature of data anticipated at Mojave Desert sites on the basis of previous research, comprise the following:

#### **Site Formation Processes**

Three components of archaeological deposits are important in assessing the research potential and significance of a site. These are the horizontal extent, vertical depth, and the integrity of cultural material. A variety of post-depositional processes can lead to disturbance and alteration of the original character of archaeological sites. Cultural processes include discard behavior, trampling, scavenging, and various prehistoric, historic and modern land uses. Natural processes include alluviation, erosion and bioturbation. An understanding of site formation processes between different types of sites in differing geographic settings in San Bernardino County will be advantageous in defining the research potential and integrity of each site, and can serve as a predictive model of sorts in defining geographic settings associated with high and low potential for archaeological deposits. Recording and describing the geomorphic processes involved in

site formation, such as alluviation/colluviation, bioturbation, erosion, and modern influences, should be implemented whenever the scale of excavation permits such an assessment.

*Research Questions in Site Formation:*

- Have recent (20<sup>th</sup> century) land use activities affected site integrity?
- Has alluviation, erosion or sheet wash affected site integrity?
- Are bioturbation or modern influences a factor in artifact distribution or site integrity?

*Data Requirements:*

- Requires sites with subsurface component and some depositional integrity.
- Documentation of post-formational processes wherever possible

### **Chronology and Dating**

Establishing a firm temporal range for each archaeological site is one of the foundations of archaeological investigation and research. Many of the subsequent research topics in prehistory, such as culture change and adaptation, focus on questions that rely on establishment of site chronology. Although the basic cultural chronology for the Mojave Desert exists, there are data gaps. Contributing to this is the relative dearth of absolute dates for archaeological sites in the desert regions of Southern California. The earliest occupation of the region has probably not yet been established, although Early Holocene occupation of surrounding lands has been documented at 9,000-10,000 years ago (Warren and Ranere 1968). Transitional sites illustrating Early-Mid-Late Holocene occupation have also not been adequately documented in the region.

Absolute dating (through radiocarbon or obsidian hydration) of sites would provide valuable information on settlement of this part of the desert with less interference from detrimental site formation issues common to larger, more complex sites. It may be possible to identify, for example, whether small, low artifact density desert sites are specialized procurement or activity locations associated with the larger occupational sites near the Mojave River.

The collection of viable quantities of material for absolute dating purposes, preferably accelerator mass spectrometry (AMS) radiocarbon dating, is essential to establishment of site chronology. Charcoal, shell or bone in quantities of 50 mg, 100 mg and 30 gm respectively, from discrete depositional loci within a site are needed to provide an adequate sample. Preferably, multiple samples are needed to establish accurate dates and account for "noise" in the dating or recovery technique. Obsidian hydration may also prove useful, although the development of accurate results is dependant upon sourcing the material, collection of appropriate quantities of nonbiased samples, and application of an acceptable

hydration rate. Although functional, obsidian hydration as an absolute dating tool for sites in this part of the Mojave Desert may be of limited utility.

*Research Questions in Dating and Chronology:*

- Can sites shed light on the Holocene occupation of the Mojave Desert area?
- Can site chronology assist in interpreting the break between Archaic and Late Prehistoric Periods?
- Can site chronology assist in interpreting the link between Late Prehistoric and Ethnographic Periods?
- Is a single occupational episode evident in the chronological record?

*Data Requirements:*

- Appropriate materials for absolute dating techniques available in sufficient quantities for radiometric and/or AMS radiocarbon dating.
- Obsidian in sufficient quantities to provide hydration dating.

**Settlement Patterns**

Prehistoric hunter-gatherers in the Mojave Desert area practiced somewhat differing mobility strategies and settlement/subsistence practices over time. At present, prehistoric settlement organization in the regional area is documented to some extent. Binford's (1980) well-used distinction between foragers (who practice residential mobility) and collectors (who practice logistical mobility) is an appropriate method to examine the dynamics of prehistoric hunter-gatherer settlement organization. Foraging systems result in consumers frequently moving to goods; such a strategy is most effective when basic resources (food and water) are clustered in nearby larger occupational areas. For foragers, difficulty arises when these basic resources are not clustered, or occur beyond the normal daily foraging radius. Movement of foraging camps between resources may not be a solution, since it may not be possible to locate the camps near certain essential resources. Storage can partially address the problem, but it can also restrict residential mobility. Hunter-gatherers address these problems through the use of food procurement parties to obtain distant resources and bring them back to base camps. Resource storage tends to diminish residential mobility and increase sedentism, since the availability of stored foods minimizes periodic food shortages. Diversification of subsistence patterns and settlement mobility over time tends to select for the development of collector settlement systems, once the technology was available to employ it.

*Research Questions in Settlement Patterns:*

- Are sufficient data available to characterize the sites as seasonal or permanent camps?
- Can seasonality be determined?
- If seasonal, is a particular resource being exploited?

- How do sites compare with recorded sites in similar locales in the region?
- Does settlement vary between sites based on chronology (Archaic - Late Prehistoric)?

*Data Requirements:*

- Adequate site structure (size, depth, artifact and ecofact characteristics) to permit extrapolation.
- Presence of bioarchaeological and technological data sets to permit extrapolation.

**Subsistence**

The study of human subsistence systems involves investigation of the interaction between humans, technology, and floral and faunal resources. Research issues related to subsistence are interrelated with the previous discussion on settlement patterns, and data gathered to address that topic may be applicable to subsistence issues as well. Subsistence is considered one of the primary forces in culture change, and data related to subsistence are often common in many archaeological deposits, thus making it one of the basic themes in archaeological research. Different approaches are taken to address the subsistence systems of past cultures. Traditionally there is a distinction between floral and faunal remains, with paleoethnobotanical and archaeofaunal studies being employed. Recently, bone chemistry and residue analysis have been utilized to study prehistoric subsistence issues. The goals and approaches of all subsistence studies are similar in that they seek to ascertain how prehistoric cultures obtained food, their consumption habits, and related activities. Common study questions that are addressed include: which plants and animals were eaten regularly, which were preferred, and which were the major components of the diet? Was there any social/gender/age differentiation in food consumption and acquisition? How was food procured? Moreover, subsistence studies, specifically archaeofaunal studies and archaeobotanical studies require knowledge of the effect that formation processes have on the archaeological record. The issue of context, specifically the predepositional and depositional processes related to organic remains, is a major concern of investigations into subsistence.

There have been few substantive archaeological investigations into subsistence issues within this portion of the Mojave Desert, largely owing to a lack of stratified sites in the area, and/or excavation of such sites. Since much of the investigation of larger, more complex sites comes from deposits near the Mojave River, addressing subsistence questions on non-riverine open-air sites becomes all the more viable. Elucidation of subsistence orientation, and resource emphasis, is an integral aspect of archaeological interpretation of the status, importance and role of sites within a regional framework.

*Research Questions in Subsistence:*

- What plants and animals were being exploited as evidenced from site constituents, and in what quantities? Are there changes over time?
- Do the types and quantities of remains vary by site?
- How were food resources prepared and consumed?
- Is seasonality apparent in resource exploitation or consumption?

*Data Requirements:*

- The presence of macro and micro floral and faunal remains.
- The presence of food procurement and processing tools.
- Contextual integrity of food remains.
- The presence of human skeletal remains for forensic analysis.

**Trade and Exchange**

Culture contact (trade and exchange) during prehistory has been documented for much of California, especially between the coastal and desert regions. Marine shell beads, for example, are not uncommon in desert prehistoric and ethnographic sites. Evidence for lithic raw material trade is most common (especially obsidian), nonetheless, trade of other items such as plant and animal materials was also prevalent. The use of obsidian by early occupants of the region has been established; sources of the raw material come from numerous locales from Baja California to Inyo County.

*Research Questions in Trade and Exchange:*

- What nonlocal resources are present that may represent trade, exchange or long distance procurement?
- Can lithic resources be sourced (e.g., Coso, Obsidian Butte or San Felipe obsidian)?
- Can nonlithic materials be sourced (e.g., bone artifacts, ceramics, shell beads)?
- Are there temporal associations with non-local materials vs. local materials?
- Are nonlocal food resources present?

*Data Requirements:*

- The presence of material culture that can be used to address trade or exchange, such as obsidian, ceramics, nonlocal food resources, etc.
- X-Ray Fluorescence (XRF) sourcing of obsidian.

**Historic Resources**

Some broadly defined urban historic archaeology research themes are proposed for the Project; they are described briefly below. The principal focus of historic archaeology within the project area will be (1) to identify evidence of Spanish/Mexican-era or mid-nineteenth century residential occupation or industry through the discovery of either foundation or feature remains or artifact deposits dating from these periods; (2) to identify evidence of the

early roadways that occupied portions of the area; and (3) to identify any additional historic use of the area (e.g. potential overseas Chinese occupation during roadway or rail construction). Likely research themes associated with the potential historic materials within the project area comprise commerce and industry, consumer behavior, and social status or ethnicity.

### **Commerce and Industry**

The archaeological remnants of contemporary industry can yield important remains that help define past technologies, workplaces, manufacturing, processes, or other activities. These deposits can also include the remains of associated neighborhoods, residential encampments, domestic activities, and related human behavior. These features can then yield potential data on labor history, economics, industrial history, ethnicity, and industrial culture.

#### *Research Questions in Commerce and Industry:*

- Do archaeological remains of local industry or commerce exist in the area?
- Do any existing remains possess information relevant to building methods or materials?
- Are construction techniques typical of this type, or are they in some way unique to there area or time of construction?
- Is there evidence of reuse, adaptation, or conversion?
- If artifacts are present, what can they reveal about the availability and sources of consumer goods from the time period involved?
- Will these resources aid in our understanding of the beginnings of urban planning in the city?

#### *Data Requirements:*

- The presence of material culture that can be used to address types of industry or commerce in the area.
- The presence of material culture that can be used to address building techniques or construction materials.
- The presence of sufficient artifacts that can be used to address commerce in the area.

### **Consumer Behavior**

Any historic cultural material scattered throughout the fill matrix would be potentially valuable as an indicator of consumer behavior. Discarded items in different fill strata may serve to illustrate the fluctuations in both fashion and utility of various items of nineteenth century material culture. Comparison of the historic material cultural with remains from similar nineteenth century deposits in the region would be of value in illustrating consumptive patterns among early residents with neighboring communities.

*Research Questions in Consumer Behavior:*

- Does the historic deposit contribute to our knowledge of the various classes or types of consumer goods at a point in time or specific location?
- Does the assemblage contain evidence of trade or regional variation in consumer goods?
- Is there evidence of hand-made materials, mass production, or other types of manufacturing processes? Are they intermixed in the deposit?

*Data Requirements:*

- The presence of a diverse and dateable material culture that can be used to track consumer behavior in the area, address questions of trade, regional variation, as well as the production and manufacture of goods.

**Social Status and Ethnicity**

The history of minority populations of the San Bernardino County region (e.g., Hispanic, African-American, and Asian) is not well documented, nor has it been the subject of urban historic archaeological assessment to any great extent. Evidence of ethnicity can come from individual artifacts (overseas Chinese serving bowls and opium paraphernalia, for example), associated faunal remains, and the detritus from cisterns, privies or trash deposits.

*Research Questions in Social Status and Ethnicity:*

- Do identified historic deposits contain information on the consumer practices of a specific social, ethnic, occupational or economic group?
- Is there evidence of wealth or status in the deposit? Conversely, is there evidence of poverty?
- Can particular types of artifacts (e.g., faunal remains) be linked to certain ethnic or social groups?

*Data Requirements:*

- The presence of material culture that can be used to address specific social, ethnic, occupational, or economic group behavior.
- The presence of material culture that can be used to address questions of wealth and poverty.

**RECORD SEARCH RESULTS**

The staff at the San Bernardino Archeological Information Center, San Bernardino County Museum (SBAIC) conducted a record search of the project vicinity on March 20, 2006, May 30, 2006 (In. No. 06-05-30-04), June 26, 2006 (In. No. 06-06-26-1) and November 16, 2006 (In. No. 06-11-16-04). The record search included a review of all cultural resource and excavation reports and recorded archaeological sites within a ¼-

mile radius of the entire Project area and within a 1-mile radius of the VV 2 main plant site area. The search included a review of archaeological, ethnographic, historical, and environmental literature, as well as records and maps on file at SBAIC.

Sixty-two studies (Table 1) have been conducted within the 1-mile record search radius of the VV 2 main plant site area and the ¼-mile record search radius of the remainder of the VV 2 Project area, 21 of which included portions of the Project area or were adjacent to the Project area (1060507; 1061025; 1061026; 1061027; 1061051; 1061158; 1061219; 1061280; 1061479; 1061504; 1061646; 1062399; 1062421; 1062570; 1062644; 1062731; 1062854; 1063020; 1063164; 1064427; and 1064429).

**TABLE 1. Cultural Resources Studies Conducted Within 1-mile of the VV 2 main plant site and ¼-mile of the remainder of the VV 2 Project area**

(T-Line = Transmission Line Survey Corridor; W-Line = Water Line Survey Corridor)

#	Survey	Author	Date	Report Title	Location
	1060078	Walker	1967	Life and Adventure along the Mojave River Trail	Within ¼ mile E of T-Line, Segment 1
	1060191	Smith	1973	Archaeological, Historical and Paleontological Site Survey for County Service Area No. 70 Improvement Zone "J", Assessment of Impact and Recommendations.	Crosses Segment 2
	1060240	Connelly	1974	Archaeological Impact Evaluation: Southern California Edison Proposed Generating Station in Upper Johnson Valley and Associated Transmission, Gas and Fuel Routes.	Within ¼ mile of Segment 2
	1060257	SBCMA	1975	Archaeologic and Paleontologic Assessment: Wastewater Facilities from Victorville.	Within ¼ mile E of T-Line, Segment 1
	1060428	Hearn et al.	1976	Archaeological Resources, Mojave Water Agency, Project No. C-06-0822, Victorville Area.	Within ¼ mile E of T-Line, Segment 1
	1060480	Hearn	1977	Archaeological – Historical Resources Assessment of Main Street, Hesperia Area.	Within ¼ mile of Segment 2
	1060507	Leonard	1977	An Archaeological Assessment of Three Job Sites	Crosses

#	Survey	Author	Date	Report Title	Location
				Within Hesperia County Water District, San Bernardino County, California.	Segment 2
1060612	SBCM		1978	An Archaeological – Historical Assessment for the Proposed System Improvements for a Water System Master Plan for Victor Valley County Water District.	Within ¼ mile of Segment 3
1060799	Rector et al.		1979	Archaeological Studies at Oro Grande Mojave Desert, California.	Within ¼ mile E of T-Line, Segment 1
1060874	Barker et al.		1979	An Archaeological Sampling of the Proposed Allen-Warner Valley Energy System, Western Transmission Line Corridors, Mojave Desert, Los Angeles and San Bernardino Counties, California and Clark County, Nevada.	Within ¼ mile of Segment 3
1060900	Weil		1979	Prehistoric Cultural Resource Investigations: Southern California Edison Lucerne Valley Project, Summary Report.	Within ¼ mile of Segment 3
1060901	Weil		1980	Prehistoric Cultural Resource Investigations of the Lucerne Valley Project, San Bernardino County, California.	Within ¼ mile of Segment 3
1061025	Harris		1973	Archaeological, Historical, and Paleontological Site Survey for County Service Area No. 70 Improvement Zone “J”, Assessments of Impact and Recommendations.	Crosses Segment 2
1061026	Harris		1974	Archaeological, Historical, and Paleontological Site Survey for County Service Area No. 70 Improvement Zone “J”, Assessments of Impact and Recommendations.	Crosses Segment 2
1061027	Reynolds		1980a	Cultural Resources Assessment: Baldy Mesa Water	Crosses

Survey #	Author	Date	Report Title	Location
			Lines, County Service Area 70, Improvement Zone J, San Bernardino County, California.	Segment 2
1061051	Geoscientific Systems	1980	Final Report: Archaeological/Historical Assessment of George Air Force Base.	Within ¼ mile E of T-Line and crosses part of T-Line, Segments 1 and 2
1061158	Greenwood and McIntyre	1981	Class III Cultural Resource Inventory: Adelanto-Rinaldi 500 kV T/L Corridors 1, 2, and 3, Los Angeles Department of Water and Power.	Crosses Segment 2
1061219	Hall et al.	1981	An Archaeological Survey of the Proposed Southern California Edison Ivanpah Generating Station, Plant Site, and Related Rail, Coal Slurry, Water and Transmission Line Corridors, San Bernardino County, California, and Clark County, Nevada.	Parallels and crosses Segment 2
1061220	Bean et al.	1981	The Ivanpah Generating Station Project: Ethnographic (Native American) Resources.	Within ¼ mile of Segments 2 and 3
1061280	Macko et al.	1982	Class III Cultural Resource Survey: Intermountain Power Project (IPP), Intermountain – Adelanto Bipole I Transmission Line, Right of Way, California Section.	Crosses Segment 2
1061336	Rector et al.	1983	Archaeological Studies at Oro Grande, Mojave Desert, California.	Within ¼ mile E of T-Line, Segment 1
1061479	Dames & Moore	1985	Mead/McCullough-Victorville/Adelanto Transmission Project, Technical Report: Volume IV, Cultural Resources.	Crosses Segment 2
1061504	Greenwood and Foster	1985	Cultural Resources Investigation for Los Angeles Department of Water and Power: Victorville-Rinaldi 500 kV	Crosses Segment 2

Survey #	Author	Date	Report Title	Location
			Transmission Line 1: Final Report.	
1061646	Norwood	1987	A Cultural Resource Survey for Add/Alter Boundary Fence, George AFB, CA.	Parallels T-Line, Segment 1 for about ½ mile and within ¼ mile of Segment 2
1062158	Mortland	1974	Archaeological Impact Evaluation: Southern California Edison Proposed Generating Station in Upper Johnson Valley and Associated Transmission, Gas and Fuel Routes.	Within ¼ mile of Segment 2
1062283	King	1989	Review of Shell Bead and Ornament Exchange Between California and The Western Great Basin by Bennyhoff and Hughes.	Within ¼ mile E of T-Line, Segment 1
1062399	McGuire and Glover	1991	A Cultural resources Inventory of a Proposed Natural Gas Pipeline Corridor from Adelanto to Ward Valley, San Bernardino County, California.	Crosses Segment 2
1062421	Drover	1991	Environmental Impact Evaluation: An Archaeological Assessment of the Community Facilities District 90-1 Northern Sewer Trunk Project, Victorville, California.	Crosses Segment 2
1062570	Sheets and Woodman	1990	Archaeological Survey and Inventory of George Air Force Base, California.	Adjacent to and within ¼ mile W of T-Line, Segments 1 and 2
1062644	Yohe and Parr	1992	An Archaeological Inventory of the Oro Grande Sewer Pipeline Alignment, Victorville, San Bernardino County, California.	From T-Line, Segment 1 to SCLA
1062731	Macko et al.	1993	National Register Eligibility Determinations for Historic Resources Along the Proposed AT&T Lightguide System,	Crosses Segment 2

Survey #	Author	Date	Report Title	Location
			Victorville to Bakersfield, CA.	
1062735	Yohe	1993	Archaeological Test Excavations along the Oro Grande Sewer Pipeline Alignment, Victorville, San Bernardino County, California.	Within ¼ mile E of T-Line, Segment 1
1062854	Cunkelman and Murray	1993	Cultural Resource Report for the Exchange of P & V Enterprise Selected Public Lands.	Five locations within main plant site area
1063020	Sturm et al.	1993	(Draft) Adelanto-Lugo Transmission Project Cultural Resources Assessment.	Encompasses Segment 3
1063025	Parr	1995	An Archaeological Assessment of 50 Acres of Public Land Proposed for Exchange (Exchange ID: BLM Serial # CACA35035) North of Adelanto, San Bernardino County, California.	Within ¼ N of main plant site area
1063164	Alexandrowicz et al.	1996	Cultural And Paleontological Resources Inventory for the Airbase Road Improvement Project, city of Victorville, San Bernardino County, CA – Interim Report.	Crosses Segment 2
1063703	Alexandrowicz and Loren-Webb	2001	An Historical Resource Identification Investigation for TTM 16252, City of Hesperia, CA.	Within ¼ mile of Segment 3
1063784	Earth Tech	1997	Cultural Resource Investigation for the Rail Alignment Property & TCE Property at George AFB, San Bernardino County, CA.	Within ¼ mile of T-Line, Segments 1 and 2
1063785	Spanne	1985	Cultural Resources Survey of Properties Proposed for Acquisition for Water Supply Improvements at George AFB, CA.	Within ¼ mile of Segment 2

Survey #	Author	Date	Report Title	Location
1063796	McKenna	1998	An Intensive Archaeological Survey of the Victor Valley Regional Wastewater Reclamation Plant Expansion Areas, Victorville, San Bernardino County, CA.	Adjacent to and within ¼ mile E of T-Line, Segment 1
1063797	McKenna	2000	A Report on Archaeological Monitoring Activities at the California Bio-Mass, Inc. Project Area in Victorville, CA.	Within ¼ mile E of T-Line, Segment 1
1063798	WSA	2002a	El Evado Waterline Construction Corridor Survey, San Bernardino County, CA.	Within ¼ mile of Segment 2
1063799	WSA	1999	Cultural Resource Assessment of High Desert Power Project, Victorville, San Bernardino County, CA.	Within ¼ mile W of T-Line, Segment 1 and ¼ mile S of main plant site area; encompasses N half of Segment 2
1063800	WSA	2002b	Archaeological Survey of Five Proposed Well Sites, San Bernardino County, CA.	Within ¼ mile of Segment 2
1063801	Estes et al.	2002	Archaeological Survey of Proposed Well Sites H-N & Water Pipeline Extension, High Desert Power Project, Victorville, San Bernardino County, CA.	Within ¼ mile of Segment 2
1064182	Alexandrowicz and Krautkramer	2003	Historical and Paleontological Resources Monitoring at the Forecast Homes Tract No. 16252 Development, City of Hesperia, San Bernardino County, California.	Within ¼ mile of Segment 3
1064187	Anon.	2001	Negative Historic Property Survey Report on the paving of Mesquite Street in Hesperia, CA.	Within ¼ mile of Segment 3
1064190	Goodwin and Tuck	2004	Cultural Resource Assessment, Tentative Parcel No. 16886 (APNs 0405-51-09, -11, -12, -13, -50), City of Hesperia,	Within ¼ mile of Segment 3

Survey #	Author	Date	Report Title	Location
			San Bernardino County, California.	
1064192	Alexandrowicz	2004a	Historical Archaeology at the Hall W. Watts Homestead.	Within ¼ mile of Segment 3
1064193	Alexandrowicz and Krautkramer	2004	Historical and Paleontological Resources Monitoring at the Forecast Homes Tract No. 16252 Development, City of Hesperia, San Bernardino County, California. [Phase II]	Within ¼ mile of Segment 3
1064427	CRM Tech	2003	Historical/Archaeological Resources Survey Report, Southern California Logistics Airport Specific Plan Amendment and Rail Service Project.	Covers Project area and ¾ to 1 mile W of project areas; within ¼ mile of T-Line, Segments 1 and 2
1064428	CRM Tech	2001	Identification and Evaluation of Historic Properties, Southern California Logistics Airport Runway 17/35 Extension to 15,000 Feet.	Within ¼ mile W of T-Line, Segment 1
1064429	CRM Tech	2004	Historical/Archaeological Resources Survey Report, Victor Valley Wastewater Reclamation Authority Regional Plant Expansion Project.	Adjacent to T-Line, Segment 1 and W-Line inside VVWRA-owned land
1064434	Compass Rose Archaeological	2000	Victorville Deteriorated Pole Project, San Bernardino County (Letter Report).	Within ¼ mile of Segment 2
1064436	Chadderdon	2003	Federal Correctional Complex, Victorville, San Bernardino County, California: Phase I Archaeological Survey for the Proposed Energy Saving Performance Contracting Project at the Federal Correctional Complex, Victorville, San Bernardino County, California	Within ¼ mile of Segment 2

Survey #	Author	Date	Report Title	Location
1064437	WSA	2001	Water Line Construction Corridor Survey (letter report).	Within ¼ mile of T-Line, Segments 1 and 2; and within ¼ mile S of main plant site area
1064442	McKenna et al.	2002	Results of a Paleontological and Archaeological Monitoring Program along a Portion of Shay Road, Victorville, San Bernardino County, California.	Within ¼ mile E of T-Line, Segment 1
1064446	McKenna et al.	2003	CA-SBR-72 Site Review (August 6, 2003) [letter report]	Within ¼ mile E of T-Line, Segment 1
1064447	Martin Marietta Energy Systems, Inc.	1991	Final George Air Force Base, California, World War II Buildings/Facilities Architectural and Historical Evaluation	Within ¼ mile of Segment 2
1064453	Mooney/Hayes Associates	2003	Cultural Resource Survey of work stations on the Robin (#1491107E), Keno (#2302155) and Mack (#4185612) 12 kV Circuits, and the Portland (#84889S, #1757195E), Poco (#80482S), and Doble (#2290725S) 33 kV Circuits, Southern California Edison Deteriorated Pole Replacement Program (2003), San Bernardino County, California (Letter Report).	Within ¼ mile of Segment 2
1065205	McKenna et al.	2005	Archaeological Investigations and Mitigation of Impacts to CA-SBR-72, a Prehistoric Archaeological Site Adjacent to the California Bio Mass, Inc. Facility, Victorville, San Bernardino County, California.	Within ¼ mile of T-Line, Segment 1

Of the 21 studies mentioned above that covered portions of the Project area or were adjacent to the Project area, eight of these covered large portions of the VV 2 main plant site, laydown areas, and northern linears (T-Line Segment 1, sanitary, and water lines).

They are important in characterizing the cultural potential of the VV 2 Project area. These studies indicate that prehistoric resources are present in the Project vicinity, but are concentrated along the Mojave River. Historic resources are also present in the Project vicinity. None of the previously recorded resources have been determined to be significant according to CEQA criteria.

In 1980, Geoscientific Systems (1980) conducted a survey of George AFB as part of a historic and cultural assessment of the historic air base (Study 1061051). The study area included a portion of the Project area along the west side of the proposed T-Line, Segment 1 route and continued to the west (i.e., where a George AFB landfill is now located). No cultural resources were recorded within the Project area as part of this study.

In 1987, a survey was conducted along the eastern fence line that marks the boundary of a George AFB landfill area (Norwood 1987 = Study 1061646). This survey paralleled the Project's T-Line, Segment 1 corridor for approximately a ½ mile. No cultural resources were recorded as part of this study.

In 1990, Science Applications International Corporation (SAIC) carried out a cultural resource study of George Air Force Base (Study 1062570). Approximately 1,675 acres were inspected during the study, resulting in the discovery of three archaeological sites and 13 isolated prehistoric artifacts. A newly discovered site, CA-SBR-6784H, was characterized by a scatter of solder-top cans and glass bottle fragments. Two previously recorded cultural resources, CA-SBR-5432 (a highly deflated rock cairn) and CA-SBR-5433 (a low-density quartzite prehistoric quarry), were relocated during the project. The 13 isolated artifacts included several tested quartzite cobbles, one quartzite chopper, two jasper flakes, one quartzite mano, and one chert scraper. SAIC determined that all archaeological sites and isolates found during the study were not considered significant or eligible for listing on the National Register of Historical Places (Sheets and Woodman 1990:17).

An archaeological inventory (Study 1062644) of the Oro Grande Sewer Pipeline Alignment was conducted in 1992 (Yohe and Parr 1992). It included the area from the Project's T-Line, Segment 1 route to SCLA property, and extended beyond the ¼ mile buffer to the west. No cultural resources were recorded within the project area as part of this study.

In 1993, as part of a project involving the exchange of P & V Enterprise selected public lands, five locations within the main site area were the subject of a cultural resource study (Cunkleman and Murray 1993 = Study 1062854). No cultural resources were recorded as part of this study.

In 1998, the cultural resource management firm McKenna et al. conducted an archaeological survey of the Victor Valley Wastewater Reclamation Authority (VWRA) (Study 1063796) Reclamation Plant Expansion Areas situated on approximately two acres, located west of the Mohave River and north of George Air Force Base. As a result of the study, prehistoric site CA-SBR-72 and historic site CA-SBR-7154H were relocated, but determined to be well outside the boundaries of the project. No additional cultural resources were identified during the survey (McKenna 1998).

CRM Tech conducted a historical and archaeological resources survey for the Southern California Logistics Airport Specific Plan Amendment and Rail Service Project (CRM Tech 2003 = Study 1064427). The survey was conducted as part of the CEQA environmental review process for that project. The survey covered the entire area of the VV 2 Project plant site, and T-line, Segment 1 route, as well as the Project sanitary wastewater and water supply lines. North of the old George Air Force Base landfill area, the CRM Tech survey area extended  $\frac{3}{4}$  to 1 mile to the west of the VV 2 Project area. The survey was an intensive-level field survey, with survey crews conducting pedestrian transects spaced at 15-meter intervals. Areas containing steep hills and drainages were subject to a reconnaissance-level inspection of the ground surface. Results of this study include the identification of 61 cultural resources – 32 archaeological sites, 28 historic buildings and a 1930-vintage highway bridge – seven of which were determined to be “historical resources” as provided by CEQA. None of these resources are located within the VV 2 Project site. The study was conducted within the last five years, meets CEC requirements for intensive field survey for most of the VV 2 main plant site and laydown areas, as well as at least  $\frac{3}{4}$  of a mile to the west of T-Line, Segment 1, the sanitary and water lines. The study, however, did not adequately cover the area north and east of the VV 2 main plant site area.

In 2004, CRM Tech conducted a historical and archaeological resources survey for the VWRA Regional Plant Expansion Project (CRM Tech 2004 = Study 1064429). The survey area was located inside VWRA-owned land that is adjacent to the Project’s proposed transmission and water line corridors. A single flake was identified during the survey of the VWRA project area. The results of this study showed that the project would not impact significant cultural resources.

The SBAIC record search indicated that 67 archaeological and historic sites had been previously recorded within the 1-mile record search radius of the VV 2 main plant site area and the  $\frac{1}{4}$ -mile record search radius of the remainder of the VV 2 Project area (Table 2). Twenty-two sites were recorded as being within the Project area: CA-SBR-10951H; CA-SBR-7154H; CA-SBR-8832H; CA-SBR-6153; CA-SBR-10317H; CA-SBR-10316H; CA-SBR-4272H; CA-SBR-7742H; CA-SBR-7752H; CA-SBR-7694H; CA-SBR-4275H; CA-SBR-7743H; CA-SBR-7744H; CA-SBR-4251H; CA-SBR-4269H; CA-

SBR-7739H; CA-SBR-7740H; CA-SBR-2910H; CA-SBR-4255H; CA-SBR-8392H; CA-7753H; and CA-SBR-4274.

- CA-SBR-10951H consists of a sparse scatter of historic materials, primarily tin cans. WSA was able to relocate the site during the survey of the lay down area south of the VV 2 main site area. The site had undergone some change since it was recorded. WSA re-recorded the site (VV 2 Site 22) and prepared a DPR update sheet on it.
- CA-SBR-7154H was identified as being adjacent to the survey corridor, approximately 150 feet west of the centerline. It consists of two concentrations of historic cans and tins, glass bottles and bottle fragments, ceramic sherds, pot handle, crown caps, and metal automotive parts. WSA was unable to relocate the site during the survey. The area where the site had been recorded has been highly impacted by recent disturbances related to a new development at the VVWRA plant site. The site appears to no longer exist.
- CA-SBR-8832H was recorded as a historic fence line in 1997. It may have originally crossed the Project survey area of T-Line, Segment 1, but it was not observed in the Project survey area.
- CA-SBR-6153 was recorded in 1977 as a temporary prehistoric campsite with a fire hearth and midden. Lithic and ceramic debris was recorded as site components. The site was not relocated during the survey of T-Line, Segment 1. Construction of Shay Road has probably destroyed the site, and it does not appear to exist any more.
- CA-SBR-10317H is the historic Victor substation-to-Barstow 33 kV transmission line that runs parallel to a portion of the T-Line, Segment 2 survey area approximately 3,000 ft. north of the Victor substation. The 33 kV transmission line was constructed in 1918. Portions of the power line have been rerouted and rebuilt on several occasions. WSA did not rerecord the resource, and the resource will not be impacted by the Project.
- CA-SBR-10316H is the historic 115 kV power line that runs along the length of the T-Line, Segment 3 survey area for approximately 10 miles. The Kramer to Victorville portion of the 115 kV power line was constructed in 1911-1913. Only portions of this transmission line near Kramer Junction and north of Adelanto have been recorded, but the entire line was determined to be eligible for NRHP listing in 1995. The SCE Kramer-to-Victor 115 kV transmission line represents approximately 34 miles of what was originally the 238 mile long Southern Sierras Power Company's Control-San Bernardino 140 kV transmission line. The line was acquired by SCE in 1964. Many changes have occurred to the original transmission system over the years. The

original system configuration has been altered by reconstruction of the substations at Victor and the construction of a new substation at Kramer Junction. The hardware has been updated along the Kramer to Victor section. The lattice steel towers are not the oldest of this type or otherwise unique. The original patrol road that was constructed for the line was purchased by the federal government in 1950 and became Highway 395.

- CA-SBR-4272H is the historic pioneer road known as the Salt Lake-Santa Fe Trail (also known as the Spanish Trail). The route of the road as recorded is based on historic maps of the area. It is supposed to cross the T-Line, Segment 3 survey area between Towers 2 and 3. This area has been highly disturbed by transmission line construction, new housing developments, off-road vehicular traffic, and modern trash dumping. WSA did not observe any evidence of a historic road in the recorded location. No historic artifacts were observed. Large quantities of modern trash littered the entire area. The road will not be impacted by the Project.
- CA-SBR-7742H was recorded in 1993 as a historic refuse deposit containing a scatter of historic sanitary cans with church key opening, three vent-hole cans, one hole-in-cap can and assorted glass shards. The site was not relocated during the survey of T-Line, Segment 3. Continuous vehicular traffic and trash dumping along the ROW dirt road has probably destroyed or covered the site.
- CA-SBR-7752H was recorded in 1993 at a location in the survey area near Tower 16 along the T-Line, Segment 3 portion of the Project area. The site consists of a scatter of 16 historic cans and one bundle of bailing wire. WSA was unable to relocate the site during the survey. The area around Tower 16 has been highly impacted by recent disturbances related to a new housing development 40 ft. to the west of the tower location, as well as transmission line tower construction. The site appears to no longer exist.
- CA-SBR-7694H is the historic LADWP Boulder 1 and Boulder 2 287.5 kV power transmission line that was constructed in the mid-1930s. CA-SBR-7694H crosses the T-Line, Segment 3 alignment in the northern half of pull area 2, near Tower 14. Only lines cross the survey area, and the associated towers lie well outside the Project area. WSA did not rerecord the resource, and the resource will not be impacted by the Project. It has been determined eligible for the National Register of Historical Places.
- CA-SBR-4275H is a historic road that was recorded in 1980 in a location that crosses the survey area between Towers 40 and 41. It appears to still be present in its recorded location as one of the several dirt roads that is highly trafficked by vehicles. The road within the project area is highly disturbed by this traffic and by the modern

trash dumping, which have continuously occurred since the time the site was recorded. The road does not appear to retain any historical integrity with the project area and, therefore, will not be impacted by the VV 2 Project.

- CA-SBR-7743H was recorded in 1993 as a historic refuse deposit containing a scatter of historic cans, including 14 sanitary cans, five vent-hole cans, one hole-in-cap can and assorted glass shards. The site was not relocated during the survey of T-Line, Segment 3, although two historic trash sites (VV 2 Site 29 and VV 2 Site 41) were recorded in the vicinity. Continuous vehicular traffic and trash dumping along the ROW dirt road or wind erosion has probably destroyed or covered the site.
- CA-SBR-7744H was recorded in 1993 as a historic refuse deposit containing a scatter of historic sanitary cans with church key opening, vent-hole cans, and assorted purple and clear glass shards. The specific site location was not relocated during the survey of T-Line, Segment 3, but the site is very near VV 2 Site 41 and may be the same site, although no purple glass was observed at VV 2 Site 41. Continuous vehicular traffic and trash dumping along the ROW dirt road may have destroyed or covered the site.
- CA-SBR-4251H is the historic Baldy Mesa power line that was previously recorded as crossing the T-Line, Segment 3 alignment approximately 100 ft. north of Tower 43. The power lines no longer exist in the Project area as the area to the east has undergone recent development with the construction of a new housing development. The resource no longer exists within the Project area.
- CA-SBR-4269H is a historic road that was recorded in 1980 in a location that crosses the survey area between Towers 27 and 28. Its recorder location is in a seasonal drainage that is traversed by many recently trafficked dirt tracks and roads. The area is highly disturbed by this traffic and by the seasonal washouts that have occurred since the time the site was recorded. WSA did not observe any trace of the historic road during its survey through the drainage. Only modern trash was observed.
- CA-SBR-7739H was recorded in 1993 in a location in the survey area between Tower 50 and 51, on the west side of the 115 kV replacement line survey area in the T-Line, Segment 3 portion of the Project area. The site consists of a scatter of four historic cans and eight fragments of a porcelain dish. WSA was unable to relocate the site during the survey. The area has been highly impacted by recent disturbances related to continuous vehicular traffic and trash dumping along the ROW dirt road. Only modern trash was observed in the survey area. The site appears to no longer exist.
- CA-SBR-7740H was recorded in 1993 in a location in the survey area near Tower 56 in the T-Line, Segment 3 portion of the Project area. The site consists of a scatter of

six historic cans, clear glass fragments, and fragments of porcelain dishes. WSA was unable to relocate the site during the survey. The area around Tower 56 has been highly impacted by recent disturbances related to the construction of the modern canal that is 20 ft. to the west of the tower location. Only modern beer cans and Styrofoam was observed in the survey area. The site appears to no longer exist.

- CA-SBR-2910H consists of historic power line that was previously recorded as crossing the T-Line, Segment 3 alignment approximately 80 ft. north of Tower 60. The power lines no longer exist in the Project area as the area to the east has undergone recent development with the construction of a new housing development. The resource no longer exists within the Project area.
- CA-SBR-4255H is the historic Hesperia power line that was previously recorded as crossing the T-Line, Segment 3 alignment approximately 100 ft. north of Tower 60. The power lines no longer exist in the Project area as the area to the east has undergone recent development with the construction of a new housing development. The resource no longer exists within the Project area.
- CA-SBR-8392H consists of the George Air Force Base railway berm that was recorded in 1993. It crosses the T-Line, Segment 2 survey area in a location approximately 1,000 ft south of Air Expressway Blvd., southeast of SCLA. The site consists of a 10 ft. high railroad berm. WSA did not observe any railroad tracks, ties, hold down plates, or spikes on the berm during its survey.. The site has been highly impacted by recent disturbances related to new construction and recent off-road traffic. A dirt road runs along the top of the berm. Only modern trash was observed in the recorded site area. The site will not be impacted by the Project.
- CA-SBR-7753H was recorded in 1993 in a location in the survey area approximately 400 ft. from Tower 17 in the T-Line, Segment 3 portion of the Project area. Its eastern boundary is adjacent to the 115kV replacement line survey area. The site consists of a scatter of three historic cans and one metal flask fragment. WSA was unable to relocate the site during the survey. The site has been highly impacted by recent disturbances related to a new housing development to the east, recent road traffic on the dirt access road, and modern dumping. Only modern trash was observed in the recorded site area. The site appears to no longer exist.
- CA-SBR-4274H is a historic road that was recorded in 1980 in a location that crosses the survey area approximately 1 mile east of the Lugo substation. Its recorder location is in an area that has been highly disturbed by new housing and road construction, construction of transmission lines, and by off-road vehicular traffic and trash

dumping. WSA did not observe any trace of the historic road during its survey. Only modern trash was observed. The road no longer appears to exist in this area.

**TABLE 2. Previously Recorded Sites Within 1 Mile of Main Plant Site and ¼ Mile of the Remainder of the Project Area**

Site #	Site Type/Constituents	Cultural/Temporal Affiliations	Reference
P-1584-14	Lithic quarry/debitage	Prehistoric/Indeterminate	Bierman 1949a
P-1584-15	Campsite/lithic scatter and rock feature	Prehistoric/Indeterminate	Bierman 1949d
P-1584-16	Lithic quarry/debitage	Prehistoric/Indeterminate	Bierman 1949b
SBR-10306H	Residential/house and reservoir remains	Historic/Late Historic	
SBR-10315H	Linear/Historic transmission line power	Historic/1931	Brock 1989; Neuenschwander and Miller 1988
SBR-10316H	Linear/Historic transmission line power	Historic/1913	Underwood and Rose 2000
SBR-10317H	Linear/Historic transmission line power	Historic/1918	Cunkelman 1993
SBR-10946H	Dump site/can scatter	Late historic/1914-1945	Shaker 2003b
SBR-10947H	Dump site/artifacts	Late historic/1914-1945	Shaker 2003c
SBR-10948H	Residential and dump site/reservoir, well, and artifacts	Late historic/1914-1945	Shaker 2003d
SBR-10949H	Dump site/ artifacts	Late historic/1914-1945	Shaker 2003e
SBR-10950H	Dump site/can scatter	Late historic/1914-1945	Shaker 2003f
SBR-10951H	Dump site/artifacts	Late historic/1914-1945	Shaker 2003g
SBR-10952	Lithic scatter/sparse scatter of quartzite, chalcedony, and jasper debitage	Prehistoric/indeterminate	Shaker 2003h
SBR-10957	Campsite/lithic scatter and rock feature	Prehistoric/Indeterminate	Shaker 2003a
SBR-10958	Lithic Scatter:  11 Lithic Flakes, 1 Scraper	Prehistoric/indeterminate	Ballester 2003

Site #	Site Type/Constituents	Cultural/Temporal Affiliations	Reference
SBR-11264H	Dump site/domestic trash	Historic/early 20 <sup>th</sup> century	Alexandrowicz 2001d
SBR-11266H	Dump site/domestic trash	Historic/early 20 <sup>th</sup> century	Alexandrowicz 2001e
SBR-11267H	Linear/Road	Historic/late 19 <sup>th</sup> -early 20 <sup>th</sup> centuries	Alexandrowicz 2001b
SBR-11269H	Dump site/domestic trash	Historic/early 20 <sup>th</sup> century	Alexandrowicz 2001f
SBR-11271H	Dump site/domestic trash	Historic/early 20 <sup>th</sup> century	Alexandrowicz 2001g
SBR-11272H	Linear/Road	Historic/pre-1942	Alexandrowicz 2001a
SBR-11273H	Linear/Road	Historic/pre-1942	Alexandrowicz 2001c
SBR-11659H	Dump site/domestic trash	Historic/early 20 <sup>th</sup> century	Alexandrowicz 2004b
SBR-11660H	Dump site/domestic trash	Historic/late 19 <sup>th</sup> -early 20 <sup>th</sup> centuries	Alexandrowicz 2004c
SBR-11999H	Dump site/domestic and industrial trash	Historic and Modern/late 20 <sup>th</sup> century	Burris et al. 2004
SBR-2734	Prehistoric campsite/FCR and flakes	Prehistoric/indeterminate	Baldwin 1978d
SBR-2910H	Linear/Historic power line	Not Available	None
SBR-3005	Lithic scatter/thin scatter of flakes on local stone	Prehistoric/indeterminate	Baldwin 1978e
SBR-3006	Prehistoric campsite/hearth features; ceramics, lithics, groundstone, shell beads	Prehistoric/indeterminate	Baldwin 1978d
SBR-3007/H	Campsite/lithic scatter and fire-affected rock; Historic structure/ structural remains and artifact scatter	Prehistoric/Indeterminate; Late historic	Baldwin 1978b
SBR-3008	Lithic scatter/chalcedony and quartz flakes	Prehistoric/Indeterminate	Baldwin 1978a
SBR-3033/H + SBR-4272H + SBR-4411	Linear site/ Prehistoric trail and historic pioneer roads; trail monument (SBR-4272H)	Prehistoric/indeterminate; historic/1849-1880	Becker et al. 1993; Macko 1993; Reynolds 1981
SBR-3618/H	Food processing site/flakes, burned bone, fire-affected rock; residential/farm	Prehistoric/Indeterminate; Late historic	Baldwin 1978c-

Site #	Site Type/Constituents	Cultural/Temporal Affiliations	Reference
	features		
SBR-4251H	Linear/Historic power line	Historic/pre-1941	Reynolds 1980c
SBR-4255H	Linear/Power line	Historic/pre-1941	Reynolds 1980e
SBR-4272H + 4411H	Linear / Historic pioneer roads	Historic/1849-1880	Becker et al. 1993; Macko 1993; Reynolds 1981
SBR-4274H	Linear/Road	Historic/late 19 <sup>th</sup> century	Reynolds 1980f
SBR-4275H	Linear/Road	Historic/pre-1878	Reynolds 1980b
SBR-4276H	Linear/Road	Historic/1860s	Reynolds 1980d
SBR-5433	Lithic quarry/debitage	Prehistoric/Indeterminate	Sheets 1990
SBR-6153	Campsite/midden and lithic and ceramic scatter	Prehistoric/Indeterminate	Reynolds 1977
SBR-6353H	Dump site/domestic trash	Historic/20 <sup>th</sup> century	Taylor 1989
SBR-69	Midden partly covered with layer of outwash; manos, pestle frag.,debitage.	Prehistoric/indeterminate	Baldwin 1978
SBR-7043	Campsite/debitage and groundstone fragments	Prehistoric/Indeterminate	Drover et al. 1991
SBR-7154H	Two concentrations of cans & tins, glass bottles & shards, ceramic shards, pot handle, crown caps, and metal automotive parts.	Historic/Late Historic	Osborne et al. 1992
SBR-7155	Food processing site/ground stone artifacts and fire-affected rock	Prehistoric/Indeterminate	Osborne et al. 1992b
SBR-72	“Footprint site”/prehistoric human and animal tracks in dried Mojave River silt; prehistoric habitation site/hearths [NRHP nominated 1979]	Prehistoric/Pinto or Gypsum period based on radiocarbon dates (860-4190 B.C.)	Bierman 1949c; Burgess 1967; McKenna 2000b; Wilke 1979
SBR-7694H	Linear/Power transmission line	Historic/1933-1936	Brock 1995
SBR-7739H	Dump site/SCA glass	Historic/20 <sup>th</sup> century	Becker and Phillips

Site #	Site Type/Constituents	Cultural/Temporal Affiliations	Reference
	fragments, hole in top cans		1992
SBR-7740H	Dump site/ glass and ceramic fragments, vent hole cans	Historic/20 <sup>th</sup> century	Becker and Phillips 1993a
SBR-7741H	Dump site/ SCA and clear glass fragments	Historic/20 <sup>th</sup> century	Becker and Phillips 1993b
SBR-7742H	Dump site/domestic trash	Historic/20 <sup>th</sup> century	Becker and Phillips 1993c
SBR-7743H	Dump site/ can scatter	Historic/20 <sup>th</sup> century	Becker, Vitorino et al. 1993
SBR-7744H	Dump site/SCA glass, vent hole cans, sanitary cans	Historic/20 <sup>th</sup> century	Becker et al. 1993a
SBR-7745H	Dump site/ glass fragments, vent hole cans	Historic/20 <sup>th</sup> century	Becker et al. 1993b
SBR-7752H	Dump site/can scatter	Historic/20 <sup>th</sup> century	Becker, Giacomini, et al. 1993
SBR-7753H	Dump site/can scatter	Historic/20 <sup>th</sup> century	Becker and Vitorino 1993
SBR-8389H	Campsite/Fire-cracked rock and bottle glass	Historic/Indeterminate	Alexandrowicz et al. 1995
SBR-8391	Campsite/debitage and fire-cracked rock	Prehistoric/Indeterminate	Alexandrowicz 1996
SBR-8392H	Linear/Railroad berm and tracks	Late historic/Indeterminate	Alexandrowicz and Krautkramer 1996-
SBR-8393	Campsite/debitage and fire-cracked rock	Prehistoric/Indeterminate	Alexandrowicz et al. 1996
SBR-8831H	Linear/fence line	Late Historic	Shaver 1997a
SBR-8832H	Linear/historic fence line	Late historic/pre-1945	Shaver 1997b
SBR-8833H	Dump site/artifacts	Late historic/pre-1945	Shaver 1997c
SBR-8834H	Dump site/artifacts	Late historic/pre-1945	Shaver 1997d
SBR-8863	Campsite/debitage and fire-cracked rock	Prehistoric/Indeterminate	WSA 1997

The linear site comprising CA-SBR-3033/H, -4272H, and -4411, represents a composite of early trails and roads through the area including the Old Indian trail, which became the Mojave or Government Road, and the old Mormon trail. These roads are crossed by other early roads such as the Santa Fe and Salt Lake trail. The importance of this trail and road system to the history of the area explains the fact that four California Historical Landmarks (CHL) are associated with it, as follows:

- **CHL 96 Mormon Road** - When the Mormons came to the San Bernardino Valley in 1851 they needed suitable lumber to construct their homes and stockade. To bring in lumber from the mountains, they built a 1-mile wagon road that required about a thousand days labor to complete. **Location:** Waterman Canyon, State Hwy 18 (P.M. 17.15), 0.5 mi W of Crestline
- **CHL 576 Santa Fe and Salt Lake Trail Monument** – This was erected in 1917 by Sheldon Stoddard, Sydney P. Waite, John Brown, Jr., George Miller, George M. Cooley, Silas C. Cox, Richard Weir, and Jasper N. Corbett in honor of the brave pioneers of California who traveled the Santa Fe and Salt Lake Trail in 1849. **Location:** S end Wagon Train Rd, SE corner I-15 (P.M. 21.4) and State Hwy 138, 17 mi N of San Bernardino
- **CHL 577 Mormon Trail Monument** - In June 1851, 500 Mormon pioneers came through this pass to enter the San Bernardino Valley, where they established a prosperous community. **Location:** W Cajon Canyon, State Hwy 138 (P.M. 10.7), 3.6 mi W of I-15, 20 mi N of San Bernardino
- **CHL 963 The Mojave Road** - Long ago, Mohave Indians used a network of pathways to cross the Mojave Desert. In 1826, American trapper Jedediah Smith used their paths and became the first non-Indian to reach the California coast overland from mid-America. The paths were worked into a military wagon road in 1859. This “Mojave Road” remained a major link between Los Angeles and points east until a railway crossed the desert in 1885. **Location:** Midway Rest Area, N-bound I-15, 30 mi NE of Barstow

None of the CHL locations are within a 1-mile radius of the VV 2 Project area.

## **CONSULTATION WITH LOCAL HISTORICAL SOCIETIES AND OTHER INTERESTED PARTIES**

In addition to the record search conducted by SBAIC, WSA contacted the following agencies on May 12, 2006, by letter, requesting information regarding historic or other cultural resources within or adjacent to the Project area.

- San Bernardino County, Planning Department, Victorville Office, 15456 W. Sage Street, Victorville, CA 92392, (760) 843-4340
- City of Victorville, Planning Department, 14343 Civic Drive, PO Box 5001, Victorville, CA 92393-5001
- Mojave Desert Heritage and Cultural Association, 37198 Lanfair Road G-15, Essex, CA 92332
- Victor Valley Museum and Art Gallery, 11873 Apple Valley Road, Apple Valley, CA 92308-7538  
San Bernardino Historical and Pioneer Society, 796 N D St, San Bernardino, CA 92401, (909) 885-2204
- Mojave Historical Society, PO Box 68, Victorville, CA 92392

The letters sent to the Mohave Historical Society and the Roy Rogers and Dale Evans Museum were returned, address unknown. The City of Victorville provided WSA with a copy of their Cultural Resources Technical Report for the City of Victorville General Plan. No other responses to these inquiries have been received as of February 2007 (refer to Appendix B for a summary of consultation).

Additional historical research into the date of construction and possible association of the structural remains encountered during the archaeological survey began with contacting local historian Richard Thompson (M.A. History, UC Riverside), who has served as the president of both the Mojave Historical Society and the San Bernardino Pioneer and Historical Society. Mr. Thompson provided valuable input concerning the type of documents held by local agencies, as well as his own assessment of the likely catalyst for construction of homes within the project area. He also provided an article on mid-century development within Victorville, which was published in the Press Dispatch on July 3, 2005. The article focused on the growth that occurred as a result of the United States Air Force reactivating the old Victorville Army Air Field, which had been shut down since the end of World War II, and renamed it George Air Force Base. The Air Force arrived at the beginning of the Korean War and found that housing on the base was insufficient. The Victor Valley Housing Corporation was then formed, and 650 dwellings were constructed on the airbase (now Southern California Logistics Airport) in the early 1950s.

Topographic quadrangles (7.5-minute Helendale 1956 [Photorevised 1993] and 30-minute 1934 Barstow) were consulted to establish broad date ranges for the construction of structures within the project area. Additional research was then conducted through the

San Bernardino County Assessor's Office, although little information was available via this avenue. Finally, Jeremy Johnson of San Bernardino County's Flood Planning Department (Department of Public Works) was contacted in order to research the availability of historic aerial photographs of the project area. Ultimately, he was able to provide a set of aerial photographs taken on November 8, 1955, which proved to be very useful.

#### **NATIVE AMERICAN HERITAGE COMMISSION CONSULTATION**

WSA contacted the Native American Heritage Commission (NAHC) in Sacramento, California, on February 24, 2006, by letter, with a description of the proposed Victorville 2 Hybrid Power Project. The letter included a request for a listing of local, interested Native American representatives and information on traditional or sacred lands within the project area and vicinity. NAHC staff member Ms. Carol Gaubatz wrote in response to the WSA letter on March 8, 2006, that a "record search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area." Included in the response was a list of Native American Contacts (Appendix C: NAHC Correspondence).

WSA again contacted the NAHC on May 23, 2006, by letter, notifying them that the record search area for the Project had been extended from a ¼-mile radius to a mile radius surrounding the project area. The letter included a request for information on Traditional or Sacred Lands within the extended record search area.

On May 23, 2006 WSA notified the following Native American persons, and requested information from them regarding Traditional of Sacred Properties inside the Project area or within a mile radius.

- Britt Wilson, Cultural Resource Coordinator, Morongo Band of Mission Indians
- Mr. Maurice Lyons, Chairperson, Morongo Band of Mission Indians
- Mr. John Valenzuela, Chairperson, San Fernando Band of Mission Indians
- Mr. Deron Marquez, Chairperson, San Manuel Band of Mission Indians
- Ms. Bernadette Brierty, Cultural Resources Coordinator, San Manuel Band of Mission Indians
- Goldie Walker, Serrano Band of Indians (contacted June 23, 2006)

An e-mail response from Britt Wilson of the Morongo Band of Mission Indians was received on June 6, 2006 (see Appendix C). As no responses were received from the remaining Native American contacts, follow-up telephone calls were made on June 23, 2006 and July 13, 2006. Britt Wilson, Morongo Band of Mission Indians, requested a copy of the Phase I report for review. John Valenzuela, San Fernando Band of Mission

Indians expressed concern about the potential for prehistoric sites in the area of impact and would like to be informed if anything cultural is encountered during construction. Goldie Walker, Serrano Band of Indians, asked to be contacted if human remains or any cultural material is discovered as a result of construction activities. No additional Native American contacts have occurred since July 2006 (please refer to Appendix C for a summary of Native American contacts).

## **SURVEY RESULTS**

From March 28 to 31, 2006, WSA archaeologists Allen Estes and Thomas Young conducted an intensive pedestrian survey of three large rectangular tracts of land and approximately 2 ½ miles of linear route – the northern section of the T-Line, Segment 1, and water and sanitary line corridors. The large tracts are the VV 2 Project main plant site (Area 1) and two laydown areas (Area 2, which lies to the west of Area 1, and Area 3, which is south of Area 1). From January 24 to 25, 2007, WSA archaeologists Allen Estes and David Buckley conducted an intensive pedestrian survey along the southern and eastern boundaries of the VV 2 Project main plant site (Area 1), the western access area to the main plant site, and the northern portion of T-Line, Segment 1. WSA archaeologists Aimee Arrigoni and Thomas Young conducted an intensive pedestrian survey of the 3-mile-long southern portion of T-Line, Segment 1 from November 9 to 10, 2006.

On November 2, 2006, WSA archaeologists Allen Estes and Eric Strother conducted a “windshield” survey of a 1-mile buffer around the main plant site (Area 1). The windshield survey was conducted in compliance with CEC guidance to determine whether standing historic buildings and structures are present within the 1-mile buffer around the plant site. The purpose of the windshield survey was to assess the impact of the Project on the historic context of any historic properties that might be present within the 1-mile buffer. The survey was conducted from vantage points that already exist (e.g., available access roads), and did not create new ground disturbances to the area.

From November 9 to 10, 2006, WSA archaeologists Aimee Arrigoni and Thomas Young conducted an intensive pedestrian survey of the T-Line, Segment 2 portion of the project area. The Segment 2 survey area consisted of two pull areas, and an approximately 1.47-mile-long corridor that will utilize a combination of both existing and newly constructed transmission towers; no Project construction (ground disturbing activities) are expected in Segment 2 outside these pull areas and the 1.47-mile corridor.

From November 3 to 7, 2006, WSA archaeologists Allen Estes and Eric Strother conducted an intensive pedestrian survey of the T-Line, Segment 3 portion of the Project area. The survey area consisted of 78 new tower sites, eight pull areas, and an

approximately 1-mile-long corridor immediately east of the Lugo Substation. From January 25 to 26, 2007, WSA archaeologists Allen Estes and David Buckley conducted an intensive pedestrian survey of the 6 ½-mile-long 115 kV replacement line corridor that runs from the Victor substation to the south and parallels the T-Line, Segment 3.

*Survey Areas*

**Area 1 (VV 2 Main Plant Site)**

Area 1 was surveyed on March 28 and 29, 2006, and January 24 and 25, 2007. The principal boundaries of the plant site area are an east-west line approximately 75 ft. south of and parallel to Colusa Road on the south, Helendale Road on the west, and a line that follows Desert Flower Road, a dirt road on the north that meanders along the northern section line of Section 2. The eastern boundary runs along the section line between Sections 1 and 2 in the northern half of the property and then, half way down the section line, turns to the east for a distance of approximately 500 ft. From here it turns south again until it makes a corner with the southern boundary line. The plant site also includes a rectangular extension on the western side for plant access. The final plant site boundaries were staked for the survey. Table 3 includes the UTM coordinates for the Main Plant Site boundaries.

**TABLE 3.UTM Coordinates for Area 1 (VV 2 Main Site Area)**

<b>Location</b>	<b>Northing</b>	<b>Easting</b>
NE corner of plant site	3833737.16	466523.08
NW corner of plant site (along Helendale Road)	3833744.70	465512.39
SW corner of plant site	3832108.30	465651.81
SE corner of plant site	3832107.21	466312.44
NE corner of western access area	3832416.55	465629.45
NW corner of western access area	3832410.30	465537.21
SW corner of western access area	3832167.07	465555.49
SE corner of western access area	3832174.77	465646.68

Helendale Road is a dirt road that runs north-south along the western boundary of the Project's main site area. It is a well traveled road without shoulders that is regularly graded. Because of the regular grading, the road is approximately a foot below the level of the surrounding ground surface.

Colusa Road is a dirt road that runs east-west approximately 25 ft. north of and parallel to the southern boundary of the VV 2 Project's main plant site. The segment of Colusa Road that is along the southern edge of the main plant site is less traveled and less maintained than the rest of Colusa that extends west to Highway 395.

WSA survey of the VV 2 main plant site included a 200-ft.-wide buffer around the entire plant site.

**Windshield of 1-Mile Buffer Around Area 1**

WSA conducted a windshield survey of the 1-mile buffer around the main plant site to determine whether historic buildings and structures are present. The purpose of the survey, which was conducted to satisfy CEC instructions, was to assess the impact of the Project on the historic context of any historic properties that might be present within the 1-mile buffer. The survey was conducted from vantage points that already exist (e.g., available access roads), and did not create new ground disturbances to the area.

**Areas 2 and 3 (Laydown Areas)**

Two rectangular laydown areas were also surveyed: The area surveyed for the western laydown area (Area 2), which encompassed approximately 50 acres, of which only approximately 30 acres will be needed) began approximately 800 ft. west of the main site area (Area 1). The southern laydown area, Area 3 (approximately 45 acres, of which only approximately 20 acres will be needed), adjoins the main site area, beginning at Colusa Road and extending to the south approximately 1,765 ft.. The survey encompassed additional buffer area than required in Area 2 and Area 3. The UTM coordinates for the corners of Areas 2 and 3 are given in the Table 4.

**TABLE 4.UTM Coordinates for Areas 2 and 3 (Laydown Areas)**

<b>Location</b>	<b>Northing</b>	<b>Easting</b>
SE corner of Area 3	3831596.25	466286.78
NE corner of Area 3	3832134.85	466286.78
SW corner of Area 2 on Colusa Road	3832140.72	465123.58
SE corner of Area 2 on Colusa Road	3832137.10	465407.26
NE corner of Area 2	3832840.15	465407.26
NW corner of Area 2	3832846.94	465123.58
SW corner of Area 3	3831600.51	465945.03
NW corner of Area 3	3832134.45	465945.03

Because of terrain and the relatively good ground visibility, the surveyed area included a buffer zone 100 ft. wide immediately outside the boundaries of each laydown area.

**Northern Linears (T-Line, Segment 1, Water and Sanitary)**

In addition to the rectangular survey areas, approximately 2½ miles of 100-ft.-wide linear corridors were surveyed, plus a 100-ft.-wide buffer on either side of the corridor. WSA did not survey the buffer where it extended into the VVWRA property, since the VVWRA property is developed with collecting reservoirs. The T-line, Segment 1 centerline was staked and the other linear centerlines were located using UTM coordinates supplied by Inland Energy on behalf of the City of Victorville. The surveyed corridor begins at the southeastern corner of Area 1, the main plant site area, and runs southeast to the northwest corner of the VVWRA property. The T-line, Segment 1 and water line corridors run parallel along this section. Near the VVWRA property, the T-Line and sanitary wastewater lines diverge from the water line corridor. The T-Line and sanitary wastewater lines continue to the south, and the water supply line runs to the east around the northern edge of the VVWRA property.

The water supply pipeline route runs east to the northeast corner of the VVWRA property and turns south. From this point, the route follows the VVWRA eastern fence line until it enters the VVWRA property just east of the facility's main offices. The T-Line and sanitary wastewater pipeline routes (in adjacent corridors) continue south from the northwest corner of the VVWRA property until they reach an existing east-west sewer lateral that runs into the VVWRA facility; the sanitary wastewater line will connect with this sewer lateral, while the T-Line route continues to the south. When the T-Line, Segment 1 route passes the southern boundary of the VVWRA property, it turns to the southeast until it reaches Shay Road. It follows along the western edge of Shay Road until it terminates at a point just north of Turner Road.

The location of the T-Line, Segment 1 survey corridor was confirmed during a drive-through of the Segment 1 route with Mr. Mike Quinn, Inland Energy's representative, on November 9, 2006. He and his crew had staked the centerline of the survey corridor. The placement of towers within this corridor was not determined at the time of the survey, so the entire corridor was surveyed. The survey area included the 100 ft. ROW and a 100 ft. buffer on either side. From the location of a dwelling at 18225 Shay Road south approximately 750 ft., the survey area was enlarged (under the direction of Mike Quinn) to include an area 400 ft. west of the staked centerline.

The UTM coordinates for the linear survey area are given in the Table 5.

**TABLE 5. UTM Coordinates for the Linear Survey Area**

<b>Location</b>	<b>Northing</b>	<b>Easting</b>
T-Line, Seg. 1, north end stake	3832071.48	466159.98
T-Line, Seg. 1, diverts from water line	3831796.20	466747.61
T-Line, Seg. 1 turns south along VVWRA	3831469.16	466907.23
T-Line, Seg. 1 turns east toward Shay Road	3830463.77	466910.92
Water Line Route Along E fence line of VVWRA	3831466.0	467219.0
Water Line Route Along E fence line of VVWRA	3831362.0	467161.0
Water Line Route Along E fence line of VVWRA	3831219.0	467212.0
Water Line Route Along E fence line of VVWRA	3831175.0	467401.0
T-Line turns to E toward Shay Road		
T-Line Reaches Shay Road	3827799.27	468082.90
South end of T-Line, Segment 1	3826203.98	468424.98

**T-Line, Segment 2**

The survey area for Segment 2 of the VV 2 T-Line consisted of two separate types of survey areas: pull areas, and an approximately 1.47-mile-long survey corridor that will utilize both existing and new transmission towers. The entire T-Line, Segment 2 corridor was not surveyed, because the Project will impact only the two pull areas (two 300-ft.-long sections of the 100-ft.-wide ROW) and the 1.47-mile-long section where the construction of new towers is required. The remainder of the T-Line, Segment 2 corridor will not be disturbed by Project construction. The survey areas were determined during a drive-through of the entire T-Line, Segment 2 with Mr. Mike Quinn, Inland Energy's representative, on November 9, 2006. He and his crew had staked both of the pull areas and the centerline of the 1.47-mile-long corridor. All survey areas in T-Line, Segment 2 were established at his direction.

The 1.47-mile-long survey corridor began southwest of the corner of Rancho Road and El Evado Road and continued north to the beginning of Segment 2 just north of Turner Road. Both new and existing transmission towers will be utilized within this corridor.

Pull areas are areas that will be used during the construction of the new T-Line to pull the new wires along the new towers. The area that will be disturbed at each pull area is estimated to be 100 ft. wide (the width of the ROW) and 40 ft. long. For each pull area a 300-ft.-wide corridor (100-ft.-wide corridor plus 100-ft.-wide buffer on either side of the

corridor) was surveyed between two tower sites to cover the area of the proposed pull area. The length of the corridor was the distance between the two tower sites, which varied from tower to tower. UTM coordinates for the surveyed Pull Areas and new ROW in the T-Line are given in Table 6.

**TABLE 6. UTM Coordinates for the Surveyed Pull Areas and new ROW in T-Line, Segment 2**

Location	Northing	Easting
Pull Area 1 (Center point)	3819408	464990
Pull Area 2 (Center point)	3823591	468101
Segment 2 (South end)	3823844	468175
Segment 2 (at Air Expressway Blvd)	3825159	468347
Segment 2 (North end)	3826144	468440

### **T-Line, Segment 3**

The survey area for Segment 3 of the VV 2 T-Line (Victor Substation to Lugo Substation) consisted of four separate types of survey areas: tower sites, pull areas, pole sites (for the 115-kV line relocation), and two linear corridors – an approximately 1-mile-long survey corridor that is 100 ft. wide and a 6 ½ -mile-long, 40-ft.-wide corridor for the 115 kV replacement line that parallels T-Line, Segment 3. These survey areas represent the areas that will potentially be disturbed by Project construction. The portions of the T-Line, Segment 3 corridor that were not surveyed will not be disturbed by Project construction. The survey areas were determined during a drive-through of the entire T-Line, Segment 3 with Mr. Mike Quinn, Inland Energy’s representative, on November 2, 2006. He indicated where tower sites were located, flagged pull areas, and showed where the 1-mile-long survey corridor should begin. All survey areas in T-Line, Segment 3 were established at his direction. The corridor for the 115 kV replacement line was determined during a drive-through of the entire 6 ½ mile line with Mr. Mike Quinn, Inland Energy’s representative, on January 24, 2007. He indicated where the replacement line would be located, how wide an area was needed for construction, where its center was located, and where a “jog” area was located. The survey area for the 115 kV replacement line was established at his direction.

Tower sites are the locations of new VV 2 Project T-Line tower construction. Each new tower site is centered 125 ft. off of the existing 220 kV Lugo to Kramer towers. The majority of the tower sites will replace existing towers of the 115 kV Victor Aqueduct to Phelan line. This segment of the line is recorded as part of the historic transmission line from Bishop built in the 1930s (site CA-SBR-10316H). The area required for the construction of new towers is 160 ft. wide and 100 ft. long. The survey area at each new

tower location extended beyond this, covering an area 300 ft. by 300 ft. centered on each tower site, which includes a 100-ft.-wide buffer on either side of the ROW. A total of 78 tower sites were surveyed on VV 2 T-Line, Segment 3. Table 7 gives the UTM coordinates of the new tower sites.

**TABLE 7.UTM Coordinates for the Surveyed Tower Sites in T-Line, Segment 3**

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Tower 1 (125 ft. W of 220 kV Lugo-Kramer Tower 10/6)	3817987	464452
Tower 2 (125 ft. W of 220 kV Lugo-Kramer Tower 10/5)	3817795	464517
Tower 3 (125 ft. W of 220 kV Lugo-Kramer Tower 10/4)	3817606	464576
Tower 4 (125 ft. W of 220 kV Lugo-Kramer Tower 10/3)	3817414	464629
Tower 5 (125 ft. W of 220 kV Lugo-Kramer Tower 10/2)	3817220	464681
Tower 6 (125 ft. W of 220 kV Lugo-Kramer Tower 10/1)	3817022	464735
Tower 7 (125 ft. W of 220 kV Lugo-Kramer Tower 9/8)	3816821	464790
Tower 8 (125 ft. W of 220 kV Lugo-Kramer Tower 9/7)	3816629	464844
Tower 9 (125 ft. W of 220 kV Lugo-Kramer Tower 9/6)	3816432	464896
Tower 10 (125 ft. W of 220 kV Lugo-Kramer Tower 9/5)	3816240	464949
Tower 11 (125 ft. W of 220 kV Lugo-Kramer Tower 9/4)	3815847	465080
Tower 12 (125 ft. W of 220 kV Lugo-Kramer Tower 9/3)	3815849	465056
Tower 13 (125 ft. W of 220 kV Lugo-Kramer Tower 9/2)	3815653	465113
Tower 14 (125 ft. W of 220 kV Lugo-Kramer Tower 9/1)	3815458	465165
Tower 15 (125 ft. W of 220 kV Lugo-Kramer Tower 8/8)	3815264	465216
Tower 16 (125 ft. W of 220 kV Lugo-Kramer Tower 8/7)	3815073	465269
Tower 17 (125 ft. W of 220 kV Lugo-Kramer Tower 8/6)	3814878	465329
Tower 18 (125 ft. W of 220 kV Lugo-Kramer Tower 8/5)	3814684	465377
Tower 19 (125 ft. W of 220 kV Lugo-Kramer Tower 8/4)	3814485	465433
Tower 20 (125 ft. W of 220 kV Lugo-Kramer Tower 8/3)	3814291	465489
Tower 21 (125 ft. W of 220 kV Lugo-Kramer Tower 8/2)	3814101	465540

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Tower 22 (125 ft. W of 220 kV Lugo-Kramer Tower 8/1)	3813906	465594
Tower 23 (125 ft. W of 220 kV Lugo-Kramer Tower 7/8)	3813713	465649
Tower 24 (125 ft. W of 220 kV Lugo-Kramer Tower 7/7)	3813516	465707
Tower 25 (125 ft. W of 220 kV Lugo-Kramer Tower 7/6)	3813322	465757
Tower 26 (125 ft. W of 220 kV Lugo-Kramer Tower 7/5)	3813168	465799
Tower 27 (125 ft. W of 220 kV Lugo-Kramer Tower 7/4)	3813007	465847
Tower 28 (125 ft. W of 220 kV Lugo-Kramer Tower 7/3)	3812714	465925
Tower 29 (125 ft. W of 220 kV Lugo-Kramer Tower 7/2)	3812534	465974
Tower 30 (125 ft. W of 220 kV Lugo-Kramer Tower 7/1)	3812339	466027
Tower 31 (125 ft. W of 220 kV Lugo-Kramer Tower 6/8)	3812147	466080
Tower 32 (125 ft. W of 220 kV Lugo-Kramer Tower 6/7)	3811948	466135
Tower 33 (125 ft. W of 220 kV Lugo-Kramer Tower 6/6)	3811754	466187
Tower 34 (125 ft. W of 220 kV Lugo-Kramer Tower 400652E)	3811618	466226
Tower 35 (125 ft. W of 220 kV Lugo-Kramer Tower 6/4)	3811352	466303
Tower 36 (125 ft. W of 220 kV Lugo-Kramer Tower 4006155E)	3811264	466324
Tower 37 (125 ft. W of 220 kV Lugo-Kramer Tower 6/3)	3811178	466347
Tower 38 (125 ft. W of 220 kV Lugo-Kramer Tower 6/2)	3810985	466401
Tower 39 (125 ft. W of 220 kV Lugo-Kramer Tower 6/1)	3810789	466453
Tower 40 (125 ft. W of 220 kV Lugo-Kramer Tower 5/7)	3810595	466506
Tower 41 (125 ft. W of 220 kV Lugo-Kramer Tower 5/6)	3810379	466569
Tower 42 (125 ft. W of 220 kV Lugo-Kramer Tower 5/5)	3810169	466619
Tower 43 (125 ft. W of 220 kV Lugo-Kramer Tower 5/4)	3809949	466688
Tower 44 (125 ft. W of 220 kV Lugo-Kramer Tower 5/3)	3809755	466738
Tower 45 (125 ft. W of 220 kV Lugo-Kramer Tower 5/2)	3809555	466795
Tower 46 (125 ft. W of 220 kV Lugo-Kramer Tower 5/1)	3809369	466851

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Tower 47 (125 ft. W of 220 kV Lugo-Kramer Tower 4/8)	3809173	466905
Tower 48 (125 ft. W of 220 kV Lugo-Kramer Tower 4/7)	3808979	466952
Tower 49 (125 ft. W of 220 kV Lugo-Kramer Tower 4/6)	3808784	467009
Tower 50 (125 ft. W of 220 kV Lugo-Kramer Tower 4/5)	3808592	467062
Tower 51 (125 ft. W of 220 kV Lugo-Kramer Tower 4/4)	3808397	467114
Tower 52 (125 ft. W of 220 kV Lugo-Kramer Tower 4/3)	3808208	467169
Tower 53 (125 ft. W of 220 kV Lugo-Kramer Tower 4/2)	3808013	467222
Tower 54 (125 ft. W of 220 kV Lugo-Kramer Tower 4/1)	3807816	467277
Tower 55 (125 ft. W of 220 kV Lugo-Kramer Tower 3/8)	3807624	467328
Tower 56 (125 ft. W of 220 kV Lugo-Kramer Tower 3/7)	3807435	467380
Tower 57 (125 ft. W of 220 kV Lugo-Kramer Tower 3/6)	3807241	467432
Tower 58 (125 ft. W of 220 kV Lugo-Kramer Tower 3/5)	3807057	467492
Tower 59 (125 ft. W of 220 kV Lugo-Kramer Tower 3/4)	3806862	467544
Tower 60 (125 ft. W of 220 kV Lugo-Kramer Tower 3/3)	3806664	467596
Tower 61 (125 ft. W of 220 kV Lugo-Kramer Tower 3/2)	3806471	467647
Tower 62 (125 ft. W of 220 kV Lugo-Kramer Tower 3/1)	3806277	467699
Tower 63 (125 ft. W of 220 kV Lugo-Kramer Tower 2/8)	3806087	467755
Tower 64 (125 ft. W of 220 kV Lugo-Kramer Tower 2/7)	3805892	467803
Tower 65 (125 ft. W of 220 kV Lugo-Kramer Tower 2/6)	3805696	467860
Tower 66 (125 ft. W of 220 kV Lugo-Kramer Tower 2/5)	3805504	467911
Tower 67 (125 ft. W of 220 kV Lugo-Kramer Tower 2/4)	3805311	467966
Tower 68 (125 ft. W of 220 kV Lugo-Kramer Tower 2/2)	3805119	468019
Tower 69 (125 ft. W of 220 kV Lugo-Kramer Tower 2/1)	3804928	468072
Tower 70	3804733	468123
Tower 71	3804541	468177

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Tower 72	3804350	468233
Tower 73	3804156	468287
Tower 74	3803963	468338
Tower 75	468111	3803916
Tower 76	467744	3803721
Towers 77 and 78 approximate location	467541	3803524

The pull areas will be used during the construction of the new T-Line to pull new wires along new towers. The estimated area of disturbance at each pull area is 100 ft. wide (the width of the ROW) and 40 ft. long. Since the pull area locations were not precisely determined at the time of the survey, a 300-ft.-wide corridor (the 100-ft.-wide ROW and a 100-ft.-wide buffer on either side of the ROW) was surveyed between two tower sites to cover the entire area proposed for a pull area. The length of the corridor was the distance between the two tower sites, which varied from tower to tower. Two exceptions were Pull Areas 7 and 8, which were located at the point where the T-Line made a 90-degree turn toward the Lugo Substation. Here the proposed pull areas were tentatively flagged, and the entire corridor was surveyed with a 100-ft. buffer on all sides, starting from the turn point out to the flagged endpoint. UTM coordinates for the surveyed Pull Areas are given in Table 8.

**TABLE 8.UTM Coordinates for the Surveyed Pull Areas in T-Line, Segment 3**

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Pull Area 1 (begin Tower 1)	3817987	464452
Pull Area 1 (end Tower 2)	3817795	464517
Pull Area 2 (begin Tower 14)	3815458	465165
Pull Area 2 (end Tower 15)	3815264	465216
Pull Area 3 (begin Tower 15)	3815264	465216
Pull Area 3 (end Tower 16)	3815073	465269
Pull Area 4 (begin Tower 33)	3811754	466187
Pull Area 4 (end Tower 34)	3811618	466226
Pull Area 5 (begin Tower 47))	3809173	466905

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Pull Area 5 (end Tower 48)	3808979	466952
Pull Area 6 (begin Tower 67)	3805311	467966
Pull Area 6 (end Tower 68)	3805119	468019
Pull Area 7 (begin Tower 74)	468338	3803963
Pull Area 7 (end Farmington St., ~500 ft. to the south)	N/A	N/A
Pull Area 8 (begin Tower 74)	3803963	468338
Pull Area 8 (end ~150 ft. to the east)	3804008	468399

The approximately 1-mile-long corridor extended from the Lugo Substation to a point where the new T-Line will join the existing 220 kV Lugo to Kramer line in order to avoid an existing housing area. The placement of towers within this corridor was not determined at the time of the survey, so the entire corridor was surveyed. The survey area included the 100 ft. ROW and a 100 ft. buffer on either side. The corridor was centered 125 ft. from the center line of the existing 220 kV Lugo to Kramer line. UTM coordinates of the approximately 1-mile-long corridor are 3803721N/ 467744E for the center of the northern end of the corridor; the southern end of the corridor is at the Lugo Substation fence.

As part of the T-Line, Segment 3 portion of the project, a 6 ½ -mile-long section of the existing 115 kV line will have to be relocated approximately 200 ft. to the east of the new line. A 40-ft.-wide corridor will be needed for the construction of the replacement 115 kV line. WSA surveyed this corridor along with a 75 ft. buffer on either side of the corridor. In addition, one wider area was surveyed to provide room for the new 115 kV line to make a jog around existing power lines. The “jog” area measured approximately 220 ft. in width and 1,100 ft. in length. The 115 kV replacement line corridor was determined during a drive-through of the entire 6 ½ mile line with Mr. Mike Quinn, Inland Energy’s representative, who indicated where the replacement line would be located, how wide an area was needed for construction, where is center was located, and where the “jog” area was located. UTM coordinates taken during the survey along the 115 kV replacement line center line are given in Table 9 below.

**TABLE 9.UTM Coordinates for the 115 kV Replacement Line Center Line**

<b>C/L from North to South</b>	<b>Northing</b>	<b>Easting</b>
115 kV C/L	3817895.61	464538.98

<b>C/L from North to South</b>	<b>Northing</b>	<b>Easting</b>
115 kV C/L	3817625.36	464614.37
115 kV C/L	3817518.83	464643.36
115 kV C/L	3816907.75	464812.36
115 kV C/L	3816660.20	464880.47
115 kV C/L	3816439.79	464941.15
115 kV C/L	3816064.52	465044.81
115 kV C/L Northern corner post of jog area	3815678.90	465151.14
115 kV C/L Southern corner post of jog area	3815341.55	465244.07
115 kV C/L	3815195.88	465284.98
115 kV C/L	3814762.83	465404.40
115 kV C/L	3813886.90	465646.85
115 kV C/L	3813601.54	465725.75
115 kV C/L	3813030.09	465881.85
115 kV C/L	3811951.70	466180.34
115 kV C/L	3810576.53	466559.89
115 kV C/L	3809799.10	466773.26
115 kV C/L	3809438.69	466875.77
115 kV C/L	3808069.55	467250.55

### *Survey Methods*

An intensive field reconnaissance was conducted within the survey areas. The two-person field crew maintained a maximum transect interval of 20 meters. Criteria used to identify sites followed Secretary of the Interior's Standards and Guidelines [As Amended and Annotated] ([http://www.cr.nps.gov/local-law/arch\\_stnds\\_0.htm](http://www.cr.nps.gov/local-law/arch_stnds_0.htm)). All sites were recorded with Department of Parks and Recreation (DPR) forms, mapped with a Trimble GPS receiver, sketch mapped, and photographed. Nonlinear sites that extended outside the survey area were recorded in their entirety.

The field survey strategy consisted of the following components.

- The survey strategy was to cover the entirety of each survey area to identify and record all visible historic and prehistoric resources within each survey area.
- No ground disturbance (i.e., shovel probes, test pits, etc.) was utilized in the survey, and there was no collection of cultural materials.
- The field survey consisted only of a pedestrian reconnaissance conducted at 20- meter (66 ft.) intervals (whenever possible).
- A Trimble GeoXT handheld GPS receiver, which provides submeter accuracy (+/-50 cm), was used to plot the location of sites, features and artifacts in each survey area, and to prepare GIS shapefiles for reporting purposes.
- Digital photographs were taken of all survey areas. Photographs include general views of the topography and vegetation density, historic or prehistoric site overviews, structures, features, artifacts, and other relevant images.
- Attempts were made to locate all previously recorded sites in the survey area and assess the integrity of the recorded site components. Previously unknown or unrecorded features or artifacts discovered within the site during the course of the survey were to be recorded.
- Any newly discovered historic (over 45 years of age) or prehistoric archaeological sites, and architectural resources over 45 years in age, were to be recorded in detail on Department of Parks and Recreation Primary Record (DPR 523) and associated (e.g., Building-Structure-Object) forms.

The rectangular survey areas (the main plant site area and two laydown areas) were surveyed by walking north to south. Two relatively small portions of Area 1 were not surveyed (parcels 242-21 and 242-25 totaling 10 acres), because access was denied by the landowners. Portions of parcels 232-31, 232-21, 232-22, 232-32, 242-23, 242-24, and 242-26 were not surveyed because modern structures currently occupy the parcels and are inhabited. Also, a pack of five to six dogs associated with one of these structures presented a threat to the surveyors. Both laydown areas were completely surveyed. The linear corridors were surveyed by walking transects parallel to the projected center line. Because the center line was not staked, compass bearings were followed.

### *Survey Results*

#### **Area 1**

WSA archaeologists surveyed Area 1 on March 28 and 29, 2006, and on January 24 and 25, 2007. The survey area consists of relatively flat terrain, except along the eastern edge where the land falls away rapidly to the west toward the Mojave River, which is approximately 250 ft. lower in elevation than most of Area 1. The soil consists of medium-grained sand. The area is slightly deflated through wind erosion, so that desert

gravels are forming on the ground surface. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, and grasses. Some minor dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent (Photo 1). The entire area has been highly disturbed by modern and late historic activities, which consist of construction of dwellings and outbuildings, dirt road formation through repeated vehicular traffic, scavenging, and both periodic and habitual dumping of garbage (Photo 2). Although several tin can scatters were recorded separately by the surveyors (e.g., VV 2 Site 1, Site 2), as well as concentrated trash scatters around old house foundations, the entire Area 1 was scattered with modern and historic trash.

The survey of Area 1 also included a windshield survey of the 1-mile buffer area around the VV 2 main plant site. Prior to the windshield survey, WSA studied available aerial photographs of the 1-mile buffer area to identify existing structures. Two existing structures were observed on the aerials, and they were examined on the ground during the survey. One additional structure was identified and examined during the survey. None of the structures were historic; all were modern in date (less than 50 years old). No other prehistoric or historic resources were observed during the windshield survey.

During the course of the pedestrian survey of the VV 2 main plant site, WSA archaeologists recorded no prehistoric isolates or prehistoric archaeological sites. Twenty-two previously undocumented historic sites were recorded.

#### *VV 2 Site 1*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. The site consists of two separate concentrations of historic and modern trash. Locus 1 is a sparse trash scatter that includes modern and historic cans. Possible historic cans include several beer cans and one sanitary food can. Modern trash includes modern beer cans, pull-top cans, and a broken wine jug with screw top. The locus measures approximately 60 ft. in length and 45 ft. in width, and it is oriented north to south. It is a scatter that consists of beer cans, fragments of a 5-gallon water bottle, plate glass fragments, and other assorted sanitary cans. Locus 2 measures approximately 20 ft. in diameter. The site has been disturbed by road traffic and erosion.

#### *VV 2 Site 2*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor

dune formation around the creosote bush and saltbush. The site consists of a moderately dense scatter of historic artifacts. The site measures approximately 90 ft. in length and 75 ft. in width. Present are about 50 sanitary and key wind tin cans, three dozen fragments of ceramic tableware, six pieces of sun-colored amethyst (SCA) glass, 12 fragments of aqua glass from at least two different "Ball" fruit jars, six fragments of clear glass, and a pail. The cans include several dozen beer cans, one Coleman mustard tin, and four hole-in-top cans. The cans are slightly embedded and covered by wind-blown sands. Some rodent burrowing was evident.

#### *VV 2 Site 3*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. The house slab is oriented north to south, and measures 25 ft. in length and 15 ft. in width. The slab is 10 inches thick. Surrounding the slab in a 20-ft. radius is a sparse scatter of building materials (fragments of plate glass, tar roof shingles, plywood scrap, and chunks of concrete) and household items (sanitary food and beer cans, bottle glass, bed springs, and carpet strips). The site has been slightly impacted by erosion.

#### *VV 2 Site 4*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. A remnant of the wood frame is still present in the southwest corner of the slab; it consists of two 2-x-4-inch boards that show signs of burning. The house slab measures 12 ft. square. The slab is 4 inches thick and sits on top of concrete walls on three sides. The concrete walls are approximately 12 inches wide and 8 inches high. Household items and construction materials are scattered around the foundation in every direction. The total area of the scatter measures approximately 100 ft. in length and 75 ft. in width, and it is oriented north to south. The slab is almost centrally located within the scatter area, and over 100 wire nails were scattered on top of the foundation. The household items that are present include bottle glass, ceramic crock fragments, a few sanitary food cans, and a gas can; the building materials include wire nails, several two-by-fours, wire, wire straps, an iron hinge, and plate glass fragments.

#### *VV 2 Site 5*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. The house slab measures 15 ft. square. The slab is 11 inches thick. A dense scatter of household items and construction materials surround the foundation approximately 20 ft. on all sides. The household items that are present include bottle glass and sanitary food cans; the building materials include Formica siding tiles and brick fragments. Step ladder parts and wood fencing debris were concentrated approximately 20 ft. south of the slab.

#### *VV 2 Site 6*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. The house slab measures 15 ft. square. The slab is 12 inches thick. There is a smaller attached concrete step (porch) that measures 12 ft. in length, 3 ft. in width, and 5 inches in thickness. It is centered along the eastern side of the main slab. A moderate scatter of household items and construction materials surround the foundation approximately 50 ft. in every direction. The household items that are present include sanitary food cans, two bicycle frames, a bassinet, bed springs, paper and plastic items; the building materials include 2-x-4s, plate glass fragments, linoleum tiles, plywood scrap, and wire nails.

#### *VV 2 Site 7*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. A portion of the wood frame (a 2-x-4-inch board) was still bolted in place along the southern edge of the slab. The house slab measures 20 ft. in length and 12 ft. in width. The slab is 10 inches thick. A moderate scatter of household items and construction materials surround the foundation 20 to 30 ft. in every direction. The household items

that are present consist primarily of sanitary food cans; the building materials are primarily 2-x-4 scraps and plate glass fragments.

*VV 2 Site 8*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. The house slab measures 15 ft. in length and 12 ft. in width. The slab is 10 inches thick. A light scatter of household items and construction materials surround the foundation approximately 20 ft. in every direction. The household items that are present consist primarily of tin food cans; the building materials are primarily plate glass fragments. Some modern paper and aluminum can trash is also present.

*VV 2 Site 9*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. A remnant of the wood frame is still bolted down along all four sides of the slab; it consists of 2-x-4-inch boards laid flat and end to end. The house slab measures 20 ft. in length and 15 ft. in width. The slab is 10 inches thick. A dense scatter of household items and construction materials surround and partially cover the slab. The extent of the surrounding scatter is 20 to 30 ft. in every direction. The household items that are present consist of a dozen sanitary food cans; ceramic fragments, and bed springs, the building materials are primarily plate glass fragments, scraps of wood and plaster, and wire nails.

*VV 2 Site 10*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of concrete foundation walls and attached slab that is surrounded by an associated scatter of historic material. The main house foundation measures 19 ft. in length and 15 ft. in width, and it consists of four formed concrete walls. The walls are 6 inches wide and 10 inches high. One-half inch iron bolts, used for securing the wood frame, are embedded in all four walls. Remnants of the wood frame are still bolted to the walls. The attached (porch) slab is formed concrete with no observable reinforcement.

The slab measures 19 ft. in length, 9 ft. in width, and 4 inches in thickness. A dense scatter of construction materials surrounds and partially covers the slab. This includes sections of fallen frames from the walls and roof. The frame sections still have plywood, clapboard, and tar paper attached. The roof sections are covered with green tar shingles. A scatter of historic artifacts surrounds the house debris for 30 ft. in every direction. The household items that are present consist of dozens of sanitary and key wind food cans; bed springs, plate glass fragments, window screens, rubber hose, and wood trap or cage remnants.

#### *VV 2 Site 11*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. A remnant of the wood frame is still bolted down along all four sides of the slab; it consists of 2-x-4-inch boards laid flat and end to end. The house slab measures 15 ft. in length and 11 ft. in width. The slab is 10 inches thick. A dense scatter of household items and construction materials surround and partially cover the slab. The extent of the surrounding scatter is 30 ft. in every direction. The household items that are present consist of approximately 40 sanitary food cans; bottle glass, metal hardware, a couch, and bed springs, the building materials are primarily plate glass fragments, scraps of wood frame and particle board, and wire nails.

#### *VV 2 Site 12*

This newly identified site is located on a relatively small knoll on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. It is slightly embedded and highly weathered. The slab measures 11 ft. in length and 8 ft. in width. A moderate scatter of household items and construction materials surround and partially cover the slab. The extent of the surrounding scatter is 20 ft. in every direction. The household items that are present consist of a sanitary food cans and bed springs. The building materials are primarily plaster chunks and scraps of wood.

#### *VV 2 Site 13*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site

consists of a concrete foundation slab and an associated scatter of historic material. The slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. A remnant of the wood frame is still bolted down along all four sides of the slab; it consists of 2-x-4-inch boards laid flat and end to end. The house slab measures 17 ft. in length and 11 ft. in width. The slab is 10 inches thick. A concrete threshold is attached to the slab along the northeastern edge of the slab where there is also a door opening in the wood frame. The threshold measures 3 ft. square and it is approximately 4 inches thick. A moderate scatter of household items and construction materials surround and partially cover the slab. The extent of the surrounding scatter is 20 ft. in every direction. The household items that are present consist of a few scattered sanitary food cans; the building materials are primarily plate glass fragments, scraps of wood and tar paper, and wire nails.

#### *VV 2 Site 14*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of two adjacent concrete foundation slabs and an associated scatter of historic material. The main house slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges of the slab. A remnant of the wood frame is still bolted down along the northeastern edge of the slab; it consists of 2-x-4-inch boards laid flat and end to end. The house slab measures 15 ft. in length and 13 ft. in width. The slab is 10 inches thick. A concrete threshold is attached to the slab at the center of the eastern side of the slab where there is also a partial door opening evident in the wood frame. The threshold measures 4 ft. square and it is approximately 4 inches thick. The secondary slab (possibly a garage) is adjacent to the northwestern corner of the main house slab. The concrete surface is rougher than the main slab, and there are no bolts for fastening a frame. The secondary slab measures 14 ft. in length and 6 inches in width. It is oriented east-west, while the main house pad is oriented north-south. A moderate scatter of household items and construction materials surround the slab for about 25 ft. in every direction. The household items that are present consist of a TV cabinet, bottle glass and bottle caps; the building materials are primarily plate glass fragments, scraps of wood and tar paper, a metal window frame, and wire nails.

#### *VV 2 Site 15*

This newly identified site is located on a slight knoll on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab and an associated scatter of historic material. The

double-L-shaped slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all edges of the slab. The house slab measures 30 ft. in length and 28 ft. in width. The slab is 10 inches thick. A moderate scatter of household items and construction materials surround the slab for 25 ft. in every direction, with most of the artifacts concentrated at the north end of the slab. The household items that are present consist of dozens of sanitary food cans; ceramic tableware fragments, bottle glass, stove parts, and bed springs; the building materials are primarily plate glass fragments, scraps of wood, and wire nails.

#### *VV 2 Site 16*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a concrete foundation slab (Feature 1), an animal pen (Feature 2), and an associated scatter of historic material. Feature 1 is a rectangular slab that is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all edges of the slab. A remnant of the wood frame is still bolted down along all the southern and eastern sides of the slab; it consists of 2-x-4-inch boards laid flat and end to end. The house slab measures 15 ft. in length and 11 ft. in width, and it is oriented north-south. The slab is 10 inches thick. Feature 2 lies approximately 70 ft. south of Feature 1 and is what appears to be the remnant of a pen built of corrugated sheet metal pieces. The pen area measures approximately 25 ft. in length and 19 ft. in width, and it is oriented east-west. Wood debris is scattered inside the pen area and may be part of the original structure. A moderate scatter of household items and construction materials is found throughout the entire area in a 50-ft. radius around the two features. The household items that are present consist of dozens of beer and sanitary food cans; paint cans, ceramic tableware fragments, bottle glass, and two sets of bed springs. Scattered building materials are primarily plate glass fragments, scraps of wood, ceramic pipe, and wire nails.

#### *VV 2 Site 17*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of two associated features – the remains of a wood frame house and a small privy – and an associated scatter of historic material. Feature 1 consists of the remains of a wood-frame house that was constructed on an earthen pad about 4 inches high. The pad measures 23 ft. in length and 14 ft. in width, and it is oriented east-west. The wood frame was constructed with 2-x-4-inch boards and fastened together with wire nails. It appeared that the structure burned down. All of the remaining boards were charred, and there was

charcoal present. Feature 2 lies 55 ft. to the southeast of Feature 1. It consists of the remnants of a small, wood-lined privy. The privy shaft measures 2½ ft. by 2 ft. and is lined on three sides with 6-inch wide slats. The depth of the privy is unknown; the shaft has filled in with earth. Wood boards from the outhouse structure that was built over the privy are scattered in the immediate vicinity. The outhouse remains include portions of a door with iron hinges. The structure was fastened with wire nails. A widespread scatter of household items and construction materials surround the house location in a 100-ft. radius. The household items that are present consist of beer and soda bottle glass, beer and sanitary food cans, glass fruit jar fragments, and a set of bed springs; the building materials consist primarily of scraps of wood and wire nails. Some modern paper and plastic debris is mixed in with the historic material.

#### *VV 2 Site 18*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a main concrete foundation slab, an attached secondary concrete pad, and an associated scatter of historic material. The main slab is made of formed concrete with no observable reinforcement. One-half inch iron bolts, used for securing the wood frame, are embedded in the slab along all four edges. The house slab measures 19 ft. in length and 16 ft. in width. The slab is 12 inches thick. A smaller concrete slab (porch or garage) is attached to the main slab along the north edge of the main slab. The smaller slab measures 19 ft. in length and 5 ft. in width, and it is approximately 4 inches thick. It contains no bolts or other additional components. A moderate scatter of household items and construction materials surround and partially cover the slab. The extent of the surrounding scatter is approximately 15 ft. in every direction. The household items consist of bottle glass and two fire-affected bed springs; the building materials are primarily plate glass fragments, scraps of wood, an iron hinge, and wire nails. Animals have burrowed below the slab.

#### *VV 2 Site 19*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of three associated features – the remains of a wood frame house, the possible remains of a privy, and the remains of a wood storage shed – and an associated scatter of historic material. Feature 1 consists of the remains of a wood-frame house that was constructed on an earthen pad about 4 inches high. The pad measures 27 ft. in length and 20 ft. in width, and it is oriented north-south. The wood frame was constructed with 2-x-4-inch boards and fastened together with wire nails. It appeared that the structure recently had burned down, as a pile of charred boards, ash and charcoal were present. Feature 2

lies 60 ft. to the south of Feature 1. It consists of the possible remnants of a privy. The privy shaft is a 6-inch deep depression that is roughly 2-ft. square. The hole has filled in with earth. Surrounding the depression is a scatter of milled boards that may represent the remains of the outhouse structure. The depth of the privy is unknown. Feature 3 is a small, collapsed wood structure (probably a storage shed) that is approximately 50 ft. to the west of the main house remains. The structure was built of 1-x-6-inch boards on a wood frame that was built with 2-x-4-inch boards. Fasteners were wire nails. A door frame and hinged door were observed in the debris. A widespread scatter of household items and construction materials surround the house location in an 80-ft. radius. The household items that are present consist of beer and sanitary food cans, glass bottle fragments, ceramic tableware fragments, a metal chair frame, a wood bed post, and two sets of bed springs; the building materials consist primarily of scraps of wood, boards, and wire nails, all of which were burned.

#### *VV 2 Site 20*

This newly identified site is located on a relatively flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is moderately deflated. The site consists of a collapsed house and an associated scatter of historic material. Wall framing and siding and roof framing and tar-shingle-on-plywood roofing were stacked on top of a concrete wall foundation. The house foundation measures approximately 20 ft. in length and 20 ft. in width. Because it was almost entirely covered with structural debris, the foundation could not be measured. The concrete foundation walls are 4 inches wide and 12 inches high. One-half inch iron bolts were used for securing the wood frame; they are embedded in the foundation walls. A large amount of structural debris lies immediately to the east of the main house remains. These may be the remains of outbuildings or storage sheds. In addition to the piles of structural debris, a moderate scatter of household items surrounds the house for 30 ft. in every direction. The household items that are present consist of dozens of sanitary food cans; ceramic tableware fragments, bottle glass, and bed springs.

#### *VV 2 Site 21*

This newly identified site is located on a terrace slope on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. The site consists of a dense scatter of historic artifacts. The site measures approximately 120 ft. in length and 100 ft. in width. Present are about 200 sanitary and key wind cans and numerous fragments of bottle glass. The cans are slightly embedded and covered by wind-blown sands. Site disturbances are from road traffic and slope wash erosion. Some rodent activity was also noted in the area.

### *VV 2 Site 33*

This newly identified site is located on a terrace slope on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. The site consists of a light scatter of historic cans with one concentration of cans in the southwest of the site area. Historic cans include 20 hole-in-top cans, 12 key-opened food cans, one open top beer can, and five coffee cans. There is a large modern trash dump up slope from the site to the southwest. The site measures approximately 100 ft. in length and 80 ft. in width, and it is oriented southwest to northeast down a slight slope (5-10 degrees). The site has been disturbed by road and foot traffic and erosion.

### **Area 2 (Western Laydown Area)**

WSA archaeologists surveyed Area 2, the western laydown area, on March 29, 2006. The survey area consists of relatively flat terrain (Photo 30). The soil consists of medium-grained sand. The area is slightly deflated through wind erosion, so that desert gravels are forming on the ground surface. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, and grasses. Some minor dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent. The entire area appeared to be relatively undisturbed. During the course of the survey, WSA archaeologists observed no prehistoric or historic material.

### **Area 3 (Southern Laydown Area)**

WSA archaeologists surveyed Area 3, the southern laydown area, on March 30, 2006. The survey area consists of slightly rolling terrain (Photo 31). The soil consists of medium-grained sand. The area is slightly deflated through wind erosion, so that desert gravels are forming on the ground surface. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, and grasses. Some minor dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent. The entire area appeared to be relatively undisturbed, except for a number of dirt roads that cross it. During the course of the survey, WSA archaeologists recorded no prehistoric isolates or prehistoric archaeological sites. One previously recorded historic site (CA-SBR-10951H) was updated on a State of California DPR-523 Continuation Form (see below and Appendix E).

### *CA-SBR-10951H = VV 2 Site 22*

This can scatter was originally recorded in 2003 by CRM Tech as CRM TECH 992-6H (CRM Tech 2003) and was eventually assigned the site number CA-SBR-10951H. The site is located in rolling terrain on the east side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with

mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. Although the UTM coordinates of the site location that were supplied by CRM Tech differ from those recorded by WSA, WSA is confident that VV 2 Site 22 represents CA-SBR-10951H. The UTM coordinates supplied by CRM Tech do not correspond to the site location as it is mapped on the archaeological site record; those recorded by WSA do correspond to this location. Also, the components of the site match those that WSA recorded. CRM Tech originally recorded 22 tin cans and one piece of SCA glass. The tin cans included specimens of the solder-dot and hole-in-cap varieties. As updated by WSA, the site now consists of 10 tin cans, including two solder-top cans, two modern beer cans, and six unidentifiable sanitary cans. The site now measures approximately 50 ft. in length and 25 ft. in width; CRM Tech recorded the site area as 67 ft. by 44 ft.. The cans are slightly embedded and covered by wind-blown sands. The site has been slightly disturbed by erosion. Some rodent activity was also noted in the area.

#### **Northern Linears (T-Line, Segment 1, Water Supply and Sanitary Wastewater Lines)**

On March 30 and 31, May 3 and 4, 2006, on November 10, 2006, and on January 24 and 25, 2007, WSA archaeologists surveyed nominal 100-ft.-wide corridors for each of the proposed transmission, sanitary and water lines around the VVWRA property and east of SCLA. A 100-ft.-wide buffer was surveyed on either side of the corridors of the proposed linears. The survey area consists of slightly rolling terrain. The soil consists of medium-grained sand. The area is slightly deflated through wind erosion, so that desert gravels are forming on the ground surface. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, and grasses. Some minor dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent. The entire area appeared to be relatively undisturbed, except for a number of dirt roads that cross it. The portion of the survey area from about Mile Post 0.5 to Mile Post 1.3 that runs along the western edge of VVWRA land has been highly disturbed by VVWRA construction activities. This portion of the survey area is a 100-ft. wide corridor that follows the outside of the VVWRA fence line, except where it turns to the east and crosses VVWRA property at approximately Mile Post 1.3 (Photos 33-37). The southernmost portion of T-Line, Segment 1 is an approximately 2 ½-mile-long corridor (from approximately Mile Post 1.5 to 4.0) that traverses a gently rolling terrain west of Shay Road, above the west bank of the Mojave River. The central portion of the segment (situated above the river) is characterized by a series of small washes that carry water off the hillside to the nearby riverbed (Photo 38). The segment crosses highly disturbed ground in and adjacent to the VVWRA. In undisturbed areas the soil consists of medium-grained sand. The area is slightly deflated through wind erosion and the vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, and grasses. Some minor dune formation was apparent around the creosote bush. Ground visibility was good; it

ranged between 60 and 70 percent. The southern portion of the segment has been disturbed by modern and late historic activities, which consist of construction of dwellings, outbuildings, and a water detention basin, as well as dirt road formation through repeated vehicular traffic.

During the course of the T-Line, Segment 1 survey, WSA archaeologists recorded one prehistoric archaeological site. Four previously undocumented historic sites were recorded.

*VV 2 Site 23*

This newly identified site is located on the flat terrace on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area has been graded, bulldozed, and cleared of vegetation. The site consists of a light scatter of prehistoric artifacts: one mortar bowl fragment and two chert flakes were observed. The artifacts appear to be in secondary context, and the site does not appear to have an intact deposit. The mortar bowl fragment consists of the rim and side of a rounded bowl, probably with a rounded base, made from basalt. The fragment is approximately 12 cm high, 10 cm wide, and 3-5 cm thick. One flake is a tertiary flake of yellow chert, measuring 20 mm in width, 25 mm in length, and 3 mm in thickness. The second flake is a tertiary flake of red chert, measuring 10 mm in width, 15 mm in length, and 2 mm in thickness. Both of the flakes were exposed by erosion. The site measures approximately 15 meters in length and 5 meters in width.

*VV 2 Site 34*

This newly identified site is located on a relatively gentle slope (5-7 degrees) on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. The site consists of a single concentration of historic trash. Historic cans include eight hole-in-top cans, two or three key-opened food tins, and five sanitary food cans. Sun-colored amethyst glass is present, along with aqua, clear, and brown bottle glass shards. The site measures approximately 100 ft. in length and 60 ft. in width, and it is oriented west to east (downslope). The site has been disturbed by downslope erosion.

*VV 2 Site 35*

This newly identified site is located on a relatively gentle slope on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. The site consists of two separate concentrations of historic trash – a concentration of bottle glass and a concentration of

historic cans – along with some other scattered cans. Historic cans include three hole-in-one cans, three sanitary food cans, two paint cans, a 5-gallon can, two large food tins, and a rectangular gallon can. Glass fragments include 40 dark green wine bottle fragments, 10 light green glass shards, over 200 clear bottle glass shards, 25 cobalt blue glass shards, and 20 dark brown beer bottle fragments, and one aqua glass shard. The site measures approximately 150 ft. in length and 100 ft. in width, and it is oriented west to east (downslope). The site has been disturbed by downslope erosion.

#### *VV 2 Site 36*

This newly identified site is located on a relatively gentle slope on the west side of the Mojave River. Vegetation consists of sparse creosote bush and saltbush. Site soils consist of alluvial sandy clay loam with mixed gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. The site consists of two separate concentrations of historic trash. Historic cans include two sanitary food cans, two unidentifiable cans, and one pail. Bottle glass fragments that are present include 12 light green glass shards, 12 dark green glass shards, 15 dark brown glass shards, and 100-150 clear glass shards. The site measures approximately 40 ft. in length and 20 ft. in width, and it is oriented northwest to southeast. The site has been disturbed by downslope erosion.

#### *VV 2 Site 32*

This newly identified site consists of two single-family dwellings, an outbuilding, a small concrete foundation, and a concrete basin and an associated concrete pad.

The largest of the three structures is a single-story Mission/Spanish style dwelling with an irregular rectangular plan. The structure is approximately 110 ft. (N-S) and 36 ft. (E-W), although the southernmost section of the structure (built as a garage) is narrower than the living quarters (approximately 28 ft. E-W). The low-pitched hipped roof is covered in composition shingles. The exterior is finished primarily with light tan stucco, but also incorporates wood and brick veneer on the west façade (front of the home). The design exhibits elements of the Mission or Spanish style, such as a covered porch that incorporates a series of arches, as well as timbers extending through the exterior along the west facade. The windows are metal sliders and a large brick chimney is evident in the central portion of the home.

The second structure, also a single-family dwelling, has a rear-facing L plan with a small addition to the south façade (rear of the home). The structure measures approximately 42 ft. (E-W) and 42 ft. (N-S) along the east façade, although the west facade is somewhat shorter. The home is covered with a side-gabled roof made of composition material and has a shed style extension over the covered entry (north facade) as well as a separate small gabled roof over the rear addition. The entryway is also enclosed with a

combination of masonry blocks and wood lattice. The windows are metal sliders and the exterior of the home is finished primarily with light tan stucco, as well as some wood veneer placed near the peak of the main roof on the gable ends.

The third structure is a square (40 ft.-x-40 ft.) outbuilding with no ornamentation. The very low-pitched (almost flat) roof is covered in gravel and the exterior is finished in light tan stucco, although a portion of the west façade appears to have been repaired with wood. There is an entry door on the south façade.

In addition to the three structures, the complex contained a large square (46 ft.-x-46 ft.) concrete basin with gently sloping sides and rounded corners. The basin is approximately 4 ½ ft. deep and is bordered with masonry blocks. A 12 ft.-x-16 ft. concrete pad sits adjacent to the southwest corner of the basin. A manhole is situated within the pad and may have contained a pump or similar device. It is unclear if the basin is still in use. The basin and slab are located approximately 190 feet northwest of the outbuilding (the northernmost of the three structures) and are situated on a small rise above the homes. In addition to a second small concrete slab (7 ft.-x-7 ft.) situated south of the basin, refuse such as wood planks, several cans, rope, and a shed roof were scattered in the gently rolling desert terrain between the concrete basin and the homes.

**TABLE 10. UTM Coordinates for VV 2 Site 32**

<b>Tower Site</b>	<b>Northing</b>	<b>Easting</b>
Concrete Basin	N/A	N/A
Concrete Pad associated with basin	N/A	N/A
Concrete Slab	N/A	N/A

**T-Line, Segment 2**

WSA archaeologists surveyed T-Line, Segment 2 on November 9-10, 2006. The surveyed areas (two pull areas and a 1.47-mile-long corridor) are spread out along relatively flat to gently rolling desert terrain. The soil consists of medium-grained sandy alluvium. The area is slightly deflated through wind erosion, so that desert gravels are forming on the ground surface, although no real desert pavement was observed in the survey areas. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, juniper and grasses. Some very slight dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent. The entire survey area is relatively undisturbed, except for a number of paved and dirt roads that crisscross it. Large quantities of modern trash have been dumped at various locations along the survey area. During the course of the survey,

WSA archaeologists recorded no prehistoric isolates or prehistoric archaeological sites. One previously unrecorded historic site, a large artifact scatter, was recorded.

#### *VV 2 Site 31*

This newly identified site is located on a flat alluvial plain. Vegetation consists of creosote bush, saltbush, and grasses. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line construction, as well as general off road traffic. The site consists of a large diffuse scatter of historic refuse with three loci. The site measures approximately 225 ft. in length and 30 ft. in width. Locus A is approximately 30 ft.-x- 20 ft. and contains over 200 cans, over 50 ceramic sherds, and over 50 glass fragments. Locus B is of similar dimensions, although the quantity of cans is slightly higher while other objects, such as ceramic and glass, are less prevalent. Locus C is 45 ft.-x-21 ft. and also contains several hundred cans as well as glass fragments and ceramic sherds. The cans are slightly embedded.

#### **T-Line, Segment 3**

WSA archaeologists surveyed T-Line, Segment 3 on November 3-7, 2006. The surveyed areas (tower sites, pull areas, and 1-mile-long corridor) are spread out along relatively flat desert terrain. The soil consists of medium-grained sandy alluvium. The area is slightly deflated through wind erosion, so that desert gravels are forming on the ground surface, although no real desert pavement was observed in the survey areas. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, juniper and grasses. Some very slight dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent, except in the last 2-3 miles of the segment, where thick grassy ground cover obscured ground visibility to less than 15 percent. The entire survey area is disturbed by power line construction and a number of dirt roads that crisscross it. The large quantity of modern trash that has been dumped all along the survey areas was the major feature. During the course of the survey, WSA archaeologists recorded no prehistoric isolates or prehistoric archaeological sites. Fifteen previously unrecorded historic sites were recorded and one historic transmission line site (CA-SBR-10316H) was updated.

#### *CA-SBR-10316H*

This previously identified site is the historic 115 kV power line that runs along the length of the T-Line, Segment 3 survey area for approximately 10 miles. The Kramer to Victorville portion of the 115 kV power line was constructed in 1911-1913. Only portions of this transmission line near Kramer Junction and north of Adelanto have been recorded, but the entire line was determined to be eligible for NRHP listing in 1995. The SCE Kramer-to-Victor 115 kV transmission line represents approximately 34 miles of what was originally the 238 mile long Southern Sierras Power Company's Control-San

Bernardino 140 kV transmission line. Many changes have occurred to the original transmission system over the years, including alterations of the original system configuration south of the Victor substation. The hardware has been updated in many places along the Kramer-to-Victor section. The lattice steel towers are not the oldest of this type or otherwise unique. A series of the 115 kV towers will be replaced by the VV 2 Project with new towers along this alignment. WSA did not rerecord the resource, but WSA updated the current documentation indicating that a portion of T-Line, Segment 3 will be replaced by the Project.

#### *VV 2 Site 24*

This newly identified site is located on a flat alluvial plain Luna and La Mesa roads along the east side of Topaz Road in Victorville, CA. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line and road construction, as well as general off road traffic. The site consists of a light scatter of historic tin cans. The site measures approximately 100 ft. in length and 30 ft. in width. The site is cut on the western edge by fresh grader push pile. Present are about 20 sanitary and key wind cans, including six beer cans and an assortment of food tins. The cans are slightly embedded and appeared to be mounded in several grader push piles.

#### *VV 2 Site 25*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic sanitary cans. The site measures approximately 55 ft. in length and 18 ft. in width. Present are about nine tin cans, seven sanitary food and beverage cans, a paint can, and a square can measuring 11 x 4 ½ x 3 inches. The cans are slightly embedded.

#### *VV 2 Site 26*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic refuse. The site measures approximately 35 ft. in length and 15 ft. in width. Present are about 10 sanitary cans, 10 lids, numerous milk bottle fragments, brown glass fragments of a baked bean container, and clear glass fragments from a fruit jar. The cans are slightly embedded.

*VV 2 Site 27*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic refuse. The site measures approximately 50 ft. in length and 30 ft. in width. Present are about 25 tin cans and clear glass fruit jar fragments. The cans consist of paint cans, beer cans (church key and pull tab openings) and sanitary food containers. They are slightly embedded.

*VV 2 Site 28*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic refuse and modern trash. The site measures approximately 40 ft. in length and 35 ft. in width. Present are about six sanitary food cans, two paint cans, a condensed milk tin, a beer can (church key opening), and glass fragments from numerous brown, green and clear glass containers. The cans are slightly embedded. Modern glass and a beer bottle are also present.

*VV 2 Site 29*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic refuse. The site measures approximately 25 ft. in length and 15 ft. in width. Present are 12-15 sanitary cans and approximately 24 fragments of brown, green and clear bottle glass. The cans are slightly embedded.

*VV 2 Site 30*

This newly identified site is located on a flat alluvial plain. Vegetation consists of creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been disturbed by road traffic. The site consists of a moderate scatter of historic refuse. The site measures approximately 25 ft. in length and 15 ft. in width. Present are 36 beer and food (sanitary and key wind) cans and approximately 40 fragments of clear bottle and jar glass. The cans are slightly embedded.

As part of the T-Line Segment 3 portion of the project, a 6 ½ -mile-long section of the existing 115 kV line will have to be relocated approximately 200 ft. to the east of the new line in the same existing ROW. A 40-ft.-wide corridor will be needed for the construction of the replacement 115 kV line. This corridor, along with a 75 ft. buffer on either side of the corridor was surveyed by WSA archaeologist on January 23-26, 2007. In addition, one wider area was surveyed to provide room for the new 115 kV line to make a jog around existing power lines. The “jog” area measured approximately 200 ft. in width and 1,100 ft. in length. The corridor parallels the new T-Line, Segment 3 and lies within the same utility corridor. The vegetation that was observed during the survey consists primarily of creosote bush, Joshua trees, common saltbush, juniper and grasses. Some very slight dune formation was apparent around the creosote bush. Ground visibility was good; it ranged between 60 and 70 percent. The entire survey area is disturbed by power line construction and a number of dirt roads that crisscross it. The large quantity of modern trash that has been dumped all along the survey area was the major feature. During the course of the survey, WSA archaeologists recorded no prehistoric isolates or prehistoric archaeological sites. Ten previously unrecorded historic sites were recorded.

#### *VV 2 Site 37*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been highly disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic refuse. The site measures approximately 60 ft. in length and 20 ft. in width. Present are about 10 sanitary cans, along with a large quantity of modern trash. The cans are slightly embedded.

#### *VV 2 Site 38*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been highly disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of hole-in-top cans (n=5-6) and indeterminate historic can fragments (n=5-6). The site measures approximately 100 ft. in length and 20 ft. in width. The cans are slightly embedded.

#### *VV 2 Site 39*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been moderately disturbed by power line

construction and erosion. The site consists of a light scatter of historic cans. The site measures approximately 60 ft. in length and 60 ft. in width. Present are about 15-20 hole-in-top cans and one paint can. There is also a sparse scatter of modern trash. The cans are slightly embedded.

#### *VV 2 Site 40*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation around the creosote bush and saltbush. It has been moderately disturbed by power line construction (some grading push piles are evident), as well as general off road traffic. The site consists of a light scatter of historic cans. The site measures approximately 150 ft. in length and 100 ft. in width. Present are about 20 sanitary cans with church key openings, along with modern trash. The cans are slightly embedded.

#### *VV 2 Site 41*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse juniper, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation. It has been moderately disturbed by power line construction, as well as general off road traffic. The site consists of a widely dispersed scatter of historic cans, with two main concentrations, and a light scatter of bottle glass. The site measures approximately 160 ft. in length and 80 ft. in width. Present are about 75-80 cans, including hole-in-top cans, sanitary cans with church key openings, key-opened food tins, and paint cans, along with modern trash. Most of the cans are fragmentary. Bottle glass remains include six amber and six aqua shards. The cans are slightly embedded. The site is in the vicinity of CA-SBR-7744H, which was recorded in 1993. Although the artifacts generally date from the same period, no SCA glass was observed at VV 2 Site 41 as it was at CA-SBR-7744H. Therefore, VV 2 Site 41 is considered to be a historic dump site that is distinct from CA-SBR-7744H.

#### *VV 2 Site 42*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse juniper, grasses, and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation. It has been moderately disturbed by power line construction (some grading push piles are evident), as well as general off road traffic. The site consists of a light scatter of historic cans. The site measures approximately 100 ft. in length and 100 ft. in width. Present are about 10-12 sanitary cans with church key openings, along with modern trash. The cans are slightly embedded.

#### *VV 2 Site 43*

This newly identified site is located on a flat alluvial plain. Vegetation consists of sparse juniper, creosote bush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation. It has been moderately disturbed by power line construction, as well as general off road traffic. The site consists of a light scatter of historic cans. The site measures approximately 100 ft. in length and 50 ft. in width. Present are about 12-15 sanitary cans with church key openings, brown beer bottle glass fragments, along with modern trash. The cans are slightly embedded.

#### *VV 2 Site 44*

This newly identified site is located on a flat alluvial plain. Vegetation consists of mixed juniper and creosote bush, saltbush, grasses and Joshua trees. Site soils consist of alluvial sandy loam with mixed small gravels. The area is slightly deflated with minor dune formation. It has been moderately disturbed by power line construction and general off road traffic. The site consists of a light scatter of historic cans and bottle glass fragments. The site measures approximately 1,500 ft. in length and 130 ft. in width. Present are about 100 sanitary cans with church key openings, key wind food tins, paint cans, beer cans, and 200 bottle glass shards, along with a large quantity of modern trash. Within the site boundaries there are two to three concentrations of historic debris, but most of the artifacts are scattered across the area. The cans and shards are slightly embedded.

### **POTENTIAL IMPACTS OF THE VICTORVILLE 2 HYBRID POWER PROJECT**

#### ***Impact Evaluation Criteria***

The proposed project is being evaluated under the California Environmental Quality Act (CEQA). The following state public resource codes and CEQA regulations apply:

- **CEQA: Public Resources Code (PRC) Sections 5020.1, 5024.1, 21083.2, 21084.1, et seq.**; requires analysis of potential environmental impacts of proposed projects and application of feasible mitigation measures.
- **Title 14, PRC, Section 5020.1** defines several terms, including the following: (f) "DPR Form 523" means the Department of Parks and Recreation Historic Resources Inventory Form; (i) "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California; (j) "local register of historical resources" means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution; (l) "national Register of Historic Places" means the official federal list of districts, sites, buildings, structures, and objects significant in American history,

architecture, archaeology, engineering, and culture as authorized by the National Historic Preservation Act of 1966 (Title 16 United States Code Section 470 et seq.); (q) “substantial adverse change” means demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired.

- **Title 14, PRC, Section 5024.1** establishes a California Register of Historical Resources; sets forth criteria to determine significance; defines eligible properties; lists nomination procedures.
- **Title 14, PRC, Section 5097.5** – Any unauthorized removal of archaeological resources on sites located on public lands is a misdemeanor. As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority or public corporation, or any agency thereof.
- **Title 14, PRC, 5097.98** prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn; sets penalties.
- **Title 14, PRC, Section 21083.2** – the lead agency determines whether a project may have a significant effect on unique archaeological resources. If a potential for damage to unique archaeological resources can be demonstrated, such resources must be avoided; if they can’t be avoided, mitigation measures shall be required; discusses excavation as mitigation; discusses cost of mitigation for several types of projects; sets time frame for excavation; defines “unique and non-unique archaeological resources”; provides for mitigation of unexpected resources; sets limitation for this section.
- **Title 14, PRC, Section 21084.1** – indicates that a project may have a significant effect on the environment if it causes a substantial change in the significance of a historic resource; the section further describes what constitutes a historic resource and a significant historic resource.
- **Guidelines for the Implementation of CEQA.** Section 15064.5 specifically addresses effects on historic and prehistoric archaeological resources, in response to problems that have arisen in the application of CEQA to these resources.
- **Title 14, Penal Code, Section 622.5** – anyone who damages an item of archaeological or historic interest is guilty of a misdemeanor.
- **CEQA Guidelines: California Code of Regulations, Sections 15000, et seq., Appendix G (j)**, specifically defines a potentially significant environment effect as occurring when the Proposed Project will “...disrupt or adversely affect ...an archaeological site, except as part of a scientific study.”

### *Thresholds of Significance*

CEQA Guidelines require that the project consider the significance of an undertaking’s impacts to historic remains and archaeological sites determined to be historical resources

under CEQA criteria (Section 15064.5). To properly evaluate the significance of impacts to such resources it is necessary to evaluate each resource in terms of the site significance criteria contained in the CEQA Guidelines. Generally, a resource shall be considered to be “historically significant” by the lead agency if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852). All significant resources must meet at least one of these basic criteria:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;
- (C) 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
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

Even if a resource does not meet these criteria, it does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

CEQA Guidelines direct public agencies to “avoid damaging effects” on cultural resources whenever it is feasible. If avoidance is not feasible, the significance of the resource shall be evaluated to determine impact and develop mitigation measures (Section 15126.4).

A project’s impacts involve the level of direct and indirect physical changes to the resource caused by the project. Examples of direct physical changes would be vegetation removal, vehicular travel over the surface, earth-moving activities, excavation, or alteration of the setting of a resource. Indirect impacts may result from increased erosion due to site clearance and preparation, or from inadvertent damage, or outright vandalism to exposed resources due to improved visibility or access.

Exposure of cultural resources during preconstruction site preparation or during construction excavation can also have a beneficial effect by making the data accessible for research. If these resources and their temporal and spatial context receive proper protection and analysis, they can add to the understanding of human adaptation to the environment and subsequent uses of the land and its resources. Analysis of cultural resources also can provide a very important key to prehistoric changes in population and human movement within and throughout a geographic region.

Thresholds of significance are criteria used to determine if the project creates damaging effects to cultural resources. Appendix G in the CEQA Guidelines provides the minimum “thresholds of significance” for impact assessment during the required CEQA review, and has been used as a standard for impact analysis. These guidelines are described in more detail in Section 15064.5 of the CEQA guidelines.

Substantial adverse change in the significance of a resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate setting such that the significance of the resource would be materially impaired. The significance of resources is materially impaired when a project:

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

Generally, a project that follows the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* or the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), shall be considered mitigated to a level that is less than a significant impact to the cultural resource.

A lead agency shall identify potentially feasible measures to mitigate adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.

A threshold of significance is an identifiable quantitative, qualitative, or performance level of a particular environmental effect, non-compliance with which means the effect

will normally be determined to be significant by the agency, and compliance with which means the effect normally will be determined to be less than significant.

The following thresholds of significance are proposed to assess whether or not project effects pose significant impacts to the cultural resources known to be present in the project area.

- A significant impact would occur if the Project would directly alter the physical remains of a resource that is determined to be a significant resource in a way that would adversely alter that determination. This could occur by the destruction or removal of intact archaeological or historic features or deposits through grading, excavation, or any other ground-disturbing activity.
- A significant impact would occur if the Project would indirectly alter the physical remains of a resource that is determined to be a significant resource in a way that would adversely alter that determination. This could occur by exposing intact archaeological or historic features or deposits to increased erosion, inadvertent damage, or vandalism due to decreased surface protection through site clearance and preparation.
- A significant impact would occur if the Project would directly alter the physical setting of the resource, if the natural setting is a contributing factor in the determination of a resource's significance. This could occur by the destruction or removal of natural features through grading, excavation, or any other ground-disturbing activity.
- A significant impact would occur if the Project would indirectly alter the physical setting of the resource, if the natural setting is a contributing factor in the determination of a resource's significance. This could occur by exposing the natural setting to increased erosion, inadvertent damage, or vandalism due to decreased surface protection through site clearance and preparation.
- A significant impact would occur if the Project would directly or indirectly disturb any human remains, including those interred outside of formal cemeteries.

#### ***Assessment of Project Impacts on Archaeological and Historical Resources***

During the course of the survey, WSA archaeologists recorded one previously undocumented prehistoric site, 42 previously undocumented historic sites, and two previously recorded historic sites (SBR-10951H and SBR-10316). Although ground-disturbing construction activities have the potential to directly impact cultural resources by disturbing both surface and subsurface soils, none of the recorded resources are considered significant resources. Thus, any Project impacts to these resources would not

be considered a significant impact in terms of CEQA significance criteria. A site by site assessment of significance is followed by Table 11, which provides a summary of the assessment of the VV 2 Project's impacts on these sites.

### **VV 2 Site 1**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. The site may represent a single dumping event. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

### **VV 2 Site 2**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. The site may be a single dump event, although the artifacts date from early to mid-20<sup>th</sup> century. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

### **VV 2 Site 3**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period 1955-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of

location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 4**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. By means of USGS topographic maps and an aerial photograph from 1955, WSA determined the construction date as being within the period 1952-1955. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 5**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 6**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps and a 1955 aerial photograph as being within the period 1955-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 7**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period 1952-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 8**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear

to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 9**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period 1952-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 10**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps and a 1955 aerial photograph as being within the period 1952-1955. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 11**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps and a 1955 aerial photograph as being within the period 1955-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 12**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 13**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period before 1952. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.  
*Recommended Treatment:* None.

#### **VV 2 Site 14**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 15**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 16**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period 1952-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for

addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 17**

*Site Type:* House frame remnants on earthen pad and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. The difference in construction method (no concrete foundation slab) suggests an earlier date, but this cannot be established. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 18**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period 1952-1989. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 19**

*Site Type:* House frame remnants on earthen pad and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could not identify the construction date. The difference in construction method (no concrete foundation slab) suggests an earlier date, but this cannot be established. None of the associated artifacts could be more precisely dated than mid to late 20<sup>th</sup> century. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 20**

*Site Type:* House foundation and artifact scatter (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period before 1952. None of the associated artifacts could be more precisely dated. The site lacks structural integrity, as well as integrity of location and materials; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 21**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential

for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **SBR-10951H (VV 2 Site 22)**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 23**

*Site Type:* Prehistoric artifact scatter (possible activity area).

*Historic Context:* Prehistoric occupation along the Mojave River.

*Eligibility:* This newly identified site is highly disturbed by previous construction and seasonal erosion, and it is not expected to yield any further information. The site does not appear to have the potential for having intact buried features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 24**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be

considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 25**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 26**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 27**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential

for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 28**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 29**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 30**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or

consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 31**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 32**

*Site Type:* Two single-family dwellings, outbuilding, concrete basin and associated concrete pad, as well as an additional concrete pad and associated refuse (historic residence).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA could only identify the construction date by means of USGS topographic maps as being within the period 1952-1989. None of the associated artifacts could be more precisely dated. The homes are currently occupied; and the archaeological information potential of the deposit for addressing historic themes related to settlement history, commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 33**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 34**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

#### **VV 2 Site 35**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 36**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 37**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 38**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 39**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 40**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 41**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 42**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 43**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**VV 2 Site 44**

*Site Type:* Artifact scatter (historic dump site).

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* This newly identified site is only marginally related to the historic context. WSA did not identify the source property or properties of the dumped materials. The site lacks integrity of location and materials, and the archaeological information potential of the deposit for addressing historic themes related to commerce or consumer behavior is considered minimal. The site does not appear to have the potential for having buried historic features and deposits that would otherwise cause it to be considered as a significant resource. Therefore, the site does not appear to be significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**CA-SBR-10316H**

*Site Type:* Linear – transmission line.

*Historic Context:* Twentieth-century occupation of Mojave Desert.

*Significance Evaluation:* A portion of this transmission line was recorded as a linear site in 1989 (Hampson 1989). Hampson recommended that the transmission line was a potentially significant historic resource, as the line is related to the historic commercial and industrial development of southern California. However, the less than 10-mile segment of the linear site that is situated within the Project area has been modified in the past with the replacement of some of the original lattice steel towers with newer wood towers and updated hardware. In addition, the original configuration of the portion of the line within the Project area was modified during reconstruction of the Victor substation. Although the transmission line as a whole is associated with events that have made a significant contribution to the broad patterns of regional history (Criterion A), the portion of the linear site that is situated within the Project area does not meet the criteria of significance for a historic resource, as it lacks integrity of location, setting, materials, and feeling. Portions of this segment of the linear resource have been reconfigured, the vicinity of the transmission line has undergone widespread development with the construction of new housing tracts, roadways, etc., and some of the towers have been reconstructed with different materials. Although the Project proposes to replace 78 towers of the transmission line, this would not be a significant impact to the total resource, which continues for hundreds of miles beyond the project boundaries. The archaeological potential of the portion of the line within the Project area is not unique to the line as a whole, and has minimal potential for addressing those historic themes related to commerce and industry that the remaining intact portions of the line would be able to address. The portion of the line within the Project area does not appear to have the potential for buried historic features and deposits that would otherwise cause it to be considered a significant resource. Therefore, the portion of the transmission line within the Project area does not appear to be historically significant under CEQA Section 15064.5, Criterion D; no other criteria apply.

*Effect of Proposed Project:* Less than significant impact.

*Recommended Treatment:* None.

**TABLE 11. Summary of Victorville 2 Hybrid Power Project Site Data and Assessment**

Site No.	Site Type/Historic Context	Site Location (UTM)	Date	Significance Potential	Effect of Proposed Project
VV 2 Site 1	Dump site/Late historic occupation of Mojave Desert	3833796.87N /465899.39E; 3833747.53N/465908.76E	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 2	Dump site/Late historic occupation of Mojave Desert	3833791.42N/466180.88E	Early to mid 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact

Site No.	Site Type/Historic Context	Site Location (UTM)	Date	Significance Potential	Effect of Proposed Project
VV 2 Site 3	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 4	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1955	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 5	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 6	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1955-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 7	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 8	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 9	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 10	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1955	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 11	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1955-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 12	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 13	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Pre-1952	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact

Site No.	Site Type/Historic Context	Site Location (UTM)	Date	Significance Potential	Effect of Proposed Project
VV 2 Site 14	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 15	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 16	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 17	House pad, privy, and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Pre-1952	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 18	House foundation slab and associated trash scatter/Late historic occupation of Mojave Desert	N/A	1952-1989	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 19	House pad, privy, and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Pre-1952	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 20	House remains and associated trash scatter/Late historic occupation of Mojave Desert	N/A	Pre-1952	Not significant: does not meet CRHR criteria or criteria for uniqueness; lacks historic integrity.	Not a significant impact
VV 2 Site 21	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
SBR-10951H (VV 2 Site 22)	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 23	Artifact scatter/ Prehistoric occupation of Mojave Desert	N/A	Prehistoric	Not significant: potentially meets criteria (D) for CRHR listing, but the deposit lacks integrity – most likely in secondary context.	Not a significant impact
VV 2 Site 24	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 25	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact

Site No.	Site Type/Historic Context	Site Location (UTM)	Date	Significance Potential	Effect of Proposed Project
VV 2 Site 26	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 27	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 28	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 29	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 30	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 31	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 32	Two single-family dwellings, outbuilding, concrete basin and associated concrete pad, as well as an additional concrete pad and associated refuse	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 33	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 34	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 35	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 36	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 37	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 38	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20 <sup>th</sup> century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact

Site No.	Site Type/Historic Context	Site Location (UTM)	Date	Significance Potential	Effect of Proposed Project
VV 2 Site 39	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20th century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 40	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20th century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 41	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20th century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 42	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20th century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 43	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20th century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
VV 2 Site 44	Dump site/Late historic occupation of Mojave Desert	N/A	Mid to late 20th century	Not significant: does not meet CRHR criteria or criteria for uniqueness	Not a significant impact
CA-SBR-10316H	Linear/transmission line	N/A	Early-to-late 20 <sup>th</sup> century	Entire line considered NRHP eligible. Portion of line in project area no longer significant, as integrity has been lost.	Not a significant impact.

Because the recorded historic structures are concentrated within the VV 2 Project area, the question arises whether or not to consider the concentration a historic district. Several characteristics regarding the concentration of structures argue against considering this a historic district.

- First, the settlement of the area appears to be random and haphazard, with up to a half dozen structures being constructed and used within any time period. There is no clear site function or organizing historic theme to the community, such as industry (a mining community, for example) or commerce (e.g., a small community build around a railway stop or a farming town). Construction of the houses does not appear to be directly related to the construction of George Air Force Base, which provided adequate military base housing. The VV 2 Project area was never owned and developed by the Air Force. All evidence suggests the land has always been privately owned. Construction of the houses, almost all of which appear to have been built after World War II, may be indirectly related to the construction of the airbase in that the construction of the airbase pushed the fringe areas outward from Victorville. The fringe areas lying between uninhabited desert and the urban center historically have been occupied randomly,

sporadically, and for various reasons, as they still are today. During the WSA survey a half dozen structures were observed that are presently being occupied.

- Secondly, none of the structures are considered significant historic resources. They appear to be rapidly and cheaply constructed, and inhabited for a short time, suggesting the inhabitants lived a transient lifestyle. This appears to be a typical characteristic of people who inhabit such fringe areas. Construction consists primarily of houses built a poured concrete slab and a wood frame. Once the structures are abandoned, any useful materials are soon taken by the next wave of inhabitants and reused. There is no evidence that any of the inhabitants tried to establish a long term residence in the VV 2 Project area. No wells, permanent roads, or any other utilities were observed in the project area that could be associated with the structures. They do not appear to have tried to cultivate or use the land in any other way than to exist on it. There is only minimal evidence that some kind of transitory livestock raising was done at some point in time. For example, some kind of makeshift pen seems to be associated with VV 2 Site 16.
- Thirdly, no cultural or ethnographic affiliations can be established for those who inhabited the Project area. The people that built and inhabited the structures are for the most part nameless. It is impossible to determine if the structures were built by the land owners or by squatters. Available records from the County Assessor's office, suggest that the landowners rarely, if ever, built residences on the land in the project area. It is possible that many of the structures were constructed by squatters, who cannot be documented.
- There does not appear to be any distinct boundary to the area other than section line roads. Even today, such structures are randomly scattered throughout the desert areas that lie on the fringe of Victorville, as well as other desert urban areas. The concentration of structures may only be a result of proximity to the City of Victorville and the Mojave River or of the recording of cultural resources associated with the VV 2 Project.

Since the survey of the VV 2 Project area did not yield evidence of potentially significant subsurface historic or prehistoric deposits, the potential for such resources to be buried at any of the sites appears to be very low, making it unlikely that inadvertent discoveries will be made during construction. Although there are no significant Project impacts that require mitigation measures, the following standard practices should be followed in the case of unexpected discoveries during construction: Should construction activities encounter cultural materials, work in the immediate vicinity should cease until an archaeologist is informed and an assessment of the historic or prehistoric resources is conducted. Treatment measures following State Historic Preservation Office consultation

(if needed) would be implemented on those properties that meet the California Register eligibility criteria.

Although considered very unlikely, in the event that Native American human remains or funerary objects are discovered, the provisions of the California Health and Safety Code, Section 7050.5(b), should be implemented. It states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible to contact the Native American Heritage Commission within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for “protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction.”

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## **APPENDIX A:**

### **Figures**

List of Figures (Cultural Report)

Figure 1: Vicinity Map

Figure 2: Project Location

Figure 3: Surveyed Areas

Figure 4: Ethnographic Map

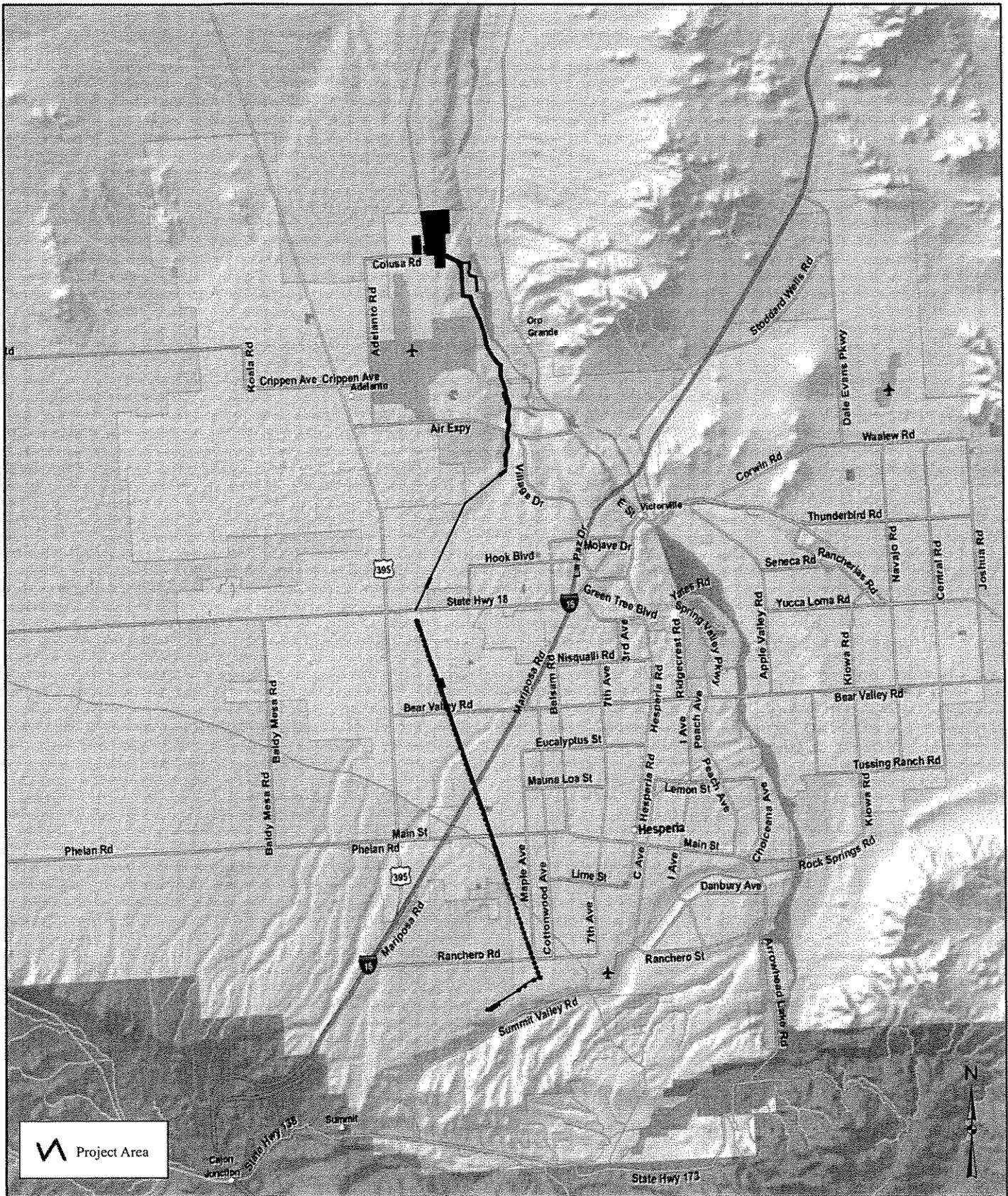












 Project Area



Figure 1  
Project Vicinity Map  
Victorville 2  
San Bernardino Co., CA



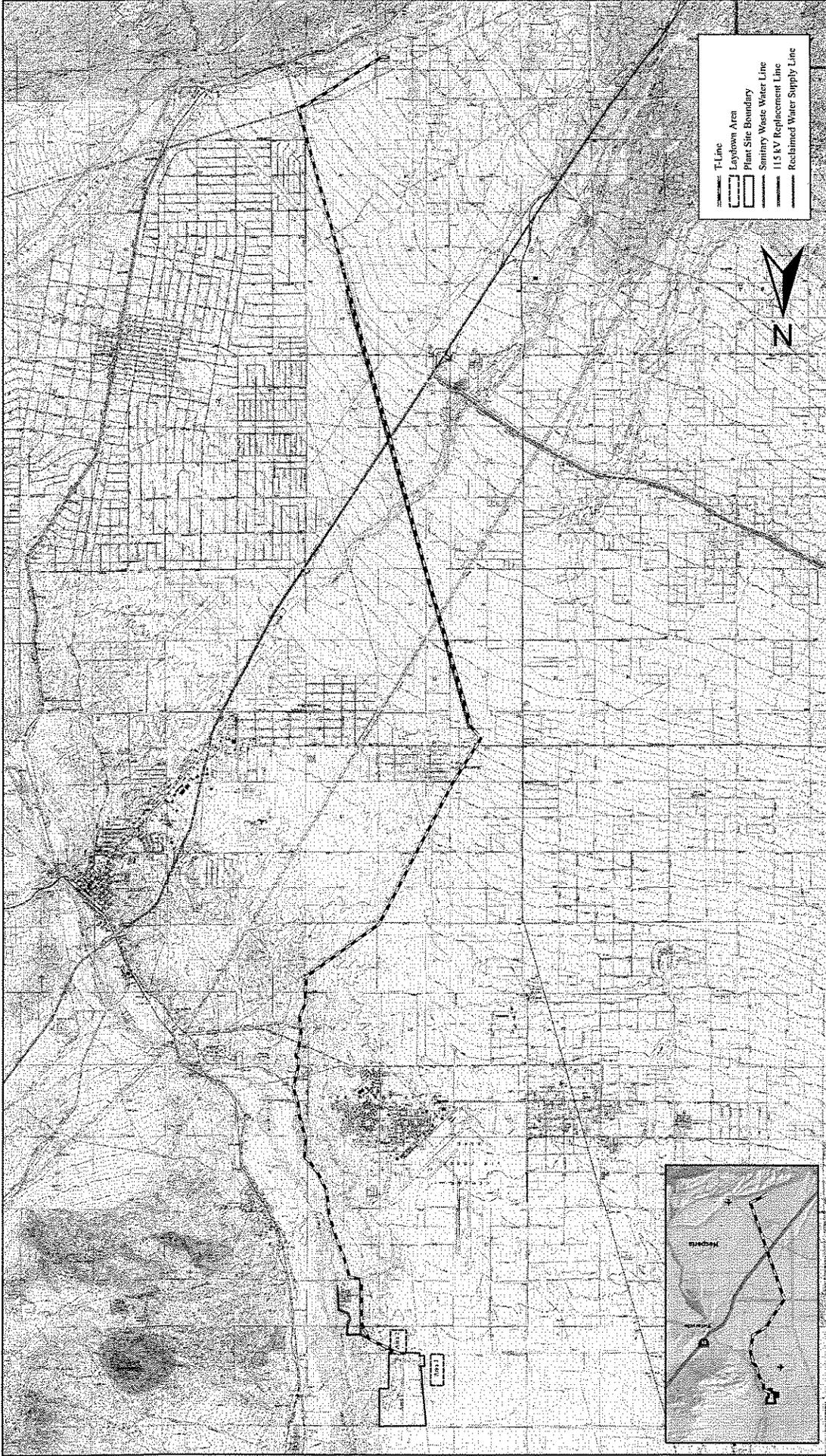


Figure 2  
 Project Location Map  
 Victorville 2  
 San Bernardino County, CA

Helendale, Victorville, Victorville NW, Adelanto, Baldy Mesa, Hesperia and Silverwood Lake USGS Topo Quads











Figure 3  
 Map 1  
 Survey Area Map  
 Victorville 2  
 San Bernardino County, CA

Helendale, Victorville, Victorville NW and Adclanto USGS Topo Quads









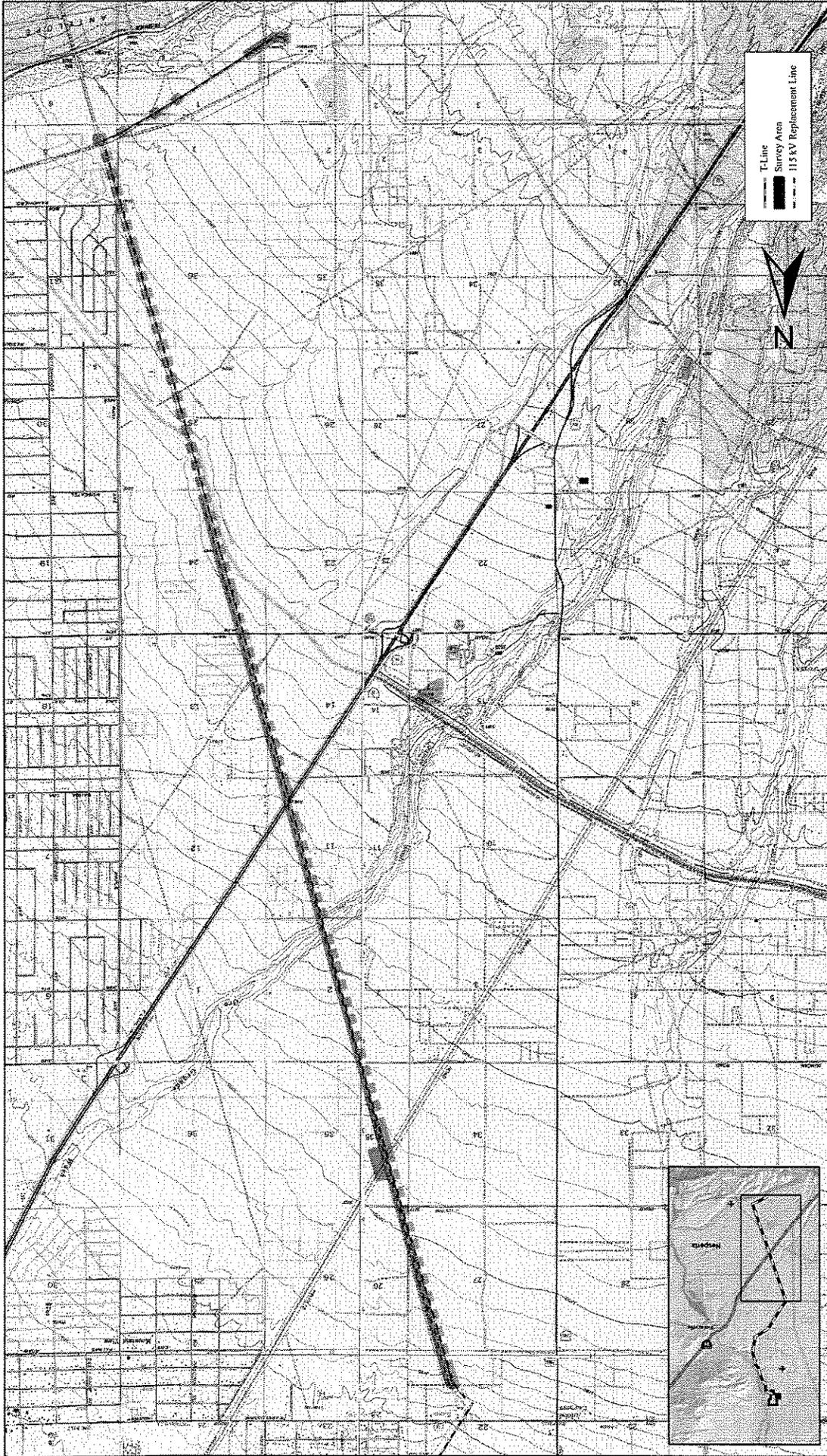


Figure 3  
 Map 2  
 Survey Area Map  
 Victorville 2  
 San Bernardino County, CA

Adelanto, Baldy Mesa, Hesperia and Silverwood Lake USGS Topo Quads

0 1.5 3 Miles









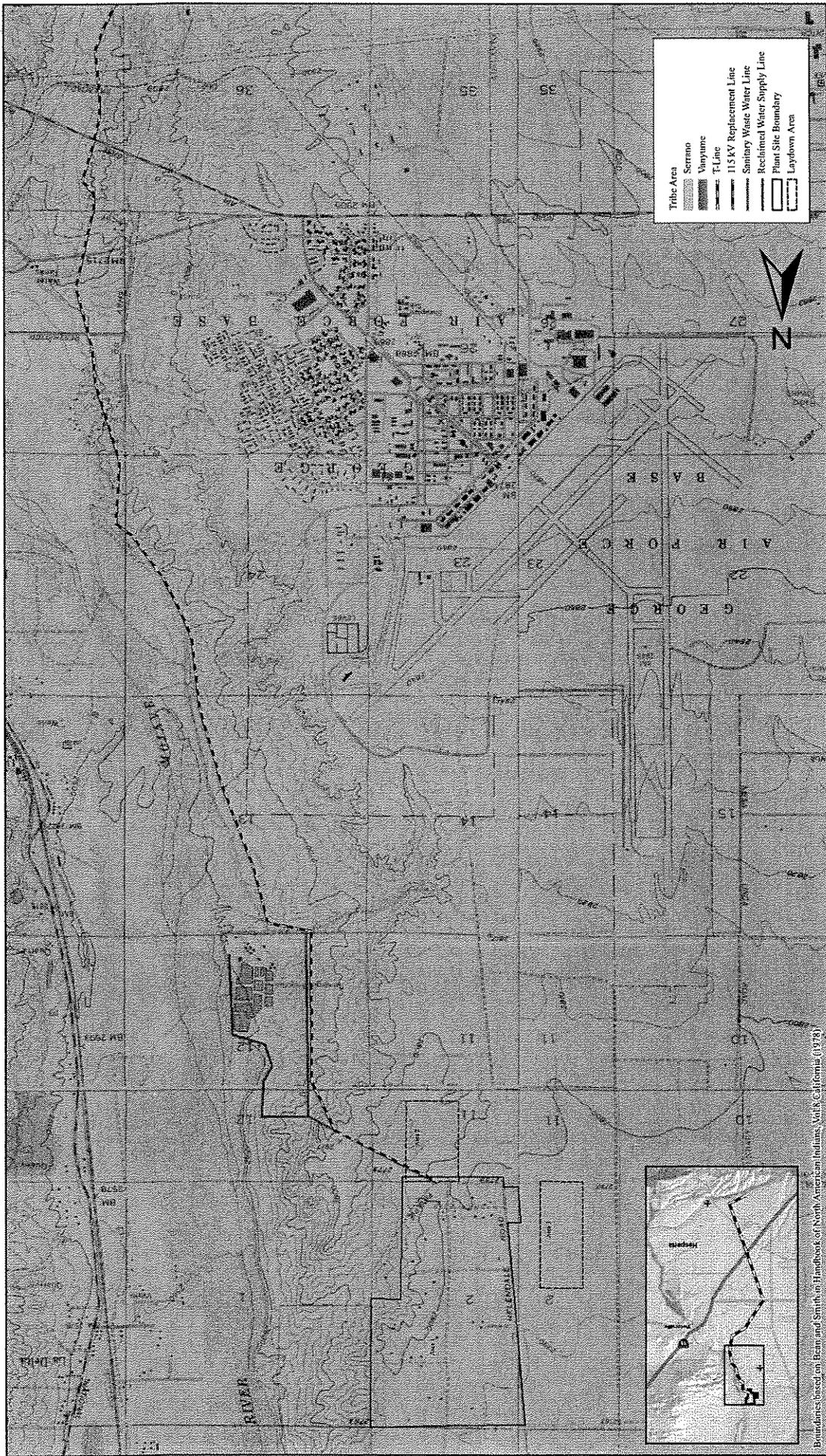


Figure 4  
 Ethnographic Map 1  
 Victorville 2  
 San Bernardino Co., CA

Victorville, Victorville NW, Holendale, and Adelanto USGS Topo Quads

0 0.5 1 Miles









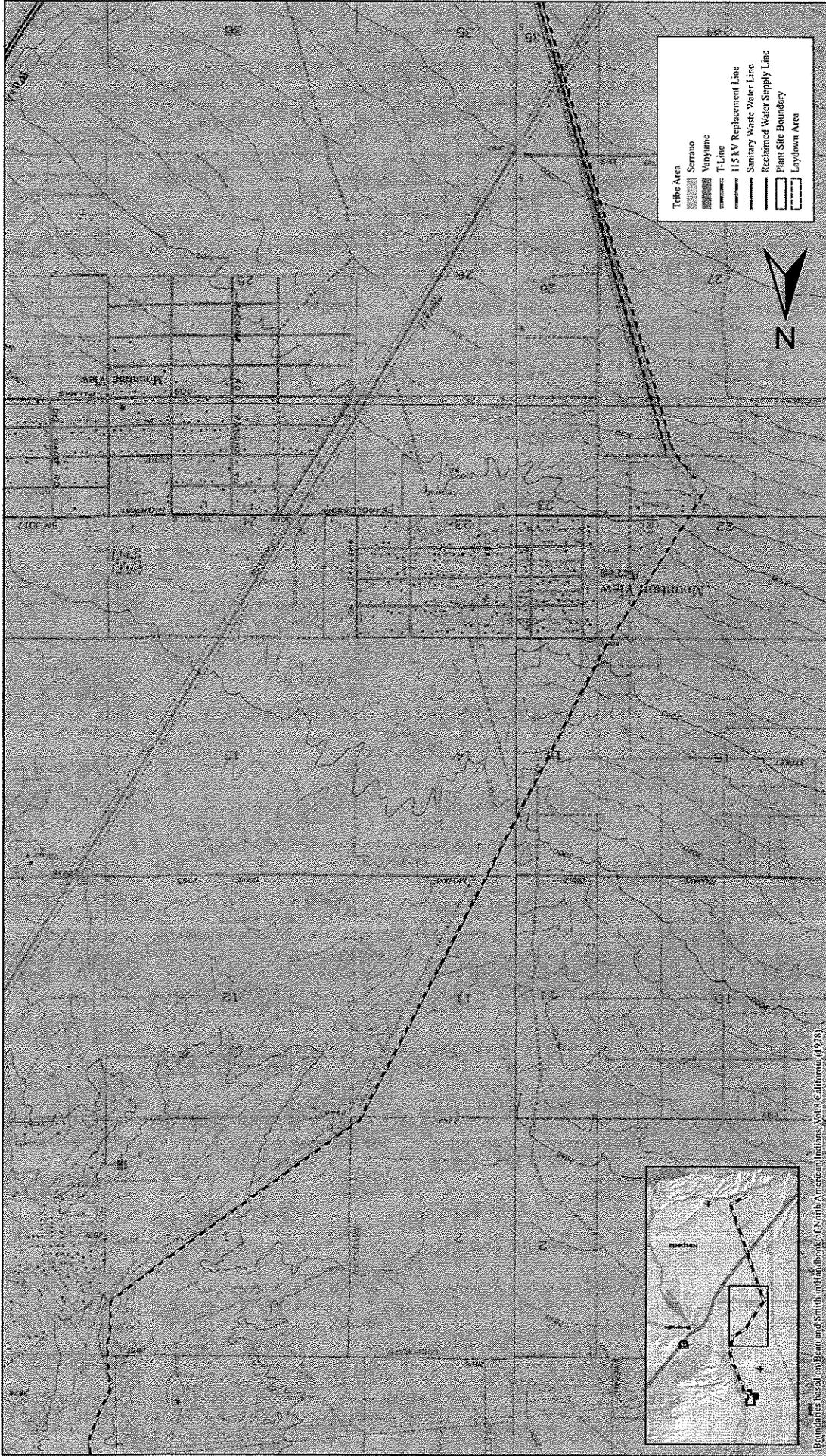


Figure 4  
Ethnographic Map 2  
Victorville 2  
San Bernardino Co., CA

Victorville, Adclanto, Hesperia, and Baldy Mesa USGS Topo Quads

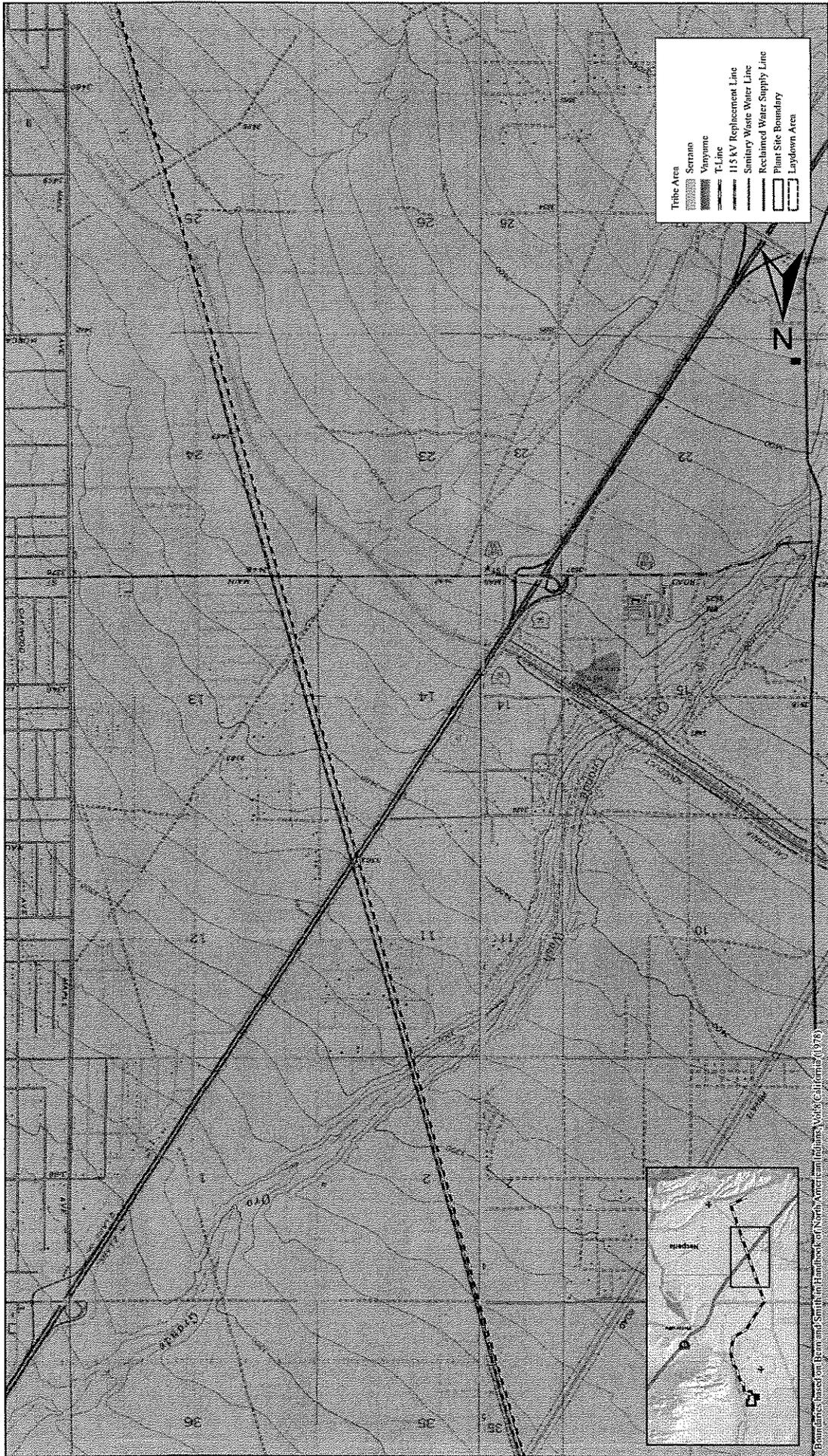
Map based on Esri and Smith with the work of North American Indians, Vol. 8, California (1978)











Boundaries based on Bern and Smith in Handbook of North American Indians, Vol. 5, California (1938)

Hesperia, and Baldy Mesa USGS Topo Quads

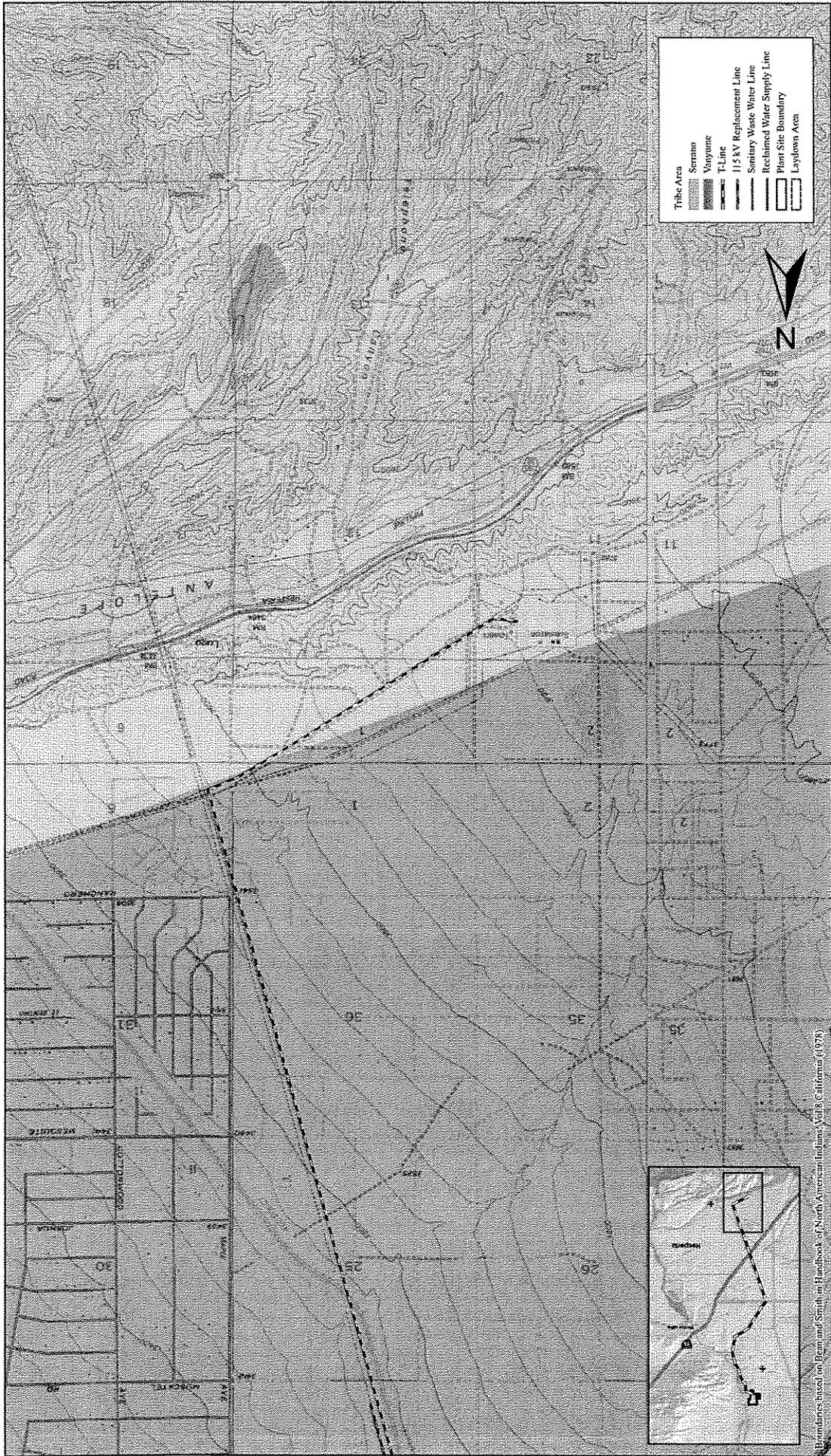
Figure 4  
Ethnographic Map 3  
Victorville 2  
San Bernardino Co., CA











Hesperia, and Silverwood Lake USGS Topo Quads

Figure 4  
 Ethnographic Map 4  
 Victorville 2  
 San Bernardino Co., CA









**APPENDIX B:**

**Consultation with Local Historical Societies  
& Other Interested Parties**









www.williamself.com

May 12, 2006

RE: VICTORVILLE 2 PROJECT, SAN BERNADINO COUNTY

Dear Sir or Madam:

William Self Associates, Inc. (WSA) has been contracted to assess potential impacts to cultural resources as part of the Victorville 2 Project. The proposed project will involve construction of a new hybrid power plant along with associated transmission and water lines. The project area is located north of the Southern California Logistics Airport (SCLA), which occupies the historic George Air Force Base, within San Bernardino County. It is within Township 6N, Range 5W, Sections 24, 13, 12, 11 and 2 (Victorville, Victorville NW and Indendale 7.5-minute USGS Topographic Quads), and Township 7N, Range 5W, Sections 35 (Indendale and Victorville NW 7.5-minute USGS Topographic Quads). The location of the project area is illustrated in Figure 1.

We would appreciate receiving any comments you may have regarding historical or other cultural resources under local ordinance within or adjacent to the project area. We have contacted the San Bernardino Archaeological Information Center for information on previously recorded archaeological and historical resources, but would appreciate any additional information you may have in your files. If you could provide your comments in writing to the address below, we will make sure the comments are provided to our client as part of the cultural resources assessment of the project.

Due to the restrictions regarding this project, we would appreciate a response by June 2, 2006, should you have information relative to this request.

Thanks again for your assistance.

Sincerely,

WILLIAM SELF ASSOCIATES

James M. Allan, Ph.D., RPA  
Principal

Attachment

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**William Self Associates, Inc.**

E-mail: [wself@williamself.com](mailto:wself@williamself.com)

CORPORATE OFFICE: San Francisco Bay Area  
PO Box 2192, 61 Avenida de Orinda  
Orinda CA 94563  
Phone: 925-253-9070 / 925-254-3553 fax

**Record of Contacts and Comments.**

<b>Contact</b>	<b>Date of Notification Letter</b>	<b>Date of Response to Letter</b>	<b>Comments</b>
San Bernardino County, Planning Department, Victorville	May 12, 2006	None	
City of Victorville, Planning Department	May 12, 2006	May 16, 2006	Provided a copy of their Cultural Resources Technical Report for the City of Victorville General Plan
Mojave Desert Heritage and Cultural Association	May 12, 2006	None	
Roy Rogers and Dale Evans Museum	May 12, 2006 July 13, 2006	n/a	Letter returned to sender, address unknown  Called (760)243-4547; was informed the museum moved to Branson, MO in 2003.
Victor Valley Museum and Art Gallery	May 12, 2006	None	
San Bernardino Historical Society	May 12, 2006	None	
Mojave Historical Society	May 12, 2006	n/a	Letter returned to sender, address unknown

**APPENDIX C:**

**NAHC Correspondence**









www.williamself.com

24 February, 2006

Native American Heritage Commission  
915 Capitol Mall, Room 364  
Sacramento, CA 95814  
(916) 653-4082; Fax (916) 657-5390

RE: *VICTORVILLE II SITE, SAN BERNARDINO COUNTY, CALIFORNIA*

Dear Native American Heritage Commission:

William Self Associates, Inc. (WSA) has been contracted to assess potential impacts to cultural resources as part of the Victorville II Site Project. The project area is located north of the George Air Force Base within San Bernardino County. It is within Township 6N, Range 5W, Sections 24, 13, 12, 11 and 2 (Victorville, Victorville NW and Helendale 7.5' USGS Topographic Quads), and Township 7N, Range 5W, Section 35 (Helendale and Victorville NW 7.5' USGS Topographic Quads) (refer to attached map).

The project involves construction of a proposed power plant with associated liner transmission lines. We bring this project to the attention of the Native American Heritage Commission with the desire to obtain, from your office, pertinent information regarding prehistoric, historic and/or ethnographic land use and sites of Native American traditional or cultural value that might be known to exist within the project vicinity, as depicted in the Sacred Lands database or other files. We would also appreciate obtaining a list of interested Native American tribal entities or individuals for the project area. We have contacted the San Bernardino San Bernardino Archaeological Information Center at the San Bernardino County Museum, Redlands, CA to review their files as part of the background research on the project.

We would appreciate a response, at your earliest convenience, should you have information relative to this request.

Thanks again for your assistance.

Sincerely,

**WILLIAM SELF ASSOCIATES**

James M. Allan, Ph.D., RPA  
Vice-President

Attachment

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**William Self Associates, Inc.**

E-mail: [wself@williamself.com](mailto:wself@williamself.com)

**CORPORATE OFFICE: San Francisco Bay Area**  
PO Box 2192, 61 Avenida de Orinda  
Orinda CA 94563  
Phone: 925-253-9070/ 925-254-3553 fax

STATE OF CALIFORNIA

Arnold Schwarzenegger Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-4082  
Fax (916) 657-5390  
Web Site: www.nahc.ca.gov



March 8, 2006

James Allan  
William Self Associates, Inc.  
PO Box 2192,  
61d Avenida de Orinda  
Orinda, CA 94563

Sent by Fax: 925-254-3553  
Number of Pages: 2

Re: Proposed Victorville II Site, San Bernardino County

Dear Mr. Allan:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-6251.

Sincerely,

Carol Gaubatz  
Program Analyst

**Native American Contacts**  
**San Bernardino County**  
**March 7, 2006**

**Morongo Band of Mission Indians**  
**Britt W. Wilson, Cultural Resource Coordinator**  
 245 N. Murray Street, Suite C Cahuilla  
 Banning , CA 92220 Serrano  
 britt\_wilson@morongo.org  
 (951) 849-8807  
 (951) 755-5200  
 (951) 922-8146 Fax

**San Manuel Band of Mission Indians**  
**Bernadette Brierty, Cultural Resources Coordinator**  
 PO Box 266 Serrano  
 Patton , CA 92369  
 bbrierty@sanmanuel-nsn.gov  
 (909) 864-8933 EXT-2203  
 (909) 864-3370 Fax

**Morongo Band of Mission Indians**  
**Maurice Lyons, Chairperson**  
 245 N. Murray Street, Suite C Cahuilla  
 Banning , CA 92220 Serrano  
 (951) 849-8807  
 (951) 755-5200  
 (951) 922-8146 Fax

**San Fernando Band of Mission Indians**  
**John Valenzuela, Chairperson**  
 P.O. Box 221838 Fernandefio  
 Newhall , CA 91322 Tataviam  
 tsen2u@msn.com Serrano  
 (661) 753-9833 Office Vanyume  
 (760) 885-0955 Cell Kitanemuk  
 (760) 949-1604 Fax

**San Manuel Band of Mission Indians**  
**Deron Marquez, Chairperson**  
 PO Box 266 Serrano  
 Patton , CA 92369  
 dmarquez@sanmanuel-nsn.  
 (909) 864-8933 EXT-3070  
 (909) 864-3370 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Victorville II Site, San Bernardino County.



www.williamself.com

May 23, 2006

RE: VICTORVILLE II PROJECT, SAN BERNARDINO COUNTY

Dear XXX

William Self Associates, Inc. (WSA) has been contracted to assess potential impacts to cultural resources as part of the Victorville 2 Project. The proposed project will involve construction of a new hybrid power plant along with associated transmission and water lines. The project area is located north of the Southern California Logistics Airport (SCLA), which occupies the historic George Air Force Base, within San Bernardino County. The location of the project area is illustrated in the attached figure.

We have contacted the Native American Heritage Commission (NAHC) in Sacramento requesting information regarding prehistoric, historic and/or ethnographic land use and sites of Native American traditional or cultural value that might be known to exist within the project vicinity, as depicted in the Sacred Lands database or other files. The NAHC provided you with a contact person who may have additional information regarding Traditional or Sacred Properties within or immediately adjacent to the project area. We would appreciate receiving any comments you may have regarding this matter. We have contacted the San Bernardino Archaeological Information Center for information on previously recorded archaeological and historical resources, but would appreciate any additional information you may have.

Due to time restrictions relating to this project, we would appreciate a response by June 9, 2006, should you have information relative to this request.

Thanks for your assistance.

Sincerely,

WILLIAM SELF ASSOCIATES

James M. Allan, Ph.D., RPA  
Principal

Attachment

**William Self Associates, Inc.**

E-mail: [wself@williamself.com](mailto:wself@williamself.com)

CORPORATE OFFICE: San Francisco Bay Area  
PO Box 2192, 61 Avenida de Orinda  
Orinda CA 94563  
Phone: 925-253-9070/ 925-254-3553 fax



www.williamself.com



Consultants in Archaeology and Historic Preservation

June 19, 2006

Native American Heritage Commission  
915 Capitol Mall, Room 364  
Sacramento, CA 95814  
(916) 653-4082; Fax (916) 657-5390

*RE: TRANSMISSION LINE ROUTE FOR THE VICTORVILLE II HYBRID POWER PROJECT, SAN BERNARDINO COUNTY, CALIFORNIA*

Dear Native American Heritage Commission:

William Self Associates, Inc. (WSA) has been contracted to assess potential impacts to cultural resources as part of the Victorville II Hybrid Power Project. The southern portion of the project area, which follows the transmission line route, runs south from the High Desert Power Plant substation at George Air Force Base until it reaches the Lugo substation, in San Bernardino County. The transmission line runs within Township 6N, Range 5W, Sections 24 and 25 (Victorville 7.5' USGS Topographic Quad), Township 6N Range 4W, Sections 30 and 31 (Victorville 7.5' USGS Topographic Quad), Township 5N Range 5W, Sections 1, 2, 11, 12, 14, 15, 22, 23, 26, 27, 34, and 35 and 31 (Victorville, Adelanto, Baldy Mesa, and Hesperia 7.5' USGS Topographic Quads), Township 5N Range 4W, Section 6 (Victorville 7.5' USGS Topographic Quad), Township 4N Range 5W, Sections 2, 8, 11, 12, 13, 14, 23, 24, 25, and 36 (Baldy Mesa and Hesperia 7.5' USGS Topographic Quads), Township 4N Range 4W, Section 31 (Hesperia 7.5' USGS Topographic Quad), Township 3N Range 5W, Sections 1, 2, 11, and 12 (Hesperia and Silverwood Lake 7.5' USGS Topographic Quads), and Township 3N, Range 4W, Section 6 (Hesperia and Silverwood Lake 7.5' USGS Topographic Quads) (refer to attached maps).

This portion of the project involves construction of a proposed transmission line. Sections of the transmission line will be strung on existing towers and sections will be strung on new towers that will be constructed as part of the project. We bring this project to the attention of the Native American Heritage Commission with the desire to obtain, from your office, pertinent information regarding prehistoric, historic and/or ethnographic land use and sites of Native American traditional or cultural value that might be known to exist within the project vicinity, as depicted in the Sacred Lands database or other files. We would also appreciate obtaining a list of interested Native American tribal entities or individuals for the project area. We have contacted the San Bernardino Archaeological Information Center at the San Bernardino County Museum, Redlands, CA to review their files as part of the background research on the project.

We would appreciate a response, at your earliest convenience, should you have information relative to this request.

Thanks again for your assistance.

Sincerely,

**WILLIAM SELF ASSOCIATES, INC.**

James M. Allan, Ph.D., RPA  
Vice-President

Attachment

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**William Self Associates, Inc.**

E-mail: [wsself@williamself.com](mailto:wsself@williamself.com)

CORPORATE OFFICE: San Francisco Bay Area  
PO Box 2192, 61 Avenida de Orinda  
Orinda CA 94563  
Phone: 925-253-9070 / 925-254-3553 fax

STATE OF CALIFORNIA

Arnold Schwarzenegger Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-4082  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)



June 23, 2006

Allen Estes  
William Self Associates

Sent by Fax: 925-254-3553  
Number of Pages: 2

RE: Proposed Victorville II Site, Victorville NW, Victorville, Adelanto, and Helendale quadrangles, San Bernardino County

Dear Mr. Estes:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

*For: [Signature]*  
Rob Wood  
Environmental Specialist III

**Native American Contacts**  
**San Bernardino County**  
 June 23, 2006

**San Manuel Band of Mission Indians**

Deron Marquez, Chairperson  
 PO Box 266 Serrano  
 Patton, CA 92369  
 dmarquez@sanmanuel-nsn.  
 (909) 864-8933 EXT-3070  
 (909) 864-3370 Fax

**Morongo Band of Mission Indians**

Maurice Lyons, Chairperson  
 245 N. Murray Street, Suite C Cahuilla  
 Banning, CA 92220 Serrano  
 (951) 849-8807  
 (951) 755-5200  
 (951) 922-8146 Fax

**San Fernando Band of Mission Indians**

John Valenzuela, Chairperson  
 P.O. Box 221838 Fernandefio  
 Newhall, CA 91322 Tataviaam  
 tsen2u@msn.com Serrano  
 (661) 753-9833 Office Vanyume  
 (760) 885-0955 Cell Kitanemuk  
 (760) 949-1604 Fax

**Serrano Band of Indians**

Goldie Walker  
 6586 Valeria Drive Serrano  
 Highland, CA 92346  
 (909) 862-9883

**Morongo Band of Mission Indians**

Britt W. Wilson, Cultural Resource Coordinator  
 245 N. Murray Street, Suite C Cahuilla  
 Banning, CA 92220 Serrano  
 britt\_wilson@morongo.org  
 (951) 849-8807  
 (951) 755-5200  
 (951) 922-8146 Fax

**San Manuel Band of Mission Indians**

Bernadette Brierty, Cultural Resources Coordinator  
 PO Box 266 Serrano  
 Patton, CA 92369  
 bbrierty@sanmanuel-nsn.gov  
 (909) 864-8933 EXT-2203  
 (909) 862-5152 Fax  
 (909) 864-3370 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural for the proposed  
 \* Victorville II Site, Victorville NW, Victorville, Adelanto, and Helendale quadrangles, San Bernardino County.

**Record of Native American Contacts and Comments.**

Native American Contact	Date of Notification Letter	Date of Response to Letter	Date of Phone Contact	Comments
Britt Wilson, Morongo Band of Mission Indians	May 23, 2006	June 6, 2006		Requested copy of Phase I report for review.
Maurice Lyons, Morongo Band of Mission Indians	May 23, 2006	None	June 23, 2006	Left voicemail
John Valenzuela, San Fernando Band of Mission Indians	May 23, 2006	None	June 23, 2006	June 28, 2006: Mr. Valenzuela expressed concern about the potential for prehistoric sites in the area of impact, and asked that construction proceed with caution in areas likely to contain prehistoric materials. He would like to be informed if anything cultural is encountered during construction.
Deron Marquez, San Manuel Band of Mission Indians	May 23, 2006	None	June 23, 2006	Left voicemail
Bernadette Brierty, San Manuel Band of Mission Indians	May 23, 2006	None	June 23, 2006	Left voicemail
Goldie Walker, Serrano Band of Indians	June 23, 2006	None	July 13, 2006	Ms. Walker asked to be contacted if human remains or any cultural material is discovered as a result of construction activities.

**From:** Britt Wilson [mailto:[britt\\_wilson@morongo.org](mailto:britt_wilson@morongo.org)]  
**Sent:** Tuesday, June 06, 2006 3:29 PM  
**To:** [wself@williamself.com](mailto:wself@williamself.com)  
**Cc:** Britt Wilson  
**Subject:** Victorville II Project - Power Plant

James:

Thank you for contacting the Morongo Band of Mission Indians concerning the above referenced project. Although we don't have any specific information on your project's parcel, it is located in a high probability area and, I believe, the village of Topiabit is close-by. The Tribe would like to request a copy of the Phase I study to allow us to further analyze the site.

In the interim, the Tribe always asks for standard conditions about inadvertent discoveries of archaeological resources or human remains. Based on the location of this site, we will also probably recommend archaeological monitors.

Thank you for contacting the Tribe. We may have additional comments after viewing the Phase I report.

Sincerely,

Britt W. Wilson  
Project Manager/Cultural Resources Coordinator  
Morongo Band of Mission Indians  
Planning & Economic Development Department  
245 N. Murray Street  
Banning, CA 92220  
Office: (951) 755-5200  
Direct: (951) 755-5206  
Fax: (951) 922-8146  
Email: [Britt\\_wilson@morongo.org](mailto:Britt_wilson@morongo.org)

Wayta' Yawa' (Always Believe)



## **APPENDIX D**

### **Resumes of Key Project Staff**

**EDUCATION**

- 2002 Ph.D. Anthropology, University of California, Berkeley.
- 1990 MA. Anthropology, University of California, Berkeley.
- 1989 MA. Maritime History and Underwater Archaeology, East Carolina University.
- 1970 BS. Business Administration, St. Mary's College, Moraga, California.

**EXPERIENCE:**

**1993 - Present:** *Vice President/Principal, William Self Associates, Inc.*

As Principal Project Director, responsibilities include project coordination and technical direction, as well as staffing, scheduling and administration.

*Recent Projects:*

- Project Director: Cultural Resources Assessment for Monterey Bay Aquarium Research Institute's Monterey Accelerated Research System Cabled Observatory Project.
- Project Director: Kinder Morgan Energy Partners Arizona Pipeline Replacement Project
- Project Director: City of Oakley Cypress Corridor Project
- Project Director: 170 King Street, San Francisco, CA
- Project Manager: Carquinez Straits Bridge Replacement and Seismic Retrofit Project
- Project Manager: San Rafael Bridge Seismic Retrofit Project
- Project Manager: San Francisco-Oakland Bay Bridge East Span Replacement Project
- Project Manager: Four Seasons Hotel Project, San Francisco
- Consulting Archaeologist. Marine Archaeological Survey of the Proposed Southhampton Shoal Ship Channel
- Consulting Archaeologist. Marine archaeological survey of the J. Baldwin Ship Channel
- Project Manager: Archaeological Investigation of the Fort Ross Industrial Complex.
- Project Manager, Muni Metro Tumbuck Project, San Francisco
- Project Manager: San Francisco Muni Railway Mid-Embarcadero Roadway/F-Line Extension Project
- Project Manager: One Embarcadero South Project

**1999 – Present:** *Research Fellow, Archaeological Research Facility, University of California, Berkeley*

**1997 – Present:** *Adjunct Professor, Department of Anthropology and Sociology, Saint Mary's College of California.*

**1990 – Present:** *Director, Institute for Western Maritime Archaeology, Archaeological Research Facility, University of California, Berkeley.*

**2005 – 2009:** *Member, National Park Service Historical Landmarks Committee*

**MEMBERSHIPS**

- Institute for International Maritime Research
- North American Society for Oceanic History
- Society for Historical Archaeology
- Society of American Anthropologists
- Society for California Archaeology

**PROFESSIONAL REGISTRATION:**

Register of Professional Archaeologists (RPA) Certification since 1999.



**EDUCATION**

1998 Ph. D. Near Eastern Studies (History and Archaeology)  
University of California, Berkeley.

**EXPERIENCE:**

**1986 – 2005**

- Unit Supervisor: U.C. Berkeley Tel Dor Excavations, Tel Dor, Israel
- Area Supervisor: U.C. Berkeley Tel Dor Excavations, Tel Dor, Israel
- Area supervisor: U.C. Berkeley Nineveh Excavations, Iraq
- Area Supervisor: U.C. Berkeley Tel Dor Excavations, Tel Dor, Israel
- Assistant Director and Field Supervisor: U.C. Berkeley Tel Dor Excavations, Tel Dor, Israel

**1995 – Present**

- Staff Archaeologist: William Self Associates, Orinda, CA
- Senior Archaeologist and Project Manager: William Self Associates, CA

*Recent Projects:*

- Contra Costa Public Works Rossmoor, CA
- KMEP Concord-Sacramento, CA
- KMEP Eastline, Arizona
- KMEP Phase III/IV, Tucson, Arizona
- Kaufman & Broad Canyon Oaks, Pleasanton, CA
- Bay Street, Emeryville, CA
- URS High Desert Power Project
- Southern California Gas Company Kramer Expansion Project
- Catellus, Hercules Project
- SF Towers, 3<sup>rd</sup> and Mission Streets, San Francisco
- Greenbriar Homes – Bernal Project
- 560 Mission Street, San Francisco
- 360 Networks Project California Public Utilities Commission
- Moffett Park Project
- 530 Chestnut Street, San Francisco
- Four Seasons Hotel, San Francisco
- Level 3 Fiber Optic San Francisco and Los Angeles



**Eric C. Strother**

**Senior Archaeologist / Human Osteologist**

**EDUCATION:**

M.A. Anthropology, 2004, California State University, Hayward

B.A. Anthropology, 1997, California State University, Chico

**EXPERIENCE:**

- **William Self Associates, Inc**, Orinda, CA. January 2001-Present. Senior Archaeologist / Human Osteologist. Specialized responsibilities include identification of human and non-human skeletal material from archaeological sites, human burial excavation, osteological analysis, inventorying, and cataloging of human remains in the presence of a Native American Monitor. Completed cultural resource assessment reports for various northern and central California projects. Completed analyses and report writing on 700+ human burials from three prehistoric midden sites in the San Francisco Bay Area.
- **California State University, East Bay**, Hayward, CA. January 2005-June 2005. Part-time Lecturer. Taught Introduction to Biological Anthropology, Winter Quarter 2005, and Field Archaeology, Spring Quarter 2005.
- **Archaeological Resource Service**, Petaluma, CA. June 1998-January 2001. Staff Archaeologist. Responsible for survey, excavation, construction monitoring, analysis and report preparation for over 40 archaeological projects within the San Francisco Bay Area. Additional responsibilities included human burial excavation, artifact cataloging, archival research, proposal writing, prehistoric and historic site record preparation, photography, illustration, mapping, and site-specific data gathering at the Northwest Information Center at Sonoma State University for numerous San Francisco Bay Area sites.
- **Origer & Associates**, Rohnert Park, CA. October 1997. Archaeological Field Technician. Performed archaeological survey and excavation at three central California sites.

**ACADEMIC EXPERIENCE:**

- **Physical Anthropology Laboratory, California State University, Chico**, April 1996 – May 1997. Laboratory Assistant – Volunteer. Forensic training in human skeletal identification, laboratory processing of human remains, radiographic documentation, and supervising and managing laboratory interns.
- **Zooarchaeology Laboratory, California State University, Chico**, April 1996 – May 1997. Laboratory Assistant – Volunteer. Identification, arrangement and curation of faunal assemblages from numerous northern California sites.

**PROFESSIONAL AFFILIATIONS**

- Register of Professional Archaeologists (RPA)
- Society for California Archaeology (SCA)