

## 5.3 Cultural Resources

This section discusses the potential effects of the Rice Solar Energy Project (RSEP) on cultural resources. Section 5.3.1 describes the cultural resources environment that might be affected by the RSEP. Section 5.3.2 discusses the environmental consequences of construction and operation of the proposed project. Section 5.3.3 determines whether there will be any cumulative effects from the project. Section 5.3.4 presents mitigation measures that will be implemented to avoid construction impacts. Section 5.3.5 discusses the laws, ordinances, regulations, and standards (LORS) applicable to the protection of cultural resources. Section 5.3.6 lists the agencies involved and agency contacts, and Section 5.3.7 discusses permits. Section 5.3.8 lists reference materials used in preparing this section.

This section is consistent with state regulatory requirements for cultural resources pursuant to the California Environmental Quality Act (CEQA). Cultural resources include prehistoric and historic archaeological sites;<sup>1</sup> districts and objects; standing historic structures, buildings, districts and objects; locations of important historic events, and sites of traditional/cultural importance to various groups.<sup>2</sup> The study scope was developed according to California Energy Commission's (CEC) cultural resources guidelines and complies with *Instructions to the California Energy Commission Staff for the Review of and Information Requirements for an Application for Certification* (CEC, 1992) and *Rules of Practice and Procedure & Power Plant Site Certification Regulations* (CEC, 2008).

This study was conducted by Clint Helton, M.A., RPA, and Aaron Fergusson, M.A., RPA, Cultural Resource Specialists (CRS) who meet the qualifications for Principal Investigator stated in the Secretary of the Interior's standards and guidelines for archaeology and historic preservation (U.S. National Park Service [USNPS], 1983). Contributions to this study were also made by archaeologist Natalie Lawson, M.A., RPA; architectural historian Elizabeth Calvit, M.A.; and historic archaeologist Matt Bischoff. Ms. Calvit is qualified as a historian, an architectural historian, and a historic preservationist under the Secretary of the Interior's Historic Preservation Professional Qualification Standards and specializes in cultural resources of the U.S. Department of Defense, particularly Cold War-era resources. Mr. Bischoff is an expert in the history of the Army's Desert Training Center and has

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1 Site is defined as "The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure...where the location itself possesses historic, cultural, or archeological value." (USNPS, 1998).

2 The federal definitions of cultural resource, historic property or historic resource, traditional use area, and sacred resources are reviewed below and are typically also applied to non-federal projects.

A cultural resource may be defined as a phenomenon associated with prehistory, historical events, or individuals or extant cultural systems. These include archaeological sites, districts, and objects; standing historic structures, districts, and objects; locations of important historic events; and places, objects, and living or non-living things that are important to the practice and continuity of traditional cultures. Cultural resources may involve historic properties, traditional use areas, and sacred resource areas.

Historic property or historic resource means any prehistoric district, site building, structure, or object included in, or eligible for, inclusion in the National Register of Historic Places (NRHP). The definition also includes artifacts, records, and remains that are related to such a district, site, building, structure, or object.

Traditional use area refers to an area or landscape identified by a cultural group to be necessary for the perpetuation of the traditional culture. The concept can include areas for the collection of food and non-food resources, occupation sites, and ceremonial and/or sacred areas.

Sacred resources applies to traditional sites, places or objects that Native American tribes or groups, or their members, perceive as having religious significance.

conducted significant previous research of the Rice Army Airfield, including his publication *"The Desert Training Center/California Maneuver Area 1942-1944; Historical and Archaeological Contexts"* (Bischoff, 2000).

Per CEC Data Adequacy requirements, Appendix 5.3A provides copies of agency consultation letters. Appendix 5.3B provides the technical report, including California Department of Parks and Recreation historic site forms (DPR 523) for newly recorded resources. Appendix 5.3C provides archival research material, including copies of historical maps and aerial photographs of the project and a complete copy of the California Historical Resources Information System (CHRIS) literature search results, which include copies of previous technical reports occurring within 0.25 mile of the project and DPR 523 forms for previously recorded resources occurring within 1 mile of the project and 0.25 mile of linear facilities. Appendix 5.3D provides names and qualifications of personnel who contributed to this study. Appendix 5.3E provides maps of the project, recorded resources, areas subject to pedestrian survey, and previously conducted studies that occurred within 1 mile of the project. Appendix 5.3F is a report of geoarchaeological investigations. Appendixes 5.3C and 5.3E are being filed under a request for confidentiality.

The project requires review under federal regulations including the National Historic Preservation Act (NHPA) and the Archaeological and Historic Preservation Act of 1974 (16 U.S. Code 469), among others, because it is a federal undertaking (federally permitted or funded).

### **5.3.1 Affected Environment**

To assess the potential for encountering cultural resource sites during an intensive pedestrian inventory and to fully understand the historical relevance (significance) of such sites, it is important to be aware of the historic and/or prehistoric activities that occurred in the area. To that end, cultural contexts are prepared to provide a chronological and thematic provenance for archaeological sites and historic properties. Given that the only cultural resources encountered during the literature review and inventory of the RSEP are historic in origin and in keeping with CEC requirements to emphasize the area within no more than a 5-mile radius of the project location (CEC, 2008, Appendix B [g][2][A]), only an historic-era context is pertinent and is presented in this section.

Because all the remains encountered within the project site and generation tie-line boundaries relate to the Army's Desert Training Center/California-Arizona Maneuver Area (DTC/CAMA), the historic context focuses exclusively on DTC/CAMA. There has been little human activity in the project area during the historic area. Events such as the construction of the Colorado River Aqueduct in the 1930s, the construction of the rail line that is now called the Arizona-California Railroad, and the establishment and later abandonment of the town of Rice are not relevant in terms of historic resources at the RSEP project, though they are nearby, because historic buildings, structures, and archaeological deposits within the RSEP site relate exclusively to the DTC/CAMA. Site records for some of these other features (Colorado River Aqueduct and Arizona-California Railroad) are found in Appendix 5C.

The project site occupies private land that was historically used during World War II as Rice Army Airfield (Rice AAF), a part of the Army's DTC/CAMA. The Rice AAF and adjacent

Camp Rice were part of a three-state ad hoc training environment established to acclimatize troops to desert warfare between 1942 and 1944 and involved infantry, artillery, and air support forces. After World War II, the airfield was disposed by the military, transferred to the county, and later sold into private ownership. Rice Airfield was operated privately until it was abandoned between 1954 and 1958. Following its municipal use, the land has been in private holding.

A Bureau of Land Management (BLM) historic context and overview of the DTC/CAMA facilities (Bischoff, 2000) concluded that Rice AAF and Camp Rice meet the criteria for listing in the NRHP. Because the construction of the RSEP would envelope most of the remains at Rice AAF, consultation under Section 106 of the NHPA will be required through the co-lead federal agencies, Western Area Power Administration (Western) and BLM, and the California Office of Historic Preservation (COHP) to develop a mitigation plan to resolve the potential adverse effects of constructing the RSEP. Possible mitigation measures are discussed in Section 5.3.4.

### 5.3.1.1 Regional Setting

The RSEP consists of the solar generation facility and a new approximately 10.0-mile-long generator tie-line. The project site encompasses approximately 1,410 acres of a 3,324-acre contiguous private land holding (referred to as the ownership parcel in this Application for Certification [AFC]).

The project site is on private land surrounded by open desert managed by BLM. State Route (SR) 62 is immediately adjacent to the northern boundary of the proposed solar site and will be the primary access during construction and operation. The proposed generator tie-line and interconnection substation are primarily located on BLM land. The Arizona-California Railroad and Metropolitan Water District's (MWD's) Colorado Aqueduct are immediately north of and run parallel to SR 62. A small crossroads settlement known as Rice was once located 2 miles west of the project site, at the junction of SR 62 and the Blythe-Midland Road, but was abandoned and only ruins of former structures remain. The nearest current residence and settlement is Vidal Junction, 15 miles east-northeast at the junction of SR 62 and U.S. Route 95. The local vegetation within the Rice Valley is dominated by Sonoran creosote bush scrub.

Construction access to the RSEP heliostat field and power generation facilities will be directly off SR 62. All construction parking, office trailers, and equipment laydown areas, as well as a construction workforce recreational vehicle (RV)/trailer parking camp, will be located at the north end of the heliostat field within the approximately 1,504-acre project area (which includes the final 1,410-acre fenced facility site). Construction power will be obtained via extension of an existing 12-kilovolt (kV) electrical distribution line that runs parallel to SR 62; the line will be extended from a location 175 feet east of the project parcel boundary for approximately 1.1 miles to the facility fenceline boundary.

The project will interconnect to Western's 161/230-kV Parker-Blythe transmission line approximately 10 miles southeast of the proposed project site. The new transmission line will be located primarily on BLM land and will include the establishment 4.6-miles of new dirt service road, use of 5.4 miles of existing dirt road (Rice Valley Road), and construction of a new 300 foot by 400 foot substation at the point of interconnection.

During operation, all project facilities other than the generator tie-line, including permanent parking areas, administration buildings, water treatment system, 230-kV switchyard, the approximately 1,370-acre heliostat field and associated power generation equipment, and evaporation ponds will be contained within 1,410-acre fenced boundary. Water will be supplied by two onsite groundwater wells and the project will not require natural gas pipeline or any other pipelines.

#### **5.3.1.1.1 Natural Setting**

The project area is in the northern part of Rice Valley on a broad, gently sloping bajada on the southern end of the Turtle Mountains. Rice Valley is a shallow, internally draining basin with no permanent source of water. Although considered to be within the West Basin of the Colorado River, which drains primarily into the Salton Sea Trough, Rice Valley is a sink within no broader hydrological connectivity. Rice Valley has a small watershed and lacks any major washes. Despite being a basin, there is no evidence that a lake ever formed in the bottom of the basin (BLM, 2007). Sand dunes and sand sheets are found throughout the valley bottom. Elevation throughout the RSEP area ranges from 750 feet to 940 feet above mean sea level, with the overall area sloping gently to the south. Rainfall in this arid area averages 2 to 3 inches annually and temperatures fluctuate from highs of 110+ degrees Fahrenheit (°F) in summer to lows in the 30s °F during the winter months.

#### **Biology**

The project area falls into the Lower Sonoran Life Zone of California (Moratto, 1984). The flora and fauna of the area have adapted to the harsh desert conditions. The local vegetation in the Rice Valley is dominated by Sonoran creosote bush scrub. The creosote bush and bursage vegetation types are the most successful flora in the area. Some cactus, saltbush, and paloverde are observed in parts of this lifezone, as well. Fauna found in this environment include jackrabbit, bobcat, coyote, and other small rodents, birds, and reptiles.

#### **Current Land Use**

The RSEP is in a harsh desert environment, with no naturally occurring source of permanent water and little in the way of raw materials or potential for settlement or development. Other than the former crossroads settlement of Rice to the west and the abandoned World War II airfield, the land is undeveloped and unsuitable for habitation and most forms of land development.

#### **5.3.1.2 Historic Setting**

The DTC in southeast California and western Arizona was created in 1942 in response to the war in North Africa, when the Nazi Germans recaptured the Libyan port of Benghazi in January. Field Marshal Erwin Rommel commanded troops to push toward Egypt, which threatened the safety and future of the Suez Canal. British troops had great difficulty stopping Rommel's fast moving troops. As a result, the U.S. War Department determined that American soldiers needed to be trained quickly in desert combat techniques to support this mission. General George S. Patton, Jr. was appointed to locate, establish, and command a center to train soldiers in desert fighting (Porter, 2009).

In February 1942, General Patton established the DTC for the U.S. Army. The center was operational for 2 years and, during that time, the U.S. Army acquired approximately 18,000 acres in southern California, Nevada, and western Arizona for the training center

(Figure 5.3-1). For optimum training, General Patton decided that everyone, including Headquarters personnel, would operate and live under simulated war conditions. Troops experienced the harsh conditions of the desert, living in tents and enduring snakes, scorpions, and tarantulas and sand and dust everywhere and in everything. Units assigned to the DTC were housed in temporary facilities, generally in what were termed divisional camps, which were designed to accommodate a full division of troops (roughly 15,000 men). These divisional camps were spread out across the expanse of the DTC, far from population centers, though generally close to railroad lines. From these camps, the soldiers spent the majority of their time training in the harsh desert environment. A strict 14-week training schedule went from small unit (platoon) activities all the way up through full division exercises. Finally, units would take part in large-scale maneuvers. As a part of preparing units for combat situations, maneuvers were a key aspect of the DTC. They were the final phase, and were intended to put the finishing touches on a division's fighting ability. Generally, an entire division would operate against another division, with one on the defensive and the other on the offensive. Maneuvers, like everything at the DTC, were designed to be as realistic as possible, forcing the soldiers to live, move, and fight under the same conditions that they would encounter in North African combat. In addition, the maneuvers were designed to extend personnel and equipment to the limit of their capabilities. Paved roads were not used during movements, and units were forced to make their own roads in many places. The men were generally allowed only one canteen of water per day, with rations consisting of nonperishable canned foods (C-rations) (Bischoff, 2000; Martin, 1991).

Demolition and sabotage were also used extensively, as they would be in a combat situation. Land mines were placed, tear gas was dropped from the air, and smoke pots were used as screens. Other exercises consisted of troop movements designed to simulate a campaign. These exercises lasted up to 11 days, and tested the ability of units to act in unison. All aspects of a real campaign were incorporated, and all units were included in these maneuvers, from armor to service units including administration, supply, maintenance, and evacuation (Meller, 1946).

The training program paid special attention to several specific areas such as cross-country movement; reconnaissance; dispersion of vehicles during marches, halts, and bivouacs; aggressive action by dismounted units; anti-aircraft defense; camouflage; night operations; battlefield recovery and evacuation of armored vehicles and other heavy equipment; driver training; and hygiene, sanitation, and first aid in the desert (Headquarters Desert Training Center, 1943).

In January 1943, the DTC began to function as a theater of operations in a combat setting in order to allow for the most realistic training possible. This provided for a communications zone and a combat zone. All service and supply units were placed within the communication zone, separated from combat units, as they would be in real war. The combat zone was the location of the live-fire exercises and maneuvers. Divisional camps essentially became the equivalent of a rear area (Bischoff, 2000).

By early 1943, the training center had expanded greatly, with numerous additional facilities and camps established. In October, the center was renamed the California-Arizona Maneuver Area (CAMA). The name change reflected how the center had shifted its focus from desert warfare training to a large-scale facility that afforded tough, realistic training.

By the time CAMA was closed in 1944, almost 1,000,000 men and women, roughly 10 percent of those who served in World War II, had gone through desert combat training there. Of the total of 85 army divisions that served in World War II, 23 trained at the DTC/CAMA. The DTC/CAMA was the largest army post and largest training maneuver area in U.S. military history (Bischoff, 2000).

Though it was the U.S. Army's first attempt at desert-warfare training, the DTC/CAMA proved useful in a variety of ways. The vast expanses of the desert allowed the Army to move across long distances, in realistic preparation for what they would have to accomplish in Europe. Because of the isolation of the area, movements were unencumbered by towns or civilians, and live-fire exercises could be conducted without fear of harming nearby citizens. The terrain permitted varied training, and almost no obstacles interfered with freedom of maneuvers. Units went cross-country, climbed, and defended and attacked positions in mountains, with few constraints. Highways were placed off limits for tactical movements, except when moving troops through narrow defiles (Meller, 1946). According to the War Department, the DTC/CAMA "offered the very best training possible for the various units of the United States Armed Forces" (as quoted in BLM, 1998). The soldiers were taught how to survive the elements, which often were their worst enemies in combat, and several commanders remarked that the men at the DTC/CAMA were in top physical condition.

Although General Patton's legacy and contribution is well publicized, many other top commanders from World War II served at the facility. Patton himself left the facility in summer 1942, to lead a portion of the Allied invasion of North Africa known as Operation Torch. Following Patton's departure, several successive Armored Corps as well as individual divisions and smaller units cycled through the DTC.

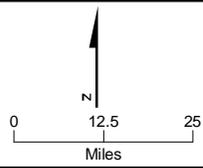
#### **5.3.1.2.1 Army Air Forces in World War II**

Because of lessons learned from combat overseas, the commanders of the DTC/CAMA wanted to make sure that air power was included in the training. They knew that close coordination with air units was critical in winning on the ground. Beyond tactical training in the support of ground units, however, airplanes were used from virtually the beginning of the DTC. The Army Air Force itself went through an incredible expansion during the life of the DTC/CAMA. In a few short years, the service dramatically changed its role in the U. S. military.

At the beginning of the war, the U.S. Army Air Corps was a "second-tier air service," which operated solely to provide support to Army ground forces. By the end of the war, however, it had become the "premiere air power of the world" in the form of the U.S. Air Force (Pedrotty et al., 1999:4-1). This change all took place within a relatively short 6-year time span, with the requisite expansion in aircraft, command structure, and ground facilities needed to support such massive expansion. By the end of the war, the U.S. Air Force had developed training bases, air fields, depots, and other facilities that still form the basis of its infrastructure today. It was during the peak of this expansion and change that the DTC/CAMA was in operation.



This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



Expansion began in early 1939 as the German military swept through Poland. Plans for expansion continued rapidly over the next few months as the German blitzkrieg quickly overran large swathes of Europe. Military leaders in America noted the deadly effectiveness of air power when combined with fast-moving ground forces. They also began to realize the possibilities of strategic air power through the bombing campaigns of the Luftwaffe over Britain (Pedrotty et al., 1999). In response, Congress passed several acts, appropriating \$2.5 billion for the Air Corps (beyond even what President Roosevelt requested) for exponential increases in aircraft, personnel, and facilities. To construct all these new facilities, the Corps of Engineers was placed in charge of Air Corps projects in early 1941. Like other wartime, military construction, the Corps of Engineers followed standardized plans. Many new tactical fields were established by acquiring and expanding former Civil Aeronautics Administration fields. A variety of other new fields were also established, including training fields, gunnery schools, cadet reception centers, and depots, among others. Construction was to be a theater of operations type, allowing for speed and ease of construction, with minimal expense (Pedrotty et al., 1999).

In June 1941, the U.S. Army Air Forces was created as a sub-service of the Army, though acting as a separate service branch, with its own Undersecretary of War and equal representation on the General Staff. The new service would struggle with its ability to operate independently and strategically for the next few years, though by the end of the war this goal would be largely realized.

With the Japanese attack on Pearl Harbor in December 1941 came additional impetus for expansion of the American air forces. Further expansion of the capability of the Army Air Forces was needed, and was undertaken rapidly. Perhaps foremost in this expansion of capability was the training of air crews. By the end of 1943, the Army Air Force contained 345 main bases, 116 sub-bases, and 332 auxiliary air fields. The build-up in air forces, however, peaked in the latter half of 1943, as the majority of air units were already overseas or in the process of being transferred overseas. Continental defense was also less of a concern, and as a result there was little reason for further expansion stateside (Pedrotty et al., 1999).

#### **5.3.1.2.2 Air Power at the DTC/CAMA**

As part of the process of training for combat, the Army Air Force and the Army Service Force were included, training to serve as support to Army Ground Forces (AGF). The initial Army Air Force groups to train at DTC/CAMA included one combat squadron, one medium observation squadron, and an air ambulance. As with the harsh conditions for ground troops, the Army Air Force operated on desert-constructed fields instead of flying in from neighboring established airbases or civilian airports (Meller, 1946).

An official air support command was first established at Camp Young, followed by four other divisional camps receiving air support commands (Meller, 1946). Unfortunately, like every other type of equipment at the DTC/CAMA, airplanes were in short supply. Air units initially assigned to the DTC consisted of one squadron of combat aviation, one medium observation squadron, and one air ambulance, all under the operational control of the DTC. Later, an entire bombardier group was assigned. Smaller units were assigned for shorter periods of time. In June 1942, the Second Air Force assumed responsibility for air operations at the DTC. Headquartered at Camp Young, the Second Air Force also assumed

responsibility for the many airfields throughout the DTC area (U.S. Air Force Historical Division, n.d.a). Air units, however, were under the direct command of the AGF, and were not allowed to act in their usually autonomous roles.

The Desert Training Center included four airfields: Rice AAF, Shaver Summit AAF, Thermal AAF, and Desert Center AAF constructed specifically for training, several other municipal airports (for example, Blythe and Needles), that participated in DTC/CAMA training activities, and up to 27 gravel-surfaced landing strips. The goal of including the Army Air Forces in training at CAMA was to improve air-ground cooperation. The joint training was for both combat and aviation commanders as well as combat troops. Using these airfields, the Army Air Forces contributed 92 planes providing air-support to more than 100,000 ground troops during training operations over the 2 years CAMA was operational. Army Air Forces training in support of ground troops over two years included 22 liaison-type planes and 70 combat-type planes flying a total of 2,600 hours on 460 tactical missions.

The air-ground training conducted in CAMA, according to the AGF, was the most satisfactory training being conducted in the United States (Meller, 1946). While the AGF thought the training of combat troops in conjunction with air support was valuable, Army Air Force Headquarters was not interested in combined training. Airplanes were scarce and General Hap Arnold believed that any airplanes that could fly should be in combat (Meller, 1946).

Nevertheless, air squadrons were primarily assigned supporting roles to the ground units, providing tactical support and generally creating a realistic combat environment (Blake, 1996). During maneuvers and other training operations, planes flew low over the troops in order to prepare them for strafing in actual combat. Air crews also practiced bombing and gunnery on several ranges spaced throughout the DTC/CAMA. For the most part, air-to-ground gunnery practice was focused on the toes of nearby mountains (Hazenbush, 1944). The low flying, twin-engine A-20 Havoc attack airplane was perhaps the most frequently encountered by ground troops. Because of the presence of these aircraft, small units learned the importance of camouflage, dispersion, and the digging of slit trenches.

A variety of airplanes were used, particularly L-1 and L-4 Piper Cubs for surveillance. During the war, these planes proved invaluable in spotting enemy units and directing artillery fire more effectively. Patton himself used his own private plane, a Stinson "Voyager," or "flying jeep" as the planes were known. In several instances, C-50 cargo planes were used, including for troop supply during maneuvers. Supplies, including ammunition, were parachuted to waiting troops by the C-50s, with mixed results. Light bomber-ground attack A-20 Havocs were stationed at Rice AAF, Blythe AAF, and Camp Essex. Douglas C-47 Skytrains were common sights in many places in the DTC/CAMA. The P-39 Airacobra, P-40 Warhawk, and P-38 Lightning were also known to have been used at the DTC/CAMA.

During the maneuvers of February and March 1943, the IV Air Support Command, which was headquartered at Thermal AAF, oversaw all air units and supplied air support to all the divisions and some of the smaller units. By April of the same year, an Air Forces Service Command was established at the DTC, and assigned to the IV Air Support Command (Meller, 1946).

Airdrome detachments were stationed at various air fields, and were under the command of the III Tactical Air Division at Camp Young. The III Tactical Air Division was given the responsibility of assisting in the training of tactical air units. In addition to training, however, each unit was in charge of maintaining its airfield and had little time for anything else. The 475th Base Headquarters and Air Base Squadron operated the Thermal AAF, as a part of the III Tactical Air Division. Under the umbrella of the 475th Base Headquarters and Air Base Squadron, several airdrome detachments were formed to operate air bases. According to the 3rd Airdrome Detachment, their policy was: "...anything and everything for the training units, to render every possible aid to units undergoing their final phase of training so that more and better trained units may be sent into combat as they are needed" (Speck, 1944:3). Truly, these units were performing a vital function: that of keeping these bases running smoothly, so that air units could focus on training for war. The 2nd Airdrome Detachment was activated on August 1, 1943 at Rice AAF. It is not known which unit operated the base prior to that time. The detachment initially consisted of four officers and fifty enlisted men. Eventually the unit would contain five officers and 186 enlisted men, which included quartermaster, medical, weather, communication, signal, and guard personnel (Speck, 1944).

In many other locations, the Army used preexisting civilian facilities, such as the airport in Boulder City, Nevada. In other cases, the Army established facilities that were subsequently taken over for civilian use after the end of the war. Most of the airfields and facilities were constructed by aviation engineer units (often battalions), some of which were attached to larger divisions, while others were not. The skills learned by the engineer units in building these facilities proved invaluable in service overseas during the war. In addition to the more permanent airfields, landing strips were created throughout the facility. Most divisional camps had some type of airfield or landing strip, which were also temporary in nature. Experimental airstrips, consisting of the mixing of cement with sand, were built in several places. These airstrips were also designed to handle small planes only. Their construction was recalled by one of the men who helped build them: "... we mixed furrows with road graders; then took the cement and spread the cement with trucks over the top of that; then mixed it in with the road graders; bladed it out smooth; sprinkled it with water tanks to compact it; and then rolled it" (Krege, 1994:6).

At the height of DTC/CAMA operations, when total personnel reached 190,000, 4,000 of these troops were from the Army Air Forces. Beginning on December 1, 1943, all air units and installations in the CAMA were taken over by the commanding General of the Army Air Forces, under the Third Air Force. The III Tactical Air Division, which had overseen the air operations, came under the control of the Third Air Force. From the AGF's perspective, this was not a welcome change. The Army's position was that the headquarters of the DTC/CAMA must command the entire facility, including all air activities; if not, a great deal of realism was lost. For the Army Air Forces, however, this was likely viewed as a welcome change, as it allowed the air units greater autonomy in training. It may have been a moot point in any case, as air support became almost nonexistent by 1944 (Meller, 1946).

By August 1944, following closure of the CAMA, most of the airfields were assigned to March Field as sub-bases, and the number of personnel stationed at them decreased (U.S. Air Force Historical Division, n.d.b). Most of the smaller airfields were simply abandoned in place.

### 5.3.1.2.3 Rice AAF

Rice AAF began as a municipal airport for Rice, a small town in the Mojave Desert in southeast California. Its original date of construction is unknown, but a review of 1932 Los Angeles Airways Chart determined that Rice Airfield was not constructed until after 1932 (Abandoned & Little-Known Airfields). Though no exact date of activation for Rice AAF is known, Rice Municipal Airport was acquired by the IV Air Support Command on September 29, 1942, and was reportedly operational by October 26, 1942 (U.S. Air Force Historical Division, n.d.a).

Rice AAF was constructed in a triangular plan, consisting of two 5,000-foot runways and numerous dispersal pads extending off the runways to the south (Bischoff, 2000). It is not certain if the airfield was originally constructed in a triangular plan or if this was a subsequent modification. The Desert Center AAF was also constructed in a triangular plan, while Shavers Summit AAF was a single air strip.

Rice AAF, like Desert Center, was a sub-base of Thermal AAF. The facility was in the heart of DTC/CAMA operations, close to camps Iron Mountain, Coxcomb, and Granite. Exact numbers of personnel stationed at Rice AAF are not known. As mentioned above, however, by late 1943, there were approximately 4,000 from the Army Air Forces in the DTC/CAMA, many of which were likely stationed at Rice AAF. By August of that year, nearby Blythe AAF housed 6,025 personnel. Rice AAF was built using largely standard plan, theater of operations-type buildings. These were similar to those found at other airfields of the time, including Desert Center. Barracks, recreation and mess halls, power houses, along with various other support facilities were constructed, reportedly designed to house 3,000 men. The base also contained an electrical generating facility, water system, communications systems including control tower, base weather office, post exchange, and base headquarters. The airfield was located adjacent to the small railroad town of Rice, which consisted of a small cafe and store (Eberling, 1997; U.S. Air Force Historical Division n.d.a).

The isolated location of Rice AAF made life difficult for the men assigned there. Supplies were difficult to come by, no recreational facilities were available, there was little chance of advancement for those stationed there, the weather was difficult, and rations were unsatisfactory. According to the unit's history, the 2nd Airdrome detachment experienced untold hardships in operating the base:

During the 7 months the 2nd Airdrome Detachment has been in existence, it has experienced great and continuous difficulty in obtaining supplies of all types, particular difficulty in obtaining engineering supplies absolutely essential in order to maintain mechanical and other fixed installations. Whether the Service Groups, the sections of the III Tactical Air Division, nor the sections at Headquarters at Thermal Army Air Field after Rice Army Air Field became a sub-base of Thermal Army Air Field have at any time provided what in the opinion of the undersigned would constitute adequate sources of supply (Costigan, 1944:3).

The morale of the 2nd Airdrome Detachment was not helped by the fact that there were no recreational facilities provided at the base. The detachment, however, purchased a motion picture projection machine, constructed an outdoor open top theater, and rented films from Los Angeles. The material for the theater was taken from "odds and ends" of other buildings.

The U.S. Army Corps of Engineers provided benches taken from a Japanese-American Internment/Relocation Center 40 miles away on the Colorado River (Costigan, 1944).

In addition to the airdrome detachment, Rice AAF was the home to several air units during the war. Most of the time, one tactical air unit was assigned to the base, although occasionally there were two. The 85th Bomb Group was transferred to Rice AAF from Blythe Army Airfield in December 1942. From Rice, the group used several bombing and gunnery ranges nearby. The 85th Bomb Group remained at Rice until April 1943 (Hazenbush, 1944). Following the 85th, the 312th Bomb Group was assigned to Rice AAF in spring and summer 1943. The 312th apparently trained in Douglas A-20 Havocs while at Rice. The A-20s had conducted some of the first strikes against Nazi targets in July of 1942, so their value was recognized early.

Later, the 339th Fighter Group was assigned to the field in September 1943. The 339th had actually been designated a Fighter Bomber Group in August of that year (following the end of the use of dive bombing, which the unit had been designated formerly), made up of three squadrons: 503rd, 504th, and 505th Fighter Squadrons. While at Rice AAF, pilots in the 339th trained in the Bell P-39 Airacobra. Like other units trained there, the 339th experienced largely unencumbered training due to good weather and absence of civilian populations. Also, similar to other air units at the DTC/CAMA, the 339th trained in providing close air support for ground units. The 339th participated in the large-scale maneuvers that were such an integral part of the training offered by the DTC/CAMA. The unit apparently spent 8 months at Rice AAF before being sent to the port of embarkation for shipment overseas. In one of many ironic twists in the war, the unit eventually flew P-51 Mustangs, a much different aircraft with a completely different role than those they had trained in while at Rice AAF (Stephenson, 1998). This unit was one of the most decorated of the war, with the most victories over enemy aircraft in one year of any unit ([www.usaf.com/8thaf/fighter/339fg.htm](http://www.usaf.com/8thaf/fighter/339fg.htm).) The 339th may have been the last air unit stationed at Rice.

On April 30, 1944, after approximately 2 years of operation, the U.S. Army closed CAMA and abandoned the fourteen camps and airfields. By the following month, Rice AAF was assigned to March Field as a sub-base, and the 2nd Airdrome Detachment was disbanded. The airfield was closed on August 2, 1944, and declared surplus in October. It was maintained for a while after this by a detachment of Squadron H from Thermal AAF (US Air Force Historical Division, n.d.a). It operated as a civilian airport beginning in 1949. A 1954 U.S. Geological Survey (USGS) topographic map depicted Rice AAF as having two paved runways, taxiways, and a ramp. Between 1952 and 1955 Rice AAF became a private airfield; however, by 1958, it was abandoned (Freeman, 2008). Aerial photography and site visits by private citizens documented the airfield's condition between 1996 and 2009. The runways, ramp, and pads were discernable from the surrounding desert landscape. There were no structures or buildings on the site.

#### **5.3.1.2.4 Camp Rice**

This short-lived divisional camp was constructed adjacent to Rice AAF in early 1942. The camp was occupied by the 5th Armored Division between August and October of that year, followed by the 6th Armored Division. The 6th detrained at Freda, and made their home at Camp Rice for the next 5 months. The 6th Armored Division's training began with field exercises, including training in night movement, and the use of maps and compasses. Firing

ranges were constructed soon after the division's arrival, and soldiers were trained in anti-aircraft firing, and first learned to use their anti-tank weapons. Division field problems gave excellent training to the 146th Armored Signal Company, which used radio, wire, and messenger communications. Charles Barbour, who was with the 86th Cavalry Reconnaissance Squadron, described the arrival of his unit:

Open space was quickly transformed into the usual orderly, military array of canvas. Sand, of course, was everywhere. After some weeks truckload after truckload of plasterboard materialized from a gypsum processing plant some miles away; laid on smoothed-out sand, it floored the tents after a fashion. Troops got into the habit of shaking out their boots in the evening to evict possible desert denizens, and to secure small belongings from larcenous desert rats (Barbour, n.d.).

Barbour went on provided a description of some of Camp Rice's facilities:

It was hot when we arrived, and for a few weeks thereafter, and the burlap-screened Quartermaster-serviced open air shower facility a few miles from camp enjoyed great patronage — but only for a few weeks. October, we found, brought its own brand of dry but freezing weather. A No. 10 can of water set on top of a stove sufficed for washcloth bath. Canvas water bags hung on a peg outside the tent became solid ice overnight. It was a wise practice to start the day in multiple layers of clothing and shed gradually as the sun climbed higher. The knit, tiny-visored skull caps designed to be worn under the helmet liner were cozy, with the ear flaps turned down.

Hissing gasoline lanterns provided light for friendly card games or private reading during the night hours. Or, beer bottles in hand, one could squat on the hard sand and watch a movie shown on a fabric screen that billowed in the wind, producing a funhouse mirror-like image of the heroes and heroines, villains and villainesses.

We learned to punch nail holes in empty cartridge cans, set them in holes scooped in the desert's surface, pour a little gasoline into the hole and light a flickering fire that would warm a can of C ration (the K was yet to come) or brew a canteen full of instant coffee on the home-made stove (Barbour, n.d.).

From Camp Rice, the reconnaissance squadron traveled across the desert perfecting its movement, extending as far south as Yuma, across the river into Arizona. The 6th Armored then took part in maneuvers against the 4th Armored Division in early 1943. Following the maneuvers, the division moved to Camp Coxcomb, which had more amenities, including closed showers and latrines.

Photographs of the camp indicate the presence of a relief map, approximately 50 by 40 feet. Like other, larger relief maps found in other camps, the one at Rice was used to plan out maneuvers and other large scale exercises. Its location was re-discovered in 1996 (Blake), though little of it remained.

The 836th Engineer Aviation Battalion was stationed at Camp Rice (or at Rice AAF) in December of 1942, presumably to assist in the construction (or improvement) of Rice AAF.

In February of 1943, the unit was transferred to Camp Young, which was considered a vast improvement over Camp Rice. The tents at the camp had floors and half walls, and were equipped with stoves. In addition, showers were available and the battalion had its own PX furnished with beer (Merz, n.d.).

#### **5.3.1.2.5 Ranges**

Both air and ground units used the surrounding desert to train. Several areas have been identified as known maneuver or training areas, with substantial ordnance found.

The Big Maria Mountains, south of Rice, were used extensively for live-fire activities (U.S. Army Corps of Engineers [USACE], 1998). These activities likely relate to the training activities of the two divisions at Camp Rice. An aerial gunnery range was established in the mountains immediately north of Rice AAF, as depicted on a map of the CAMA from 1943. Approximately 5,000 acres of the Rice Valley Sand Dunes were set aside as bombing and strafing ranges for the Rice AAF. It also appears that troops from Camp Rice used the area for live-fire exercises. Several clearance efforts have been conducted in the area following the closure of the CAMA, with 105-millimeter (mm) and 75mm projectiles recovered, along with one 37mm round (USACE, 1996).

#### **5.3.1.3 Resources Inventory**

In preparing the cultural resources inventory, CH2M HILL followed procedures and requirements set forth in the BLM California State Office Cultural and Paleontological Use Permit (CRUP), including both national and California Special Conditions (Permit #CA-07-17 including the update to Special Conditions for California dated January 30, 2008), and the CEC's *Rules of Practice and Procedure & Power Plant Site Certification Regulations* (CEC, 2008) for the cultural resources survey.

These inventory methods included archival research, reconnaissance, and intensive pedestrian surface survey. The area of potential effect (APE) for the project was also determined in accordance with the latest CEC *Rules of Practice and Procedure & Power Plant Site Certification Regulations* (CEC, 2008) for assessing potential impacts on archaeological and architectural resources. The results of the resource inventory are presented in the following sections.

The RSEP cultural resources survey area included a block survey of a 3,324-acre parcel of ownership property, a 200-foot-wide buffer around the property (226 acres), a 400-foot-wide by 10.0-mile-long generator tie-line corridor survey area (of which 9.2 miles, or 446 acres, are located outside of the project parcel), and a 500-foot x 500-foot electrical substation survey area, including a 50- to 100-foot buffer (9.6 acres)(Figures 5.3-2a and 5.3-2b). The project parcel survey is entirely on private land while the generator-tie line crosses land managed by the BLM (Palm Springs-South Coast Field Office) as well as two small private holdings. The field work was completed in September 2009.

##### **5.3.1.3.1 Archival Research**

A literature search was conducted by CH2M HILL archaeologist Natalie Lawson on April 23, 2009, at the Eastern Information Center of the CHRIS at University of California, Riverside in Riverside, California. The search comprised the area within a 1-mile radius of the project site and a 0.5-mile radius around the generator tie-line and substation (study

area). Additionally, inquiries were made to the Palm Springs-South Coast and Needles BLM field offices for relevant background data for the survey area.

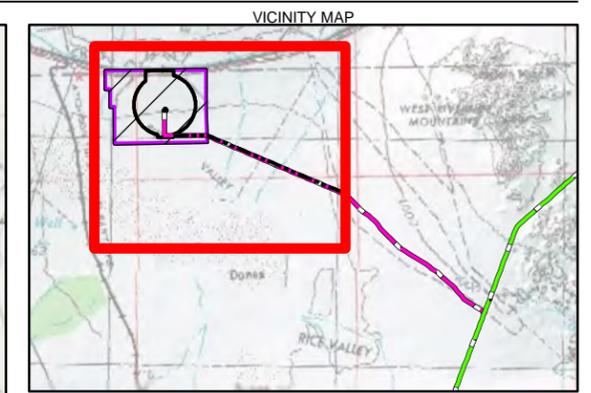
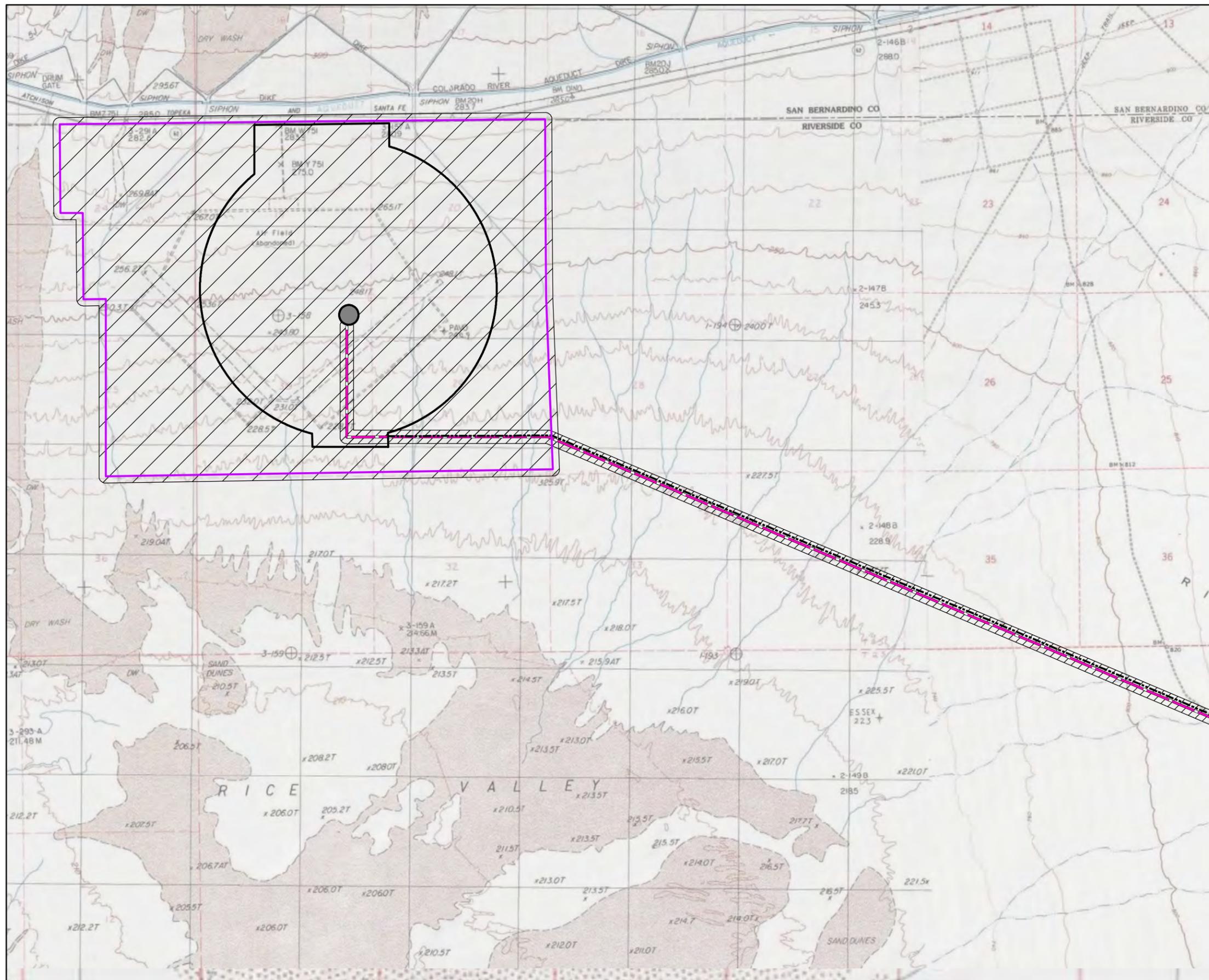
The CHRIS literature and records review included a review of all recorded archaeological sites as well as all known cultural resource survey and excavation reports. The NRHP, California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), and California Points of Historical Interest were all examined. State and local listings were consulted for the presence of historic buildings, structures, landmarks, points of historical interest, and other cultural resources. The following historic maps were reviewed: War Department, Corps of Engineers, US Army, Rice, California 1944, 1:62,500; USGS Rice, California 1954, 1:62,500; USGS Rice, California 1983 1:24,000; and USGS Big Maria Mts. Quadrangle, California-Arizona 1951, 1:24,000.

The majority of the RSEP area has not been previously surveyed for cultural resources. The literature review revealed seven previous surveys within the RSEP area or 1-mile buffer, as follows:

- In 1978, a series of small surveys were conducted and reported on “California Desert Program Archaeological Sample Unit Record” forms. While these forms document some small sites in the region, no sites are located within the APE or the 1-mile buffer.
- A 17-meter-wide seismic testing line was surveyed in 1983 that crossed near the southern end of the RSEP area (Wilke, 1983). This survey did not record any cultural resources.
- In 1980, a survey was conducted by a staff archaeologist with the Tennessee Valley Authority for two small, uranium exploration sites near the southern end of the transmission line (Lippencott, 1981). No sites were recorded.
- In 1997, a survey was conducted for the Parker-Blythe No. 2 161-kV transmission line (Schaefer, 1998). While this survey did document 77 cultural resources along the 64-mile route, none of these resources are located within the APE or the 1-mile buffer.
- A small survey was conducted at the location of existing telecommunications towers near the northeastern corner of the RSEP area. This survey did not record any cultural resources (Duke, 1999).
- A small survey was conducted for co-locating telecommunications equipment alongside existing towers and equipment near the northeastern boundary of the RSEP area (Pletka, 2003). This survey did not locate any cultural resources.

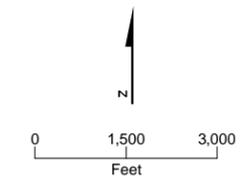
Also included in the files was a regional cultural resources overview report for the Colorado Desert (von Till Warren et. al., 1980). This report provides a good overall context for the known cultural resources and the prehistoric uses of the region.

Most of the cultural resources that are recorded in the area were not recorded during pedestrian surveys. The entire DTC/CAMA within California is classified CHL #985, including all seven facilities in Riverside and San Bernardino counties. For this reason, the entire project area is currently listed on the CRHR as a historical resource. Despite receiving some initial evaluation and contextual information as part of the DTC/CAMA Historical

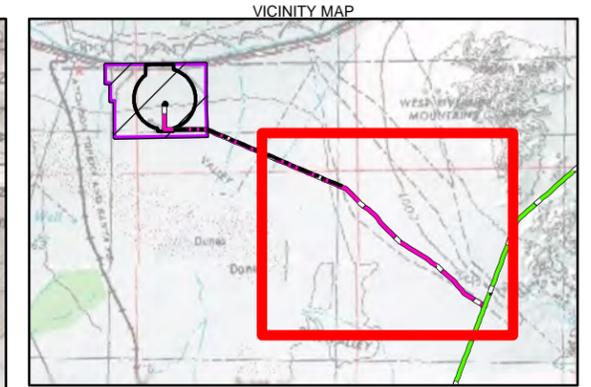
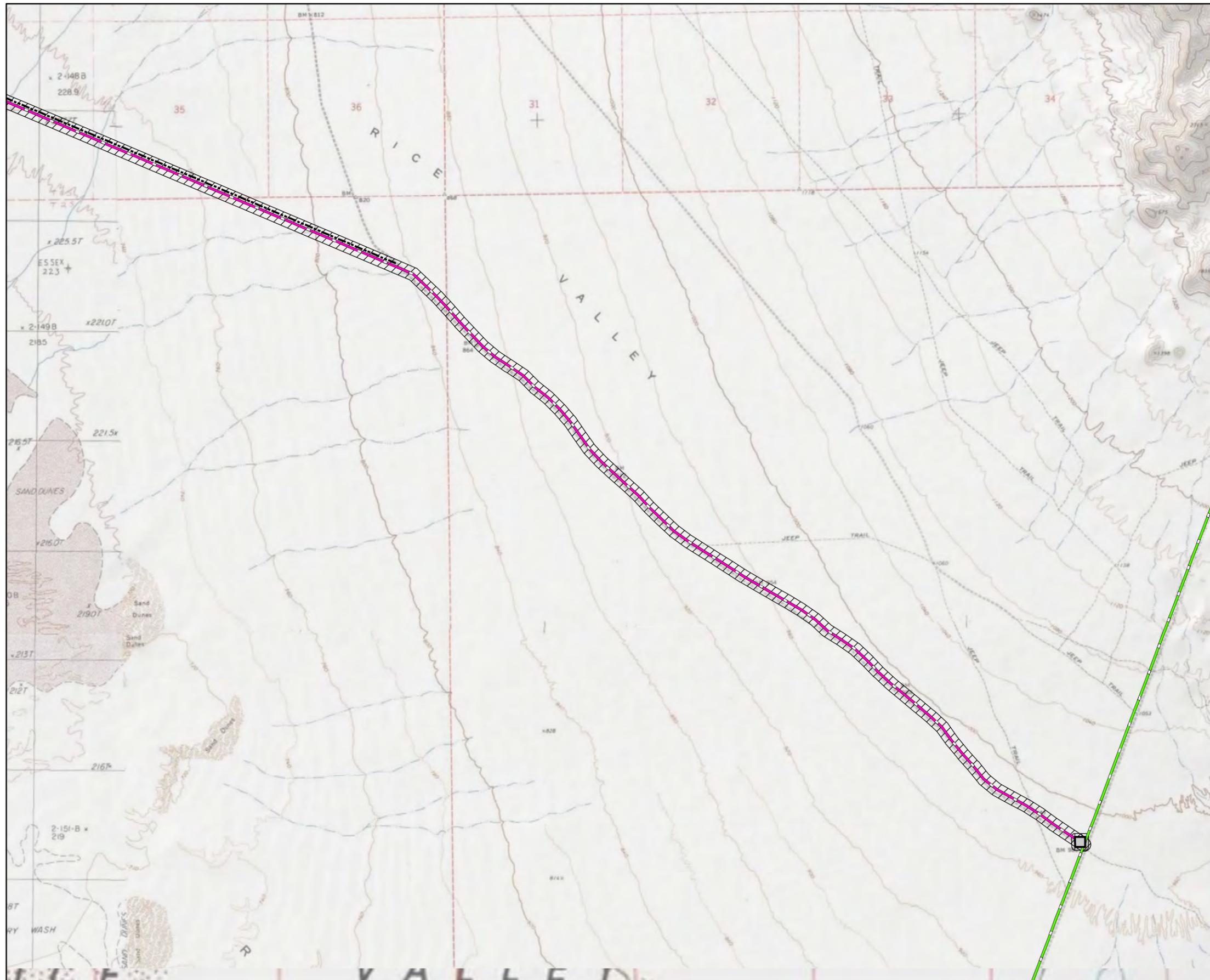


- LEGEND**
- TRANSMISSION LINE ACCESS ROAD
  - RSEP PROPOSED TRANSMISSION LINE
  - PARKER-BLYTHE TRANSMISSION LINE
  - OWNERSHIP PROPERTY
  - PROJECT FENCELINE BOUNDARY
  - PROPOSED SUBSTATION
  - POWER BLOCK/RECEIVER
- SURVEY FOR ARCHEOLOGICAL RESOURCES**
- ▨ ROW BUFFER - 200 FEET
  - ▨ SUBSTATION BUFFER - 100 FEET
  - ▨ PROPERTY BUFFER - 200 FEET

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

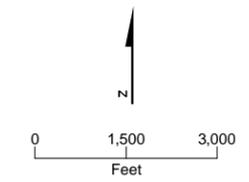


**FIGURE 5.3-2A**  
**AREAS SURVEYED FOR CULTURAL RESOURCES**  
 RICE SOLAR ENERGY PROJECT  
 RIVERSIDE COUNTY, CALIFORNIA



- LEGEND**
- TRANSMISSION LINE ACCESS ROAD
  - RSEP PROPOSED TRANSMISSION LINE
  - PARKER-BLYTHE TRANSMISSION LINE
  - OWNERSHIP PROPERTY
  - PROJECT FENCELINE BOUNDARY
  - PROPOSED SUBSTATION
  - POWER BLOCK/RECEIVER
- SURVEY FOR ARCHEOLOGICAL RESOURCES**
- ▨ ROW BUFFER - 200 FEET
  - ▤ SUBSTATION BUFFER - 100 FEET
  - ▧ PROPERTY BUFFER - 200 FEET

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 5.3-2B**  
**AREAS SURVEYED FOR CULTURAL RESOURCES**  
 RICE SOLAR ENERGY PROJECT  
 RIVERSIDE COUNTY, CALIFORNIA

and Archaeological Contexts (Bischoff, 2000), the Rice AAF has not previously been recorded on a DPR 523 form nor assigned a site number.

Camp Rice (P-36-10526) partially extends into the eastern edge of the RSEP project parcel (though not within the facility fenceline boundary), has a site record and has been assigned a site number. Camp Rice was a U.S. Army Divisional Camp associated with the DTC/CAMA. In addition to Camp Rice, one small historic site was recorded as a component of Camp Rice, and is actually within the boundaries of Camp Rice although it was given a separate site number (P-36-16932). This was apparently the result of the same site being recorded in two different counties (Riverside and San Bernardino) and reported to different CHRIS Information Centers.

Other resources within the study area include the Colorado River Aqueduct (CRA) which remains in use (P-36-10521). The CRA runs from Lake Havasu on the Colorado River to Lake Mathews south of Riverside. It was a Works Progress Administration (WPA) project with initial land surveys conducted as early as 1928, and which first delivered water to Los Angeles in 1941. SR 62 (P-36-10525) runs parallel with the CRA from Parker, Arizona, to Palm Springs, California. The road was likely in use during construction of the CRA, but the first indication that the road became a permanent route was in 1943, during the Army's use of the DTC/CAMA. The Atchinson, Topeka, and Santa Fe Railway Parker Cutoff (P-36-9853) (now the Arizona-California Railroad) also runs in the same corridor as SR 62 and the CRA.

#### **5.3.1.3.2 Archaeological Field Survey**

A cultural resources survey of the proposed RSEP site was conducted in September 2009. CH2M HILL archaeologist Clint Helton, M.A., RPA, as the BLM Cultural Resource Use Permit Administrator and a CRS who meets the qualifications for Principal Investigator stated in the Secretary of the Interior's standards and guidelines for archaeology and historic preservation (USNPS, 1983), supervised the cultural resources study and provided technical support and senior review. Fieldwork was directly supervised by CH2M HILL archaeologist Aaron Fergusson, M.A., RPA. The field crew consisted of Humphrey Calicher, Ken Hazlett, Ryan Rolston, and Dan Ewers. Historic archaeologist Matt Bischoff, as an independent contractor, also conducted a site visit and assisted with historic context development, interpretation of sites and features, and documentation.

The field survey was conducted under CH2M HILL's CRUP (CA-07-17) from the BLM and a Fieldwork Authorization executed by the BLM Palm Springs-South Coast field office (No. 66.24-09-21).

The survey was a non-collection survey; all artifacts were mapped and photographed in place. No artifacts were collected by CH2M HILL. Due to the known use of the area for live-fire military training, ordnance materials and unidentifiable military items were avoided during the survey when observed, for crew safety. During survey within areas determined to be sensitive for unexploded ordnance (UXO), such as the southern portion of the generator tie-line, which is in the Rice Valley Training Area, a known live-fire range used during World War II and also during the 1960s, the survey crew was escorted by a trained UXO technician. Some ordnance items were observed in this area, including 75-mm shell casings, fragmented ordnance material (shrapnel), 105-mm mechanical timers, and .30- and 0.50-caliber shell casings and projectiles. For safety, these materials were not

approached or recorded. For further information on the training range, please see Section 5.15, Waste Management.

The field survey included the RESP site and the area that encompasses the rights-of-way for the new generator tie-line that will interconnect the project to Western's 161/230-kV Parker-Blythe transmission line approximately 10 miles southeast of the proposed solar site. The new tie-line will be located primarily on BLM land and will require construction of 4.6 miles of new unpaved access road and use of 5.4 miles of existing dirt roads to provide construction and maintenance access. In addition, a new 300-foot by 400-foot substation will be constructed at the point of interconnection. In total, the field survey comprised inventory of the 3,324-acre project ownership property, a 200-foot-wide buffer around the ownership boundary (an additional 226 acres), the 9.2-mile long portion of the 10.0-mile and 400 foot-wide generator tie-line survey area that lies outside the ownership property boundary (446 acres), and a 500-foot by 500-foot area for the interconnection substation and its 100-foot-wide buffer (three sides only; the fourth side is in the generator tie-line survey area) (9.6 acres). The total area surveyed for the RSEP is thus 4,005.6 acres.

The survey for prehistoric and historic archaeological resources was conducted using pedestrian transects spaced no more than 15 meters apart. Much of the ground surface within the solar collector field consists of the eroded remains of concrete and asphalt or oil runways and roads of the former Rice AAF. Subsurface exposures, including rodent burrows and cut banks, were examined. Transect spacing, observation strategies, and sparse vegetation allowed for the detection of small sites (fewer than five artifacts or features).

Because there are no longer any standing structures associated with former Rice AAF, the survey focused on existing structural remains that include building foundations and features. Further interpretation of these features will emphasize literature review, archival records and photographs, and other sources of historical information to develop a historic context within which the Rice AAF can be thoroughly documented and evaluated. The BLM's developed context for the DTC/CAMA (Bischoff, 2000) played an integral role in directing the research, as did the direct participation of Matt Bischoff, author of the BLM context statement, in assessing existing conditions and evaluating historical archaeological deposits, and assisting with the recording of the Rice AAF and Camp Rice features and artifacts.

The remains of the Rice AAF were newly recorded on DPR 523 forms with appropriate supporting forms as needed. The previously prepared DPR form for Camp Rice (P-36-10526) was updated to reflect artifact concentrations and features that could be associated with Camp Rice. The *Handbook for Completing an Archaeological Site Record* (COHP, 1989) and *Instructions for Completing the California Historic Resources Inventory Form* (COHP, 1990) were followed in preparation of the DPR forms.

Surface visibility for the overall project area was excellent (90 to 100 percent), depending on amount of surface vegetation. Small amounts of modern trash dating from the 1960s were noted during the survey, including plastic, glass, and aluminum cans, which increased in frequency near SR 62. Onsite soils consist of sandy loams with basalt rock clasts of varying sizes. Given the record of intensive use of this area for training during World War II, it is remarkable that the desert has seemingly mostly reclaimed this area. Oiled roads and concrete have eroded, and the roads, runways, taxiways, and concrete dispersal pads are

covered in places with sand and sediments, where the vegetation (mostly bursage and creosote bush) has returned and is growing quite well. The runways appear obvious from the aerial photos, but on the ground they are barely distinguishable from the surrounding desert. This is mostly because, although site has been recolonized by the normal native mix of creosote bush and bursage, the runway areas are densely regrown to the lighter-colored bursage and only sparsely to the darker-colored creosote bush.

The results of the survey are perfectly consistent with the historical records of World War II-era training use from 1942-1944. In fact, there is no evidence of any earlier occupation, and most of the later debris post-dates 1962 as evidenced from the aluminum pull top cans. Much of the historic debris consists of Army ration food containers including soldered evaporated/condensed milk cans, C-ration cans, clear glass quart-sized food jars, or bottle glass.

As stated earlier, the field team recorded Rice AAF as a previously unrecorded site and updated the existing Camp Rice DPR form with additional information regarding features and concentrations. The features recorded at Camp Rice lie outside the proposed RSEP fenceline, but are within the boundary of the larger project parcel. All of the archaeological remains found are clearly associated with the Army's occupation of the area during World War II, so all finds were included in the DPR forms for either Rice AAF or Camp Rice (Appendix 5.3B). In total, 139 features and 95 artifact concentrations were recorded. Features and material observed included debris burn pits, building foundations, rock features, and earthen pits or berms while concentrations included can dumps, can and glass dumps, and debris dumps.

No prehistoric resources of any kind were observed during the survey.

### **5.3.1.3.3 Field Survey Results**

#### ***Rice Army Airfield***

The Rice AAF parcel boundary will cover approximately 4 square miles (~2,500 acres) and measures roughly 2 miles north-south, by 2 miles east-west (Figure 5.3-3). The entire site is located within the ownership property boundary and most of it is within the project parcel. The RSEP fenceline will encompass much, but not all, of the site. The Rice AAF site consists of three major areas: (1) the administration area, (2) runways, and (3) dispersal pads. The administration area is located at the north end of the site, just south of SR 62 and consists of a small road network, with the remains of former buildings, now restricted to concrete slabs and footings. Interpretation has led to their identification as the Administration Building, Base Operations Building, Barracks and Mess buildings, etc. At the lower center of the administration area, just north of the runway area, is a well-preserved concrete pad 800 feet long and 300 feet wide. It is likely (based partly on discussions with World War II veterans) that this served as a parade ground or deck for mustering and reviewing troops and equipment.

There are two runways at Rice AAF that are at right angles to one another and that are oriented northeast-southwest and northwest-southeast, respectively. The runways themselves are to be 5,000 feet long and 150 feet wide. The broader, formerly cleared areas adjacent to and surrounding the runways created a giant V-shaped, cleared area with two legs, each 545 feet wide. Where the legs meet at the 'V', they are 1.07 miles long (short or inner edge) and 1.17 miles long (long or outer edge). As stated above, lighter-colored

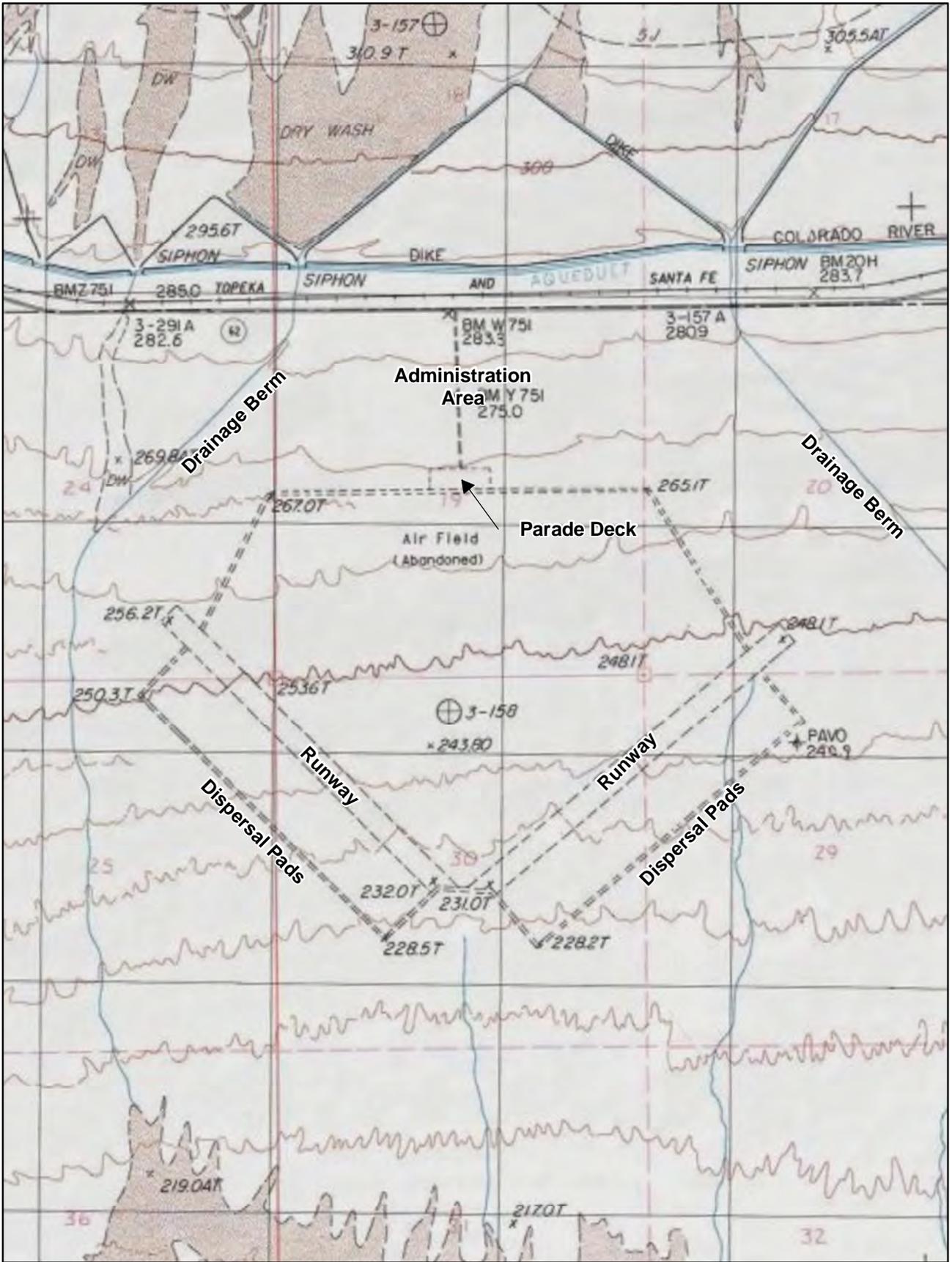
bursage has recolonized the runways to a density similar with that of the surrounding desert. Darker creosote bush, however, has recolonized only sparsely such that the runways are clearly visible on aerial photographs.

Each runway has a taxiway that parallels it to the south at a distance of about 700 feet. The taxiways are about 60 feet wide. Branching off of the taxiways are taxiway lanes that lead to 30 dispersal pads or "hard stands," 15 on each taxiway, that are about 50 feet square. The access lanes are of variable length, between 150 and 1,000 feet long, likely to prevent propwash from aircraft on adjacent stands from affecting activities or increasing maintenance problems, due to propeller-blown dirt and dust, at neighboring stands. The distance between the lanes varies between 150 and 500 feet. Six of the dispersal pad lanes intersect other lanes at an angle, rather than branching directly from and perpendicular to, the main taxiways.

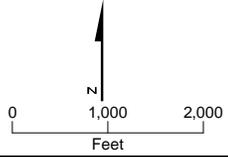
**Features** – The project field team recorded 128 features associated with the Rice AAF, including concrete building foundations, stone aerial markers, rock alignments, rock-lined pits, and other various pits. Detailed maps showing the feature locations and tables indicating their content are provided in the cultural resources technical report, which is Appendix 5.3B to this document and has been submitted to the CEC, BLM, and Western separately under a request for confidentiality to protect the site from vandalism and unauthorized collecting.

The following is a summary of the most numerous types of features:

- **Pits:** There are 48 pit features on the Rice site. These include a large number of rock-lined pits and rock-lined trenches, wood-lined pits, septic pits, and burned debris pits. Many of the buildings have small (2-foot by 4-foot), wood-lined pits located just outside the building.
- **Concrete pads:** There are 27 concrete slabs or pads at the site, representing former buildings (most of the slabs) and a large parade ground. Some of these have anchor bolts or pipes sticking up out of the slabs. The largest concrete pad measures 870 feet by 300 feet and probably served as a parade ground or deck. From the size and features associated with the building foundations, the following building types were identified:
  - Base headquarters
  - Airfield Operations Building
  - Mess hall
  - Lavatories
  - 700 Series temporary buildings serving as barracks
  - Pump motor foundations and fuel storage tanks
  - Shower buildings
  - Storehouses
  - Officer's lavatory and shower building
  - Power or pump house



This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.



**FIGURE 5.3-3**  
**RICE ARMY AIRFIELD**  
 RICE SOLAR ENERGY PROJECT  
 RIVERSIDE COUNTY, CALIFORNIA

- **Rock piles:** There are six rock pile features at Rice AAF. These are up to 3-meter-diameter piles of the basalt rocks that are commonly available onsite and nearby.
- **Emplacements:** There are seven features recorded as emplacements. These are generally shallow pits with low embankments from 1 to 14 meters in length and width. Some are square, and open in one direction.
- **Rock alignments:** There are four features recorded as isolated rock alignments at Rice AAF. Many of the buildings also have rock-lined pathways leading from the road to the building, a common practice on military installations. The rocks used are locally obtained basalt. There are two areas of rock alignments that seem to delineate tent areas, likely for unit tents with possible insignias out of rock.
- **Airfield marker:** Near both runways are large, stone Xs made from basalt rocks, likely as an indication that the runways are closed.
- **Firing butt:** One of the airfield's dispersal pads faces directly into a large mound of dirt and likely served as a firing butt used for light testing of aircraft guns without having to take off. This particular dispersal pad faces away from the dispersal pad network.
- **Concrete Footings:** One feature consists of an array of 33 small concrete footings in three rows of eleven footings each; these were probably footings for a barracks structure.

**Artifact Concentrations** – The field team recorded 39 artifact concentrations within the Rice AAF site boundary. These concentrations include Army ration can and glass dumps, dumps of burned ration debris, and construction debris. All of these are classified as debris scatter, can scatter, or burned debris scatter, except for two, which are classed as “construction debris” and consist of lumber, wire, plumbing, and plaster debris. All of the debris and can scatters contain cans. A few also contain glass debris, batteries, sheet metal, hardware cloth, or other metal debris. Detailed maps showing the artifact concentration locations and tables indicating their content are provided in the cultural resources technical report, which is Appendix 5.3B to this document and has been submitted to the CEC, BLM, and Western separately under a request for confidentiality to protect the site from vandalism and unauthorized collecting.

The following are artifact types that are present in the artifact concentrations:

- **Cans:** Types include key-opened meat and fish, C-ration, fuel, brake fluid, paint, hole-in-top condensed milk, sardine, beverage, coffee, fruit and vegetable cans, ammo box lid, and tobacco tins.
- **Glass:** Debris includes clear glass jars and jar fragments, melted glass, amber-colored and green-colored bottles and fragments, ketchup bottles, and Coca-Cola bottles and fragments.
- **Metal (other than cans):** Debris includes metal strapping, nails, sheet metal, hardware cloth, metal poles, buckets, galvanized steel pipe, padlock, light bulb base, automotive leaf spring, wire spool, and hose clamp.
- **Other debris:** Includes batteries, rubber hose, ceramic plate fragments, charcoal, and plaster.

### **Camp Rice**

Parts of Camp Rice are located within the RSEP project parcel (though not within the fenced project area). The parts that are located within RSEP, however, represent only a small portion of the entirety of Camp Rice, which is 3 miles long and just under a mile wide. The portion recorded for the RSEP survey, is an area at the west-southwest portion of Camp Rice, measuring at the widest, about 1,500 feet east to west and about 4,500 feet north to south. As can be seen on aerial photos, Camp Rice was a long, narrow, orderly layout of 20-foot-wide streets, in the peculiar pattern characteristic of most, if not all of the DTC/CAMA camps, of pairs of streets 100 feet apart, separated by larger gaps of about 800 feet (at Camp Rice). Based on historical photos, the larger open areas between the streets were spaces for rows of tents cities occupied by the troops. At Camp Rice, like the other camps (including nearby camps Granite and Iron Mountain), there is a central roadway that forms a semi-circle around a headquarters flagpole circle. The portion of Camp Rice on the RESP property is the extreme western end of the camp.

In the RSEP portion of Camp Rice, there is no evidence of permanent structures or other significant features, other than roads. Along the roads, however, are debris scatters, dumps, and trash burning pits. In all, thirteen features were recorded as part of Camp Rice. Detailed maps showing the feature locations and tables indicating their content are provided in the cultural resources technical report, which is Appendix 5.3B to this document and has been submitted to the CEC, BLM, and Western separately under a request for confidentiality to protect the site from vandalism and unauthorized collecting

All but two of the features are pits filled with debris, either burned or buried. The largest is 30 by 5 meters. The smallest is 0.2 by 0.5 meter. These pits have varying amounts of debris in them, mostly cans (hole-in-top, paint, milk, Army ration) and glass (ketchup, mason jars, Coca Cola bottles, amber, green, and clear fragments), with little other debris. The two features that are not pits include a capped well and an excavation interpreted as an emplacement about 30 feet in diameter, with a 50-centimeter high berm surrounding it (and 200 or so Army ration cans inside of it).

There are an additional 59 artifact concentrations in the portion of Camp Rice located within the RSEP boundary. Detailed maps showing the artifact concentration locations and tables indicating their content are provided in the cultural resources technical report, which is Appendix 5.3B to this document and has been submitted to the CEC, BLM, and Western separately under a request for confidentiality to protect the site from vandalism and unauthorized collecting.

Some of the concentrations contain burned debris that has been dumped; however, most are simply locations where ration containers were dumped, often just off the side of roads. These vary in quantity from a few cans to more than 200, with many moderate-sized dumps of 10 to 50 cans, and contain the following:

- **Cans:** Types include square or rectangular meat (including cans marked “roast beef”), C-ration, paint bucket cans, hole-in-top condensed milk, tobacco tin, coffee, and fruit and vegetable cans.
- **Glass:** Debris includes clear glass jars and jar fragments, melted glass, amber-colored and green-colored bottles and fragments, and Coca-Cola bottles and fragments.

- **Metal (other than cans):** Debris includes vehicle parts, metal strapping, steel cable, nails, wire, .50-caliber shell casings and their ammunition links, metal fragments, hacksaw blade, and hardware cloth rolls.
- **Other debris:** Includes batteries, fuse, shoe heel, yellow ceramic plate fragments, and charcoal.

### ***Site Evaluation–Rice AAF and Camp Rice***

Rice AAF and Camp Rice are long-abandoned facilities, with no remaining standing structures. Only dilapidated portions of the original runways, taxiways, and dispersal pads; some concrete foundations; trash scatters; and dumps are still visible.

The DTC/CAMA was deactivated April 30, 1944. With its deactivation, the War Department dismantled the camps; gathered supplies, materials, and equipment; and shipped them to other military depots (BLM, 1986). Currently there are no buildings or structures remaining on any of the training camps, headquarters, or airfields. There are a limited number of artifacts or standing structures remaining at these locations. The most notable of these include the altar of the camp chapel (Camp Young), rocks that outlined walkways and roads (various camps), and monuments erected during the training period to soldiers who died at the camps.

When the Army abandoned the Rice AAF and Camp Rice, they removed all salvageable buildings and materials. They then burned or buried anything that was not able to be moved or re-used elsewhere. There are numerous indications of the burning of materials on site, both the burning of trash and the burning of construction materials. According to local residents, much of the area has been picked over by treasure hunters hoping to dig up and find materials buried by the Army. The looting of the site is evident, with indications of modern digging across both Camp Rice and the Rice AAF. Modern aluminum cans are frequently found in pits that also include historic debris, a likely indication that the pits are a result of modern digging.

The BLM recommended seven of the original eleven Army camps for listing in the NRHP in 1986. The only remnants of the camps are the roads and walkways, most covered by vegetation or washed away by water and wind. The interpretative plan developed to protect the camps describes plans to close areas to vehicular traffic, stabilize areas that have eroded, close areas to artifact collectors, clear away vegetation, erect interpretive plaques and prepare brochures for self-guided tours.

None of the airfields are included in this designation. Of the three airfields, only Rice is abandoned. Shavers Summit AAF has been renamed Chiriaco Summit Airfield and operates as a small local airfield. Desert Center AAF is also an active airfield; however, only one of its two air strips is being used. The other has been abandoned and is in disrepair.

To determine the NRHP eligibility of Rice AAF, both its historic significance and integrity must be assessed. Rice AAF is significant to our military history because it played an important role in training U.S. Army troops for World War II in North Africa. The combined training of air and land forces was a valuable tool for the men that would help win World War II. It would be eligible for the NRHP and the CRHR under Criterion A for its association with CAMA and Criterion B for its association with a significant historical figure, General Patton.

The historic significance of Rice AAF, and Camp Rice, is high. However, based on the field investigations, the physical remains of Rice AAF are well on their way to being completely reclaimed by the desert and have been impacted by fire and looting, leaving the integrity of these sites somewhat damaged. There is little left of the Rice airfield. The footprint and plan of the runways is visible from the air, but at ground level, the elements are not clear and are covered with vegetation. For comparison sake, of the three airfields used for desert training, Shavers Summit AAF, now Chiriaco Summit retains a high degree of its original design and is still used as an airfield. While one of the two air strips at the Desert Center AAF has been abandoned, the other is still in use.

This said, despite historic and modern disturbance and the ongoing erosion and deposition taking place through natural and cultural processes at these sites, Rice AAF and Camp Rice do contain some additional data potential. Rice AAF and Camp Rice are important components to the NRHP-eligible DTC/CAMA cultural landscape district. A draft multiple property submission for this district was previously prepared and submitted, and is awaiting edits for final approval. Rice AAF and Camp Rice are likely to be designated as contributing elements to this overall submission for the DTC/CAMA district. Integrity considerations for these types of sites are very different from traditional sites. As stated above, construction of permanent facilities for the DTC/CAMA was very limited, which reflects the war time urgency, as well as the commander's desire for spartan conditions. Further, when viewed as an important component of the whole, Rice AAF and Camp Rice both help to convey the significance of this broader DTC/CAMA district. The integrity of location, design, and setting are generally still able to convey the significance of both Camp Rice and Rice AAF. As a result, Rice AAF and Camp Rice should be considered eligible for listing on the NRHP (and the CRHR) under Criteria A and B.

Until a more detailed evaluation is done of the large number of artifact concentrations and refuse features at these sites, it is not possible to address the Rice AAF's potential to achieve significance under Criterion D ("have yielded, or may be likely to yield, information important in prehistory or history"). There is a large quantity of historic debris (39 artifact concentrations) dating from the period of significance for Rice AAF (1942-1944). In only the small portion of Camp Rice that is within the RSEP parcel boundary, there are 59 artifact concentrations.

Although this large number of individual refuse features has been recorded in terms of their location and general context, this study has not included the more detailed analysis of the context and integrity of the refuse deposits, nor has it examined whether or not they have the potential to answer important questions regarding the history of DTC/CAMA and the Army's World War II training programs that could not be answered in another way, such as by consulting historical records. In other words, more consideration of the recording work and preliminary analysis will determine whether or not the properties are also eligible for NRHP listing under Criterion D.

#### **5.3.1.3.4 Architectural Survey**

The CEC's Siting Regulations require that historic architecture be addressed in the AFC:

New historic architecture field surveys in rural areas shall be conducted inclusive of the project site and the project linear facility routes, extending no

less than 0.5 mile out from the proposed plant site and from the routes of all above-ground linear facilities (Appendix B [g][2][C])

In the case of the RSEP, the only buildings or structures located within 0.5 mile of the site that are greater than 45 years in age are SR 62, the Colorado River Aqueduct, and Arizona-California Railroad. None of these features is located within the boundaries of the RSEP or its off-site transmission line or would be affected by it. These properties have been previously recorded and historic structure site records (DPR 523) for these facilities are found in Appendix 5.3C.

Because the architecture of the Rice AAF is no longer present, the architectural history portion of the assessment focused on existing conditions, with a strong emphasis on the literature review, archival records and photographs, and other sources of historical information to develop a historic context within which the Rice AAF can be thoroughly documented and evaluated. Although some features, such as the runways and dispersal pads remain in outline, Rice AAF has become more of an archaeological site than an architectural site, as the structural remains have deteriorated. A multidisciplinary approach was therefore taken to this assessment, and included contributions by architectural historian Elizabeth Calvit and historic archaeologist Matt Bischoff. The developed context for the DTC/CAMA (Bischoff, 2000) played an integral role in directing the research, as did the participation of Mr. Bischoff in assessing existing conditions, evaluating archaeological deposits, refining the historic context, and reviewing NRHP eligibility statements.

#### **5.3.1.3.5 Geoarchaeological Investigation**

Geoarchaeological investigations of the RSEP project site were conducted on August 5, 2009, in conjunction with geotechnical studies of the site. The full geotechnical report (Terracon Consultants, 2009) is included in this AFC as Appendix 2B. Geoarchaeologist Dr. W. Geof Spaulding accompanied a geotechnical investigation crew to the site to observe the excavation of two backhoe trenches on the site and record and interpret their stratigraphy to make an assessment of the sensitivity at this location for subsurface prehistoric archaeological deposits. Dr. Spaulding's qualifications are included in Appendix 5.2D. A memorandum documenting the investigation is included in this AFC as Appendix 5.2F.

Each trench was initially excavated to a depth exceeding 10 feet and then, after geotechnical sampling, backfilled to a depth of approximately 5 feet to allow safe access by the investigating geoarchaeologist. Strata and stratigraphic boundaries were then described and identified, and summarized in a stratigraphic column for each of the two trenches. Examination of the deeper portions of the trenches (>6 feet) from the surface suggested that stratigraphic variability is muted with increasing depth in the area.

Of the two trenches, only Trench 1 provided a complete stratigraphic sequence. Grading during the development of the Rice AAF airfield affected the area where Trench 2 was located, and the upper portion of the stratigraphic sequence here was removed and replaced by 16 to 30 cm of recompacted fill and rubble. Nevertheless, the preserved portion of the stratigraphy of Trench 2 accords well with observations of Trench 1 strata.

The general stratigraphy exposed by the geotechnical trenching is consistent with current understanding of alluvial fan sequences in the Mojave and Colorado Deserts where deposition occurs primarily as a consequence of hillslope instability during episodes of

major environmental change (it is thought usually during deglaciations). Slopes that were relatively well vegetated during glacial periods accumulated a relatively thick colluvial mantle over the span of approximately 50 to 70 thousand years, only to shed that mantle in response to postglacial aridity. The last episode of widespread hillslope erosion occurred at the close of the last glacial age, approximately 10,000 to 15,000 B.P. (Ponti, 1985; Dohrenwend et al., 1991).

Two alluvial units were exposed by the geotechnical trenching, although the unit itself possessed several; different horizons chiefly as a result of pedogenic processes. The following summarizes the features of the stratigraphy from top to bottom:

**0 - 55 cm:** Unit I. Horizontally, coarsely bedded, weakly indurated alluvial sand with gravel stringers; silty sand to coarse sand; generally poorly sorted. Moderate to weak reaction to hydrochloric acid (HCl) in top 15 centimeters (cm), to *no* reaction to HCl below 36 cm.

**0 - 20 cm:** Eolian sands mixed with alluvium, fining upward to sandy silts to silts in the top 5 cm. Weak reaction to HCl. Separated by a gradational transition over 20 cm from the underlying alluvial sand:

**36 - 55 cm:** Distinct argyllic horizon; clays present and reddening evident. Well indurated. Stringers of carbonate increasing with depth.

**55 cm - >3 m:** Unit II. Poorly sorted silty, sandy alluvial gravel; coarsely bedded; Stage 2 to 3 carbonate morphology with a *strong* reaction to HCl.

The silts of the top 5 cm of this section are frequently thought to be of late Holocene in age, while the top approximately 20 cm of section likely encompass the entire Holocene. This upper unit is indistinctly separated from the rest of Unit I below. The clay-rich argyllic horizon at the base of Unit I is typical of Late Pleistocene alluvial units (Dohrenwend et al., 1991). Unit II is likely to be Middle Pleistocene or older in age.

Thus the Holocene (the last 10,000 years) appears to be restricted to at most the top 20 cm of the stratigraphic column and, based on the results of Trench 2 and an overview of the project area, the Holocene section may have been obliterated by World War II-era activities. No artifacts or ecofacts were observed during trench excavation, and no ecofacts would be expected to be preserved in this type of well-oxidized alluvial soil. Given the low-productivity desert scrub ecosystem in the vicinity and the waterless landscape, an assessment of low subsurface archaeological potential would be consistent with the setting as well as the stratigraphy.

#### 5.3.1.3.6 Native American Consultation

CH2M HILL contacted the Native American Heritage Commission (NAHC) by letter on August 31, 2009, to request information about traditional cultural properties such as cemeteries and sacred places in the project area. The NAHC responded on September 9, 2009. The NAHC record search of the Sacred Lands file did not indicate the presence of Native American cultural resources in the immediate project area. The record search conducted at the CHRIS Northwest Information Center also did not indicate the presence of Native American traditional cultural properties.

The co-lead federal agencies for the purposes of the project's federal permitting have been identified as Western and BLM. All consultation with Native Americans will be conducted by Western and BLM (as per Steve Tromley of Western communicated via email on August 14, 2009). The NAHC list of Native Americans interested in consulting on development projects was provided to Western and BLM. Correspondence with the NAHC is included in Appendix 5.3A.

#### **5.3.1.3.7 Local Historical Societies/Museums**

The General Patton Memorial Museum in Chiriaco Summit was visited by CH2M HILL on July 30. The museum staff were consulted for sources of information on the Rice AAF and Camp Rice and provided several brochures on the DTC/CAMA and publications with useful contextual information within which to understand the Rice AAF. No other local historical societies exist in the area that could be contacted for information.

### **5.3.2 Environmental Analysis**

This section describes the environmental impacts of RSEP construction and operation. CH2M HILL conducted a complete survey of the project area and associated linear facilities.

The Rice AAF and all associated features, foundations, debris, and artifacts was newly recorded on DPR 523 forms as a single site and all features were mapped, photographed, and recorded using GPS equipment to assist in the overall documentation and evaluation of the site. Artifacts and features relating to nearby Camp Rice were also recorded and an update to the existing DPR form was prepared.

Given the local topography, distance to major stream drainages or other archaeologically sensitive features, and the scale and scope of previous ground disturbance in the area from the Rice AAF, archaeological sensitivity of the surface soils of the RSEP site and generator tie-line is considered low. The sensitivity of the underlying soils is considered low, given prehistoric resources are absent in the general vicinity. No prehistoric artifacts or sites have been previously documented within 1 mile of the project site and generator tie-line, despite several previous surveys.

#### **5.3.2.1 Significance Criteria**

Appendix G, Environmental Checklist Form of the CEQA guidelines, addresses significance criteria with respect to cultural resources (Public Resources Code Sections 21000 et seq.). Appendix G (V)(a, b, d) indicates that an impact would be significant if the project will have the following effects:

- Cause a substantial adverse change in the significance of a historical resource
- Cause a substantial adverse change in the significance of an archaeological resource
- Disturb any human remains, including those interred outside of formal cemeteries

Project investigations included archival research; review of all previous cultural resource investigation reports; contacts with all other interested agencies, and a complete field survey. These studies indicated that the Rice AAF has potential to be impacted by the project.

### 5.3.2.2 Construction Impacts

The literature search and pedestrian inventory have shown that the only cultural resource that could be affected with the project's APEs is the Rice AAF. The current investigation of this site suggests that it is eligible for listing in both the NRHP and CRHR, and that Rice AAF and Camp Rice should likely be considered contributing elements to the overall DTC/CAMA cultural landscape district.

Construction of the RSEP would cause an adverse effect to a historic property. Construction would result in damage to or removal of many of the existing features of Rice AAF, including portions of the runways and dispersal pads, and some of the remaining foundations in the administrative area at the north end of the site. Construction would also damage or destroy many of the artifact and other features concentrations that were located during the archaeological surveys. Portions of the airfield and runways lie outside of the project fenceline as planned and would not be affected. Camp Rice is also outside of the project fenceline and could be avoided during the construction and operation of the project.

### 5.3.2.3 Operation Impacts

No additional ground disturbance would be required during project operation; therefore, impacts on cultural resources are not anticipated during RSEP operation. Maintenance of project facilities would not cause any effects outside of the initial construction area of impact. One possible indirect impact would be possible continued vandalism and unauthorized collecting of artifacts at Rice AAF in the areas outside of the project fenceline and at Camp Rice. Although the presence of RSEP project operation staff could act as a deterrent to continued vandalism in areas outside the RSEP fenceline, it is possible that, lacking proper instruction, project operations and maintenance staff might engage in artifact collecting.

### 5.3.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Pub. Resources Code Section 21083; California Code of Regulations., Title 14, Sections 15064(h), 15065(c), 15130, and 15355). The project's effects on cultural resources are likely to be restricted to its effects on Rice AAF, a cultural resource that contributes to the significance of the DTC/CAMA. It is unlikely that the project will affect other resources that are currently unknown, based on the geoarchaeological assessment that buried prehistoric sites are unlikely in this location, and the project will avoid Camp Rice.

The RSEP would only cause a cumulative adverse effect in this case, if, combined with other projects, it would cause or significantly contribute to causing the remaining contributing elements of DTC/CAMA to lose their significance through the collective weight of individual project effects. Examination of the other DTC/CAMA sites, however, shows that seven of the eleven camps have been found eligible for listing on the NRHP. These properties are relatively well preserved, or at least as well preserved as Rice AAF and Camp Rice are. For example, Camp Granite and Camp Iron Mountain, both located at the west end of the Rice/Ward Valley within 20 miles of RSEP, are undisturbed by any kind of development subsequent to World War II and have only been affected, as is the case with

Rice AAF, by vandalism, unauthorized collecting, and natural forces. These properties are not currently planned for development. Because they are located on federal land, it is likely that these properties will continue to see the benefit of federal land and resources management.

In summary, although the project will cause an adverse impact on Rice AAF, this effect is unlikely to combine cumulatively with other past, present, and reasonably foreseeable future projects in an adverse way. In addition, measures to mitigate the RSEP's effects on Rice AAF make it further unlikely that RSEP would cause a significant adverse cumulative impact in terms of cultural resources.

### **5.3.4 Mitigation Measures**

Mitigation measures will be necessary to take into consideration the RSEP's potential adverse effect on Rice Army Airfield, a historic property. In addition, although the geoarchaeological study has determined that there is a low probability for buried prehistoric archaeological deposits to occur at the site, measures should be implemented so that effects on historic properties are not adverse in the event that such resources are encountered during the construction phase of the project.

#### **5.3.4.1 Rice Army Airfield/Camp Rice**

Because the Rice AAF appears eligible for the NRHP and CRHR and RSEP will adversely affect this site, mitigation measures are necessary to take these effects into account. Camp Rice also appears eligible for listing in the NRHP and CRHR, but the RSEP will avoid this site. RSE proposes to consult with co-lead federal agencies Western and BLM through the compliance process of Section 106 of the National Historic Preservation Act and 36 Code of Federal Regulations (CFR) Part 800, and with the COHP, to develop a comprehensive mitigation plan for this property. Elements of this plan may include the following:

- Intensive survey-grade GIS-based mapping of Rice AAF
- Archival research leading to the preparation of a more detailed historic context statement for Rice AAF that elucidates the key thematic elements on which its significance is grounded, including oral history interviews with veterans of units who trained at Rice AAF or Camp Rice
- Preparation of a brochure, pamphlet, or multimedia product that will add to the general public's common knowledge, understanding, and appreciation of Rice AAF, Camp Rice, and the DTC/CAMA
- Collection and analysis of archaeological deposits at the Rice AAF and preparation of a scientific archaeological report on the results of the analysis

##### **5.3.4.1.1 Intensive Mapping**

This measure would involve the use of a combination of survey-grade GPS, aerial photography, and GIS technologies to create detailed plan maps of Rice AAF that would document the key structural elements (runways, taxiways, dispersal stands, roads, and foundations). The maps may be used to supplement existing DPR 523 forms for both sites, the pending DTC/CAMA multiple property district submission, lay documents and publications, and will be provided to interested agencies. These maps would provide a

permanent and complete (as far as is possible given the deterioration of the site) record of the airfield's architecture.

#### **5.3.4.1.2 Archival Research, Oral History, and Historic Context Development**

This measure would involve conducting archival research to gather additional information in the history and context of DTC/CAMA, focusing particularly on Rice AAF and Camp Rice. This would be done in order to develop an expanded historic context applicable specifically to these properties. Sources of information could include the Department of Defense military archives in Washington DC and National Archives in Washington or San Bruno, California. Developing the context could also involve contacts with veterans' organizations that may lead to previously written memoirs or unit histories (for example, 2nd Airdrome Detachment, 85th Bomb Group, 312th Bomb Group, 339th Fighter Group, 5th Armored Division, or IV Air Support Command) containing information about Rice AAF or to oral interviews with soldiers who may have trained there. This measure would also include preparing an update to the DPR forms for both Rice AAF and Camp Rice.

#### **5.3.4.1.3 Public Interpretive Document**

This measure would involve preparing an interpretive publication for the general public that will add to the public's knowledge, understanding, and appreciation of Rice AAF, Camp Rice, and the DTC/CAMA. The publication could consist of a brochure, pamphlet, or video to be made available to the public, BLM, Western, the George S. Patton Museum, and state and local libraries.

#### **5.3.4.1.4 Archaeological Investigation**

As stated above, it is inconclusive whether or not Rice AAF and Camp Rice are eligible for NRHP listing under Criterion D (scientific or historical information). This measure therefore would require the intermediate step of analyzing the results of site recording efforts to evaluate, in consultation with Western, BLM, and the COHP, whether or not the site is significant in terms of the information value of its archaeological deposits. This measure would involve an archaeological study and analysis of the refuse remains at Rice AAF and analysis of the remains to answer important research questions regarding military training activities at Rice AAF and DTC/CAMA that cannot be answered using written sources or by other means. If significant for its archaeological remains, then RSE would prepare a scientific investigation plan for the site and, after review by Western, BLM, CEC, and COHP, would implement the plan, leading to scientific analysis of the remains and preparation of a scientific report.

#### **5.3.4.2 Emergency Discovery Procedures for Buried Archaeological Deposits**

The following measures are prudent measures to mitigate what could be adverse effects to prehistoric archaeological resources if encountered unexpectedly during construction:

- (1) designation of an on-call Cultural Resources Specialist (CRS) to investigate any cultural resources finds made during construction,
- (2) implementation of a construction worker training program,
- (3) monitoring during initial clearing of the plant site,
- (4) procedures for halting construction in the event that there is an inadvertent discovery of archaeological deposits or human remains,
- (5) procedures for evaluating an inadvertent archaeological discovery, and
- (6) procedures to mitigate adverse impacts on any inadvertent archaeological discovery determined significant.

#### **5.3.4.2.1 Designated Cultural Resources Specialist**

RSE will retain a designated CRS who will be available during the earth-disturbing portion of the RESP construction periods to inspect and evaluate any finds of buried archaeological resources that might occur during the construction phase. If there is a discovery of archaeological remains during construction, the CRS, in conjunction with the construction superintendent and environmental compliance manager, will make certain that construction activity stops in the immediate vicinity of the find until the find can be evaluated. The CRS will inspect the find and evaluate its potential significance in consultation with CEC staff and the CEC compliance project manager (CPM). The CRS will make a recommendation as to the significance of the find and any measures that would mitigate adverse impacts of construction on a significant find.

The CRS will meet the minimum qualifications for Principal Investigator on federal projects under the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The CRS will be qualified, in addition to site detection, to evaluate the significance of the deposits, consult with regulatory agencies, and plan site evaluation and mitigation activities.

#### **5.3.4.2.2 Construction Worker Training**

RSE will prepare a construction worker sensitivity training program to ensure implementation of procedures to follow in the event that cultural resources are discovered during construction. This training will be provided to each construction worker as part of their environmental, health, and safety training. The training will include photographs of various types of historic and prehistoric artifacts and will describe the specific steps that will be taken in the event of an unanticipated discovery of cultural material, including human remains. It will explain the importance of, and legal basis for, the protection of significant archaeological resources. The training will also be presented in the form of a written brochure.

#### **5.3.4.2.3 Monitoring**

RSE will retain a qualified archaeologist to monitor excavations during the project's construction phase. If archaeological material is observed by the monitoring archaeologist, ground-disturbing activity will be halted in the vicinity of the find so that its significance (NRHP and CRHR eligibility) can be determined. If evaluated as significant, mitigation measures (avoidance or data recovery) will be developed in consultation with the CEC.

The geoarchaeological investigation that was done for the RSEP (see Section 5.3.1.3.4) has concluded that there is a low probability of finding buried or previously undiscovered prehistoric archaeological deposits at the RSEP site, partly because of the shallow extent of Holocene geological deposits that may contain archaeological remains and partly because of disturbance of the Holocene deposits that are or were present by Rice AAF construction and training activities. Monitoring should therefore include an assessment by the CRS after initial construction activities are monitored as to whether the monitoring is needed and should be continued.

#### **5.3.4.2.4 Emergency Discovery Procedures**

If the archaeological monitor, construction staff, or others identify archaeological resources during construction, they will immediately notify the CRS and the site superintendent, who

will halt construction in the immediate vicinity of the find, if necessary. The archaeological monitor or CRS will use flagging tape, rope, or some other means as necessary to delineate the area of the find within which construction will halt. This area will include the excavation trench from which the archaeological finds came and any piles of dirt or rock spoil from that area. Construction will not occur within the delineated find area until the CRS, in consultation with the CEC staff and CEC CPM, can inspect and evaluate the find.

#### **5.3.4.2.5 Site Recording and Evaluation**

The CRS will follow accepted professional standards in recording any find and will submit the standard DPR 523 form and location information to the CHRIS Information Center.

If the CRS determines that the find is not significant and the CEC CPM concurs, construction will proceed without further delay. If the CRS determines that further information is needed to determine whether the find is significant, the designated CRS will, in consultation with the CEC, prepare a plan and a timetable for evaluating the find.

#### **5.3.4.2.6 Mitigation for Emergency Discoveries**

If the CRS, CEC staff, and CPM determine that the find is significant, the CRS will prepare and conduct a mitigation plan in accordance with state guidelines. This plan will emphasize the avoidance, if possible, of significant archaeological resources. If avoidance is not possible, recovery of a sample of the deposit from which archaeologists can define scientific data to address archaeological research questions will be considered an effective mitigation measure for damage to or destruction of the deposit.

The mitigation program, if necessary, will be carried out as soon as possible to avoid construction delays. Construction will resume at the site as soon as the field data collection phase of any data recovery efforts is completed. The CRS will verify the completion of field data collection by letter to the project owner and the CPM so that they can authorize construction to resume.

#### **5.3.4.2.7 Curation**

The CRS will arrange for curation of archaeological materials collected during an archaeological data recovery mitigation program. Curation will be performed at a qualified curation facility meeting the standards of the COHP. The CRS will submit field notes, stratigraphic drawings, and other materials developed as part of the data recovery/mitigation program to the curation facility along with the archaeological collection, in accordance with the mitigation plan.

If scientific excavations are conducted as part of the mitigation program (see Section 5.3.4.1.4), then artifact collections stemming from samples taken at the site will be curated in accordance with state and federal standards.

#### **5.3.4.2.8 Report of Findings**

If a data recovery program is planned and implemented during construction as a mitigation measure, the CRS will prepare a detailed scientific report summarizing results of the excavations to recover data from an archaeological site. This report will describe the site soils and stratigraphy, describe and analyze artifacts and other materials recovered, and draw scientific conclusions regarding the results of the excavations. This report will be submitted to the curation facility with the collection.

### 5.3.4.2.9 Inadvertent Discovery of Human Burials

If human remains are found during construction, project officials are required by the California Health and Safety Code (Section 7050.5) to contact the Riverside County Coroner. If the coroner determines that the find is Native American, he or she must contact the NAHC. The NAHC, as required by the Public Resources Code (Section 5097.98) determines and notifies the Most Likely Descendant with a request to inspect the burial and make recommendations for treatment or disposal.

### 5.3.5 Laws, Ordinances, Regulations and Standards

Among the local LORS discussed in this section are certain ordinances, plans, or policies of the State of California and the County of Riverside. Federal LORS are applicable given the project is considered a federal undertaking. A summary of applicable LORS is provided in Table 5.3-1.

**TABLE 5.3-1**  
Laws, Ordinances, Regulations, and Standards for Cultural Resources

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
<b>Federal</b>			
Section 106, National Historic Preservation Act	Project crosses federal land and constitutes a federal undertaking; Western and BLM are the co-lead federal agencies	COHP/ Environmental Protection Agency	Section 5.3.1, 5.3.2
<b>State</b>			
CEQA Guidelines	Project construction may encounter archaeological and/or historical resources	CEC	Section 5.3.1, 5.3.2
Health and Safety Code Section 7050.5	Construction may encounter Native American graves; coroner calls the NAHC	State of California	Section 5.3.1, 5.3.2
Public Resources Code Section 5097.98	Construction may encounter Native American graves; NAHC assigns Most Likely Descendant	State of California	Section 5.3.1, 5.3.2
Public Resources Code Section 5097.5/5097.9	Would apply only if some project land were acquired by the state (currently no state land)	State of California	
<b>Local</b>			
County of Riverside, General Plan Section 7.1.2 and Section 7.1.3	Sets goals to protect valuable architectural, historical, archaeological and cultural resources	Yes	5.3.1, 5.3.2

### 5.3.5.1 Federal LORS

Federal protection for significant archaeological resources are applicable to the RSEP given that the project's generator tie-line and interconnection substation facilities crosses federal lands, and the project is considered a federal undertaking.

The NHPA requires federal agencies to take into consideration the effects of their undertakings on historic properties, defined as properties (buildings, districts, sites, structures, objects) that meet the criteria for listing in the NRHP, found at 36 CFR Part 60. The agencies' responsibilities under the NHPA are described in Section 106 of the Act and in federal regulations at 36 CFR Part 800. Federal agencies are enjoined to (1) determine an undertaking's APE on historic properties, (2) inventory potential historic properties within the APE, (3) evaluate properties identified to determine their eligibility for listing in the NRHP, (4) assess the potential effects of the undertaking on properties determined to meet NRHP criteria, and (5) if the effects would be adverse, avoid or mitigate those effects. In this case, Western and BLM have been designated the co-lead federal agencies with Section 106 compliance responsibilities. As the lead federal agencies, it is the responsibility of Western and BLM to make determinations of NRHP eligibility and to consult with the State Historic Preservation Officer regarding the undertaking's effects on historic properties.

#### 5.3.5.1.1 Eligibility for Listing on the NRHP

Cultural resources are districts, sites, buildings, structures, landscapes, or objects considered important to a culture or a community. Cultural resources can include archaeological sites, historic architectural and engineering properties, and traditional cultural places. Cultural resources considered significant to our history are listed on the NRHP.

To be listed in the NRHP, a property must have historic significance and integrity, and generally be at least 50 years old. Certain properties are exempt from the 50-year rule if they possess exceptional importance. A property must demonstrate significance in at least one of the following areas, each of which describes an NRHP criterion (36 CFR Part 60.4, 1997):

- Criterion A: Association with events that have made a significant contribution to the broad patterns of our history
- Criterion B: Association with the lives of persons significant in our past
- Criterion C: Embodiment of the distinctive characteristics of a type, period, or method of construction or representative of the work of a master, or possessing high artistic value, or representative of a significant and distinguishable entity whose components may lack individual distinction
- Criterion D: Yielding, or likely to yield, information important in prehistory or history

To be listed on the NRHP, a property must not only be significant under the criteria, but must also have integrity. The evaluation of integrity is grounded in an understanding of the physical features of a property and how they relate to its significance (36 CFR Part 60.4). To retain historic integrity, a property will always possess several, and usually most, of these aspects. A property is evaluated in relation to its integrity of (1) location, (2) design, (3) setting, (4) materials, (5) workmanship, (6) feeling, and (7) association. The retention of specific aspects of integrity is required for a property to convey its significance. Integrity, combined with one or more NRHP criteria, will determine if a property is eligible for the

NRHP. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant.

### 5.3.5.2 State LORS

CEQA requires review to determine if a project will have a significant effect on archaeological sites or a property of historic or cultural significance to a community or ethnic group eligible for inclusion in the CRHR (CEQA Guidelines). CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment (Section 21084.1 of the Public Resources Code) and defines substantial adverse change as demolition, destruction, relocation, or alteration that would impair historical significance (Section 5020.1). Section 21084.1 stipulates that any resource listed in, or eligible for listing in, the CRHR<sup>3</sup> is presumed to be historically or culturally significant.<sup>4</sup>

Resources listed in a local historic register or deemed significant in a historical resource survey (as provided under Section 5024.1g) are presumed historically or culturally significant unless the preponderance of evidence demonstrates they are not.

A resource that is not listed in or determined to be eligible for listing in the CRHR, is not included in a local register of historic resources, nor deemed significant in a historical resource survey, may nonetheless be historically significant (Section 21084.1; see Section 21098.1).

CEQA requires a Lead Agency to identify and examine environmental effects that may result in significant adverse effects. Where a project may adversely affect a unique archaeological resource,<sup>5</sup> Section 21083.2 requires the Lead Agency to treat that effect as a significant environmental effect and prepare an Environmental Impact Report. When an archaeological resource is listed in or is eligible to be listed in the CRHR, Section 21084.1 requires that any substantial adverse effect to that resource be considered a significant environmental effect. Sections 21083.2 and 21084.1 operate independently to ensure that potential effects on archaeological resources are considered as part of a project's environmental analysis. Either of these benchmarks may indicate that a project may have a potential adverse effect on archaeological resources.

3 The CRHR is a listing of "...those properties which are to be protected from substantial adverse change." Any resource eligible for listing in the CRHR is also to be considered under CEQA.

4 A historical resource may be listed in the CRHR if it meets one or more of the following criteria: "(1) is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; (2) is associated with the lives of persons important to local, California or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or (4) has yielded or has the potential to yield information important in prehistory or history (...of the local area, California or the nation)" (Public Resources Code §5024.1, Title 14 CCR, Section 4852). Automatic CRHR listings include NRHP-listed and determined eligible historic properties (either by the Keeper of the NRHP or through a consensus determination on a project review), State Historical Landmarks from number 770 onward, and Points of Historical Interest nominated from January 1998 onward. Landmarks prior to 770 and Points of Historical Interest may be listed through an action of the State Historical Resources Commission.

5 Public Resources Code 21083.2 (g) defines a unique archaeological resource to be: An archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.

Other state-level requirements for cultural resources management appear in the California Public Resources Code Chapter 1.7, Section 5097.5 (Archaeological, Paleontological, and Historical Sites), and Chapter 1.75, beginning at Section 5097.9 (Native American Historical, Cultural, and Sacred Sites) for lands owned by the state or a state agency.

The disposition of Native American burials is governed by Section 7050.5 of the California Health and Safety Code and Sections 5097.94 and 5097.98 of the Public Resources Code, and falls within the jurisdiction of the NAHC.

If human remains are discovered, the county coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the coroner determines the remains to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native American so they can inspect the burial site and make recommendations for treatment or disposal. The project will comply with these requirements related to cultural resources through the implementation of the mitigation measures described previously in Section 5.3.4.

### 5.3.5.3 Local LORS

Although the CEC has preemptive authority over local laws, it typically requires compliance with local LORS, plans, and policies.

The Riverside County General Plan identifies and documents significant historic and prehistoric resources, and provides for the preservation of representative and worthy examples. The plan also recognizes the value of historic and prehistoric resources, and assesses current and proposed land uses for impacts on those resources. Riverside County has also drafted its own requirements regarding the preparation of cultural resources reports for privately initiated development projects (updated March 1993), entitled *Requirements for the Preparation and Review of Archaeological and Biological Reports*.

### 5.3.6 Agencies and Agency Contacts

Table 5.3-2 lists the state agencies involved in cultural resources management for the project and a contact person at each agency. These agencies include the NAHC and, for federal undertakings, the COHP.

**TABLE 5.3-2**  
Agency Contacts for Cultural Resources

Issue	Agency	Contact
Native American traditional cultural properties	NAHC	Dave Singleton Associate Governmental Program Analyst NAHC 915 Capitol Mall, Room 364 Sacramento, CA 95814 (916) 653-4082

**TABLE 5.3-2**  
Agency Contacts for Cultural Resources

Issue	Agency	Contact
Federal agency NHPA Section 106 compliance	COHP	Milford Wayne Donaldson State Historic Preservation Officer 1416 9th Street, Room 1442, Sacramento, CA 95814 (916) 653-6624
Federal agency NHPA Section 106 compliance	BLM	Chris Dalu Archaeologist BLM Palm Springs-South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262 (760) 833-7100
Federal agency NHPA Section 106 compliance	Western	Steve Tromley Archaeologist Western PO Box 12155 Lakewood, CO 80228-8213 (720) 962-7253

### 5.3.7 Permits and Permit Schedule

Other than certification by the CEC, no state, federal, or local permits are required by the project for the management of cultural resources. Consultation with the State Historic Preservation Officer is required under NHPA Section 106.

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