ARCHAEOLOGICAL/HISTORICAL SURVEY OF THE SAN ONOFRE TO ENCINA 230 KV TRANSMISSION LINE

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FOREWARD

This report has been prepared in response to a request by the Nuclear Regulatory Commission (NRC letter dated 10/2/78, Docket No. 50-361 & 50-362) for additional archaeological/historical information regarding proposed San Onofre 2&3 (SONGS) transmission lines. The information contained herein incorporates results of earlier reports (Environmental Data Statement submitted to California Public Utilities Commission, Fall 1978) and is intended as a complete response regarding the archaeological/historical matters on the SONGS to Encina Line.

ARCHAEOLOGICAL/HISTORICAL SURVEY OF THE SAN ONOFRE TO ENCINA 230 KV TRANSMISSION LINE

1.0 INTRODUCTION

This report details and discusses an intensive archaeological/historical field survey conducted for San Diego Gas & Electric Company (SDG&E) within an existing 230 KV transmission line right-of-way within San Diego County.

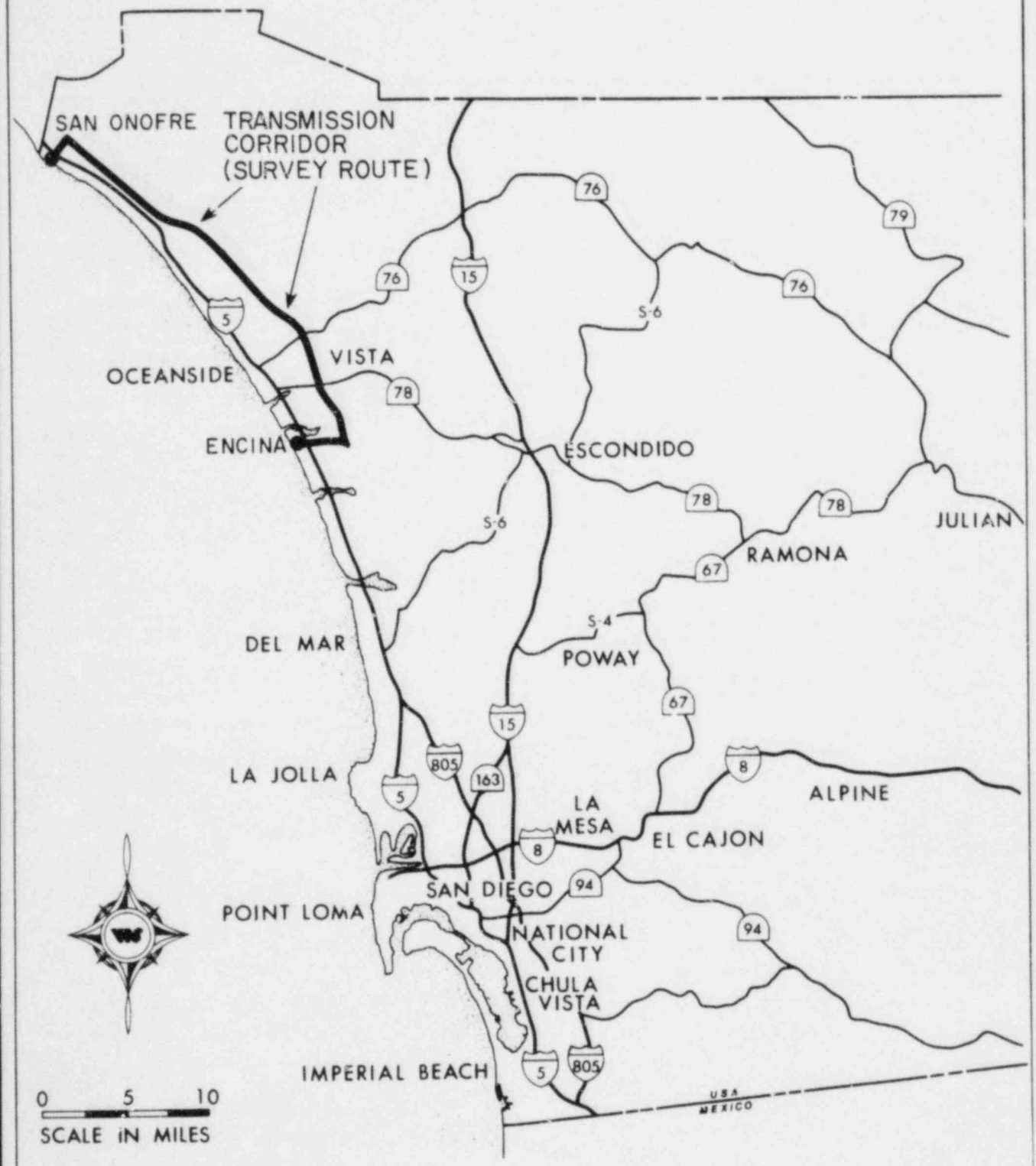
The transmission line corridor starts from the San Onofre Nuclear Generating Station and terminates at the Encina Substation (Figure 1). The survey was conducted in order to assess the location and significance of cultural resources within the San Onofre to Encina 230 KV transmission line right-of-way.

1.1 Project Characteristics

Currently, a combination of double circuit steel lattic towers, steel poles, and wooden H-frame towers occupy the right-of-way to be used for the San Onofre to Encina transmission line. The right-of-way varies in width from 100 to 200 feet. One 230 KV circuit, which connects San Onofre with SDG&E's Mission Substation, is now supported by these existing structures. For the majority of the right-of-way, this circuit is carried by lattice steel towers designed to accommodate two circuits. Thus, for about 97 percent of the San Onofre to Encina right-of-way, one vacant position is available on existing lattice towers.

Approaching the Oceanside Airport from the north, the existing circuit transitions from the steel lattice towers to lower wooden H-frame structures. The reason for this transition is to reduce the height of the circuit and the structures in the vicinity of the Oceanside Airport. South of the airport area, the circuit again transitions to the taller, lattice steel towers, which continue southward to the Encina substation.

The proposed project calls for the addition of one circuit throughout the entire length of the existing right-of-way. Where vacant positions currently exist on the



Regional Locale of the Project Area.

FIGURE 1

lattice towers, the new circuit would merely be pulled into place from specific puller and reel locations, thus occupying the second position on the lattice towers. This portion of the project would involve roughly 23.3 miles of the 23.9 mile right-of-way (Figures 2-1 through 2-5), the remaining 0.6 mile being that segment just east of the Oceanside Airport. In this area, approximately six new wood H-frame structures would be built within the existing right-of-way parallel to the H-frame structures which now carry the existing circuit past the Oceanside Airport. The new structures will be similar in design and appearance to those already in place (Figure 2-4).

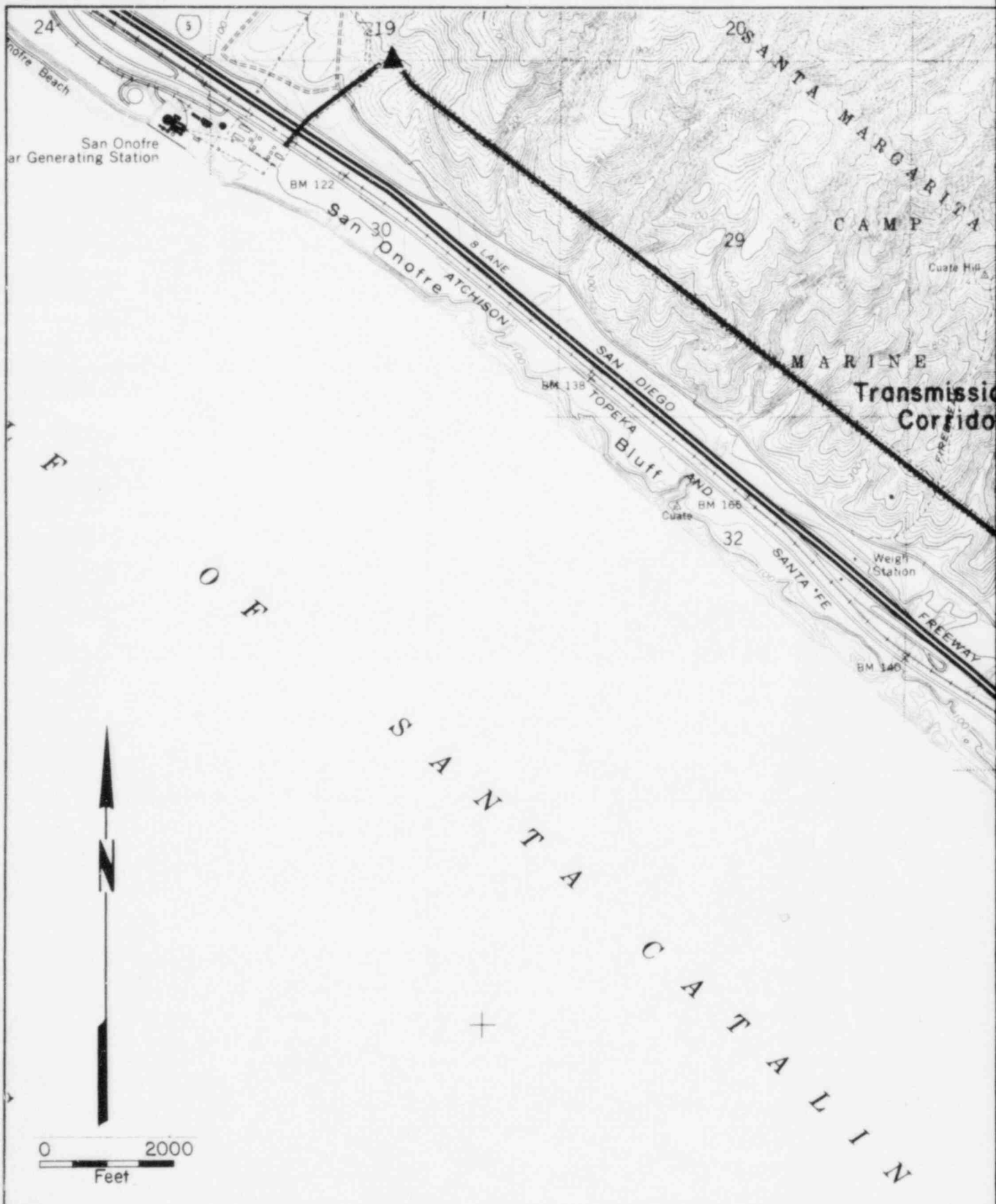
In addition, one new steel tower will be constructed at the Encina "Hub." The "Hub" is a term used to refer to an area about 1.5 miles east of the Encina Substation where several circuits from various directions merge and lead into the Substation. The new tower will be needed to provide the necessary clearance between the new circuit and the existing lines (See Figure 2-5).

Specific work activities involved in the project include the following:

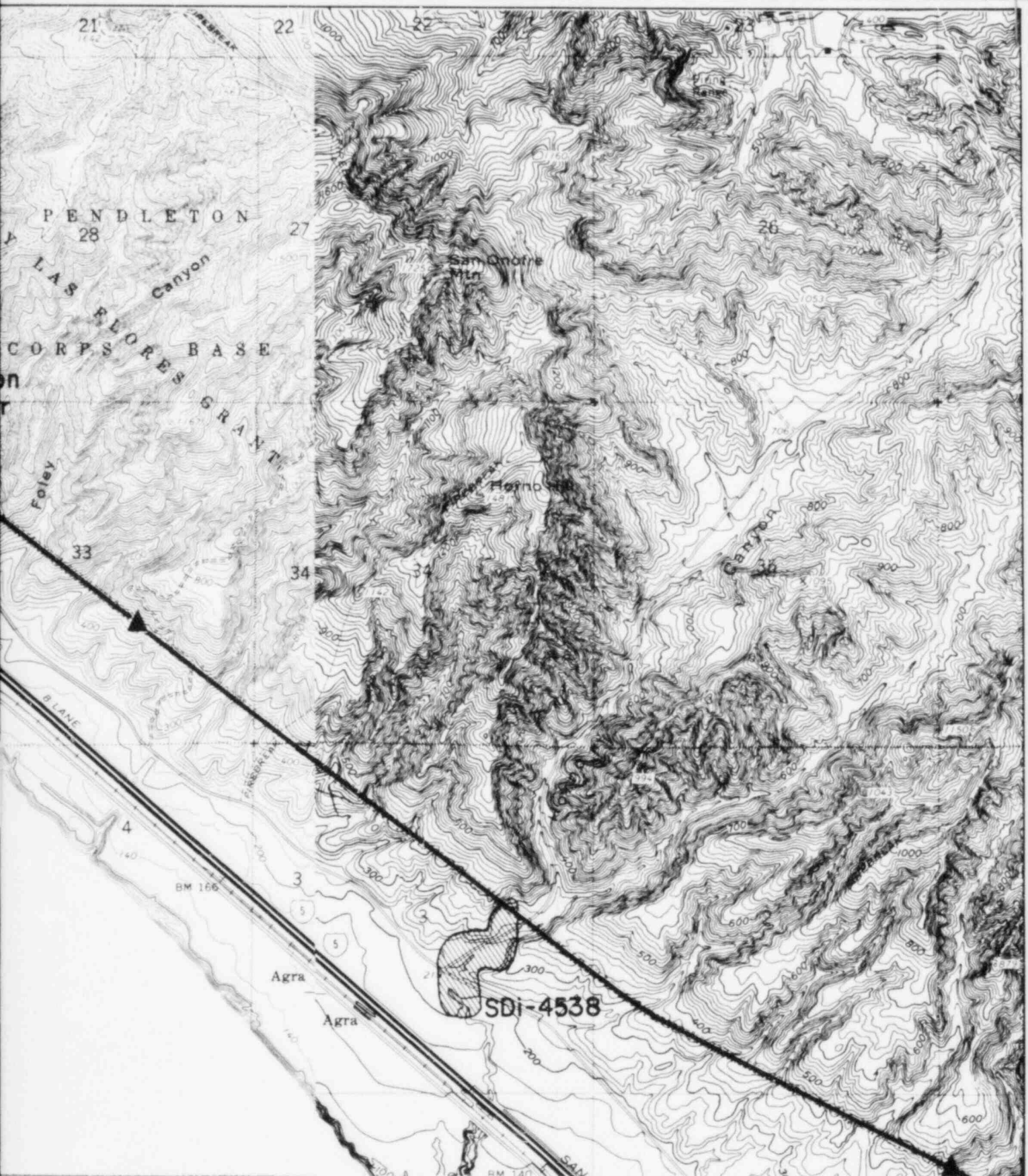
1. Excavation for and placement of footings for the wooden structures near Oceanside Aiport and the single lattice tower at the Hub.
2. Hauling, assembly and erection of wooden structures and one steel tower.
3. Hauling and installation of conductor and overhead groundwire assemblies.
4. Conductor stringing operations.

In summary, the proposed project will consist of three interrelated activities:

1. The addition of one circuit to the existing vacant position on existing double circuit steel towers from San Onofre to the Encina Substation (23.3 miles of the 23.9 mile right-of-way).
2. The installation of new wooden structures for a 0.6-mile segment of the right-of-way east of the Oceanside Airport.
3. The installation of one steel tower at the Encina Hub to provide necessary clearances between the new circuits and existing lines.

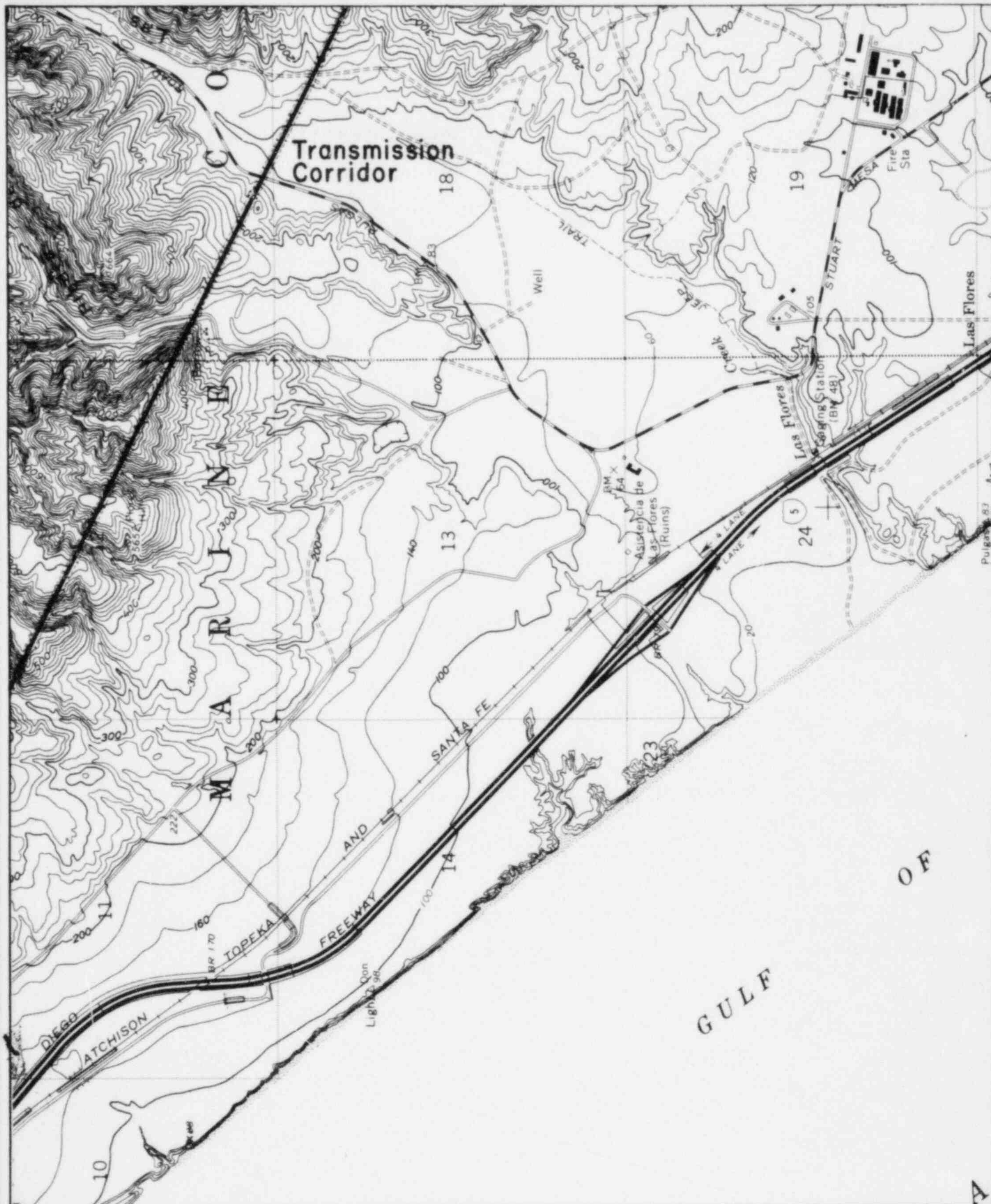


▲ Conductor Stringing Operation Site.

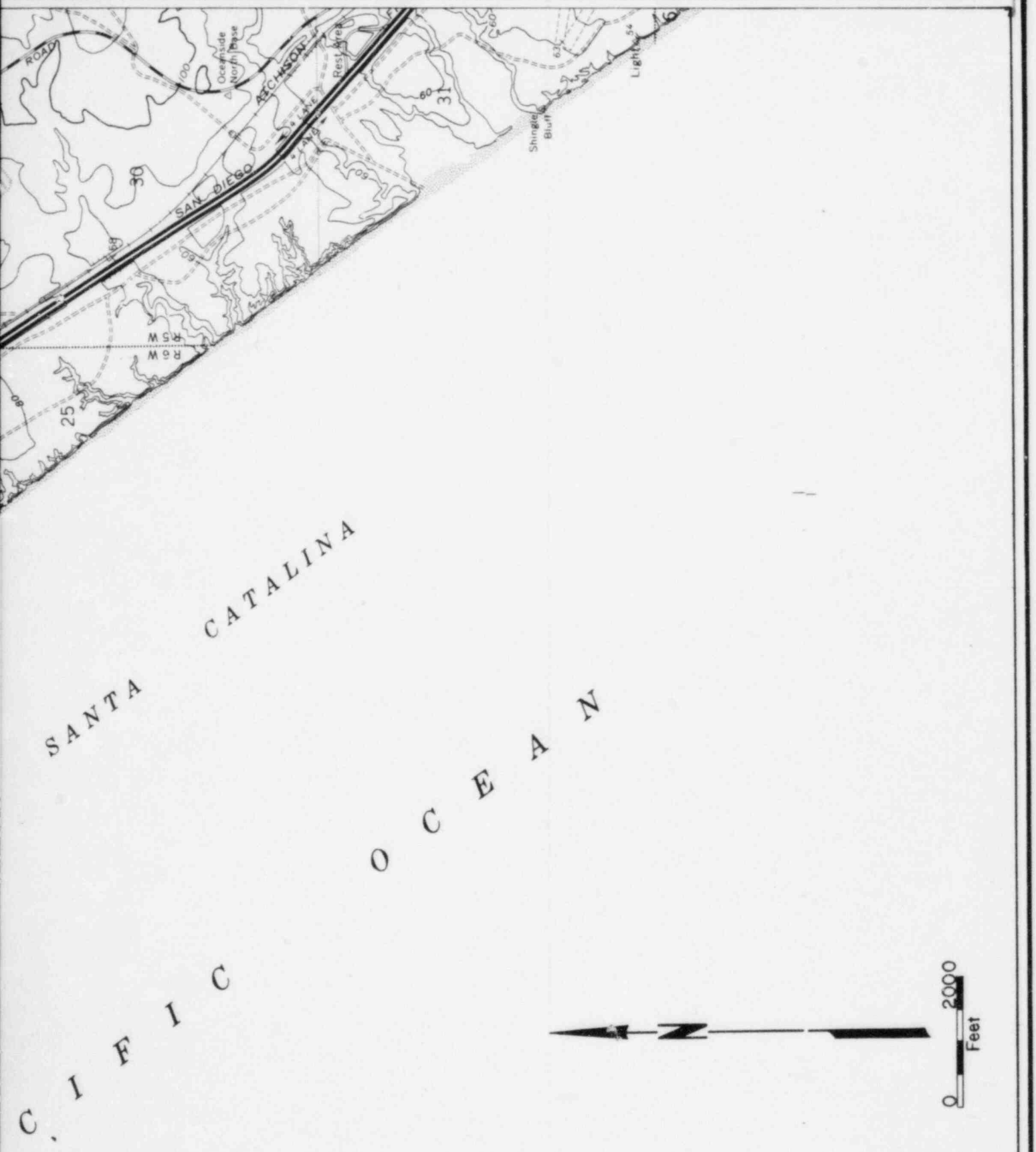


Current Investigation and Archaeological Sites Encountered Within SDG&E Right-Of-Way (San Onofre Bluff 7.5' USGS Quadrangle).

FIGURE 2-1



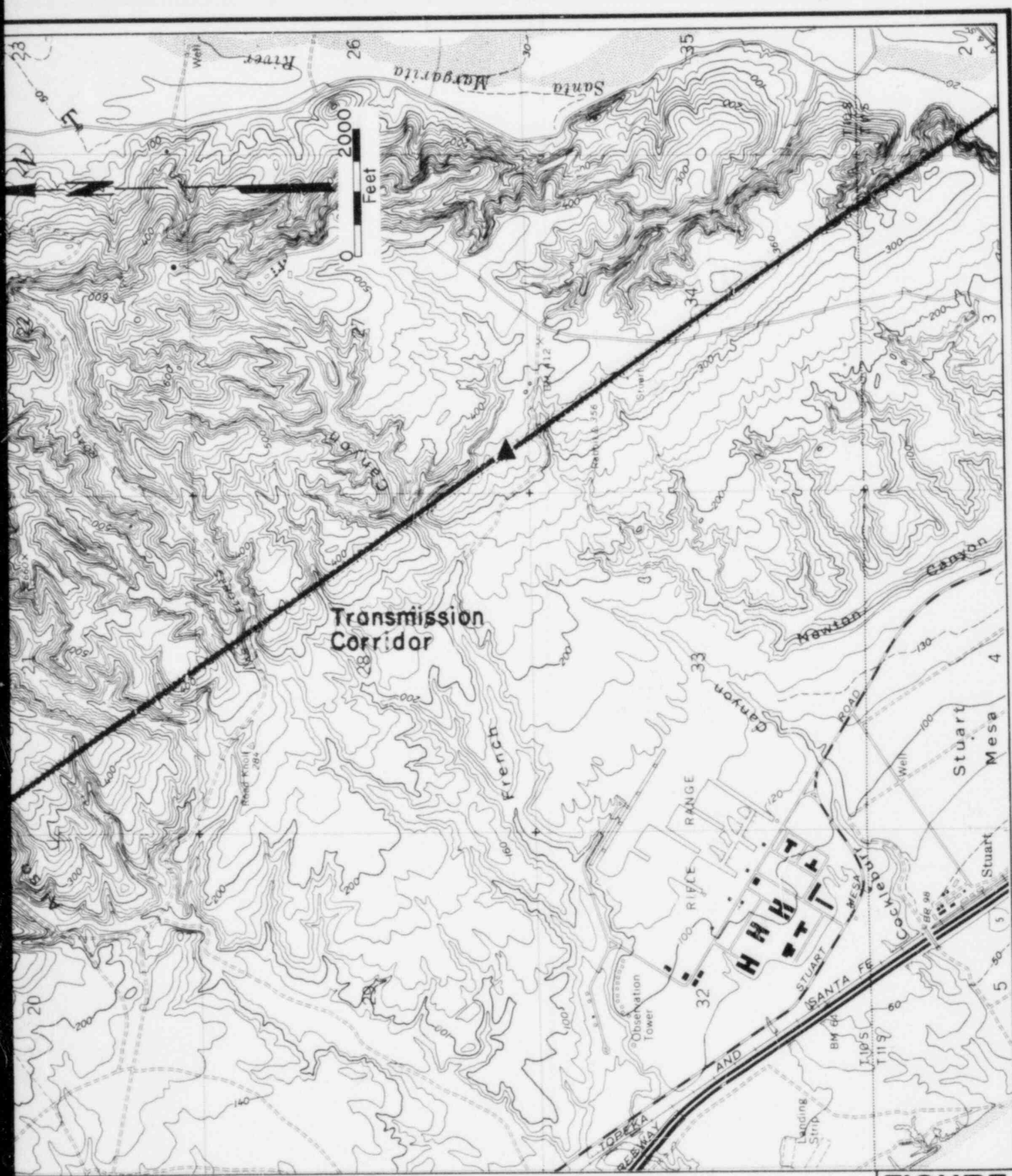
Transmission Corridor
M A R I N E C O
18
19
13
24
14
11
10
23
Well
TRAIL
JEEP
Creek
Las Flores
Las Flores
STUART
MESA
Fire Sta
Asistencia de Las Flores (Ruins)
4 LANE
ATCHISON TOPEKA AND SANTA FE
DIEGO
FREEWAY
GULF OF
A



Current Investigation Within SDG&E Right-Of-Way (No Archaeological Sites Encountered) (Las Pulgas 7.5' USGS Quadrangle).

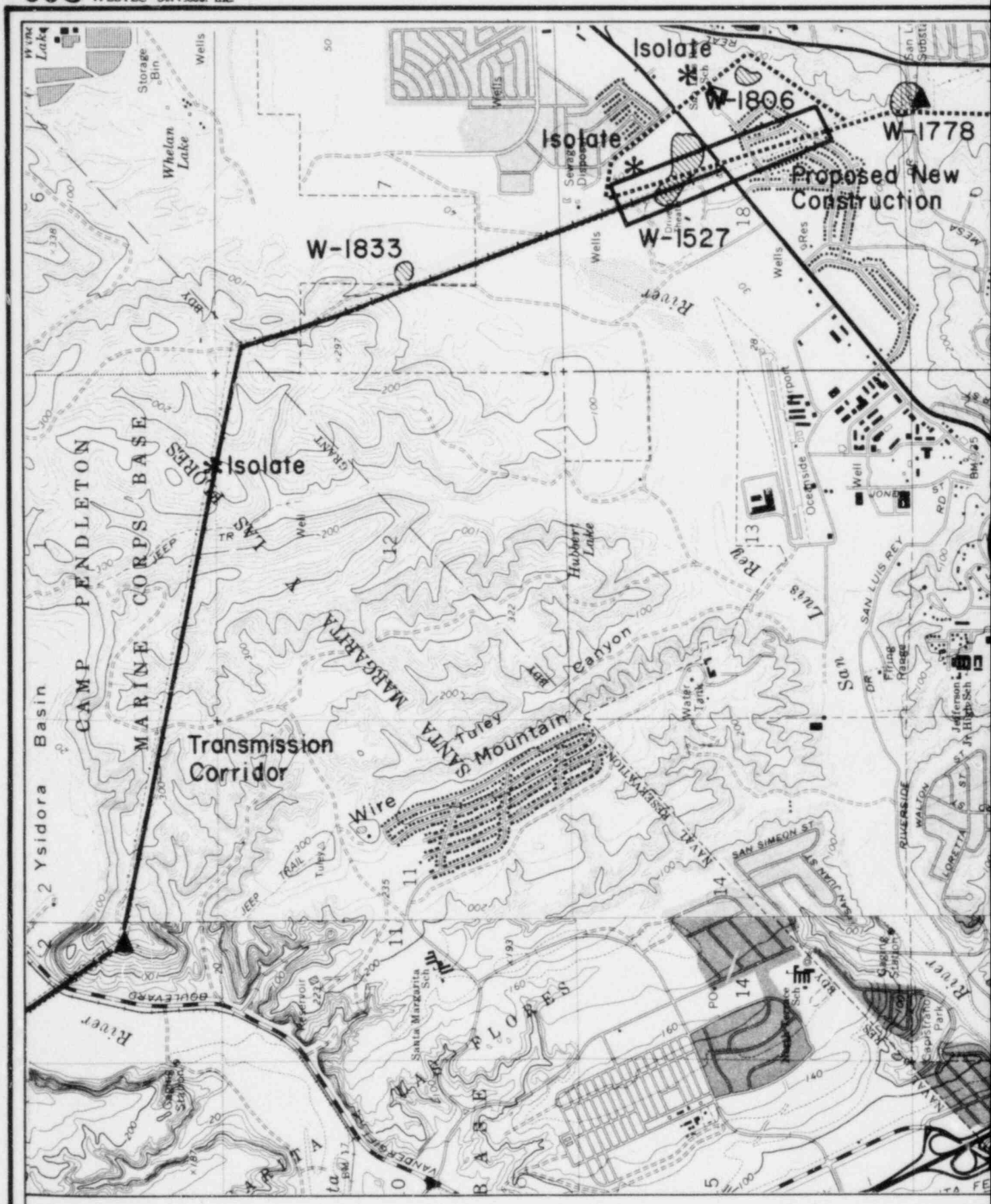
FIGURE 2-2

▲ Conductor Stringing Operation Site.



Current Investigation Within SDG&E Right-Of-Way (No Archaeological Sites Encountered) (Las Pulgas Canyon 7.5' USGS Quadrangle).

FIGURE 2-3



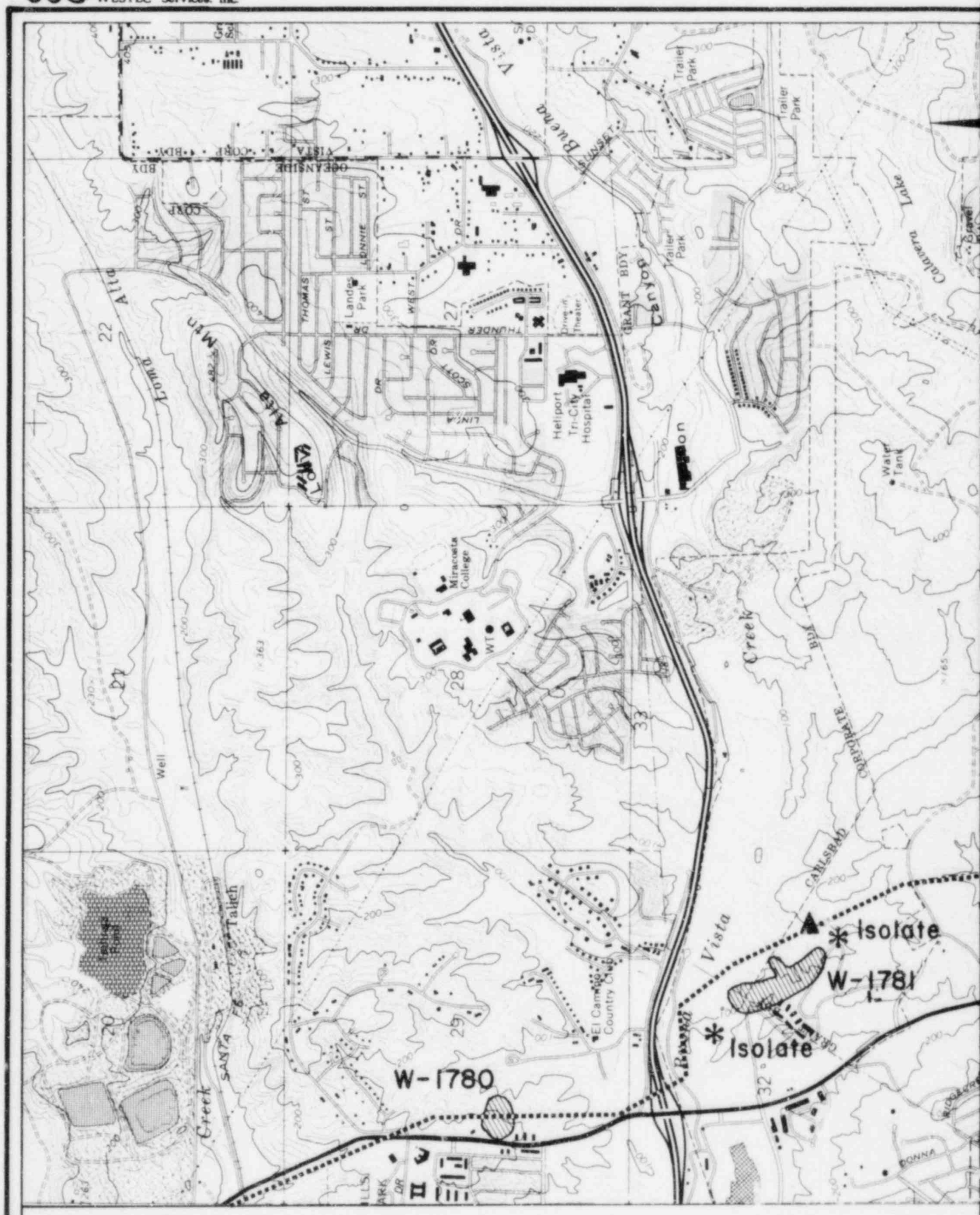
▲ Conductor Stringing Operation Site.

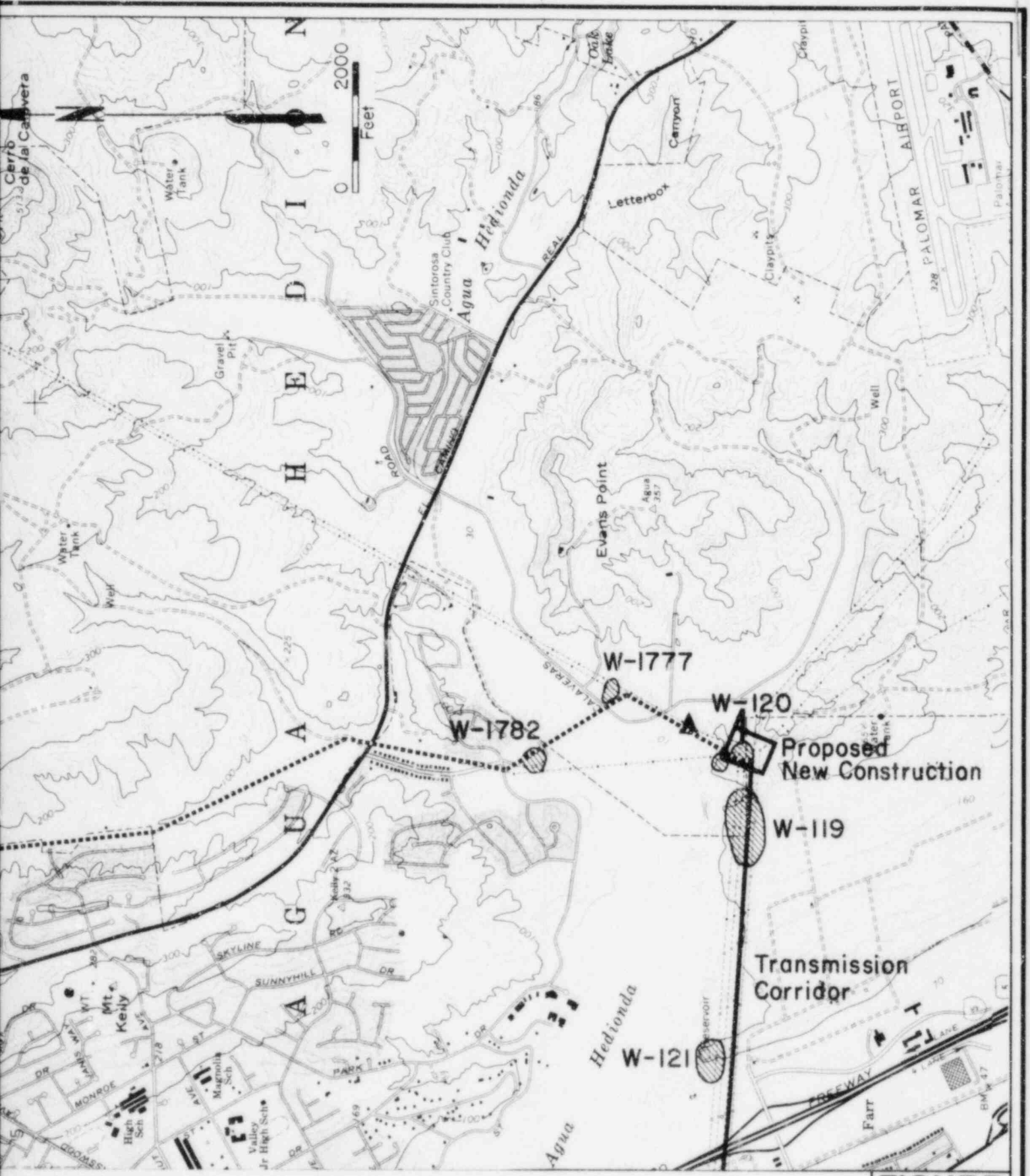
..... Previously Surveyed.

Current Investigation and Archaeological Sites Encountered Within SDG&E Right-Of-Way (Oceanside and San Luis Rey 7.5' USGS Quadrangles).

FIGURE 2-4

WESTEC Services, Inc.





Current Investigation and Archaeological Sites Encountered Within SDG&E Right-Of-Way (San Luis Rey 7.5' USGS Quadrangle).

FIGURE 2-5

1.2 Archaeological/Historical Investigation Characteristics

The current investigation and detailed report includes an intensive field survey of the proposed project area by a qualified archaeological staff and consultant (resumes are presented as Attachment 1 to this report). The field survey was conducted within the existing transmission line right-of-way from the San Onofre Nuclear Generating Station to the San Luis Rey Substation and from the Encina Substation to the east approximately 1.5 miles (Figures 2-1 through 2-5). Information from other recent field investigations which located archaeological resources within those portions of the existing San Onofre to Encina 230 KV transmission line right-of-way scheduled for new construction (WESTEC 1978a; WESTEC 1978b) has been incorporated into the current investigation (Figures 2-4 and 2-5).

The investigative techniques employed in this study conform with the guidelines and requirements of the Nuclear Regulatory Commission and the California Public Utilities Commission.

Prior to the commencement of fieldwork, a thorough review of pertinent literature was conducted, including, but not restricted to: previous fieldwork reports for the area; historical documents relating to prehistoric sites; and a compilation of known sites in the area (Section 3.0).

The Native American Heritage Council and all appropriate area representatives were contacted for their advice or comments (Attachment 2). No responses have been received at this time (no negative comments are anticipated). Any responses to these requests and consideration of these resources in light of the proposed project will be appended to this report (and Attachment 2) when available.

2.0 PROJECT DESCRIPTION

2.1 Project Location

The route of the existing right-of-way involved in this project is shown in Figures 2-1 through 2-5.

The approximate 24-mile route extends from the San Onofre Nuclear Generating Station in extreme northwest San Diego County to the SDG&E Encina Substation located near the Encina Power Plant in Carlsbad. It traverses through Camp Pendleton, unincorporated areas of the County, and portions of the cities of Oceanside and Carlsbad. The field survey crew consulted the USGS 7.5' quadrangle maps for San Onofre Bluffs, Las Pulgas Canyon, Oceanside and San Luis Rey (Figures 2-1 through 2-5).

3.0 BACKGROUND DATA

3.1 Archaeological Overview

The coastal region of southern California has long been the subject of archaeological investigation. Stretching back at least to the early fieldwork of Malcolm Rogers in the 1920s, numerous archaeological researchers have collected a vast array of information and data pertinent to reconstructing past lifeways of native Californians (Rogers 1929).

Past field investigations along coastal San Diego County have been sponsored by institutions such as the San Diego Museum of Man, San Diego State University, University of California at Los Angeles, University of San Diego, and Scripps Institution of Oceanography. Implementation of the California Environmental Quality Act has brought the private sector into archaeological research through predevelopment surveys and mitigation or salvage projects.

The interpretation and synthesis of over 50 years of coastal archaeological research would entail the preparation of several lengthy papers or monographs. Thus, for the purpose of this analysis, a brief overview of previous fieldwork is provided to establish a broad, regional framework within which the archaeological sites along the proposed San Onofre to Encina 230 KV right-of-way can be viewed. The reader is referred to the various sources noted throughout this discussion and in Attachment 3. Regionally specific data are presented in this subsection to supplement the cultural history discussed in Attachment 3 and ethnobotanical data in Attachment 4.

Archaeological studies have been conducted adjacent to the northern San Onofre to San Luis Rey Substation right-of-way within Camp Pendleton. In his survey report Charles Bull (1975:39-41) reported an extremely large site (SDi-4538) with a midden depth of over one meter (3 feet). Dr. Paul H. Ezell removed fragments of human bone from SDi-4538. The transmission corridor below San Onofre cuts across the site known as the Horno Canyon archaeological site.

As shown in Figure 2 of the Bull report (1975:3), his survey area included small segments of the SDG&E corridor near Horno Creek and further to the south at Las Flores Creek. For the most part, the transmission corridor across Camp Pendleton has not been previously field surveyed, although one major study (Welch 1977) has been conducted north and east of the project area, and several smaller studies have been completed along the San Luis Rey River (Carrico 1974, 1977; Drover 1977; Kaldenberg 1973), no major excavation or survey oriented toward testing hypotheses or generating significant data have been conducted in the area. A recent testing program at a site (SDi-5130) approximately 2000 feet west of the corridor near the Oceanside Airport revealed an extensive shell midden site that may have comprised a major settlement (Carrico 1975). Studies throughout the general area (Meighan 1954:215-227; McCown 1955; Warren 1964) have added significant data at the survey level, but have not possessed the type of data base which generates or warrants the conclusions necessary to formulate an adequate "cultural history" of the area.

Fieldwork and research along the coast between the San Luis Rey Substation and Encina Substation indicate a predominance of camp middens and campsites containing La Jolla cultural components within the coastal littoral (Rogers 1929:454-67, 1966; Moriarty et al. 1959). The relative sparseness of Paleo-Indian San Dieguito sites is considered an indication that this ill-defined culture preferred and utilized inland valleys and desert regions (Rogers 1966:1-140; 1929:454-67; Moriarty 1969:1-8).

Taken as a whole, Early Milling sites in the coastal littoral in and around the corridor comprise an increasingly better-defined cultural pattern encompssing settlement and land use factors, special activity areas, and human movement across the land. Many of our assumptions about La Jolla peoples have not been thoroughly validated through rigorously applied, empirical archaeological research. However, competent excavors and researchers (Kaldeberg and Ezell 1974; Moriarty 1959; Harding 1951; Rogers 1929, 1945, 1966) have produced at least chronological and cultural parameters,

and in so doing have developed a broad depiction of La Jolla peoples in the San Diego coastal region.

The cultural picture that emerges is one of a largely nomadic people who seasonally inhabited the low mesas and knolls overlooking costal lagoons and bays, beach fronts, and inland slopes. Drawn to the estuaries and ocean bluffs by an environment teeming with edible life forms, the La Jollans evidently exploited the ocean and estuaries as a segment of a seasonal round (Warren 2954:4-5).

If the archaeological record is correct in categorizing La Jollan sites within the study area, it would appear that the La Jolla peoples operated from seasonal base camps located along the ocean front (Shumway et al. 1959; Rogers 1929) or along bay-estuary channles (May 1973; Carrico 1976b; Kaldenberg and Ezell 1974; Warren et al. 1961; Warren 1964). These seasonal base camps are probably the result of a people who had developed a "Central-Based Wandering" community pattern. As defined by Beardsley and others (1956:138), a Central-Based Wandering people is one "that spends part of each year wandering and the rest at a settlement or 'central base,' to which it may or may not consistently return in subsequent years."

The cultural remains left at seasonal base camps of Central-Based Wanderers should differ significantly from those left at limited-use areas or temporary campsites, by virtue of variable techno-economic activities, intensity of use, ecological setting, and settlement systematics. J.N. Hill (1974:91) has suggested that main village sites or main base camps should possess relatively greater numbers of certain attributes or artifacts when compared with campsites or special use areas. Using the model developed by Hill, it can be seen that certain large La Jollan sites that have been labelled as habitation sites or villages tend to have more structures or features, increased incidence of ourials, evidence of multiple sex/age utilization, more hearths, greater variety of artifacts, evidence of tool manufacture and sharpening, more ornaments and decorative artifacts, evidence of a wider variety of floral and faunal

remains, location on or near ecological edge situations (ecotones), location strategically near a wide variety of economical, cultural and technological resources, and, finally, location near major drainages or sources of water. In fact, excavations along the southern San Diego County coast have supported Hill's contention of site differentiation and made it possible to categorize archaeological sites as limited-use areas, campsites and village or base campsites. Other sites along coastal San Diego County probably represent limited-use areas where the La Jolla people sought to exploit the rich and variable environment surrounding them.

3.1.1 San Dieguito Cultural Pattern

The oldest sites (San Dieguito Radition circa 12,000 to 8000 years ago) are generally located on knoll and mesa tops well above present-day water sources. San Dieguito sites usually reflect temporary camping or sporadic resource exploitation by high nomadic hunters. Typical cultural debris on San Dieguito sites include flaking debris, large chopping scraping tools and blades. Cultural elements not usually associated with San Dieguito sites include milling equipment, shell middens, ceramics, crematons and small projectile points.

Thus far, no village type sites associated with the San Dieguito culture have been excavated or reported within the general area. Similarly, no San Dieguito human burials have been found in San Diego County. A majority of San Dieguito sites are relatively small stone tool scatters or remnants of stone workshops where tools were manufactured.

3.1.2 La Jolla Cultural Pattern

Within the study area, La Jollan sites (circa 7000 to 3000 years ago) are the most frequently occurring type of site. These sites are most often situated on lower terraces and hills above major water courses. The greatest density of La Jollan sites occurs on the margins of lagoons and estuaries adjacent to the San Diego coast. As one

goes inland to the coastal foothills and valleys, sites associated with the La Jolla Pattern decrease.

Typically, La Jollan sites consist of medium to large activity areas including shellfish processing camps, occupation areas, stone tool workshops and milling sites. Extensive camps may include human burials, stone tools, faunal remains, fire hearths and possible living floors. Less intensively occupied sites may be comprised of a few scattered stone tools or remnants of sporadic camping.

3.1.3 Late Milling Cultural Pattern

The Late Milling Archaic Tradition encompasses two different linguistic groups; the Shoshonean-speaking Luiseno and the Yuman-speaking Kumeyaay-Northern Diegueño. Although different linguistically, these people shared similar material cultural traits.

Late Milling sites are often situated near present-day water sources at much lower elevations than the sites of either the San Dieguito or La Jolla patterns. Generally, Late Milling sites vary from single isolated artifacts to entire village (rancheria) sites. Preliminary data indicates that most Late Milling villages were situated at the far eastern edges of lagoons or further inland along major water confluences.

Late Milling sites frequently contain ceramics, projectile points, shell middens, milling equipment, stone tools and stone tool manufacturing debris. Several sites along the coastal zone of San Diego have contained cremations and other objects of sacred value.

3.2 Historical/Ethnohistoric Overview

3.2.1 Protohistoric-Spanish Period, 1769-1821

The arrival of Spanish explorers and missionaries in July 1769 began the slow process of changing southern California from land controlled by a prehistoric society to a land dominated by European society and technology. The years 1769-1821 represents

the fascinating transition period wherein the use of archaeological data and historical data must be combined to depict the cultural history of the area.

The following dicussion is necessarily brief because of the limited study area and because a thorough documentation of this period would require extensive use of original Spanish papers and documents. Rather than using a chronological approach, the discussion follows a geographic framework based on specific points of early Spanish-native contact and/or lands that passed from native ownership to Spanish ownership.

- Agua Hedionda

When Don Gaspar Portole and his party of explorers arrived at what is now known as Agua Hedionda Lagoon on July 18, 1769, they reported foul-smelling stagnant pools of water, thus the Spanish name for stinking water was permanently attached to the area. Portola's diarist noted that an abandoned native village occupied the valley floor near some clear water (Palou 1926:2:115). Later mission records and travalogues report that Agua Hedionda rancheria was a major Luiseño settlement that was abandoned by the mid-1800s (Carrico 1977; Merriam 1968) when the Agua Hedionda Rancho was granted to Juan Maria Marron.

- Buena Vista

After their visit to the Agua Hedionda Valley, Portola's party continued northward across mesa tops and deep canyons until they reached a deep, wide valley near present-day El Camino Real and Highway 78. Because of the scenic vista and open view to the Pacific Ocean, Portola named this valley Buena Vista, literally "good view."

Portola noted that a native village was situated on the summit of a hill above Buena Vista Creek. The villagers had been told of the Spaniards' trek northward by native runners sent from the rancheria at San Elijo below Agua Hedionda (Palou 1926:2:116-117). Aware that the Spaniards had beads for trade, and curious to see these bearded men on large sweating beasts, at least forty villagers walked into the Spanish

camp to barter and gawk. After an amiable exchange, the Luiseño traders left camp with glass trade beads, apparently satisfied that the newcomers were friendly traders.

Buena Vista was another major Luiseño settlement that endured early Spanish influence and thrived until the early American period. In later years the rancheria apparently moved somewhat east away from the lagoon itself and inland, somewhat removed from El Camino Real and white influence.

- San Luis Rey

The presence of Luiseños throughout the lower portions of the San Luis Rey River is well-documented by historians, early explorers and ethnographers. Gaspar de Portola crossed the wide San Luis Rey River Valley on his way to Monterey (Carrico 1977) and found the valley floor "so green that it seemed to us that it had been planted (Palou 1926:2:116)." It was also noted that two large Luiseño villages were situated on both sides of El Camino Real at opposite ends of the valley.

The Spaniards found the natives to be friendly, outgoing and prepared for their arrival. Because of the water supply, lush vegetation and large numbers of natives, it was recommended that the San Luis Rey Valley, originally named San Juan Capistrano, and later called San Juan Capistrano Viejo, be considered as a potential mission site. Twenty-nine years later, in 1798, four tracts of land were granted by King Carlos IV and a mission was officially founded at San Luis Rey although a church would not be built until 1802. The present mission structure was begun in 1811 and completed in 1815. Mission San Luis Rey de Francia was one of the most successful California missions in terms of converting natives and development of a farming/grazing subsistence.

Secularization of the mission, circa 1834, left the church without funds to support its large gardens, to maintain the thousands of heads of livestock or its converted native population. The most industrious converted natives were relocated at the Pueblo de Las Flores within the Las Flores Valley in what is now Camp Pendleton.

Gradually the mission fell into a dilapidated state and the natives drifted away from the mission system. The American takeover of California, which was finalized by statehood in 1850, led to further deterioriation of the church.

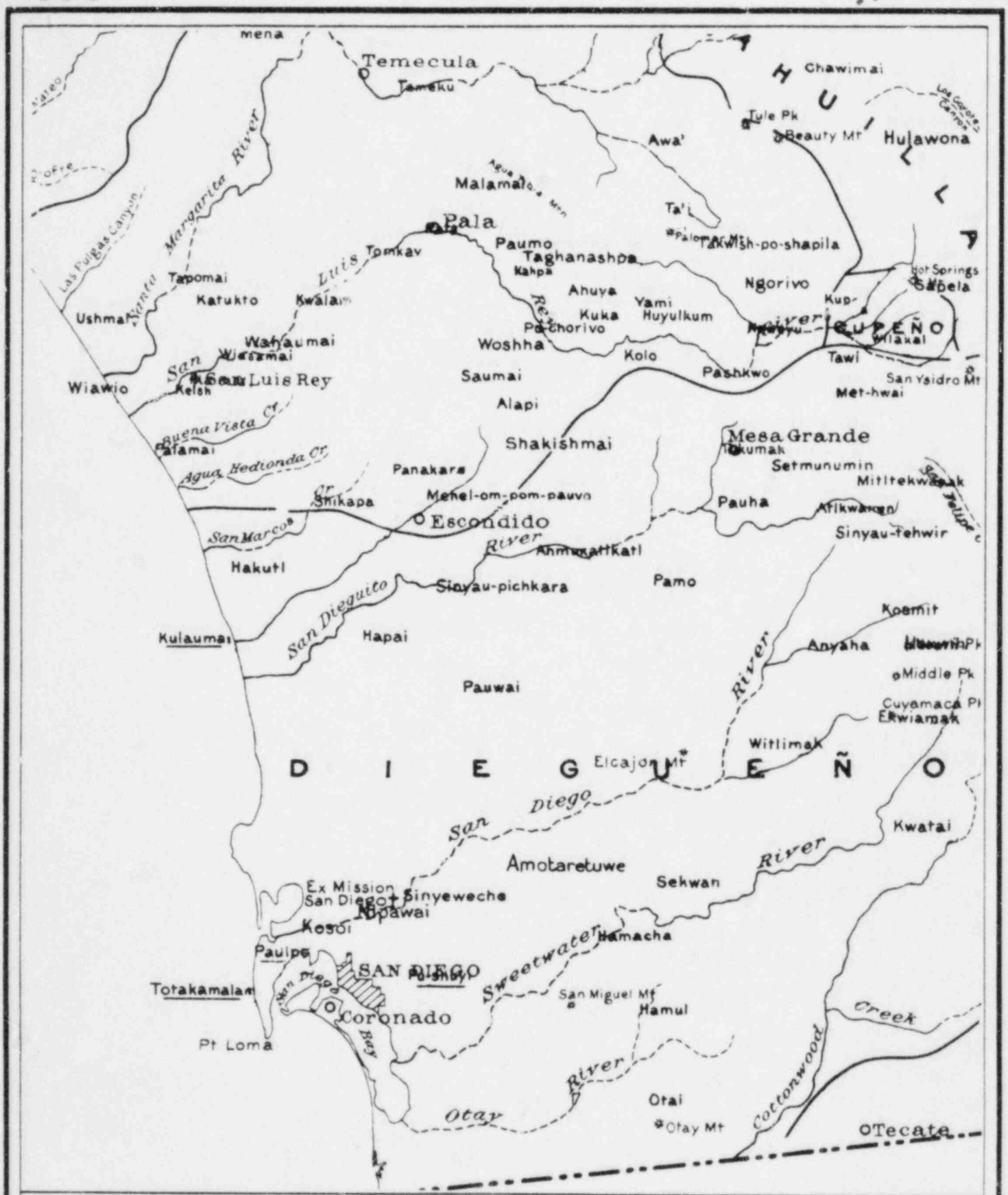
In a dialogue reportedly dictated about 1835 by Pablo Tac, a Luiseño neophyte, the Luiseño name of Quechla was given for San Luis Rey (Tac 1958:19). Pablo Tac stated that quechlam was the plural form of a native word for a certain kind of stone and that quechla was the singular form. A recent historian (Hudson 1964) noted that Keish, Qee'sh, and Quechla are orthographic variances for the same Luiseño village/placename. In his 1908 study of the Luiseño, Sparkman (1908:191) reported that his informants called San Luis Rey, Keish (see Figure 3).

The San Luis Rey area contained 21 different Luiseño clans indicating a dense and diverse population, equalled in numbers of clans only by the rancheria at Pechanga (Strong 1929:276-277). Based on Kroeber's estimate (1970:686) that a clan was comprised of 25 to 30 persons, a population of between 525 and 630 Luiseños can be suggested for the San Luis Rey area. Kroeber (1970:Plate 57) recorded four villages in the vicinity of Mission San Luis Rey: Keish (at San Luis Rey); Wiasamai and Wahaumai, located west of San Luis Rey; and Kwalam, located halfway between San Luis Rey and Pala (see Figure 3).

- Santa Margarita

The first European exploration of the Santa Margarita Valley was accomplished when Portola and his party continued their push northward to Monterey in July 1769. The Spaniards reported that a native village of no less than sixty persons was situated along the banks of Santa Margarita Creek. The natives traded with Portola's men and received glass beads which they apparently considered worthwhile.

Throughout the late eighteenth century, the village at Santa Margarita had repeated contact with Spanish traders. Attempts to missionize the natives were only minimally successful until the founding of Mission San Luis Rey de Francia in 1798.



Native Settlements in San Diego County and Linguistic Boundaries (after Kroeber 1970).

FIGURE 3

Following secularization of the missions in 1834, various influential persons throughout California sought and received large grants of land. Pio Pico received a provisional grant in 1836 for portions of what later became the Santa Margarita y Las Flores.

Pio Pico's dealings with the natives who occupied the Santa Margarita area were frequently unscrupulous and unjust. Throughout the early 1800s natives either abandoned their traditional villages within what is now Camp Pendleton or temporarily centralized at the Pueblo de Las Flores. Originally, a pueblo established for the emancipated Luiseños from Mission San Luis Rey, Las Flores and Las Flores Valley as a whole was coveted by Pio Pico and his brother Andres. The Picos apparently gained title to Las Flores by granting it to Pablo Apis, a Luiseño nota, or leader, in 1844 and traded Apis the 2,200 acre Temecula grant for the more than 43,000 acre Las Flores grant (Witty 1970:29; Rush 1965:94). The later consolidation of the San Onofre, Santa Margarita and Las Flores grants led to the formation of the huge Santa Margarita y Las Flores Rancho and the removal or demise of native population within the rancho.

3.2.2 Mexican Period, 1821-1848

With the changeover to Mexican rule, the missions which previously provided cohesion for Alta California began to dissolve into ineffectuality. In their place a large number of ranchos were established — the so-called "Spanish" land grants were doled out almost entirely during the Mexican Period.

Within San Diego County, dissolution of the missions was felt most markedly in the vicinity of San Luis Rey and San Diego. Although the Mexicans assumed control in the early 1820s, it was not until the 1830s that secularization was effected. The missions were abandoned and a series of 32 ranchos was established in San Diego County. Two of the ranchos occupied portions of the study area (Brackett 1949).

Rancho Santa Margarita y Las Flores, Spanish for Saint Margaret and the Flowers, was by far the larger of the two land grants; it is now Camp Pendleton. Actually, this grant is a combination of the 89,742-acre Rancho San Onofre y Santa

Margarita, granted in 1841, and the more southerly 43,699-acre Las Flores Rancho, granted in 1844. Both were granted to Andres and Pio Pico (Rush 1969). The two rancho names were known from earliest historic times. The Santa Margarita River was named by Don Gaspar de Portola in 1769, and the name Las Flores is noted on early documents as a Luiseño rancheria. Originally, the ranch was one of six ranches comprising the San Luis Rey Mission cattle empire and extended north into present-day Orange County. There are two major buildings remaining from this period. One, the main ranchhouse, is now the Commandant's headquarters at Camp Pendleton. The other is the asistencia at Las Flores, now in ruins. Neither is close to the project study area.

Agua Hedionda was a medium-sized rancho approximately one-tenth the size of Rancho Santa Margarita y Las Flores. It spread over slightly more than 13,000 acres, occupying roughly the area of today's City of Carlsbad (USGS quadrangles). Land grant status was granted in 1892 to Juan Maria Marron, an important politico and popular figure in San Diego (Brackett 1951). The main ranch house (now a private residence) and several adobe ruins remain from the Mexican Period. One of the ruins is contiguous to the study area one-quarter of a mile east of the corner of Chestnut Avenue and present-day El Camino Real, but not within the proposed disturbance zone. None of the other structures are within the study area.

3.2.3 Early Anglo Period, 1848-1884

The influx of Americans, resulting in the political takeover of southern California by the United States of America, wholly changed the character, fabric, and physical appearance of the area. Changes were not immediate, however, and for over 30 years (1848-1878), present-day San Diego County conditions changed at the relatively leisurely pace typical of earlier decades. Two significant innovations manifested themselves during the period: 1) American citizens acquiring Rancho lands; 2) the constructing of a railroad through San Diego County.

Patenting of lands through the American court system was a long, slow process. It was not uncommon for the patenting process to take 10 tor 15 years, longer in some instances. The claims for the Pico grants were recognized by the courts in 1855, for instance, but a patent was not granted until 1879. At the Agua Hedionda Rancho, conditions were only slightly more efficient; a patent was granted in 1870, long after Juan Marron's death (Brackett 1951).

Railroad construction had significant impacts upon the area's development. Although the area's growth was not immediate, the Southern California Railroad was built north from San Diego (actually National City), and by 1881 was completed to the study area. The original route did not go to Los Angeles. It turned inland at present-day Escondido Junction and followed today's spur line route to Fallbrook. Then the line wound through the tortuous Santa Margarita Canyon to Temecula, reaching San Bernardino in 1884. The connection to Los Angeles was completed within the next three years (WESTEC Services, Inc 1978c). Small stations and section houses were established at intermediate points along the line, but no real town development along the railroad in the North County occurred until the late 1880s.

Very little urban development took place during this time. Early records show given populations only for the various ranchos -- each rancho was purported to have had a convenient arbitrary population of 25 persons (Rand McNally and Co. 1973). Otherwise, growth occurred only at San Luis Rey where a post office was established in late 1861. With only a short interruption, this post office has continued to operate to the present day (U.S. Post Office Department n.d.).

3.2.4 Anglo Community Development, 1884-1920

Completion of the Southern California Railroad made coastal San Diego County far more accessible than ever before. The easy accessibility opened the area to thousands of tourists and new residents.

The previously natural landscape and the rancho-oriented lifestyle both were doomed by changing land uses, including an increase in agriculture. The easy accessibility, increased population and changing land uses produced the Great Real Estate Boom of 1886-1888. The short-lived economic prosperity largely disappeared after the boom, but it had formed the basic urban patterns which predominate today.

Successful boom towns whose limits now encroach upon the study area include Oceanside and Carlsbad. The two towns have had parallel histories with Oceanside consistently playing the role of "big brother," growing a little faster, starting a bit earlier, and developing more broadly than its neighbor to the south.

Oceanside, named for its relation to inland San Luis Rey, began about 1884 as a seaside hamlet. It had an established population prior to the Great Boom of 1886-1888 and, due to massive out-of-state advertising, grew during the boom. Unlike most other southern California communities, it continued to grow after the boom; by 1900 it had a population of 330 and by 1920 Oceanside had over 1150 residents (Rand McNally n.d.). By that time, it was a mercantile and service center, exporting a wide variety of local vegetables through local packing houses. There was also a silica sand plant (Heibron 1936:319). Carlsbad is slightly older than Oceanside; John W. Frazier homesteaded in what is present-day central Carlsbad about 1883. Lured to the area by Frazier's recently excavated and ever flowing well, several small agriculturalists gathered to form the community of Frazier's Well. A resort town was established there during the Great Boom because

of the well-known, reputedly healthful qualities of the water. The town was renamed because of the water's supposed similarity to the famed Well No. 9 at Karlsbad, Bohemia. Carlsbad's population quickly decreased following the Great Boom. Like Oceanside, Carlsbad had an agricultural growth incentive from the late 1910s to 1920s. However, by that time Oceanside had established itself as the local retail center, effectively preventing Carlsbad from similar expansion and economic diversity (WESTEC Services, 1978c).

The completion of an all-weather road through the area provided more incentive for growth. Wagon roads and trails were abundant into the 20th century, but non-railroad transport was actually little improved over that available to the padres in the 18th century. Demands began to be made for better roads after 1906, due to the availability of the automobile . The first long-distance road between Los Angeles and San Diego was completed in 1909; constructed of dirt and gravel, this surface was replaced with concrete by 1918 to support the general increase in trafffic (McVicar 1971).

3.2.5 Recent Historical Impacts, 1920 to Present

In recent decades, the landscape of many coastal southern California areas has been transformed to the extent that evidence of historic lifestyles and artifacts is scarcely recognizable. Generally speaking, the northern portion of the project study area has experienced very little development, but many changes have occurred south of the old Santa Margarita y Las Flores grant boundary. Despite the large growth in the area, even today the transmission lines go through zones less developed than those to the east or west.

The northern portion of the study area has changed in recent years from pastoral to military; in 1942, the U.S. Navy purchased the entire grant area. Since World War II, the U.S. Marine Corps has occupied the land, and acquired additional land on the northeastern boundary of the old land grant (Brackett 1949). The

population of the base is small, concentrated, and located over a mile from all portions of the transmission line right-of-way (USGS quadrangles).

The line travels through generally uninhabited land in the Oceanside-Carlsbad area. Several post-World War II tract areas and the small subsettlement of Oceana are in close proximity to the transmission line; all appear to have been built after the line's construction (ASCS, various dates). Further south the line generally follows present-day El Camino Real Street, but south of State Highway 78, it jogs east to include the valley wherein the original El Camino Real is thought to have traveled (WESTEC Services 1978). The land is generally undisturbed and dry; however, swamplands, a cemetary, a golf course and agricultural lands all come near or underneath the right-of-way. The transmission line travels through incorporated areas of both Oceanside and Carlsbad due to large annexations in the late 1950s and mid-1960s, respectively (Burrus 1971).

Available records indicate that the transmission line was built during the mid-to-late 1950s apparently causing no obvious interference to existing structures. It was not the first long-distance electrical transmission line in the area; Heilbron (1936:201) indicates that an SDG&E line existed across north County as early as 1936. The present line was built to join the Encina power plant which was constructed in 1952, therefore, its earlier route was at least partially rerouted.

3.2.6 Origins of Area Place Names

Although few structures of historic importance exist within the immediate vicinity of the transmission line, the large diversity of cultural influences/impacts in the area is evidenced by the historical nomenclature used. Spaniards, Mexicans and Americans have all contributed to the topography of the area. From north to south, place names crossing or close to the right-of-way include:

• Foley Canyon, a small canyon on the northwest side of San Onofre Mountain, located about two miles southeast of the San Onofre Station. The derivation of its name, however, remains unknown according to Lou Stein, local place name expert (1975:49).

• San Onofre is used as a place name for the nuclear generating station, a coastal bluff, and a high ((1725 ft. above mean sea level (MSL)) mountain in extreme northwestern San Diego County and a long-time Santa Fe Railway stop (northwest of the generating station). San Onofre is Spanish for Saint Onuphrus, a fourth-century Egyptian hermit; records indicate the name was first used in 1828 for a land grant in the area, Santa Margarita y San Onofre, which was administered by nearby Mission San Juan Capistrano. Like many land grants, it was named for a saint. Brackett (1949) explains, "The ranchero usually named his holdings for the patron saint of his family, or the saint upon whose holy day the grant was made."

• Horno Canyon is south of San Onofre Mountain. "Horno" is Spanish for an "oven" or "kiln," but its direct application as a place name is not known. Stein suggests it was named because of the extremely hot temperatures that may exist in the area.

• Piedra de Lumbre Canyon is located immediately northwest of Las Pulgas Canyon on Camp Pendleton. One of several suggested meanings for the Spanish phrase translates it as "fire rock." It is not known why or when the canyon was given this appelation.

• Las Pulgas Canyon, largest canyon within Camp Pendleton, is located at the center of the present-day Marine base and is midway between the generating station and the Camp's southern boundary. The name is Spanish for "the fleas." Unfortunately, fleas were an integral part of everyday life in many southern California areas. When Portola's expedition traveled north from San Diego in July 1769, they stopped at a deserted Indian rancheria which was infested with fleas to

the point where the troops became infested and gave the site its name (Gudde 1949).

• Aliso Canyon is located two miles south of Las Pulgas Canyon. "Aliso" is the Spanish word for alder, although it has also been used for sycamore. The name has widespread use in California, and considering the predominant tree cover in the area, it is probable that it was named for the common western canyon sycamore, rather than the less frequent white alder (Lacy 1978).

• French Canyon is located immediately north of Stuart Mesa, in southern Camp Pendleton. It is place-named for settlers of French origin. Stein states that it is now a nickname form, which suggests that the original name may previously have been somewhat less complimentary than at present.

• Fire Mountain is located about two miles due east of central Oceanside. Stein indicates that the mountain (200 ft above MSL), currently occupied by a cemetary, was named because of the red stone outcroppings visible on its slopes.

• Buena Vista Creek is the drainage which generally separates Oceanside from Carlsbad. Spanish for "good view," it is a commmon local name; the downstream lagoon and an upstream rancho are also called Buena Vista. Records indicate that the creek may have been named before the rancho; the creek was known as early as the end of the Spanish period (1821), while the land grant was not approved until 1845. Both creek and rancho may have been named for an Indian rancheria in the area (Gudde 1949).

• Mount Kelly is a hilltop, 347 ft above MSL, immediately east of downtown Carlsbad. In 1870, Robert Kelly took over the ownership of the Rancho Agua Hedionda holdings, and in the 1890s his holdings were divided among his nine nephews and nieces. Many members of the Kelly family are active in the Carlsbad area today (WESTEC Services, 1978).

• Evans Point, the highest point in the western portion of Carlsbad, is located a mile east of Agua Hedionda Lagoon and generally west-southwest of Rancho Agua Hedionda. It was named in 1908 for Admiral Robley D. Evans who commanded the U.S. Navy's Great White Fleet. The present residence of the Allen Kelly family, it was an earlier generation of Kellys who climbed the hill that year to watch the Fleet during the West Coast portion of its highly publicized tour. The family was so impressed by the passage that they named the hill after Admiral Evans (Howard-Jones 1978; Pickle 1978).

3.3 Record Search Data

The San Diego Museum of Man and the San Diego State Unviersity have a number of sites recorded within and surrounding the right-of-way which may be impacted by new construction. Those sites have been discussed in general in the previous subsections and are located on maps and described further in Attachment 5 of this report.

Additional record search data covering the entire length of the proposed San Onofre to Encina 230 KV right-of-way have also been received from the above institutions, as well as from the California State Office of Historic Preervation. Responses to these additional requests and consdieration of these resources in light of the proposed project are also appended to this report as Attachment 5. The information obtained through WESTEC Services' record search effort are summarized in the following sub-paragraphs.

3.3.1 San Diego State University and San Diego Museum of Man

WESTEC Services, Inc. has completed a thorough review of pertinent record data from those institutions and agencies possessing such data. The Society for California Archaeology District 11 Clearinghouse at San Diego State University forwarded a complete record search for the entire San Onofre to Mission right-of-

way which is included in Attachment 5 to this report. Similar data were requested from the San Diego Museum of Man and are also contained in Attachment 5.

3.3.2 University of California, Riverside/Los Angeles

Data from San Diego State University and San Diego Museum of Man constitute a complete inventory of officially recorded archaeological sites in, or adjacent to, the transmission corridor. Communication with the University of California, Riverside (Kaye White 1978:Personal Communication) and with the University of California, Los Angeles (Martin Rosen 1978:Personal Communication) confirmed the completeness of our inventory. Both of these institutions reported that San Diego State University was the official clearinghouse and that records kept at Riverside and at Los Angeles were incomplete duplicates of the larger, more updated records at San Diego State University.

3.3.3 National Register/California Landmarks

The records at the California State Office of Historic Preservation indicated that several State Landmarks and National Register sites were located in the general vicinity of the corridor. Our review of the data provided in their letter dated August 31, 1978 is as follows:

- CLS No. 616/National Register Las Flores Adobe and Las Flores Site are located approximately one and one-quarter miles west-southwest of the San Onofre to Encina Hub corridor.

- CLS No. 784, El Camino Real, is the recorded location of an early road/trail system. Throughout western San Diego County much of this historic road has been incorrectly recorded as following old Highway 101 along the coast. Actually the route was considerably farther inland near the present day El Camino Real between Carmel Valley and the San Luis Rey River. At the San Luis Rey River the original El Camino Real continued an inland route past the Mission San Luis Rey, across the high mesas east of Ysidora Basin, in Windmill Canyon, down to the Santa Margarita River

near the Home Ranch and then followed a route similar to present-day Basilone Road until it left San Diego County.

The San Onofre to Mission line is contiguous to old El Camino Real from Buena Vista Creek to the San Luis Rey River along an approximate four mile stretch. The corridor crosses the probable route of El Camino Real within Carroll Canyon, above Agua Hedionda near Rancho Santa Fe, and above Rose Canyon.

- Santa Margarita Ranchouse is located within Camp Pendleton more than two miles northeast of the corridor route.

- San Luis Rey Mission Church is situated one mile northeast of the transmission corridor as it crosses the San Luis Rey River.

- La Christianita, California Historical Landmark #562, is located several miles north of the generating station.

4.0 TECHNIQUES OF ARCHAEOLOGICAL INVESTIGATION

4.1 Field Survey

The survey techniques employed in this study conform with the guidelines and requirements of the Society for California Archaeology (King et al. 1973) and with those set forth by the National Park Service in their "Guidelines for the Preparation of Statements on Environmental Impact on Archaeological Resources."

On-foot reconnaissance of the transmission line right-of-way during current investigation started in the most northerly aspect of the northenmost section of the project area. Traveling south between the right-of-way boundaries, two 2-person teams transversed each previously unsurveyed segment (in parallel, zig-zag fashion) of the existing right-of-way. As shown in Figures 2-1 through 2-5, these areas included the San Onofre Nuclear Generating Station and the existing southeasterly right-of-way to the San Luis Rey Substation. The survey resumed at the Encina Substation, and continued east along the right-of-way to the Encina "Hub" (approximately 1.5 miles). Existing access roads, areas below existing transmission lines and towers within the right-of-way were also thoroughly examined during field investigation. Archaeological resources were tentatively marked on survey maps (scale: 1 inch = 2000 feet) and nearby natural features (i.e. trees, tall shrubs) were flagged to facilitate a later field check.

All archaeological resources located during the course of the intensive field survey were subsequently field checked. The secondary field-check phase included all previously recorded and newly discovered sites. This included compiling new site record forms or updating previous site information and evaluating the cultural assemblage and areal extent. All site information has been recorded with the San Diego Museum of Man and San Diego State University, Department of Anthropology. A photographic record was compiled and sketch maps were prepared to include extent of site area, general topography, nearby roadways and other identifiable man-made features.

Additionally, each of the conductor stringing operation locations (puller and reel) was subsequently field checked to include a reinvestigation of possible cultural resources and evaluation of impact upon any archaeological sites within said locations.

4.2 Photographic Record

A photographic record of each site encountered within the study area was compiled. Photographs portray those features or remains comprising the most substantial or outstanding aspects of each site, as well as the general setting surrounding each resource.

Camera equipment employed during this process consisted of a 35mm single lens reflex camera Vivitar. Kodacolor II color print (ASA 100) film was used for the majority of photographs taken. Photography record forms were used to document each exposure, and these records (along with the negatives) are on file.

4.3 Survey Limitations

Portions of the subject right-of-way surveyed for the current study are covered by dense, drying, ruderal grasses. This flora obscures the surface soils from scrutiny in all but the most recently disturbed areas. For this reason, recently graded access roads, cleared areas around existing power poles, game trails, and other portions of the subject property not blanketed by a dense layer of drying grasses were intensively scrutinized.

5.0 FIELD INVESTIGATION RESULTS

5.1 Survey Results

The results of the current intensive archaeological/historical field survey of the proposed 230 KV transmission line project between the San Onofre and Encina Generating Stations were positive. Four previously recorded archaeological sites and one artifact isolate were found within the right-of-way boundaries, as shown in Figures 2-1 through 2-5.

Additionally, results of two previous field surveys of portions of the same proposed San Onofre to Encina 230 KV right-of-way scheduled to receive construction impacts (WESTEC 1978a; WESTEC 1978b) were also positive: nine archaeological sites were encountered within or adjacent to the right-of-way boundaries. Five artifact isolates were also noted. Locations of these sites are shown in Figures 2-1 through 2-5.

No historic sites were encountered within the proposed San Onofre to Encina 230 KV transmission line project.

Location and description of all archaeological sites encountered during previous and current field investigations of the project area are detailed in the following subsection and in Table 1. Reference is made to each site's location in relation to the project area, each site's apparent surface extent, and the general condition of each site's resources. Where appropriate, disparities between data obtained through an examination of record searches and that which was noted in the course of the field survey are also discussed.

5.2 Description of Archaeological Resources

- SDi-4538: Discovered in 1960 by Speegle and Ezell, this La Jollan site is described as a midden deposition containing an abundance of shellfish remains. One human burial was exposed by a stream cut and a surface collection was performed, although no artifact description was completed. The site is located at the mouth of

Table 1

ARCHAEOLOGICAL SITES ENCOUNTERED DURING FIELD INVESTIGATIONS OF THE PROJECT AREA

San Onofre to Encina August 1978	San Onofre to Mission October 1978	Current Study December 1978
W-1527 (SDi-5455)	W-1806	SDi-4538
W-120	W-1778	W-1833
	W-1779	W-119
	W-1780	W-121
	W-1781	Isolate Artifact (1)
	W-1782	
	W-1777	
	W-120	
	Isolate Artifacts (5)	

Horno Canyon just northeast of Interstate 5, within the Camp Pendleton Marine Corps base.

During the current field investigation the site area was revisited. Several artifacts including a chopping tool and flake were observed as well as shellfish remains consisting of Chione sp. and Pecten sp.. At this time, it was noted that site SDi-4538 was located directly beneath transmission lines that span Horno Canyon and directly to the southwest of the project right-of-way. The site area has been impacted severely by military construction and maintenance of a road leading into Horno Canyon. Dimensions for this resource were incalculable due to the disturbed nature of the area.

- W-1833: This site is located on the north side of the San Luis Rey River centered on a small knoll east from a SDG&E power transmission line and immediately adjacent to the right-of-way (Franklin 1978). SDi-5131 (adobe) is one-quarter mile to the southwest. The river drainage is to the south/southeast 100 meters. The artifact assemblage is comprised of manos, chopping tools, Tizon Brown Ware fragments, hammerpounders, some flakes, one metate fragment, historic porcelain and glass. The inventory is not extensive and was not present on the surface in large amounts. Species of shellfish (Chione californiensis) were observed at the base of the knoll on the southwest fringe, with occasional fragmented shell on the knoll itself. The site measures 60 meters northeast to southwest, by 40 meters northwest to southeast. Ruderal grasses obscured the ground, but artifact visibility was nonetheless adequate. Site soil was an expansive clay/loam and was cracked in most areas. There was no obvious soil discoloration indicative of a rich midden. The presence of old historic glass and porcelain may be linked with SDi-5131, or SDi-5133, but that area of investigation was not pursued at this phase.

- W-1527: Discovered in 1977 by Richard Norwood, this archaeological site is also recorded with San Diego State University as SDi-5445. It has been described as a light shell scatter covering an extensive area. No other cultural debris were observed,

and ground cover (weeds) was described as heavy (Norwood 1977). The site is located north of Mission Road, west of El Camino Real, and east of the Valley Drive-In in the City of Oceanside, California.

During an earlier survey of portions of the proposed San Onofre to Encina 230 KV transmission line project (WESTEC 1978a), site W-1527 was revisited and assessed. At that time, it was noted that site W-1527 was located near the 30 foot contour within the natural floodplain of the San Luis Rey River. Although the site did not match the previous configurations recorded by Norwood (1977), extremely thick ground cover definitely limited complete documentation of the site's surface extent. At the request of SDG&E, WESTEC Services, Inc. implemented an accurate mapping and limited data recovery program for site W-1527, designed to refine record information and better assess potential adverse impacts. Trench excavation resulted in the recovery of historic debris, shellfish remains and limited stone tools and flaking debris examined from each test trench coupled with the site's physical setting within a major floodplain, may indicate that the site is comprised of flood deposited debris. Scrutiny of the horizontal and vertical deposition of these materials, coupled with available data concerning the flooding and disruption of the San Luis Rey River floodplain in 1916 (MsGlashaw and Ebert 1918), indicate that natural environmental forces may have deposited these cultural debris rather than deposition by human agency (Carrico 1978).

- W-1806: This site was also encountered during an earlier survey of the existing transmission line corridor (WESTEC 1978b) and is situated near the southeast boundary of the San Luis Rey School, some 600 meters southwest of the intersection of Mission Road and El Camino Real. Primarily a shell midden scatter comprised of a variety of shellfish remains (Chione sp., Aquipecten sp., Ostrea sp., Donax sp.) in a matrix of slightly darkened soils, this resource exhibited only two aritifacts: a single Tizon Brown Ware pot sherd and one quartz flake. Intensive survey in the immediate

region of this site suggests that much of what may have been a large, permanent campsite has already been destroyed by construction of the adjacent school and nearby housing. Scattered shellfish remains were observed along both the southeast and northeast perimeters of the school yard, and the area of site concentration appears along what may have previously been a low-lying knoll (60 foot contour) prior to school site construction. Dimensions for this resource were incalculable due to the disturbed nature of the area.

- W-1778: Located west of El Camino Real and north of Mesa Drive, site W-1778 occupies a previously disturbed ridgeline near the 200 foot contour (WESTEC 1978b). Sighted immediately within and adjacent to SDG&E's San Luis Rey Substation, this resource is comprised of stone tools (four hammer-pounders), flaking debris, scattered shellfish remains (Chione sp., Aquipecten sp., Ostrea sp., Donax sp.) and darkened soils. Dimensions for this resource were calculated as being 40 meters (131 feet) by 30 meters (98 feet), although the site may have been larger prior to the impacts of construction related to Mesa Drive and the substation.

- W-1779: Situated on the toe of a west-facing knoll overlooking Loma Alta Creek, site W-1779 occupies some 1,050 square meters (35 x 30 meters) between the 125 and 150 foot contours. Noted during a previous study (WESTEC 1978b) were thousands of shellfish remains, primarily Donax sp., although at least one clamshell (Saxidomus sp.) was observed. Additionally, fire-cracked rocks were found in several disjunct portions of the site.

Site disturbance has occurred, but is not immediately measurable. SDG&E transmission lines lie along the site's western boundary, while the most prominent topographic feature on or near the site (to the east) has been graded flat.

- W-1780: This resource was encountered within and immediately adjacent to the subject right-of-way on the eastern side of El Camino Real between Oceanside Boulevard and Vista Way (WESTEC 1978b). The two loci identified for site W-1780 are

situated between the 200-220 foot contours, and occupy an area some 60 meters (196 feet) by 30 meters (98 feet), and 15 meters (49 feet) by 10 meters (33 feet) in size. Artifacts and cultural debris noted during the course of this study include hammer-pounders, chopping tools, and numerous manos; shellfish remains (Chione sp., Aquipecten sp., Donax sp., and salt water mollusk), fire-cracked rock, and dark, black soils were also observed.

Site W-1780 has received intensive disturbance from nearby development, which has obliterated approximately 0.25 acres of site material. Prior periodic grading associated with SDG&E transmission easement roads has also impacted the site, cutting into as much as one-half meter (depth) of the site's surface.

- W-1781: Occupying a ridgeline just above the 100 foot contour, site W-1781 is situated just inside the northernmost portions of the City of Carlsbad corporate boundary. The site is comprised of two separate areas exhibiting artifact concentrations, while a thin, scattered layer of cultural debris may be seen connecting the two. Site area has been estimated as 15,000 square meters, measuring 50 meters (164 feet) by 300 meters (984 feet) on a side.

Artifacts observed on the surface include two quartz projectile points, one bifacial blade fragment, one domed scraper, felsite flakes, bifacial andunifacial manos (one each), numerous (10+) hammer-pounders, two pot sherds and chopping tools. Faunal remains consist of Chione sp., Aquipecten sp., Ostrea sp., Donax sp., and numerous mammal bone fragments.

SDG&E's San Onofre to Mission right-of-way is some 30 meters east of this resource. Previous site disturbances include an earthen water reservoir, a modern house foundation, past agricultural activies, and SDG&E access roads.

- W-1782: Discovered within the immediate path of the subject right-of-way on the northern side of Agua Hedionda slough, site W-1782 occupies the toe and south-facing slope of a low-lying knoll between the 10 to 60 foot contours (WESTEC 1978b).

Observed on the surface were chopping tools, one bifacial mano, flakes, one hammer-pounder, fire-cracked rock, and shellfish remains (Chione sp., Aquipecten sp) scattered over an area measuring some 80 meters (262 feet) by 50 meters (164 feet) — or 4,000 square meters in size.

Previous adverse impacts to this resource consist of easement roads, transmission poles and towers, and grading (in the northeast portion of the site). Additional impacts created by foot, horse and ORV traffic have also occurred.

- W-1777: Overlooking Agua Hedionda slough to the west, site W-1777 occupies a low knoll (20-60 foot contours) extending westward from Evans Point to the east. Previously impacted by existing SDG&E rights-of-way (including the present subject corridor), agricultural activities, and access roads, the site has been reduced to 2,400 square meters in size, measuring some 40 meters (131 feet) by 60 meters (197 feet) on a side.

The site consists of a light shell midden and lithic scatter exhibiting flakes, chopping tools, a scraper, fire-cracked rock, and shellfish remains (Chione sp., Aquipecten sp.) and salt walter mollusk (WESTEC 1978b).

- W-120: Discovered during the 1920's and recorded by Malcolm Rogers in 1929, the site was described as a highland permanent camp with manos, metates, and fire hearths. Recent survey of this region for San Diego County's Comprehensive Planning Organization identified at least one locus of W-120 on the higher portions of the mesa near the 100 to 160 foot contours (Carrico 1978:personal communication).

During the two previous investigations (WESTEC 1978a; WESTEC 1978b), site W-120 was revisited, and a second locus was observed. Located at a lower elevation than the previously described locus, W-120A exhibited flakes, one mano and mano fragment, fire-cracked rocks and shellfish remains (Chione sp., Donax sp.) scattered across an area measuring some 20 meters (65 feet) by 15 meters (49 feet) in size.

Site W-120 (both loci) is presently being impacted by easement roads, wooden transmission poles and steel lattice towers, and a large community of apparently homeless hispanic-speaking peoples.

- W-121: This archaeological site was originally encountered by Malcolm Rogers. Described as a large multi-component site (San Dieguito, La Jollan, and Diegueño), comprised of numerous shellfish remains, fish bone, charcoal, stone tools, flaking debris and pottery sherds.

Scrutiny of this area during current field survey revealed the presence of darkened soils, numerous stone tools, flakes and flaking debris, manos and shellfish remains. Site area extends approximately 20,000 square meters at an elevation of 140 feet above sea level on a low ridge system southeast of Agua Hedionda Lagoon. Site W-121 lies directly below and to the north of the existing SDG&E right-of-way. Site continuity has been disturbed by tomato cultivation and various access roads.

- W-119: Discovered in the 1920's by Malcolm Rogers, this archaeological site was described as 4,047 square meters of midden concentration and prehistoric structures including cobble hearths and one cobblestone sweathouse. The artifact inventory consisted at that time of numerous stone tools, flakes and flaking debris, metates and manos. Limited subsurface testing of the sweathouse by Rogers revealed the presence of an earlier human flex burial..

During the current investigation, site W-119 was revisited. The site area is situated directly within and immediately to the north and south of the existing right-of-way. Field survey revealed the presence of darkened soils, shellfish remains, flakes and flaking debris, stone tools, and numerous unifacial and bifacial manos. Shellfish remains were comprised of Chione sp. and Pecten sp. fragments. Present site extent was calculated at approximately 22,500 square meters although flower cultivation obscured much of the area. Site disturbance has occurred, but is not immediately measurable. Disturbances include past and present farming activities and SDG&E

access roads. It is possible that site W-119 may have at one time been contiguous with nearby sites W-120 and W-121 as a larger village location.

- Isolates: During the course of the previous field investigations of the project right-of-way and during the current field survey, isolated artifacts that appeared to be without direct context with other artifacts or features were noted. The proximity of Isolates 2 through 5 to archaeological sites would suggest that prior to as yet undetermined disturbances, these isolates could have been contained within one or another of the archaeological sites discussed in the previous subsection.

During the current field investigation an isolated chopping tool and four extremely weathered shell fragments were noted within the subject right-of-way and immediately adjacent to a transmission pole northwest of the San Luis Rey River. No other artifacts were encountered and no archaeological site has been recorded in the vicinity.

An isolated mano and several Donax sp. shell were noted along the subject right-of-way north of Mission Road. These materials were most probably associated with site W-1527 (documented in the report for the proposed San Onofre to Encina 230 KV circuit - WESTEC 1978a) prior to the use of this area for agricultural activities.

A single Chione sp. shell was noted on a low-lying knoll 180 meters north of site W-1806 (WESTEC 1978b). This isolate may have been associated with what has already been described as a heavily impacted, and highly disturbed archaeological site.

A single basalt scraper was noted immediately south of archaeological site W-1779 and was probably associated with activities at that site.

Two isolates were also noted near site W-1781 (WESTEC 1978b); one lying 200 meters northwest, and another situated some 100 meters southeast of the site. These were identified as a basalt hammerstone-pounder and a small domed felsite scraper, respectively. It is highly probable that these isolates were more closely associated to the principal site locus prior to recent intensive disturbance.

6.0 ARCHAEOLOGICAL RESOURCE ANALYSIS AND SIGNIFICANCE

6.1 Resource Analysis

The cultural resources present within and adjacent to the proposed San Onofre to Encina 230 KV transmission line project appear representative of a well-developed hunting and gathering group (or groups) exhibiting a limited range of diverse technologies. These resources are herein analyzed in terms of their observable qualities relative to the generalized data base for prehistoric cultures in the San Diego County region.

As previously discussed, intensive survey of the project right-of-way revealed the presence of 13 archaeological sites. Food processing, as evidenced by milling technologies, was noted at 62 percent of the sites (W-120, W-1527, W-1780, W-1782, W-1833, W-119, W-121 and W-1781), while each site subjected to study exhibited rather extensive surface scatters of at least four species (or subspecies of salt water shellfish). Stone working, or evidence of sharpening, using, or making stone tools, was observed at every site with the exception of sites W-1779 and SDi-4538 (85 percent). The presence of pottery, as evidenced by fragmentary remains, was noted only at sites W-1527, W-1781, W-121 and W-1833 (23 percent).

Prehistoric use of land and, therefore, settlement patterns, are dependent upon several factors, including lack or presence of natural, exploitable resources, nearness to water, avoidance of areas considered taboo or beyond tribal/band boundaries, and site specific terrain. Generally, one can anticipate finding large shell midden sites within a few miles of the beach/lagoon zone because it is often more expedient in terms of search and preparation time to migrate to a major seasonal food source than it is to transport the resource back to a camp or village located several miles distant. To maximize the quantity and type of exploitable resources, large camps or villages were often situated in locales central to several major resources. Establishment of base camps afforded prehistoric peoples the opportunity to maintain a semi-permanent

central base from which they could extensively exploit the varied surrounding resources.

A group of people who operate from a semi-permanent base camp often form "a community that spends part of each year wandering and the rest at a settlement of 'central base,' to which it may or may not consistently return in subsequent years" (Beardsley 1950:138). The concept of central based gatherers is probably applicable to the prehistoric peoples who occupied the sites currently under discussion. If this is the case, these archaeological resources may represent small, satellite camps or special use areas that were occupied sporadically as support camps for larger, more permanent camps or villages located nearby. Specifically, the quantity and type of artifacts at each site are indices to the type and intensity of human activity conducted there.

6.2 Archaeological Significance

In recent years archaeologists, cultural historians and native Americans throughout California generally, and San Diego County specifically, have been formalizing previously ill-defined concepts of site significance (Moratto and Kelly 1976:193-201; Lipe 1974:213-45; May 1976; California Legal Services 1977:2-5, 8). This redefinition and clarification of basic premises has led to a more cohesive statement of significance, although several major problems still exist, e.g. the apparent conflict between some native American values and scientific research methods.

Any evaluation of significance as it may apply to cultural resources must take into account several considerations. Past criteria for judging significance have often been far too oriented toward saving or salvaging only sites or features which represented the finest, largest or most unique cultural resource. As a result of this "Cadillac" approach, cultural resources have frequently been destroyed without regard for their research potential or resource value.

In many areas large Victorian houses and structures indicative only of upper class life have been saved and restored, while at the same time little attention has been

focused on preserving elements of middle or lower class life. Similarly, until recently, archaeological sites representing major village complexes, ceremonial sites or obvious occupational areas have been more likely to receive attention than have quarry sites, bedrock grinding stations or temporary campsites (Talmage et al. 1977).

If this type of highly selective assessment of significance were allowed to continue, future cultural historians would be left with a seriously skewed data base without hope of ever replacing or reconstructing the serious gaps which would exist. In an effort to avoid this self-perpetuated destruction of resources many cultural resource managers, government agencies and field researchers have begun to take a more critical assessment of significance.

A recent article by Moratto and Kelly (1976:193-202) has suggested that significance of cultural resources should be considered in light of historic, scientific, ethnic, public, geographic, monetary and legal significance. Rather than representing individual approaches to ascertaining significance, use of these criteria are employed as interdependent factors. The following assessment of significance for the cultural resources in the study area uses the system suggested by Moratto and Kelly as well as local levels of significance.

Archaeological sites can be evaluated for significance based on their ability to: (1) better explain or document a specific historic event or movement; (2) further our understanding of native American ethnic values; (3) preserve or maintain native American spiritual values; (4) transmit a feeling of, or a direct link to, the prehistoric past; or (5) represent a particular cultural pattern within a geographic or regional context.

The condition or integrity of a site must be considered when assessing significance. A site that could have many of the attributes noted above may have been severely disturbed to the point that its significance has been either lessened or destroyed.

6.2.1 Explanation or Documentation of Historic Events or Movements

Archaeological sites can be sources of data about a specific historic event or movement if artifacts or cultural debris indicative of that event or movement are present. An example would be excavation of trash dumps associated with the early Anglo-American period, circa 1860. Stratified trash mounds might document the gradual change and historic movement from a largely Hispanic-Mexican economic system to an American-British system, as evidenced by changing ceramic wares and bottles, increase in machine-made goods and decrease in Mexican-made goods.

More specifically, a recent surface collection and limited subsurface archaeological test near Rancho Bernardo aided historians in correctly identifying the actual location of General George Kearny's ill-fated battle at Mule Hill (Schreier 1975:19-22). Prior to Mr. Schreier's investigation, the exact battle location was hotly disputed. Thus, an apparently insignificant scatter of rusted metal and leather pieces became important as a major source of documentation about a significant historic event in early American California.

None of the sites in the current study area can be said to represent or document specific historic events or movements.

6.2.2 Native American Ethnic Values

An archaeological site or natural feature can provide information about native American ethnic values by substantiating land claims or antiquity of territorial possession. Recent damage suits insituted by native Americans against water districts and the Federal Government have been won or lost partially on the basis of archaeological/anthropological data (Ezell 1961; Ezell and Carrico 1975). In that sense, an archaeological site can be a significant resource as an ethnic reference point, as proof of prehistoric occupation or as a source of ethnic identity.

At this stage of research, none of the sites currently under study appear to contain data or resources that could fulfill the above requirements. A majority of the

sites are probably not ethnically associated with contemporary native people. Additionally, the site appears to lack the spectrum of data necessary to document ethnic identity.

6.2.3. Native American Spiritual Values

Native American spiritual values may make an otherwise seemingly insignificant site highly significant. The presence of sacred crystals, human burials or artifacts associated with religious practices can dramatically increase the threshold of site significance. Thus, spiritual or sacred significance can transcend the physical manifestation of a site. For example, although a site may be severely disturbed to the point that it possesses only minimal scientific value, the presence of human bone or sacred stones must be considered as evidence of possibly significant cultural values.

Archaeological analysis of surface debris indicated a lack of those artifacts associated with spiritual values. Ethnographic data and consideration of living native Americans would aid in this assessment and will be evaluated if input from native representatives is received.

6.2.4 Direct Link or Bond with the Past

Large shell middens, bedrock pockmarked with grinding holes, and fragments (sherds) of prehistoric pottery on the surface of a site can constitute a link or bond with the distant past. Adults as well as children can thrill to the experience of holding a 9000 year old stone tool or feeling the 500 year old thumbprint indentations in a clay fragment. Outdoor museums or sites left in open space can relay a sense of the past not often found in textbooks.

The significance of visually apparent sites is that they afford an opportunity for interested citizens to see, touch and feel a glimmer of the past. Increased urbanization and concomitant destruction of such educationally valuable sites reduces the opportunity for the public to view these sites and thus increases the significance of those that remain.

Past impacts, the irregular distribution of surface debris and the absence of aesthestically or visually appealing features of sites may negate the possibility that these sites as a whole can be seen as direct, tactile links with the past. However, certain features, e.g. bedrock miling complexes, may serve as tactile links although the surrounding site is destroyed or badly impaired.

6.2.5 Sites as Sources of Potentially Unique Scientific Data

A final measure of significance is the importance of a site in explaining or clarifying regional/geographic archaeological uniqueness. The effects of the southern California coast upon native populations were profound. The availability of fresh waters, the proximity to easily exploited lagoons, the lushness of the canyons, and temperate climate provided an environmental setting unlike any other.

The archaeological sites in the coastal zone and on adjacent plains provide a chance to study intense settlement patterns, the dietary adaptations of prehistoric peoples, the social mechanisms associated with semi-maritime cultures, and the gradual depopulation of the coast. As coastal land becomes more urbanized, coastal archaeological sites are lost with little or no data recovery. These resources are truly nonrenewable and sufficiently different to warrant at least minimal scientific testing.

The observed assemblages of cultural debris at sites W-1777 through W-1782 (inclusive), W-120, W-119, W-121, W-1527, W-1806, W-1833, and SDi-4538 may represent ill-defined, but probably unique and significant cultural resources. The question of significance in relation to archaeological resources can no longer be answered solely in terms of scientific value. The significance of any given archaeological site is multifaceted; consideration of only one of these aspects is wasteful at best. As suggested by Moratto and Kelly (1976:193-202), the significance of archaeological resources should be assessed in several terms, including: research value to the scientist; aesthetic, cultural and economic values to the community at large, and; cultural heritage values to present-day native American peoples.

As resources for scientific inquiry, the 13 archaeological resources identified during the current study may possess information about prehistoric lifeways including diet, seasonality, lithic technology, settlement patters, regional dispersal and cultural change. Investigation of these archaeological locales which determines site function, provides data relative to inter-site relationships or refines the determination vis-a-vis cultural affinity would be a significant contribution to the prehistory of San Diego County.

Local native Americans may also view these resources as culturally significant to further documentation of their rich heritage, although no materials or locations were observed which might immediately be identified as displaying aspects of spiritual, mythological or religious importance.

6.3 National Register Evaluation

Archaeological resources in the study area vary from sites apparently possessing little scientific, cultural or aesthetic value, to sites that may be eligible for the National Register. At this time it is not possible to fully assess the archaeological sites in the study area by National Register Criterion (d). In brief, Criterion (d) states that properties may qualify for the National Register if they have yielded or might yield data or information significant to interpreting the prehistory or history of an area. Although each site in the study area can no doubt yield some information, it appears that two sites may warrant National Register status.

These two sites are SDi-4538 and W-120. Site SDi-4538 is located within the Camp Pendleton Marine Corps base and within the transmission corridor although not in a construction area. Site W-120 is located adjacent to the Encina Hub witnin an area slated for installation of a single transmission pole.

6.3.1 Site SDi-4538

Site SDi-4538 as a whole is probably eligible for National Register status. The known presence of portions of at least one human skeleton coupled with the large

areal extent of a midden deposit in an area that has received only limited archaeological investigation is evidence that this site may yield important data. Specifically the possibility of Juaneño rather than Luiseño cultural affinity may be examined at SDi-4538, or, if the site proves to be pre-Late Milling, an opportunity to document Early Milling patterns, e.g. Chumash versus La Jolla, may present itself.

The transmission corridor traverses a small, and severely damaged, portion of SDi-4538. Any further assessment or evaluation of SDi-4538 as a whole should involve the Department of the Interior and the responsible officers within the Marine Corps base itself. The bulk of the undisturbed portion of SDi-4538 is well-beyond the study area and removed from SDG&E jurisdiction. As currently proposed, no construction or new ground activity will result from the proposed project.

6.3.2 Site W-120

Site W-120 is one of several large archaeological sites situated along the upland terraces of ancient Agua Hedionda. Malcolm Rogers noted that this site contained artifacts from the late San Dieguito culture, the late La Jolla peoples and from the lasst group to inhabit, San Diego County, the Late Milling peoples (Northern Diegueño?). Test trenching at this site by Malcolm Rogers revealed cultural debris to almost one meter in depth (Rogers n.d.).

In the more than 50 years since Rogers recorded W-120, the two-acre sporadic midden site has been relic collected, randomly excavated and criss-crossed with dirt roads. Local relic collectors boast of the quantity and variety of artifacts that they have spirited away from this site. Yet, in spite of all these impacts, the site retains large unmolested areas worthy of future assessment and investigation.

In a soon to be published cultural resource inventory of the Carlsbad region, the Comprehensive Planning Organization (CPO) recommends that W-120 be considered for inclusion to the National Register. That recommendation is based on the extent of the site, the cultural variation present there, the location of the site on the supposed

"boundary" between Northern Diegueño and Luiseño peoples, and the research potential possessed by the site. Site W-120 was one of 22 from a total of 103 archaeological sites noted in the CPO study area which were recommended for National Register inclusion.

6.4 Summary of Significance

All present-day human populations have evolved from pre-historic hunters, gatherers or foragers more similar to the ancient inhabitants of southern California than dissimilar. The basic human needs of food, water and shelter were fulfilled in similar ways along the prehistoric coasts of France and Africa, as well as southern California. Salvage and preservation of significant archaeological resources can provide insights into prehistoric life. To learn about the native peoples of the survey area is to learn more about our own ancient roots.

7.0 POTENTIAL ADVERSE IMPACTS

Based on current survey and record search data and preliminary construction plans, the following impacts may adversely affect known cultural resources within the proposed project area.

7.1 Direct Adverse Impacts

For the purpose of this study, direct impacts are defined as those alterations in landform or altered land use that are a function of proposed installation of new wooden structures, replacement of existing wooden structures and the proposed impact zones due to the addition of a circuit to existing towers. All new structures will be constructed within existing rights-of-way and, where possible, adjacent to existing towers.

7.1.1 Historic Resources

With the exception of the adobe ruin , and the recurring presence of El Camino Real mentioned earlier, no sites of historic significance or proven National Register status are known within or adjacent to the immediate project area. El Camino Real is recognized as California Historic Landmark number 784; the adobe ruin is as yet officially unrecognized. No known historic resources are within proposed impact zones or areas of new construction.

7.1.2 Prehistoric Resources

As discussed in Section 1.1, the major areas of new construction for the proposed project and, thus, the areas with the greatest potential for being adversely impacted, are the 0.6 mile segment of the right-of-way just east of the Oceanside Airport and the area located directly at the Encina "Hub" (Figures 2-4 and 2-5). These areas contain archaeological sites W-1527 and W-120 respectively (Figures 2-4 and 2-5), which could be adversely impacted by the proposed project.

Additional direct adverse impacts may occur during addition of one circuit throughout the existing San Onofre to Encina 230 KV transmission line right-of-way. Where vacant positions currently exist on the lattice towers, the new circuit would be pulled into place using specific conductor (puller and reel) stringing locations (proposed impact zones) as previously discussed in Section 1.1 and shown in Figures 2-1 through 2-5. Archaeological site W-1778 is situated within a proposed staging location and could be adversely impacted by the proposed project (Figure 2-4). However, as discussed in Section 8.0, avoidance of the site W-1778 area can be accomplished by use of an existing paved access road (Mesa Drive) preventing further site disruption.

The remaining archaeological sites described in this report (W-1806, W-1779, W-1780, W-1781, W-1782, W-1777, W-119, W-121, and SDi-4538) will not be adversely impacted by proposed new construction.

8.0 MITIGATION MEASURES

The following measures are suggested to minimize or limit potential adverse impacts to the cultural resources, specifically sites W-1527, W-120 and W-1778, located directly within existing transmission line areas scheduled for new construction or conductor stringing operation sites:

Phase I: Controlled, accurate instrument surveys for the locations and perimeters of these cultural resources within the SDG&E right-of-way or areas of potential impact will be made, and the data transferred to the appropriate SDG&E project maps (scale: 1 in. = 200 ft). Ground cover surrounding these resources ought to be sufficiently scrutinized and cleared to allow more accurate definition of each site's horizontal extent. Such a measure will provide a more accurate assessment with regard to the potential for direct adverse impacts.

Phase II: Based on the results of instrument surveys, SDG&E engineers for the proposed project should assess the possibility of avoiding these archaeological resources proven (by Phase I procedures above) to exist within sensitive portions of the project right-of-way, i.e. within areas scheduled for new transmission towers/poles, SDG&E access roads, and construction of winching/staging areas. This measure would allow SDG&E to further implement avoidance procedures which might better preserve the affected resources and preclude archaeological testing procedures.

Phase III: For those cultural resources located in portions of the project site where avoidance is a viable engineering alternative, SDG&E's project engineers will design the project so that no construction will occur within or in the immediate vicinity of those resources. Within the constraints of viable design, SDG&E would incorporate into the project construction specifications a clause prohibiting any construction activities (including equipment staging, material storage, and construction of access roads) within or in the immediate vicinity of

these archaeological sites. Specifically, the archaeological site area W-1778, located directly within a proposed conductor stringing operation site, could be avoided by use of an existing paved road ((Mesa Drive). All equipment staging and circuit addition operations could be maintained on Mesa Drive, thereby avoiding contact with the site area and further site disruption.

Phase IV: For those cultural resources located in portions of the project where avoidance is not feasible, the results of contacts with appropriate native American representatives will be used to ascertain the existence of any religious or sacred values associated with those resources. If such values are found, further discussions would be held to determine an acceptable course of investigation/mitigation. Alternatives to the general methods described below could include capping to preserve the resource, or the attendance of a native American representative during any subsurface testing.

The general method of investigation will include surface collection and controlled, limited subsurface testing to assess those resources' subsurface extent. A combination of testing methods, to include mechanical trenching (e.g. ditch witch) and hand excavated test pits (i.e. 1 x 1 meter square) should be implemented to assess the nature, extent, and condition of any existing subsurface cultural deposits. All excavated (mechanical and hand-dug) soil should be passed through one-eighth-inch mesh hardware cloth and scrutinized by professional archaeologists to ascertain the presence or absence of subsurface cultural debris. Completion of the subsurface testing procedures should be followed by a timely report detailing the fieldwork, results, disposition of cultural materials removed from the subsurface, and necessity for additional testing or other mitigation measures, if applicable.

It is recommended that the above described phased mitigation program, Phases I through IV, be conducted at archaeological site W-120. Archaeological

site W-120 could be avoided by new construction if the proposed single new steel tower at the Encina "Hub" is moved from contact with the site area. Dependent upon the degree of movement possible within construction specifications, a controlled instrument survey (Phase I) for the perimeters of site W-120 could define nearby locations not considered culturally sensitive at which new construction could proceed (Phases II amd III). Limited subsurface test excavation (Phase IV) may also be necessary at the proposed single pole location to ensure avoidance of any subsurface cultural deposition.

Phases I through IV for mitigation of adverse impacts to archaeological site W-1527 have been completed (Carrico 1978). Following limited subsurface testing at W-1527, as requested by SDG&E in October 1978, specific mitigation measures necessary for additional testing were suggested (Carrico 1978:Section 9.0). Briefly stated, a controlled data recovery and resource avoidance program was proposed which should include controlled field test excavation and subsequent laboratory analysis for those small (less than .05 percent of the total estimated site area) portions of site W-1527 which cannot be avoided by new construction.

Specifically, a 4 meter square test unit should be excavated at each proposed pole location within site W-1527. As currently proposed, this would entail excavation of 4 units or a total of 16 square meters. Sixteen square meters would comprise a 100 percent sample of the primary impact area and should constitute an adequate sample of any endangered resources.

Following excavation and analysis of any subsurface cultural debris within the impact zone at W-1527, a final report should be prepared. The report should discuss rationale for the study, consideration of native American values and present the data gleaned from the excavation.

9.0 CONCLUSIONS

The archaeological resources encountered within the San Onofre to Encina 230 KV transmission line right-of-way include some which are unique and significant cultural remains. The presence of these resources in an area which possesses the possibility for answering myriad questions about past lifeways enhances their significance and scientific value. Specific steps have been recommended to mitigate potential direct adverse impacts upon those resources within the right-of-way boundaries which could be affected by scheduled new construction or conductor staging operations. If these recommendations are implemented as noted in Section 8.0, valuable archaeological resources, specifically sites W-1527, W-120 and W-1778, will not be lost nor impaired.

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Attachment 1

RESUMES

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Experience:

1977 Consultant, WESTEC Services.

1973-1978 Senior Investigator for Cultural Resources Inventory of Camp Pendleton, U.S. Marine Corps Base, California.

1973-1976 Mayor's Sciences Resources Panel, San Diego.

1971 Consultant, Colorado River Indian Tribes Museum excavations in the ruins of La Paz, Arizona.

1971-1975 Director, Applied Archaeological Program, Department of Anthropology and San Diego State University Foundation.

1970-1974 Director, excavation at Bancroft Ranch House, Spring Valley Historical Society.

1969 Summer excavation in Sweden (Viking cemetery).

1968 Consultant, Peace Corps Training Program.

1966-1968 Visiting lecturer, American Anthropological Association.

1966-1976 Project superintendent, Royal Presidio Excavation Project, San Diego Historical Society.

1964-1965 Visiting anthropologist for Cornell University, Coordinator of the Cornell Andean Research and Development Program in Bolivia, Ecuador, and Peru.

1956 Came to San Diego State College as Assistant Professor of Anthropology, now Professor of Anthropology Emeritus.

1956 Spring and summer, taught part-time, instructor in anthropology at, then, Arizona State College at Flagstaff, Arizona.

1956 Part-time Instructor in Anthropology, Arizona State College, Flagstaff, Arizona; conducted additional salvage excavations for El Paso Natural Gas Company; archaeological survey, El Paso Natural Gas Company Pipe Line route, Ashfork to Glendale, Arizona.

1955	Archaeological Survey, Southern Pacific Gas Line route across the Gila River Indian Reservation, Arizona.
1951	Began working as research anthropologist for the Gila-Pima-Maricopa Indian community.
1950	Carried out archaeological survey for the U.S. National Park Service; archaeologist on the El Paso Natural Gas Company Pipe Line through Arizona.
1949	Assistant excavation foreman, University of Arizona Archaeological Field School at Point of Pines, Arizona.
1948	Re-entered the University of Arizona; granted the Ph.D. in Anthropology, 1956.
1946-1948	U.S. Immigration Border Patrol, Ajo, Arizona.
1943-1946	Served in the United States Navy.
1941-1943	U.S. Immigration Border Patrol, El Paso, Texas and Las Cruces, New Mexico.
1941	Field Supervisor, WPA Archaeological Project, Hillsboro, North Carolina.
1940	Laborer, Temporary Ranger, and Guide, U.S. National Park Service at Tonto, Walnut Canyon, and Casa Grande National Monuments, Arizona.
1939	Field Supervisor, WPA Archaeological Project, Pueblo Grande, Arizona.
1938	Assistant excavation foreman, Sul Ross-Peabody Expedition in the Big Bend, Texas.

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American Anthropological Association (Retired Fellow).

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Archaeological Fellowship, San Diego State University (Advisor).

Arizona Archaeological and Historical Society (Editor, "The Kiva," 1953-1955).

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1976 Professor Emeritus of Anthropology, San Diego State University.

1974 President, Society for California Archaeology.

1969 Thord Gray Fellowship in Sweden, American-Scandinavian Foundation.

1968 President, Southwestern Anthropological Association.

1953 Holiday Fellowship in History, University of Arizona.

1952 Stillhamer Research Grant, American Association for the Advancement of Science.

1937 B.A. with distinction.

1935 A.A. with distinction.

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1965 Magnetic Prospecting in Southern California (with James R. Moriarty, John D. Mudie and Anthony I. Rees). American Antiquity, Vol. 31, No. 1, pp. 112-113, July.

1963 The Maricopas: An identification from documentary sources. Anthropological Papers, No. 6. University of Arizona Press.

1963 Is there a Pima-Hohokam continuum? American Antiquity, Vol. 29, No. 1, pp. 61-66. Society for American Archaeology.

1963 Death of a Society (with Henry F. Dobyns and Greta S. Ezell). Ethnohistory, Vol. 10, No. 2, pp. 105-161. American Ethnohistoric Conference. Indiana University. Reprinted in The Emergent Native Americans: A Reader in Culture Contact - Deward E. Walker, Jr. (editor), Little, Brown and Company, Boston, 1972, pp. 192-217.

1961 The Hispanic Acculturation of the Gila River Pimas. Memoir Series, No. 90. American Anthropological Association.

1960 What were Nixora? (with Henry F. Dobyns, Alden W. Jones and Greta S. Ezell). Southwestern Journal of Anthropology, Vol. 16, No. 2, Summer, pp. 230-258. University of New Mexico Press.

1959 Sonoran Missionaries in 1670 (with Henry F. Dobyns). New Mexico Historical Review, Vol. XXIV, No. 1, pp. 52-54, January, University of New Mexico Press.

1958 An early geographer of the Southwest: Father Diego Bringas. El Museo, Vol. 11, No. 2 (n.s.), May, pp. 18-30. San Diego Museum of Man.

1957 Thematic changes in Yuman warfare (with Henry F. Dobyns, Alden W. Jones and Greta S. Ezell). In: Cultural Stability and Cultural Change Proceedings of the 1957 Annual Spring Meeting of the American Ethnological Society, pp. 46-71.

1957 Fray Diego Bringas, a forgotten cartographer of Sonora. Imago Mundi, Vol. XII, pp. 150-158. Mouton & Co., The Hague, The Netherlands.

1957 The conditions of Hispanic-Pimen contacts on the Pima River. America Indigena, Vol. XVII, No. 2, April, pp. 164-191. Instituto Indigenista Interamericano, Mexico, D.F.

1957 Indians finally get compensation. Editorial, San Diego Union January 26, San Diego.

1956 Spanish leader visited pueblo. Feature article, Arizona Daily Star, February 23, Tucson.

1956 The Arizona section of the San Juan Pipeline (with Wesley L. Bliss). In Pipeline Archaeology, edited by Fred Wendorf, pp. 81-139. Laboratory of Anthropology, Santa Fe, and Museum of Northern Arizona, Flagstaff.

1955 Research in the archives in Mexico, D.F. (with Greta S. Ezell). Arizona Quarterly, Vol. 11, No. 3, Autumn, pp. 251-258. University of Arizona, Tucson.

1955 Indians under the law: Mexico, 1921-1947. America Indigena, Vol. XV, No. 3, July, pp. 199-214. Instituto Indigenista Interamericano, Mexico, D.F.

1955 The archaeological delineation of a cultural boundary in Papgueria. American Antiquity, Vol. 20, No. 4, April, pp. 367-374. Society for American Anthropology.

1955 An artifact of human bone from eastern Arizona (with Alan P. Olson). The Plateau, Vol. 27, No. 3, January. Museum of Northern Arizona, Flagstaff.

1954 An archaeological survey in northwestern Papagueria. The Kiva, Vol. 19, No. 2, Spring. Arizona Archaeological Society, Tucson.

1937 Shell work of the prehistoric Southwest. The Kiva, Vol. 3, No. 3, December. Arizona Archaeological and Historical Society, Tucson.

RICHARD L. CARRICO

Historian
Manager, Cultural Resources Group

M.A. History, San Diego State University, 1976
B.A. Anthropology, San Diego State University, 1975
B.A. History, San Diego State University, 1972

WESTEC Services, Inc., 1973 to present
Archaeological and Historical surveys and excavations, 1970 to present

---

WESTEC Services, Inc.

Environmental impact investigations and accompanying analyses of residential, commercial and industrial project sites' historical and archaeological resources. Investigations include field investigation, mapping, identification of cultural artifacts, and laboratory research. Has conducted archaeological/historical surveys throughout southern California. Has served as excavation director for several archaeological salvage projects. Designated qualified historian and archaeologist by San Diego County Environmental Review Board, and Society of Professional Archaeologists.

San Diego State University

Dig foreman at Bancroft Ranch House site, 1973-74. Completed archaeological-historical investigations for San Diego State University Foundation in conjunction with private developers, the California Department of Transportation and on behalf of the Pima - Papago and Maricopa Indians.

Copley International

Completed primary research on a historical survey of the San Diego Santa Fe Depot for an Environmental Impact Report.

Palomar Community College

Employed as an instructor of Archaeology, 1974-75.

Mesa Community College

Employed as an instructor of Archaeology, 1976 to present.

Archaeological Investigations (Private)

Served as dig foreman on six San Diego North County sites: W-450, W-459, W-551, W-578, LSF-7, and LSF-2. Over 6,000 hours of excavation experience, survey experience and archaeological research.

Publications

Journal of San Diego History, "Identification of Two Burials at the Presidio de San Diego," (Fall 1973).

Petroglyph: Newsletter of SDSU Anthropology Department, "The Bancroft Ranch Site," (Fall 1973); "Archaeology as Art," (Winter 1973).

Indian Historian, "The Wilderness Concept: An Anglo-Ethnocentric View of Over-Reaction," (at press).

San Diego County Archaeological Society Occasional Paper No. 1, "The Bancroft Ranch House: A Preliminary Report," (December 1974).

Journal of San Diego History "Review of San Diego Indians as Farmers by Ted Couro," (Fall 1976).

Papers Presented

"The Impact of the Railroad on Europe, 1848-1860," Phi Alpha Theta Conference, 1972.

"The American Wilderness: A Study in Ethnocentric Over-Reaction," Phi Alpha Theta Conference, 1973.

"The Bancroft Ranch House: From Kumeyaay Village to Anglo Ranch," Society for Historical Archaeology Conference, Berkeley, California, 1974.

"The Romero Burials at the Presidio de San Diego," Society for Historical Archaeology, Berkeley, California, 1974.

"Archaeologists and Developers: A Symposium," Society for California Archaeology, San Diego, California, 1976.

Manuscripts

"The Presidio de San Diego: From Fresh Adobe to Excavated Ruins," manuscript on file at the Serra Museum, San Diego Historical Society.

"An Architectural and Historical View of the Presidio de San Diego Chapel," manuscript on file at Serra Museum, San Diego Historical Society.

Editor of the Archaeological Fellowship of San Diego State University Newsletter and Quarterly Journal, 1973-1974.

Awards

Old Town Historians: Graduate Award for "An Architectural and Historical View of the Presidio de San Diego Chapel."

Professional Affiliations

Society for California Archaeology
Society for Historical Archaeology
Pacific Coast Archaeological Society
San Diego County Archaeological Society
Archaeological Fellowship of San Diego State University
San Diego Historical Society
Pacific Historical Society
Spring Valley Historical Society
Phi Alpha Theta - Honorary Historical Society

LESLEY C. ECKHARDT

Project Archaeologist

M.A. Archaeology, University of the Americas, Puebla, Mexico (pending)
B.A. Anthropology, University of California, Riverside, 1975

WESTEC Services, Inc., 1977 to present
Archaeological and Historical surveys and excavations, 1971 to present

---

WESTEC Services, Inc.

Environmental impact investigations and accompanying analyses of residential, commercial and industrial project sites' historical and archaeological resources. Investigations include field investigation, mapping, identification of cultural artifacts and laboratory research. Has conducted archaeological/historical surveys throughout southern California. Has served as excavation director for several archaeological salvage projects. Designated qualified archaeologist in Field Research by Society of Professional Archaeologists.

California Department of Transportation

Conducted excavations and analyses for state and federally funded highway projects.

University of California, Riverside

Conducted field surveys and excavations for private firms, state and federal agencies and the Archaeological Research Unit of UCR. Was actively involved in organizing and maintaining accurate field records and data banks.

Riverside County Parks Department

Conducted field surveys, excavations and analyses for department projects.

Bureau of Land Management, Riverside

Conducted field surveys and was actively involved in organizing and maintaining field records and data banks.

Riverside City Museum

Conducted field surveys and analyses for museum projects.

University of the Americas, Mexico

Served as Assistant Instructor of Archaeology. Also conducted excavations and analyses for University projects.

Institute of Anthropology and History, Mexico

Conducted extensive field investigation at Cacaxtla, Tlaxcala. Investigations included excavation, mapping, identification of cultural artifacts, and laboratory research.

Publications

Perris Reservoir Archaeology, "Floral Remains," 1973.

Papers Presented

"Discovery of a New Pictograph Site in Rancho Bernardo, San Diego County," Annual Museum of Man Rock Art Symposium, 1977.

Manuscripts

Special Studies in "Archaeological Test Excavations in Moosa Canyon," California Department of Transportation, 1978.

Over thirty environmental impact reports, including excavation, field survey, and analysis material, on file with City and County of San Diego.

Organizations

Society for California Archaeology
San Diego County Archaeological Society
Archaeological Resource Management Society
Spring Valley Historical Society
Society of Professional Archaeologists

Honors and Awards

1978	Membership Chairperson, Archaeological Resource Management
1976	Graduate Fellowship, Anthropology Department, University of the Americas, Mexico
1970-74	Dean's Honor List: University of Arizona, Tucson; Riverside City College, California; University of California, Riverside
1966	Valedictorian, Victor Valley High School, California

Randy L. Franklin

Associate Archaeologist

Associate in Arts, Palomar Junior College, San Marcos, California, 1978
Archaeological Certification, Palomar Junior College, San Marcos, California, 1978

WESTEC Services, Inc., 1977 to present

WESTEC Services, Inc.

As an associate archaeologist, Mr. Franklin investigates environmental impacts related to historical and archaeological resources. As a member of the Cultural Resources Group, his investigations and analyses are related to residential, commercial and industrial project sites. His experience includes field investigations and mapping, in addition to identification of cultural artifacts and laboratory research. He has conducted archaeological/historical surveys throughout San Diego County and has served as excavation field supervisor for several archaeological salvage projects.

Organizations

San Diego County Archaeological Society
Sierra Club

Honors and Awards

1976-77 Dean's Honor List: Palomar Junior College, San Marcos, California

Attachment 2

PERSONS CONSULTED

WESTEC Services, Inc.
3211 Fifth Avenue
San Diego, CA 92103
(714) 294-9770

78-287E-3584
December 20, 1978

Ms. Rosalie Robertson
1174 Lexington Avenue
El Cajon, California 92020

Subject: SDG&E Proposed Expansion of San Onofre to Mission/Encina 230 KV Transmission Line

Dear Ms. Robertson:

I would like to bring to your attention the San Diego Gas & Electric Company's proposed San Onofre to Mission/Encina 230 KV transmission line expansion. This project is within an existing right-of-way, and will consist of new structure installation plus modification of existing structures. Topographic maps outlining the project's boundaries are enclosed.

In our capacity as archaeological consultants, WESTEC Services, Inc. has been retained to conduct this study. It is our concern that all, or portions, of the property described above may have social significance to present-day native American peoples. Record searches requested from San Diego State University and San Diego Museum of Man disclosed twenty previously recorded native American sites within the entire project area. These sites are representative of the technology and cultural heritage of early native American peoples: W-114 (SDi-1016); W-119; W-120; W-121; W-127A (SDi-210); W-137 (SDi-4990); W-139; W-178; W-185; W-261; W-281; W-393; W-696; W-940; W-954; W-1527 (SDi-5445); W-1528 (SDi-5444); W-1632 (SDi-5455); SDi-4538; and SDi-5536. Additionally, it has come to be recognized that certain areas, whether cultural remains are to be found there or not, may have sacred or religious significance to present-day native Americans. Within your jurisdiction as the native American representative the following sixteen sites have been recorded: W-114 (SDi-1016); W-119; W-120; W-121; W-127A (SDi-210); W-178; W-185; W-261; W-281; W-393; W-696; W-940 (SDi-4402); W-054 (SDi-4538); W-1528 (SDi-5444); W-1632 (SDi-5455); and SDi-5536.

We are not qualified to address these questions directly, so we would request your advice on the matter. As a representative for Kumeyaay Incorporated, we would appreciate any comments, information or advice you might offer.

WESTEC Services, Inc. has conducted a field survey of the power line right-of-way, to evaluate the condition of previously recorded sites and document the presence of any previously

unrecorded cultural remains. The Public Utilities Commission, the State Office of Historic Preservation, and the Nuclear Regulatory Commission will assess the impact of this proposed development to environmental resources in the region; in part on the basis of our report and any additional public input. When the study is completed, we will be pleased to provide you with a copy of the archaeological report for your consideration.

Copies of this letter have been sent to Stephen Rios, Patricia Duro, Henry Rodriquez, and Vincent Ibanez.

If you have any questions regarding this study or require additional information, please contact the undersigned at 714-294-9770.

Thank you for your assistance in this matter.

Respectfully,

Richard L. Carrico
Manager, Cultural
Resources Group

RLC/rc

Enclosures

WESTEC Services, Inc.
3211 Fifth Avenue
San Diego, CA 92103
(714) 294-9770

78-283E-3584
December 20, 1978

Mr. Henry Rodriquez
P. O. Box 281
Pauma Valley, California 92061

Subject: SDG&E Proposed Expansion of San Onofre to Mission/Encina 230 KV Transmission Line

Dear Mr. Rodriguez:

I would like to bring to your attention the San Diego Gas & Electric Company's proposed San Onofre to Mission/Encina 230 KV transmission line expansion. This project is within an existing right-of-way, and will consist of new structure installation plus modification of existing structures. Topographic maps outlining the project's boundaries are enclosed.

In our capacity as archaeological consultants, WESTEC Services, Inc. has been retained to conduct this study. It is our concern that all, or portions, of the property described above may have social significance to present-day native American peoples. Record searches requested from San Diego State University and San Diego Museum of Man disclosed twenty previously recorded native American sites within the entire project area. These sites are representative of the technology and cultural heritage of early native American peoples: W-114 (SDi-1016); W-119; W-120; W-121; W-127A (SDi-210); W-137 (SDi-4990); W-139; W-178; W-185; W-261; W-281; W-393; W-696; W-940; W-954; W-1527 (SDi-5445); W-1528 (SDi-5444); W-1632 (SDi-5455); SDi-4538; and SDi-5536. Additionally, it has come to be recognized that certain areas, whether cultural remains are to be found there or not, may have sacred or religious significance to present-day native Americans. Within your jurisdiction as a native American representative, three sites -- W-137 (SDi-4990), W-139, and W-1527 (SDi-5445) -- have been recorded.

We are not qualified to address these questions directly, so we would request your advice on the matter. As a representative for the affected native American people from the San Luis Rey River to the Agua Hedionda Lagoon, we would appreciate any comments, information or advice you might offer.

WESTEC Services, Inc. has conducted a field survey of the power line right-of-way, to evaluate the condition of previously recorded sites and document the presence of any previously

unrecorded cultural remains. The Public Utilities Commission, the State Office of Historic Preservation, and the Nuclear Regulatory Commission will assess the impact of this proposed development to environmental resources in the region; in part on the basis of our report and any additional public input. When the study is completed, we will be pleased to provide you with a copy of the archaeological report for your consideration.

Copies of this letter have been sent to Steve Rios, Vincent Ibanez, Rosalie Robertson, and Patricia Duro.

If you have any questions regarding this study or require additional information, please contact the undersigned at 714-294-9770.

Thank you for your assistance in this matter.

Respectfully,

Richard L. Carrico
Manager, Cultural
Resources Group

RLC/rc

Enclosures

WESTEC Services, Inc.
3211 Fifth Avenue
San Diego, CA 92103
(714) 294-9770

78-286E-3584
December 20, 1978

Mr. Vincent Ibanez
Tribal Representative
Pechanga Reservation
P. O. Box 181
Temecula, California 92390

Subject: SDG&E Proposed Exapnsion of San Onofre to Mission/Encina 230 KV Transmission Line

Dear Mr. Ibanez:

I would like to bring to your attention the San Diego Gas & Electric Company's proposed San Onofre to Mission/Encina 230 KV transmission line expansion. This project is within an existing right-of-way, and will consist of new structure installation plus modification of existing structures. Topographic maps outlining the project's boundaries are enclosed.

In our capacity as archaeological consultants, WESTEC Services, Inc. has been retained to conduct this study. It is our concern that all, or portions, of the property described above may have social significance to present-day native American peoples. Record searches requested from San Diego State University and San Diego Museum of Man disclosed twenty previously recorded native American sites within the entire project area. These sites are representative of the technology and cultural heritage of early native American peoples: W-114 (SDi-1016); W-119; W-120; W-121; W-127A (SDi-210); W-137 (SDi-4990); W-139; W-178; W-185; W-261; W-281; W-393; W-696; W-940; W-954; W-1527 (SDi-5445); W-1528 (SDi-5444); W-1632 (SDi-5455); SDi-4538; and SDi-5536. Additionally, it has come to be recognized that certain areas, whether cultural remains are to be found there or not, may have sacred or religious significance to present-day native Americans. Within your jurisdiction as the native American representative, one site -- SDi-4538 -- has been recorded.

We are not qualified to address these questions directly, so we would request your advice on the matter. As a representative for the people of Pechanga, we would appreciate any comments, information or advice you might offer.

WESTEC Services, Inc. has conducted a field survey of the power line right-of-way, to evaluate the condition of previously recorded sites and document the presence of any previously

unrecorded cultural remains. The Public Utilities Commission, the State Office of Historic Preservation, and the Nuclear Regulatory Commission will assess the impact of this proposed development to environmental resources in the region; in part on the basis of our report and any additional public input. When the study is completed, we will be pleased to provide you with a copy of the archaeological report for your consideration.

Copies of this letter have been sent to Stephen Rios, Patricia Duro, Henry Rodriquez, and Rosalie Robertson.

If you have any questions regarding this study or require additional information, please contact the undersigned at 714-294-9770.

Thank you for your assistance in this matter.

Respectfully,

Richard L. Carrico
Manager, Cultural
Resources Group

RLC/rc

Enclosures

WESTEC Services, Inc.
3211 Fifth Avenue
San Diego, CA 92103
(714) 294-9770

78-285E-3584
December 20, 1978

Ms. Patricia E. Duro
Commissioner, Native
American Heritage Commission
P. O. Box 648
Valley Center, California 92082

Subject: SDG&E Proposed Expansion of San Onofre to Mission/Encina 230KV Transmission Line

Dear Ms. Duro:

I would like to bring to your attention the San Diego Gas & Electric Company's proposed San Onofre to Mission/Encina 230 KV transmission line expansion. This project is within an existing right-of-way, and will consist of new structure installation plus modification of existing structures. Topographic maps outlining the project's boundaries have been sent to all area representatives.

In our capacity as archaeological consultants, WESTEC Services, Inc. has been retained to conduct this study. It is our concern that all, or portions, of the property described above may have social significance to present-day native American peoples. Record searches requested from San Diego State University and San Diego Museum of Man disclosed twenty previously recorded native American sites within the entire project area. These sites are representative of the technology and cultural heritage of early native American peoples: W-114 (SDi-1016); W-119; W-120; W-121; W-127A (SDi-210); W-137 (SDi-4990); W-139; W-178; W-185; W-261; W-281; W-393; W-696; W-940; W-954; W-1527 (SDi-5445); W-1528 (SDi-5444); W-1632 (SDi-5455); SDi-4538; and SDi-5536. Additionally, it has come to be recognized that certain areas, whether cultural remains are to be found there or not, may have sacred or religious significance to present-day native Americans.

We are not qualified to address these questions directly, so we would request your advice on the matter. As a representative for the Native American Heritage Commission, we would appreciate any comments, information or advice you might offer.

WESTEC Services, Inc. has conducted a field survey of the power line right-of-way, to evaluate the condition of previously recorded sites and document the presence of any previously unrecorded cultural remains. The Public Utilities Commission, the

State Office of Historic Preservation, and the Nuclear Regulatory Commission will assess the impact of this proposed development to environmental resources in the region; in part on the basis of our report and any additional public input. When the study is completed, we will be pleased to provide you with a copy of the archaeological report for your consideration.

Copies of this letter have been sent to Stephen Rios, Henry Rodriquez, Vincent Ibanez, and Rosalie Robertson.

If you have any questions regarding this study or require additional information, please contact the undersigned at 714-294-9770.

Thank you for your assistance in this matter.

Respectfully,

Richard L. Carrico
Manager, Cultural
Resources Group

RLC/rc

WESTEC Services, Inc.
3211 Fifth Avenue
San Diego, CA 92103
(714) 294-9770

78-284E-3584
December 20, 1978

Mr. Stephen M. Rios
Executive Secretary
Native American Heritage Commission
1400 Tenth Street
Sacramento, California 95814

Subject: SDG&E Proposed Expansion of San Onofre to Mission/Encina 230 KV Transmission Line

Dear Mr. Rios:

I would like to bring to your attention the San Diego Gas & Electric Company's proposed San Onofre to Mission/Encina 230 KV transmission line expansion. This project is within an existing right-of-way, and will consist of new structure installation plus modification of existing structures. Topographic maps outlining the project's boundaries have been sent to all area representatives.

In our capacity as archaeological consultants, WESTEC Services, Inc. has been retained to conduct this study. It is our concern that all, or portions, of the property described above may have social significance to present-day native American peoples. Record searches requested from San Diego State University and San Diego Museum of Man disclosed twenty previously recorded native American sites within the entire project area. These sites are representative of the technology and cultural heritage of early native American peoples: W-114 (SDi-1016); W-119; W-120; W-121; W-127A (SDi-210); W-137 (SDi-4990); W-139; W-178; W-185; W-251; W-281; W-393; W-696; W-940; W-954; W-1527 (SDi-5445); W-1528 (SDi-5444); W-1632 (SDi-5455); SDi-4538; and SDi-5536. Additionally, it has come to be recognized that certain areas, whether cultural remains are to be found there or not, may have sacred or religious significance to present-day native Americans.

We are not qualified to address these questions directly, so we would request your advice on the matter. As a representative for the Native American Heritage Commission, we would appreciate any comments, information or advice you might offer.

WESTEC Services, Inc. has conducted a field survey of the power line right-of-way, to evaluate the condition of previously recorded sites and document the presence of any previously

unrecorded cultural remains. The Public Utilities Commission, the State Office of Historic Preservation, and the Nuclear Regulatory Commission will assess the impact of this proposed development to environmental resources in the region; in part on the basis of our report and any additional public input. When the study is completed, we will be pleased to provide you with a copy of the archaeological report for your consideration.

Copies of this letter have been sent to Patricia Duro, Henry Rodriquez, Vincent Ibanez, and Rosalie Robertson.

If you have any questions regarding this study or require additional information, please contact the undersigned at 714-294-9770.

Thank you for your assistance in this matter.

Respectfully,

Richard L. Carrico
Manager, Cultural
Resources Group

RLC/rc

Attachment 3

CULTURAL HISTORY

Attachment

CULTURAL HISTORY

In the prehistoric past, the area now comprising San Diego County was densely occupied by native American peoples including at least three major cultures. From roughly 12,000 to 8,000 years ago, the San Dieguito people were the sole inhabitors of this region. Beginning about 8,000 years ago and extending to about 3,000 years ago, the La Jolla-Pauma culture was in existence, with the Pauma aspect being present in the inland regions. Commencing about 2,500 years ago and 1,000 years ago respectively, the Kumeyaay (Diegueño) and Luiseño lived and hunted in the area. A broad overview of the three major cultural patterns is provided below.

The following cultural history is a means of outlining and briefly describing the known prehistoric cultural traditions. A primary goal of a cultural history is to provide a diachronic or developmental approach to past lifeways, settlement patterns and cultural processes.

Lacking a synthesis of valid, regionally specific data, we are forced to fall back on a geographically generalized accepted cultural history which is, at best, ill-defined. As perceived by recent scholars, at least three major cultural patterns have operated in San Diego County (Table CH-1). There is also the possibility that a much older "Early Man" period may have existed in North America, if not San Diego County.

Table CH-1

CHRONOLOGICAL MODEL FOR SAN DIEGO COUNTY PREHISTORY AND HISTORY

CLIMATE	TIME	CULTURAL SETTING	STAGE
Medithermal			
Moderately warm; arid and semi-arid	1876 A.D.	Reservation Period	
	1850 A.D.	Anglo-European Era	
	1830 A.D.	Mexican Era	
	1769 A.D.	Hispanic Era	Historic
	1542 A.D.	Spanish Era	Protohistoric
	1000 A.D.	Late Prehistoric cultures	Late Milling
	3,000 B.P.	La Jolla Complex termination	
Altithermal	4,000 B.P.		
	6,000 B.P.	Los Compadres (W-578) occupied	
Arid, warmer than present	7,500 B.P.	La Jolla Complex	Early Milling
Anathermal	8,000 B.P.		
		Harris Site (SDi-149) occupied	
Climate like present but growing warm, humid and subhumid	9,500 B.P.	San Dieguito Complex	Paleo-Indian
End of Glaciations	10,000 B.P.		
	21,000 B.P.	Yuha Man	Early Man
	48,000 B.P.	Del Mar Man	Early Man

Recent research and experimentation with amino-acid dating (Bada 1974) has given new life to a decades-old assertion (Carter 1957) that humans were in the New World, and specifically along Mission Valley and the San Diego River, over 40,000 years ago. Although such a possibility exists, and continuing research seems to point in that direction, many scholars are unwilling to categorically state that humans occupied the New World before approximately 30,000 years ago. Continued research in the Arctic region and within our own area should help in resolving the date of initial New World occupation.

A. San Dieguito

The oldest well-documented inhabitants of the region were apparently the Paleo-Indian San Dieguito people. Typified as nomadic large-game hunters, these people occupied the mesas, mountains and deserts of San Diego County roughly between 21,000 and 8,000 years ago (Warren 1961:252-253; Rogers 1966:140-148; Ezell 1974:personal communication). The culture of the San Dieguito people has been divided into three relatively distinct phases representing assumed variations in time and space. Within these three phases exist various "industries" that are geographically and ecologically based; these are not of specific concern in this analysis. San Dieguito I, the oldest of the known Paleo-Indians in San Diego County, inhabited the desert regions east of the Cuyamaca/Laguna mountain ranges as long ago as 21,000 years (Childers 1974; Ezell 1974:personal communication).

In general, the ancient hunters of the San Dieguito I phase apparently left little or no permanent record on the land, except for their scattered lithic tools, waste stone debris and two recently discovered burials in the Yuha Basin-Truckhaven area (Rogers 1939:25-31; Ezell 1974:personal communication; Childers 1974; Wallace 1955:189-191). Broad characteristics of the San Dieguito I people include their manufacture and use of crudely formed stone flakes, blades and scrapers.

San Dieguito II is found both in the desert and throughout western San Diego County. Lithic artifacts represented by this phase include more finely worked blades, somewhat smaller and lighter points, and a larger variety of scrapers and choppers. In general, however, the same morphological types remain basically unchanged from the earlier phase. Like their predecessors, these people were medium-to-large-game hunters, although foraging must have served to supplement their diet (Warren 1961:262; Moriarty 1969:1-18), perhaps to a greater extent than most scholars have implied.

The terminal San Dieguito phase, San Dieguito III, represents a morphological and typological change, as indicated by an altered technology. The tool types become far more varied both in style and in functional design, thus indicating a change in the culturally determined mental templates. Such alteration in technological form can be attributed to environmental adaptation and/or a technological "snowball" effect, wherein technological advances and changes thrive and feed on themselves and progressively create a new technological mode.

As a result of such technological changes, the tools of the San Dieguito III phase exhibit not only a wider variety of tool types, but also a fundamental refinement in tool manufacture. A primary difference in tool technology is represented by the introduction of pressure-flaked blades and points. Unlike simple percussion flaking, pressure flaking requires a more delicate touch and more finely conceived mental template. The resulting tools exhibit form, complexity and balance not found in the early phases of the San Dieguito people.

Other diagnostic traits associated with San Dieguito III include planes, choppers, plano-convex scrapers, crescentic stones, elongated bifacial knives, and intricate leaf-shaped projectile points (Rogers 1939:28-31). Beyond specific tool types and the introduction of pressure flaking, there exists no absolute method of discerning between San Dieguito II and III. Patination, a weathering process involving chemical change on the surface of stones, is a relative guide to antiquity and provides gross distinctions between the San Dieguito phases; however, its use is limited by the many variables which are involved in its application.

B. La Jolla-Pauma

By about 7,000 years ago, a new group of peoples had begun to inhabit and exploit the coastal and inland regions of San Diego County (Moriarty 1969:12-13). These people, the La Jolla, were nomadic exploiters of maritime resources (Harding 1951; Moriarty

et al. 1959:185-216; Wallace 1960:277-306), who also relied on seed gathering and vegetal processing. The La Jolla people may have been entering into the mortar and pestle phase late in the terminal stage of the La Jolla-Pauma transitional period (Warren 1961). The tool types of the La Jolla indicate that these members of what Wallace (1955) terms Early Milling Horizon possessed a far greater reliance on the sea and foraging than their predecessors, the San Dieguito people, although Kaldenberg and Ezell (1974) have excavated at least one San Dieguito site, W-49, which contained a well-defined shell midden. The variety and quality of lithic tool manufacture is much more basic and unrefined when compared with even the basal phase of the San Dieguito complex.

Characteristic traits of the La Jolla culture include fire hearths, shell middens, flexed inhumation, grinding implements, and absence of ceramics. The archetype La Jolla sites are located along the coast near bay or lagoon areas. Several classic La Jolla sites are situated on the terraces above Agua Hedionda Lagoon and Batiquitos Lagoon.

In recent years, inland La Jolla sites of a seemingly later period have been discovered in transverse valleys and sheltered canyons, including Valley Center (True 1959:225-263; Warren *et al.* 1961:1-108; Meighan 1954:215-227). These non-coastal sites have led to a new name for La Jolla-type sites with an inland location. True (1959), Warren (1961) and Meighan (1954) had applied the term Pauma Complex to certain inland sites which possess a predominance of grinding implements (especially manos

and metates), lack of shell, greater tool variety, more sedentary life patterns than expressed by San Dieguito sites, and an increased dependence upon gathering. However, it is more probable that these inland sites represent a non-coastal manifestation of Early Milling peoples who adopted or developed a hunting mode more so than their coastal brethren. Wallace (1955:214-230) denotes this late transitional phase as Intermediate, and establishes its position between Early Milling Horizon and Late Milling Horizon.

C. Kumeyaay/Northern Diegueño - Luiseño

By 2,000 years ago, Yuman-speaking peoples sharing cultural elements had occupied the Gila/Colorado River drainage (Moriarty 1966). Through gradual westward migration the Yumans drifted into Imperial and San Diego Counties, where they came into contact and apparently acculturated with the remnants of the Early Milling La Jolla cultural tradition (Moriarty 1966, 1965). Because of basic similarities in the late La Jolla/early Yuman patterns, it is difficult to clearly define the contact period or point between La Jolla/Yuman.

Dr. James R. Moriarty (1965, 1966) has suggested that there existed a pre-ceramic Yuman phase, as evidenced from his work at the Spindrift Site in La Jolla. Based on a limited number of radiometric samples, Moriarty has concluded that a pre-pottery Yuman phase occupied the San Diego coast 2,000 years ago and that by 1,200 years ago ceramics had diffused from the eastern deserts.

Although some researchers still follow Malcolm Rogers' belief that Yuman peoples first appeared in San Diego County only 1,000 years ago (Rogers 1945), there is a growing body of data supporting Moriarty's hypothesis. A recent excavation of a La Jolla/Kumeyaay site in Sorrento Valley (Carrico 1975) encountered a cultural stratification with a basal date of 3,755 years ago and a terminal date of 2,525 years ago. It is worth noting that the upper stratum (0-10 centimeters) of the dated column contained ceramics and projectile points commonly considered time-markers indicative of Late Milling Kumeyaay. Radiometric dating of a large shell sample from this stratum produced a date of 2,525±70 years B.P. The near absence of ceramics and total lack of projectile points below the 10-centimeter level, within a series of strata that contained a variety of seemingly early cultural material dated at 2,925±70 B.P. (30-40 centimeters) and 3,755±75 B.P. (50-60 centimeters) may indicate that the Rimbach Site is a multi-component, culturally stratified site containing a transition between La Jolla and Yuman circa 2,500 years ago.

Whether Yuman peoples moved into the area 2,500, 2,000, or 1,500 years ago, they brought with them a culture heavily influenced by their Yuman neighbors in the eastern desert region of California and along the Colorado River. These prehistoric/protohistoric peoples possessed ceramics, operated a closely knit clan system, utilized a highly developed grinding technology, had elaborate and extremely complex kinship patterns, created rock

art, and carried on extensive trade with the surrounding cultural areas (Rogers 1945:167-198; Kroeber 1970:709-725; Strong 1929). It has also been postulated that the Kumeyaay and their neighbors to the north, the Luiseño, may have been practicing a basic type of protoagriculture prior to Hispanic contact (Lewis 1973; Shipek 1974:personal communication; Treganza 1947).

About 1,000 to 1,500 years ago, a group of Shoshonean-speaking people migrated out of the Great Basin region and intruded like a wedge into southern California. This wedge separated the Yuman groups and was eventually to cause great cultural variations (Kroeber 1970:278; True 1966). In coastal San Diego County, this group of Shoshonean intruders has been labeled the San Luis Rey I and II Complex (Meighan 1954:215-227). When the early Hispanic explorers contacted these people, they called them Luiseños, after the Mission San Luis Rey de Francía founded in the heart of Luiseño (San Luis Rey II) territory. Agua Hedionda Lagoon is traditionally considered as the point of separation between Northern Diegueño and Luiseño territory.

Although of a different linguistic stock, the Luiseño and the Diegueño (after San Diego) shared many cultural traits. D.L. True (1966) has suggested that basic similarities in ecological exploitation, environmental setting and temporal placement forced the late-coming and highly nomadic Shoshoneans to adapt to a life style and cultural pattern that was established and functioning upon their arrival. D.L. True outlines certain attributes or

traits which he finds as dissimilar between the two cultures. He notes that Luiseño projectile points are more basic than those of the Diegueño; those of the Luiseño are predominantly made of quartz. He also notes that ceramics were evidently a late development of the Luiseño; they probably learned the use of pottery from the Northern Diegueño. True also postulates the Luiseño possessed a very small, very closed trade network; that in general they were not as world-aware as the Diegueño, although Luiseño cosmology and religion seem better developed.

Luiseño territory encompassed an area from roughly Agua Hedionda inland to Escondido, east to Lake Henshaw, north into Riverside County, and west through San Juan Capistrano to the coast. The current general study area supported large populations of Luiseño, both in historic and prehistoric times. The Luiseño exploited a lush and bountiful environment within their territory through well-adapted seasonal migrations, extensive knowledge of native plant life, establishment of clan-governed districts, and various social control mechanisms.

The Luiseño were/are one of the most mystically sensitive and religious peoples of California. Even a cursory analysis of their cosmological tales, shamanism, world-view, and numerous specialized religious ceremonies reveals a deep-rooted, well-conceived, thoughtful approach to life's mysteries (Sparkman 1908:215-227; DuBois 1908; Kroeber 1970).

D. Protohistoric Period

The Hispanic intrusion (1769-1822) into native-American southern California affected the coastal tribes and peoples living in well-traveled river valleys. The Mexican Period (1822-1848) saw continued displacement of the native population by expansion of the land grant program and development of extensive ranchos. The Gold Rush and the concomitant granting of statehood, combined with an influx of aggressive, land-hungry Anglos, caused a rapid displacement of the natives, as well as deterioration of their culture and lifeways (Shipek 1974; Bancroft 1886; Kroeber 1970).

The literature on these later peoples, the Kumeyaay, Luiseño, Cahuilla, Cupeño and others, is rather extensive and includes Barrows (1900), Bean and Saubel (1972), Caughey (1952), Gifford (1918), Hayes (1929), True (1970), Heizer and Whipple (1957), Hooper (1920), Kroeber (1970), Cuero (1968), Sparkman (1908:87-234), and Strong (1929).

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Attachment 4

ETHNOBOTANICAL DATA

ETHNOBOTANICAL DATA

The intimate and complex relationship between native Americans and their environment has received renewed attention in recent years. Archaeologists, ethnographers, palynologists, and other scholars have attempted to gain insights into folk medicine and vegetal exploitation and preparation, and to understand the interrelationships between past peoples and their environs. Through ethnographies, histories and personal interviews, a large, although not comprehensive, body of knowledge has been compiled about native-American plant use in southern California.

The reader is referred to a series of works that, taken together, comprise a broad ethnobotanical background for San Diego County. Examples include: "Santa Ysabel Ethnobotany," by Ken Hedges (1967); *Temalpakh,* by Lowell John Bean and Katherine Saubel (1972); *The Culture of the Luiseño Indians,* by Philip Sparkman (1908); *The Autobiography of Delfina Cuero* (Cuero 1968); *Indians of the Oaks,* by Melicent Lee (1937); *Handbook of the Indians of California,* by Alfred Kroeber (1970); and "Southern Diegueño Customs," by Leslie Spier (1923).

Although plant life throughout the region has undergone a great deal of change (even during the 200 years since European contact), it is possible to make general assumptions about past plant communities and their use. Plant species noted near the project area, and their known use and period of ripening, are noted

in Table EB-1. Most native species present in the region today were also present in 1769, as evidenced by historical documentation (Fages 1972:46-47; Palou 1926:110-117; Emory 1848). Thus, recent ethnobotanical studies (Hedges 1967) may be of use back to at least 1769, and probably earlier.

The presence of certain plants in the protohistoric period, and verification of their use by Late Milling peoples (circa 2,000 B.P. to 1769 A.D.), offers no assurance that earlier peoples utilized or even knew how to utilize specific plants. Construction of an ethnobotanical model with the hope of stretching inferences back prior to Spanish contact is tenuous, at best. The following discussion should be viewed as possible prehistoric uses of flora within the region.

The single most important food source for Late Milling peoples was the acorn. Although stands of coast live oak and scrub oak in the general vicinity provide a substantial quantity of acorns, the black oak, growing in the upland mountain regions, was preferred. Acorn collection and processing involves a series of specialized activities, ranging from scheduling (knowledge of when acorns are ripe and easiest to harvest), to shelling, grinding and leaching (Bean and Saubel 1972:121-1129; Hedges 1967:4-8; Lee 1937:241; Cuero 1968:30-31).

Ethnohistorical and ethnographic data indicate the importance of females in procuring and preparing foodstuffs in aboriginal hunting and gathering societies. One early visitor (Bartlett

Table EB-1

PLANT SPECIES NOTED NEAR THE PROJECT AREA, THEIR KNOWN USE AND PERIOD OF RIPENING

PLANT SPECIES			SEASONALITY			
Common Name	Scientific Name	Use	Winter	Spring	Summer	Fall
Willow	*Salix* sp.	Construction	----------			
Chamise	*Adenostoma fasciculatum*	Construction/Medicinal	----------			
Scrub Oak	*Quercus dumosa*	Food				X
Lilac	*Ceanothus megacarpus*	Firewood	----------			
Holly-Leaf Cherry	*Prunus ilicifolia*	Food/Beverage				X
Toyon	*Heteromeles arbutifolia*	Food				X
Sugarbush	*Rhus ovata*	Food/Beverage			X	
Gooseberry	*Ribes quercetorium*	Food			X	
Squaw Bush	*Rhus trilobata*	Food/Beverage			X	
Engelmann Oak	*Quercus engelmannii*	Food				X
Live Oak	*Quercus agrifolia*	Food				X
California Juniper	*Juniperus californica*	Food/Medicinal			X	
Manzanita	*Arctostaphylos Adans.*	Food/Beverage			X	
Jimsonweed	*Datura meteloides*	Hallucinogenic	----------			
Miner's Lettuce	*Montia perfoliata*	Food		X		
Prickly Pear Cactus	*Opuntia occidentalis*	Food			X	
Wild Rose	*Rosa californica*	Food/Beverage			X	
White Sage	*Salvia apiana*	Food/Spice			X	
Black Sage	*Salvia mellifera*	Food/Spice			X	
Elderberry	*Sambucus mexicana*	Food/Spice			X	

1854:122) to the village of San Felipe noted: "The women appear to be the chief laborers, the men lounging about the camp most of the day." Moving on to the *rancheria* of Vallecitos, Bartlett (1854: 125) noted much the same about Diegueños residing there: "The laboring or preparing them [the acorns] for food is, like almost all other labor, performed by the women, who were to be seen in front of every hut wielding their heavy stone pestles."

Preparation of acorns requires specialized activities requiring technological diversity through the use of certain tools (i.e. hammerstone, mano, pestle) and specific grinding platforms (i.e. metates, mortars, slicks). The presence of all these implements and features within the area is evidence for acorn processing and use.

Although the nutritional value of acorns varies with species, size and preparation method, Bean and Saubel (1972:125-126) have noted that acorns are very high in fat content and caloric value, but contain less protein and carbohydrates than most cereal grains. Seasonal variation in acorn availability, accessibility of alternate food sources, and time of the year determine the relative importance of acorns at any given time. White (1963:121) has suggested that acorns comprised almost 50 percent of the Luiseño diet.

The inhabitants of the study area would have had access to a wide variety of native fruits that are ethnographically recorded as edible. Manzanita and holly-leaf cherry provided a fruit and a

seed that could be ground into a meal (Hedges 1967:34; Bean and Saubel 1972:41; Cuero 1968:31; Sparkman 1908:194-230). Prickly pear and elderberry were consumed fresh or were dried for storage (Hedges 1967:24, 44; Sparkman 1908:195; Bean and Saubel 1972:77, 138; Lee 1937:138-142, 155-156). Toyon berries were eaten fresh or were dried or parched before consumption (Bean and Saubel 1972:77; Sparkman 1908:194). Spanish dagger served as a fruit that was usually roasted prior to being eaten, although sometimes it was eaten raw.

Many of the plants comprising the Chaparral community have edible seeds that are easily harvested. Black and white sage seeds and leaves were ground into a meal that was made into mush or used to supplement other foods such as acorns (Sparkman 1908:229; Spier 1923:335; Hedges 1967:31; Lee 1937:63; Bean and Saubel 1972:136-138). Besides providing fruit, both prickly pear and Spanish dagger generate seeds that can be used as food (Sparkman 1908:230; Lee 1937:41; Spier 1923:336).

The riparian habitats along adjacent streams were a favored exploitation area for greens and native vegetables to supplement the native diet (Cuero 1968:33-34). Bartlett (1854:122) noted that the Diegueños at San Felipe waded "about the marsh gathering roots and seed..." Many of these greens were eaten raw; others were boiled or dried for later use. New leaves and tender shoots of white sage were eaten raw; blossoms of Spanish dagger were par-boiled, and prickly pear pads were boiled (Hedges 1967:24, 31; Sparkman 1908:195-196; Lee 1937:126, 243; Spier 1923:336).

Beverages serve an important role in any diet, as sources of water, sugars, nutrients, and refreshment. Native Americans in the San Diego area soaked manzanita pulp and/or the whole fruit in water to produce a beverage (Cuero 1968:31; Bean and Saubel 1972: 40-41). Lemonadeberry was mixed with water to produce a slightly acidic beverage (Bean and Saubel 1972:132). Cana was often boiled to produce a tea that served as a refreshment and a medicinal tonic (Hedges 1967:19; Bean and Saubel 1972:70). Beverages were also made from berries of the sugar bush and basketweed (Bean and Saubel 1972:132).

Many plants that were used as food sources also provided medicines. White sage, one of the most important curative plants, doubled as a medicine and a purifier (Cuero 1968:50; Hedges 1967: 31; Bean and Saubel 1972:136; Sparkman 1908:1-9). White sage and California sagebrush were smoked or consumed as a cure for colds. White sage leaves were also used in a sweathouse as a vapor-producing medicinal (Bean and Saubel 1972:136, 138; Hedges 1967:44; Lee 1937:214, 243).

Teas containing medicinal herbs and spices were a common method for treating colds, influenza and respiratory problems. Medicinal teas were made from white sage (Hedges 1967:31), elderberry blossoms (Bean and Saubel 1972:138), and holly-leaf cherry bark (Bean and Saubel 1972:120). Fevers were cured by drinking tea made from elderberry blossoms (Hedges 1967:44; Bean and Saubel 1972:138; Lee 1937:214, 243). Teas made by boiling buckwheat

leaves or flowers (Bean and Saubel 1972:72) or manzanita leaves (Bean and Saubel 1972:41) were also used as a treatment for gastric disorders and diarrhea.

Washes and antiseptic solutions were made from buckwheat, scrub oak, white sage, mistletoe, and chamise (Hedges 1967:38, 43; Bean and Saubel 1972:72, 129, 136). Poultices made from boiled cottonwood leaves were used for sprains, sore muscles, minor cuts, and headaches (Hedges 1967:39; Bean and Saubel 1972:106).

Construction materials for houses, fiber and thatching came from willows, oak, manzanita, deer weed, and chamise (Bean and Saubel 1972:29-31; Lee 1937:59; Cuero 1968:25; Spier 1923:338). Spanish dagger was the most commonly used source of fiber because of its pliable yet strong nature, plus its resistance to moisture and rotting (Cuero 1968:25, 31; Bean and Saubel 1972:152; Lee 1937:58-60; Spier 1923:338).

Firewood was derived from oak timbers and bark (Bean and Saubel 1972:130). Chamise roots were used in roasting pits; chamise branches were tied together to make torches (Bean and Saubel 1972:30). Manzanita served as a major fuel source, especially for indoor use, because of its clean burning (Spier 1923:41, 339).

Local floral resources could have provided a viable source of basket or thatching material, including basket weed, bunch or deer grass, willow, and juncus (Merrill 1973:13-16). Storage vessels or granaries were made of scrub oak, chamise and coffeeberry (Cuero

1968:31; Hedges 1967:13, 38, 40; Bean and Saubel 1972:135; Lee 1937:79-81). Dyes for baskets came from elderberry (Bean and Saubel 1972:138).

Soap was derived from a variety of plants, depending upon the season and availability. Spanish dagger root was culturally preferred and usually accessible (Bean and Saubel 1972:151-152; Cuero 1968:33). Sea-blite was another source of natural soap (Cuero 1968:33).

In summary, the area in and around the project area could have afforded native Americans a source of foods, medicines, condiments, and construction materials. Although ethnographic data cannot be directly applied to the prehistoric period, it may be inferred that at least some of the above data would apply to the aboriginal people who inhabited the study area.

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Attachment 5

RECORD SEARCH DATA

STATE OF CALIFORNIA—THE RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 2390
SACRAMENTO 95811
(916) 445-8006

August 31, 1978

Richard L. Carrico
Cultural Resource Manager
Westec Services, Inc.
1520 State Street
San Diego, CA 92101

Dear Mr. Carrico:

Subject: San Onofre to Mission 230 KV Circuit and San Onofre to Encina 230 KV Circuit

I appreciate the opportunity to comment on the properties which may be effected by this undertaking. My staff has reviewed our files on properties listed on or determined eligible for listing on the National Register of Historic Places and properties listed on the California Historic Landmarks.

The following properties were noted to be in the vicinity of this undertaking and should be addressed in an enviornmental document:

State Landmarks

#562 La Cristianita
#616 Las Flores Asistencia
#784 El Camino Real

National Register of Historic Places

Las Flores Adobe
Santa Margarita Ranchhouse
Las Flores Site
San Luis Rey Mission Church

If I can be of further assistance, please do not hesitate to contact Mr. William Seidel at (916) 445-8006.

Sincerely yours,

William E Padgett for

Dr. Knox Mellon
State Historic Preservation Officer
Office of Historic Preservation

KM:pbp

SAN DIEGO MUSEUM OF MAN

1350 El Prado, Balboa Park, San Diego, California 92101, Telephone (714) 239-2001

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Date of Request: 23 August 1978 (X)Letter ( )Telephone (X) In Person

Date Request Received: 12 September 1978 (X)Map Received (X)Map Returned

Name of Project: SDG&E San Onofre to Mission and San Onofre to Encina Transmission Corridor
Job #3519

( ) The Museum of Man files show no recorded sites for the project area.

(X) The Museum of Man files show the following sites (X)within (X)in the vicinity of the project area.

Site No. W-99 Culture(s): La Jolla I and II; San Dieguito II (trace)

Description: Occupation site; cobble hearths; burials; metates; manos; midden; stone flaking.

Recorded by: M.Rogers

Site No. W-108 Culture(s): San Dieguito II (trace); La Jolla II; Yuman III

Description: Highland accretion midden; hearths; burial; sherds; brown jasper knife; Canalino chalcedony spearpoint; flaking; tools; metates.

Recorded by: M.Rogers

Site No. W-109 Culture(s): San Dieguito II (trace); La Jolla II; Yuman III

Description: Highland winter camp; hearths; sherds; flaking; midden; arrowpoints.

Recorded by: M.Rogers

Site No. W-112 Culture(s): Traces of San Dieguito II, La Jolla II and Yuman III

Description: Highland accretion midden with scattered camping; cobble hearths; platforms; metates; cache of quartz moonstones.

Recorded by: M.Rogers

Site No. W-113 Culture(s): La Jolla II

Description: Highland winter camp sites; cobble hearths; mortars; midden.

Recorded by: M.Rogers

Site No. W-114 Culture(s): La Jolla II; Yuman III (trace)

Description: Highland winter camping; cobble hearths; platforms; metates; shell.

Recorded by: M.Rogers

Please note: The project area may contain archaeological resources in addition to those noted above. This report is made from San Diego Museum of Man files only and may not include data pertaining to localities other than those covered in previous Museum of Man surveys or gathered by other institutions or by individuals.

Record check by: Grace Johnson

Date: 25 September 1978

RS-2

Signed: Lowell E. English

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-115 Culture(s): La Jolla II

Description: Highland winter camping; midden; cobble hearths; flaking; metates.

Recorded by: M.Rogers

Site No. W-116 Culture(s): San Dieguito II; La Jolla II; Yuman III

Description: Highlan accretion; cobble hearths; platforms; midden; manos; metates; blade; shell.

Recorded by: M.Rogers

Site No. W-117 Culture(s): La Jolla II; Yuman III (trace)

Description: Highland camping site; midden; hearth stones; steatite digging weight or large bead; shell; metates.

Recorded by: M.Rogers

Site No. W-118 Culture(s): San Dieguito II; La Jolla I (?) and II

Description: Slough terrace camp site; cobble hearths; burial; Canalino red serpentine bead; perforated plummet stone; obsidian; tools; midden; shell; charcoal.

Recorded by: M.Rogers

Site No. W-119 Culture(s): San Dieguito II (trace); La Jolla I (?) and II; Yuman III (trac

Description: Permanent highland slough terrace midden; cobble hearths; sweathouse; metate fragments; manos; burial; quartzite digging weight; sherds; flaking and flaked artifacts.

Recorded by: M.Rogers

Site No. W-120 Culture(s): San Dieguito III; La Jolla II; Yuman III

Description: Highland permanent camp site; hearths; midden; metates; manos.

Recorded by: M.Rogers

Site No. W-121 Culture(s): San Dieguito II; La Jolla I (?) and II; Yuman III

Description: Slough terrace midden of a permanent type; cobble hearths; burials; Canalino steatite digging weigh; hematite plummet stone; tools; metates; grinding slabs.

Recorded by: M.Rogers

Site No. W-122 Culture(s): San Dieguito II; La Jolla II

Description: Highland accretion midden; cobble hearths; house pits; burial; metates; manos; tools; flakes.

Recorded by: M.Rogers

Site No. W-123 Culture(s): La Jolla I and II; Yuman III

Description: Slough margin midden; cobble hearths; cremation; sherds; arrowpoints; bow pipe.

Recorded by: M.Rogers

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-124 Culture(s): San Dieguito II (trace); La Jolla II

Description: Highland winter scattered camping; cobble hearths; platforms; midden; burial; sherds.

Recorded by: M.Rogers

Site No. W-125 Culture(s): San Dieguito II; La Jolla II

Description: Highland camping; hearths; metates; manos; flaking; hammerstones.

Recorded by: M.Rogers

Site No. W-126 Culture(s): La Jolla I and II; San Dieguito II (trace)

Description: Slough terrace midden; cobble hearths; worked stone; flakes.

Recorded by: M.Rogers

W-127

Site No. W-127A Culture(s): San Dieguito II; La Jolla II

Description: Slough terrace camping; cobble hearths; midden; tools; flaking; metates; manos; planes.

Recorded by: M.Rogers

Site No. W-128 Culture(s): La Jolla I and II; Yuman III (trace)

Description: Highland accretion midden; cobble hearths; sherds; manos; bedrock metates; hammerstone; scraper. J.Moriarty 1974

Recorded by: M.Rogers

Site No. W-129 Culture(s): La Jolla II; Yuman III

Description: Highland camping; cobble hearths; platforms; steatite perforated curing slab; shell; sherds; metates.

Recorded by: M.Rogers

Site No. W-130 Culture(s): San Dieguito II (trace); La Jolla II

Description: Slough terrace accretion camping; hearths; midden; metates; manos; steatite artifacts.

Recorded by: M.Rogers

Site No. W-131 Culture(s): San Dieguito II and III (trace); La Jolla II

Description: Slough terrace midden; hearths; bowling stones; metates; broken hopper-mortar.

Recorded by: M.Rogers

Site No. W-132, A,B Culture(s): San Dieguito II; La Jolla II; Yuman III

Description: Slough terrace midden; cobble hearths; burial; sherds; metates, hammerstones; cores; choppers; scraper; manos; flakes; bone; crescent. E.L.Davis 1967

Recorded by: M.Rogers

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-133A,B,C,D Culture(s): San Dieguito II (trace); La Jolla II; Yuman III (trace)

Description: Highland accretion of scattered occupation; cobble hearths; sweat house; manos; Canalino spearpoint; midden; sherds; metates; flakes; core-hammerstone. Recorded by: E.L.Davis 1967 M.Rogers

Site No. W-134 Culture(s): San Dieguito II; La Jolla I (?) and II

Description: Slough margin midden with a long occupation; cobble hearths; flakes; tools; metates; grinding slabs.

Recorded by: M.Rogers

Site No. W-139 Culture(s): San Dieguito II (trace); La Jolla II; Luiseno

Description: Highland accretion midden; cobble hearths; Channel Islands artifacts; sherds; arrowpoints; bowling stones; metates; mortars; pestle.

Recorded by: M.Rogers

Site No. W-140 Culture(s): La Jolla II; Luiseno

Description: Highland intermittent camping; cobble hearths; midden; sherds.

Recorded by: M.Rogers

Site No. W-141 Culture(s): San Dieguito II (trace); La Jolla II; Luiseno

Description: Slough terrace midden; cobble hearths; Diegueno perforated curing stone; sherds; ring stones; metates; bone; olivella bead; abalone ring.

Recorded by: M.Rogers

Site No. W-141B Culture(s): La Jolla I and II; Luiseno

Description: Midden; mortar fragments.

Recorded by: M.Rogers

~~W-156~~

Site No. W-156B Culture(s): San Dieguito II and III

Description: Highland permanent camp site; hearths; flakes; artifacts; amulets. W-156B is the main felsite ledge quarry of the San Dieguito people.

Recorded by: M.Rogers

Site No. W-173 Culture(s): San Dieguito II and trace of III; Yuman III (trace)

Description: Highland camp of the permanent type; cobble hearths; flakes; shell; blades.

Recorded by: M.Rogers

Site No. W-176B Culture(s): San Dieguito II; La Jolla II; Yuman III (trace)

Description: Occupation site; shell.

Recorded by: M.Rogers

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-177 Culture(s): San Dieguito II; La Jolla II (trace)

Description: Highland intermittent camping; metates; manos.

Recorded by: M.Rogers

Site No. W-178 Culture(s): La Jolla II; Yuman III

Description: River terrace camp of probable permanancy; Obsidian Island arrowpoint; midden; shell.

Recorded by: M.Rogers

Site No. W-179 Culture(s): San Dieguito II; La Jolla II

Description: Highland camping site; cobble hearths; midden; shell; metate fragments; manos; hammerstones; cores; flakes/debitage; scrapers.

Recorded by: M.Rogers R.Kaldenberg 197

Site No. W-181 Culture(s): San Dieguito II and III; La Jolla II

Description: Highland accretion camp site with scattered occupation; roasting platforms or sweat-house debris; flaking.

Recorded by: M.Rogers

Site No. W-185 Culture(s): San Dieguito II; La Jolla II (trace)

Description: Highland scattered camping; mano fragments.

Recorded by: M.Rogers

Site No. W-186 Culture(s): San Dieguito II or III; Yuman III

Description: River bottom camp site and workshop; cremation; sherds; arrowpoints; tools; flakes.

Recorded by: M.Rogers

W-188

Site No. W-188A Culture(s): San Dieguito II and trace of III; La Jolla II (trace); YumanI

Description: Highland accretion camp site; hearths; midden; sherds; manos; blades; flaking. W-188A has location noted only with no data filed.

Recorded by: M.Rogers

Site No. W-191 Culture(s): San Dieguito II

Description: Highland intermittent camping with scattered occupation.

Recorded by: M.Rogers

W-197

Site No. W-197A Culture(s): San Dieguito II; La Jolla II; Yuman III

Description: Highland intermittent camping; hearths; sherds; metates; manos; middens.

Recorded by: M.Rogers

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-198 Culture(s): San Dieguito II and III; La Jolla II; Yuman III

Description: Camps and quarry; cobble hearths; chert blade and arrowpoint; flakes; midden; tools; milling slabs; sherds; planes; scrapers; cores. San Dieguito type site with full range of artifacts.

Recorded by: M.Rogers E.L.Davis 1969

Site No. W-261 Culture(s): San Dieguito II

Description: Camp site.

Recorded by: M.Rogers

Site No. W-279 Culture(s): San Dieguito II; La Jolla II; Yuman (trace)

Description: Plateau periodic camp site; house pit; cobble hearths; hand choppers; sherds; metates; manos.

Recorded by: M.Rogers

Site No. W-281A (W-281) Culture(s): San Dieguito II; La Jolla II

Description: Camp sites; metates; manos; flaking.

Recorded by: M.Rogers

Site No. W-282 Culture(s): La Jolla II; Yuman III

Description: Intermittent camping; sherds; cobble hearths; metates; manos; choppers; flaking; bedrock metates and mortars; arrowpoints; shell.

Recorded by: M.Rogers

Site No. W-386 Culture(s): Not known

Description: Discovery site of quartz blade fragment.

Recorded by: Reported by: Mrs. A. Mitchell 1969

Site No. W-392 Culture(s): Diegueno

Description: Bedrock metates.

Recorded by: R.Clarke 1970

Site No. W-393 Culture(s): Diegueno

Description: None

Recorded by: R.Clarke 1970

Site No. W-467 Culture(s): San Dieguito II and III; La Jolla II; Yuman III

Description: Midden; burial; pottery; choppers; blade.

Recorded by: P.McDonald 1972

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-468 Culture(s): Not noted

Description: Scatter of shell, cobble flake tools and manos; scrapers; planes; flakes.

Recorded by: R.May 1972

Site No. W-558 Culture(s): Yuman III

Description: Tizon brownware pottery fragments; scrapers; flakes.

Recorded by: J.Moriarty 1974

Site No. W-577 Culture(s): San Dieguito; La Jolla; Luiseno; Kumeyaay; American agricultura

Description: Seasonal camp site and a food processing area; pottery; blades; pushplanes. As of Dec. 1974 the site no longer exists in any form. Recorded by: R.Kaldenberg 1974

Site No. W-594 Culture(s): Kumeyaay (?)

Description: Grinding station. Subsequent surveys inthis areafailed to reveal any trac of this site originally reported by Ryzdynski and filed by Kaldenberg. The site, as originally reported, appears not to exist in the reported location. Recorded by: R.Kaldenberg 1975

Site No. W-597 Culture(s): San Dieguito (?)

Description: Tool scatter; scraper-cores.

Recorded by: R.Kaldenberg 1975

Site No. W-601 Culture(s): La Jolla

Description: Shell midden; manos; tools; flakes.

Recorded by: G.Fink 1974

Site No. W-613 Culture(s): San Dieguito

Description: Quarry site; lithic scatter; tool blanks; hearths; scrapers; flakes; cores; hammerstones; debitage. R.May 1975

Recorded by: R.Kaldenberg 1975

Site No. W-614 Culture(s): San Dieguito II and III

Description: Camp site and food processing area with flaking; scrapers; pushplanes.

Recorded by: Mooney 1975

Site No. W-917 Culture(s): San Dieguito (?)

Description: Quarry site; scatter of flakes, cores, and tools; hammerstones; debitage; scrapers; blades.

Recorded by: R.Kaldenberg 1976

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-918 Culture(s): Not noted

Description: Shell and flake scatter; manos; debitage; thermal fractured rock.

Recorded by: R.Kaldenberg 1976

Site No. W-919 Culture(s): San Dieguito (?); La Jolla

Description: Shell and artifact scatter; midden; cores; flakes; scrapers.

Recorded by: R.Kaldenberg 1976

Site No. W-941 Culture(s): Not noted

Description: Shell and flake scatter.

Recorded by: R.Kaldenberg 1975

Site No. W-942 Culture(s): Not noted

Description: Shell and flake scatter; ceramics; metate; cores; hammerstones; scrapers; pushplane.

Recorded by: R.Kaldenberg 1975

Site No. W-947 Culture(s): Historic

Description: Ruins of the Encinitas Adobe.

Recorded by: R.Kaldenberg 1975

Site No. W-950 Culture(s): Unknown

Description: Camp site; shell and flake scatter; choppers; hammerstones; cores; debitage.

Recorded by: R.Kaldenberg 1975

Site No. W-951 Culture(s): Unknown

Description: Camp site; midden; shell; flakes/debitage; manos; metate fragments; hammerstones; cores; scrapers; thermal fractured rock.

Recorded by: R.Kaldenberg 1975

Site No. W-971 Culture(s): Non-diagnostic

Description: Shell and lithic scatter; flakes; thermally fractured rocks.

Recorded by: R.Kaldenberg 1976

Site No. W-978 Culture(s): La Jolla

Description: Lithic scatter; shell; hammerstone; cores; flakes; metate fragment; mano fragments; pushplane; thermally fractured rocks.

Recorded by: R.Kaldenberg 1976

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-1034 Culture(s): Not noted

Description: Lithic scatter; tools; flakes; mano.

Recorded by: J.Kinney 1976

Site No. W-1035 Culture(s): Not noted

Description: Flaking station; cores.

Recorded by: J.Kinney 1976

Site No. W-1036 Culture(s): Not noted

Description: Lithic scatter; possible hearths; flakes; tools; core.

Recorded by: J.Kinney 1976

Site No. W-1038 Culture(s): Not noted

Description: Milling station; bedrock mortars and grinding slicks; manos; pestle.

Recorded by: J.Kinney 1975

Site No. W-1172 Culture(s): Unknown

Description: Camp site; shell; hearths; cores; flakes/debitage.

Recorded by: C.Bull 1977

Site No. W-1306 Culture(s): Blade and Core

Description: Burnt and broken rock; hearths; cores; tools; choppers.

Recorded by: H.Minshall 1977

Site No. W-1322 Culture(s): Early Man Horizon

Description: Lithic scatter; tools; cores; flakes.

Recorded by: G.Self 1977

Site No. W-1345 Culture(s): Late Prehistoric

Description: Discovery site of cloud blower pipe.

Recorded by: J.Egan 1977

Site No. W-1356 Culture(s): Prehistoric

Description: Shell; flakes; mano fragments.

Recorded by: W.Eckhardt 1977

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request: Westec Services, Inc. - William Eckhardt

Name of Project: SDG&E San Onofre to Mission and Encina Transmission Corridor - Job #3519

Site No. W-1359 Culture(s): Prehistoric

Description: Artifact scatter; flakes; manos; shell.

Recorded by: W.Eckhardt 1977

Site No. W-1383 Culture(s): Early Man

Description:

Recorded by: B.Reeves 1977

Site No. W-1438 Culture(s): Early Milling

Description: Cultural debris; flakes; debitage; scraper.

Recorded by: L.McCoy 1977

Site No. W-1439A,B,C Culture(s): Early Milling; Historic

Description: W-1439A consists of a adobe ruin and flakes, debitage and scrapers. W-1439B consists ofa single flake. W-1439C consists of a single projectile point.

Recorded by: L.McCoy 1977

Site No. W-1444B Culture(s): Not noted

Description: Chopping tools.

Recorded by: L.McCoy 1977

Site No. W-1445B,C Culture(s): Not noted

Description: W-1445B consists of two utilized flakes. W-1445C consists of a single projectile point.

Recorded by: L.McCoy 1977

Site No. W-1500 Culture(s): Unknown

Description: Bedrock grinding slicks.

Recorded by: S.Berryman 1977

Site No. W-1671 Culture(s):

Description: Site mapped only. Site data has not been received.

Recorded by: C.Stickel 1978

Site No. W-1741A,B Culture(s): La Jolla; Late Prehistoric

Description: Locus A has flaked stone and pottery. Locus B has concentrations of rock, possibly not cultural.

Recorded by: K.Hedges 1978

DEPARTMENT OF ANTHROPOLOGY

San Diego State University
San Diego, CA 92182
(714) 286-6300

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request WESTEC

Date of Request August 23, 1978 (x) Letter ( ) Telephone ( ) In Person

Date Request Received August 25, 1978 (x) Map Received (x) Map Returned

Name of Project SDG&E San Onofre to Mission & San Onofre to Encina Transmission Corridor 3519

( ) The San Diego State University files show no recorded site for the project area.

(X) The San Diego State University files show the following sites (X) within (X) in the vicinity of the project area.

Site No. SDI-147 Culture(s): Recorded by Treganza, no site description.
Description:

Site No. SDI-148 Culture(s): Recorded by Treganza, no site description.
Description:

Site No. SDI-150 Culture(s): Unknown
Description: 150 yards in diameter, possibly 1 foot in depth, "arrowheads, metates, manos, and a possible stone hand tool". (Smart, 1949)

Site No. SDI-209 Culture(s): Recorded by Treganza, no site description.
Description:

Site No. SDI-210 Culture(s): Recorded by Treganza, no site description.
Description:

Site No. SDI-213 Culture(s): Recorded by Treganza, no site description.
Description:

Note: This report includes only that information available from the San Diego State University files and may not include data on file at other institutions. A lack of sites recorded in our files cannot be taken as assurance of the absence of archaeological materials. If it should occur that any cultural remains are encountered during the course of construction, a qualified archaeologist should be notified.

Record check by Clarissa Smith

Date Aug. 31, 1978 Signed Harry L. Neal

DEPARTMENT OF ANTHROPOLOGY

San Diego State University
San Diego, CA 92182
(714) 286-6300

REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

Source of Request _____

Date of Request _____ ( ) Letter ( ) Telephone ( ) In Person

Date Request Received _____ ( ) Map Received ( ) Map Returned

Name of Project _____

( ) The San Diego State University files show no recorded site for the project area.

( ) The San Diego State University files show the following sites ( ) within ( ) in the vicinity of the project area.

Site No. SDI-316 Culture(s): Unknown

Description: Approx. 100 ft. in diameter, 1 stone bowl and 1 scraper plane, test pit yielded very few artifacts. (Warren, 1958)

Site No. SDI-317 Culture(s): Unknown

Description: Approx. 60 feet in diameter, area of dark soil covered with broken rock a few artifacts. (Warren, 1958)

Site No. SDI-318 Culture(s): Unknown

Description: Approx. 60 feet in diameter, surface scatter, largely ditritus of felsite 1 chopper observed. (Warren, 1958)

Site No. SDI-319 Culture(s): Unknown

Description: Approx. 60 ft. in diameter, surface site containing ditritus of felsite and scattered artifacts, scrapers and blades. (Warren, 1958)

Site No. SDI-320 Culture(s): Unknown

Description: 20 by 30 feet, small chipping station, points, scrapers and 1 pot sherd. (Warren, 1958)

Site No. SDI-149 Culture(s): "The San Dieguito Type Site" "Harris Site"

Description: 17 ft + deposit frbm San Dieguito to Diegueno. Excavated: Rogers, Warren, Davis, & Ezell. ref: Museum of Man Pubs. "The San Dieguito Type Site." (Warren, 1958, May, 196[illegible] Wakefield, 1963)

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Record check by _____

Date _____ Signed _____

DEPARTMENT OF ANTHROPOLOGY

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San Diego, CA 92182
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REPORT ON ARCHAEOLOGICAL SITE FILES RECORD SEARCH

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Name of Project _____

( ) The San Diego State University files show no recorded site for the project area.

( ) The San Diego State University files show the following sites ( ) within ( ) in the vicinity of the project area.

Site No. SDI-532 Culture(s): Unknown

Description: 75 x 100 feet, scrapers, manos, crude, site soil not distinguishable from surrounding soil. (Warren, 1959)

Site No. SDI-608 Culture(s): Unknown

Description: Manos, Metate frag., and scraper plane. (Warren, 1959)

Site No. SDI-609 Culture(s): Unknown

Description: 300 x 300 feet, midden with few shells and surface artifacts-core tools and manos. Stratigraphic section of cut bank by J. Prost. (Warren, 1959)

Site No. SDI-610 Culture(s): Unknown

Description: 500 x 200 feet, small amount of midden with a few shells, core tools, scraper, metate and mano. (Warren, 1959)

Site No. SDI-611 Culture(s): Unknown

Description: 300 feet in diameter, extensive habitation site, midden with shell, manos, metates, choppers, scrapers, flakes, hammerstones etc. (Kowta, 1959)

Site No. SDI-630 Culture(s): Unknown

Description: 300 x 100 feet, dark soil with heavy shell concentration, large campsite, mano, 11 hammerstones and chopper. ref: Wallace ms. on file ASUCLA (Wallace, 1958)

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Date Request Received _____ ( ) Map Received ( ) Map Returned

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( ) The San Diego State University files show no recorded site for the project area.

( ) The San Diego State University files show the following sites ( ) within ( ) in the vicinity of the project area.

Site No. SDI-631 Culture(s): Unknown

Description: 200 yds. x 50 yds., large campsite, manos, metate frag., choppers, cobble pestles, hammerstones, slight midden. (Wallace, 1958)

Site No. SDI-688 Culture(s): Unknown

Description: Approx. 200 ft. in diameter, thin scattering of Pectin and chione to 1 1/2 feet, manos, choppers, and scraper planes. (Warren & Warren, 1960)

Site No. SDI-689 Culture(s): Unknown

Description: 100 x 50 feet, some shell, scrapers, manos and 3 blades. (Warren& Warren, 1960)

Site No. SDI-695 Culture(s): Unknown

Description: 100 feet in diameter, stream cut with shell and dark midden, approx. 1 foot deep. (Warren& True, 1960)

Site No. SDI-696 Culture(s): Unknown

Description: 150 yds. x 50 yds., midden with light shell, core and hammerstone, mano, 3 pot sherds. (Warren,&True, 1960)

Site No. SDI-697 Culture(s): Unknown

Description: 100 feet in diameter., artifacts and shell scattered on the surface, manos, scrapers and choppers. (Warren & True, 1960)

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Record check by _____

Date _____ Signed _____

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Date Request Received _____ ( ) Map Received ( ) Map Returned

Name of Project _____

( ) The San Diego State University files show no recorded site for the project area.

( ) The San Diego State University files show the following sites ( ) within ( ) in the vicinity of the project area.

Site No. SDI-698 Culture(s): Unknown

Description: 1000 x 400 feet, scattered shell and artifacts, manos, choppers and scrapers. (Warren & True, 1960)

Site No. SDI-699 Culture(s): Unknown

Description: 200 x 50 feet, surface artifacts, manos and scraper planes. (Warren & True, 1960)

Site No. SDI-700 Culture(s): Unknown

Description: Approx. 200 ft. in diameter, scattered Pectin and Chione, a few artifacts, manos, shoppers and scrapers. (Warren & True, 1960)

Site No. SDI-701 Culture(s): Unknown

Description: 200 x 100 ft., area littered with artifacts and a few shell, manos, metate, scrapers, and choppers. (Warren & True, 1960)

Site No. SDI-702 Culture(s): Unknown

Description: 200 ft. in diameter, flat bench covered with artifacts and some shell, scrapers, manos and choppers. (Warren & True, 1960)

Site No. SDI-763 Culture(s): Unknown, Also known as W-106, excavated by Kaldenberg.

Description: 3000 x 1000 feet, shell midden, a few low mounds (King, 1961). Hohokam point, hammerstones, c14=5500+ 50 at 80 cms. (Kaldenberg, nd) no ref.

Note: *This report includes only that information available from the San Diego State University files and may not include data on file at other institutions. A lack of sites recorded in our files cannot be taken as assurance of the absence of archaeological materials. If it should occur that any cultural remains are encountered during the course of construction, a qualified archaeologist should be notified.*

Record check by _____

Date _____ Signed _____

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Date of Request _____ ( ) Letter ( ) Telephone ( ) In Person

Date Request Received _____ ( ) Map Received ( ) Map Returned

Name of Project _____

( ) The San Diego State University files show no recorded site for the project area.

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Site No. SDI-764 Culture(s): Unknown

Description: 100 feet in diameter, shell and a few artifacts. (King, 1961)

Site No. SDI-765 Culture(s): Unknown. 100 ft. in diameter. Manos, 3 grdenish

Description: gravel lines, ca. 24 inches wide and 30 ft. to 60 ft long. Gravel pictographs? (Warren, 1960)

Site No. SDI-946 Culture(s): Unknown, perhaps Luiseno. Dark midden and moderate

Description: amounts of shell, 150 yards in diam. (CNW & RHC, 1961). Very large site with thick shell midden, hammerstones, core, flakes,manos, metates. (Kaldenberg, 1976)

Site No. SDI-1015 Culture(s): Incorrect location, no site records.

Description:

Site No. SDI-4357 Culture(s): Unknown

Description: Ca. 200 x 300 ft. Surface is littered with patinated scrapers, flakes and debitage. (Kaldenberg, 1975)

Site No. SDI-4398 Culture(s): Unknown

Description: 5 x 5 meters, a "deflated hearth" containing thermally fractured rock. (Kaldenberg, 1976)

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Site No. SDI-4401 Culture(s): "La Jolla" (May put a test pit in 1973)
Description: 30 x 30 meters, a deposite of 50 to 80 cms. a shell fish processing camp, a shell midden, core, flakes, sidescraper, metate frag., mano, chopper. (Kaldenberg, 197

Site No. SDI-4413 Culture(s): "Late Prehistoric"
Description: Scattered shell, flakes and pottery, area less than 10 meter sq. (Welch, 1975) for ref. see below, SDI-4417

Site No. SDI-4414 Culture(s): Unknown
Description: A single mortar situated on top of a large, prominate outcrop. (Welch, 1975) for ref. see below, SDI-4417

Site No. SDI-4416 Culture(s): "La Jollan"
Description: 200'e-w, 250' n-s, shell-Pe ten, Chione and Bean Clam, flakes and a mano frag. (Hancock & McPeek, 1975, Welch, 1975)for ref. see below, SDI-4417

Site No. SDI-4417 Culture(s): Unknown. Low mounds, shell and cobbles, earth oven and
Description: 1 burial, Amargosa/San DieguitoIII point, crescentic, metates(Ezell & Campo, 1975). Postholed,1x1 test, 6/75-hammersotne, doughnut stone, blade, burial, bowl

Site No. _____ ~~Culture(s)~~: frags., choppers, manos, scraper plane, point (Welch, 1975)
~~Description~~: Surface collection performed, April, 1975, Ezell & Campo. 53 postholes dug, June, 1975, Welch. ref:Santa Margarita River Valley & Adjacent Areas, Camp Pendleton. Welch, 1975.

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Site No. SDI-4424 Culture(s): Unknown. ref. see SDI-4417
Description: 50 x 20 meters, light shell midden, oywter, Chione, Pecten, metate, flakes several tool frags., and cores. (Welch, 1975)

Site No. SDI-4426 Culture(s): Unknown. ref. see SDI-4417
Description: 50 x 20 meters, several flakes and 1 mano, scattered shell to depth of 28-35 cms. (Welch, 1975)

Site No. SDI-4427 Culture(s): Unknown. ref. see SDI-4417
Description: 20 x 25 meters. Light shell scatter exclusively of Chione, several flakes. 13 postholes were dug. (Welch, 1975)

Site No. SDI-4492 Culture(s): "San Dieguito, La Jollan"
Description: Site covers hilltop, hammerstone, flakes. (Kaldenberg, 1975)
ref: "Rancho Zorro" (?) EIR Appendix F, RECON

Site No. SDI-4538 Culture(s): Unknown "El Horno Creek Skeleton"
Description: Ca. 7 ft. below surface, 1 burial exposed by stream cut, some shell, surface collection performed no artifact description. (Speegle & Ezell, 1960)

Site No. SDI-4540 Culture(s): No site description
Description: _____

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Site No. SDI-4578 Culture(s): Unknown

Description: "Midden, excavation potential ok." no description, no identification

Site No. SDI-4579 Culture(s): Unknown

Description: "Midden, excavation potential, excellent. no description, no identification

Site No. SDI-4630 Culture(s): "San Dieguito, La Jollan"

Description: Contains concentrations of groundstone tools, flaked stone tools, midden, shell. Highly patinated. 3000 sq. ft. ref: contact RECON. an EIR. (Kaldenberg, 1975)

Site No. SDI-4631 Culture(s): "San Dieguito (?)"

Description: 6000 sq. ft., random distribution of surface tools, 4 heavily patinated scraper-cores. ref: see RECON an EIR. (Kaldenberg, 1975)

Site No. SDI-4662 Culture(s): "Kumeyaay". 1976, posthole samples taken by Moriarty.

Description: Midden 25m ns x 20m ew. 7-10% sample excavated Jan. 1977, flakes, proj. points, manos, cores, hammerstones, bead, shell, potsherds. (Berryman, 1977)

Site No. SDI-4846 Culture(s): "La Jollan"

Description: 2 loci encompassing 1/2 acre. Flakes, chipped tools, mano frags., thermally fractured rock and shell. Postholing was done. (Kaldenberg, 1976)

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Site No. SDI-4847 Culture(s): "La Jollan"

Description: Extensive shell midden with deposits in excess of 3 ft, 1250 x 1500 meters. mano frags., metate frags., flakes, blades, scrapers . (Rogers, 1966, Kaldenberg, 1976)

Site No. SDI-4848 Culture(s): "La Jollan" Rogers (1966) recorded pottery. Extensive

Description: shell midden to depth of 1.5 - 3 feet and 700 x 650 ft. Manos and frags., mortar rim frags., metate frags., cores, choppers, flakes, scrapers, proj pt. (Kaldenberg 1976)

Site No. SDI-4849 Culture(s): "La Jollan"

Description: 200 ft. x 150 ft. Midden containing hammerstones, flakes, mano frags., and thermally fractured rocks. (Kaldenberg, 1976)

Site No. SDI-4854 Culture(s): Unknown

Description: Light lithic scatter, 150 x 150 ft., surface, highly patinated flakes and scrapers. (Kaldenberg, 1976)

Site No. SDI-4855 Culture(s): Unknown. Flaking station , 25 x 25 ft., cores and core

Description: frags. in context, hammerstone, flakes, scraper, hearth feature, quartz, andesite and basalt debitage. (Kaldenberg, 1976)

Site No. SDI-4856 Culture(s): Unknown

Description: 30 x 12 ft, a roasting pit or cooking area, some tools and flakes eroding from a large chamise to the west. (Kaldenberg, 1976)

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Site No. SDI-4857 Culture(s): Unknown

Description: A hearth with 42 thermally fractured cobbles and 25+ debitage, basalt and felsite. (Kaldenberg, 1976)

Site No. SDI-4858 Culture(s): Unknown

Description: Light shell scatter, 120 ft. in diameter, Chione only. (Kaldenberg, 1976)

Site No. SDI-4859 Culture(s): "Kumeyaay"

Description: Light shell scatter and potsherds, 60 x 60 ft. May be a portion of W-149 as described by Rogers. (Kaldenberg, 1976)

Site No. SDI-4860 Culture(s): Unknown

Description: Hearth with underlying ash, 3 x 3 ft. (Kaldenberg, 1976)

Site No. SDI-4862 Culture(s): "Kumeyaay"

Description: Light shell scatter, 130 x 130 ft., flakes, 1 pot sherd, Pecten and Chione. (Kaldenberg, 1976)

Site No. SDI-4863 Culture(s): "La Jolla"

Description: 150 x110 ft., Shell, thermally fractured rock, manos, flakes and scrapers, on knoll slope and at base. (Kaldenberg, 1976)

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Site No. SDI-4864 Culture(s): "La Jolla" A moderate scatter of artifacts of various Description: types, 180 x 400 ft., flakes, metate frags, mano frags and some shell Chione and Pecten. (Kaldenberg, 1976)

Site No. SDI-4865 Culture(s): "La Jollan"

Description: Dense surface shell concentration, 200 x 60 feet. Hammerstones, cores, flakes, mano frags., flake tools, Pecten and Chione. Part of W-149? (Kaldenberg, 1976)

Site No. SDI-4866 Culture(s): Unknown

Description: Light shell scatter, 80 ft. in diameter. (Kaldenberg, 1976)

Site No. SDI-4867 Culture(s): "La Jollan"

Description: Light shell scatter and lithic debris with black, sandy midden, 400 x 600 ft. (Kaldenberg, 1976)

Site No. SDI-4868 Culture(s): "La Jollan"

Description: Light surface scatter, 100 x 40 ft., hammerstone, cores, flakes, metate frag., mano frags, pushplane, thermally fractured rock. (Kaldenberg, 1976)

Site No. SDI-4869 Culture(s): Unknown

Description: Light scatter of lithic debris, 350 x 200 ft., some shell frags-Pecten, flakes and debitage. (Kaldenberg, 1976)

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ite No. SDI-4870 Culture(s): Unknown

Description: Isolated tools, 2 core tools. (Kaldenberg, 1976)

ite No. SDI-4935 Culture(s): Unknown

Description: Extensive midden deposit of flakes, ceramics, mano and metates, slicks nearby, 5,600 sq.m. postholes were dug. (Carrico, 1977) Possible burial.

te No. SDI-4990 Culture(s): Not recorded. 17% test excavated 1977, ref:report submitted

Description: to Carlsbad Dev. Corp, Carlsbad Plan. Comm. & SDCAS, May 20, 1977. 3 loci, 15000 sq. m. midden, pottery,cores, scrapers, beads, shell, bone, drills etc. (Ike, Pardash 1977)

te No. SDI-5093 Culture(s): Unknown

Description: Shallow midden with hearth and burnt shell, possible flake. (Langenwalter, 1977)

te No. SDI-5108 Culture(s): Unknown

Description: Light flake scatter and stone/cobble alignment. 190 x 32 feet. (May, 1974)

te No. SDI-5111 Culture(s): Unknown

Description: Milling station, 3 basins. (May, 1974)

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Site No. SDI-5112 Culture(s): Unknown

Description: Milling station with 9 basins. (May, 1974)

Site No. SDI-5113 Culture(s): Unknown. Possibly Roger's W-282.

Description: Milling station with 17 licks. (May, 1974)

Site No. SDI-5114 Culture(s): Unknown

Description: A roasting pit with medium to heavy patina. (May, 1974)

Site No. SDI-5115 Culture(s): Historic, 22 x 31 ft., 2 room house ruin, walls were

Description: plastered, glass, iron ; plaster, bricks, wagon ports, machinery, bottles, jars, barrel straps, pans. 19c. settlement of Lusardi family. 1872-1882. (May, 1974)

Site No. SDI-5120 Culture(s): Unknown

Description: Small scatter of flakes, teshoas, one expended core. (Eckhardt, 1977)

1936 sq meters, no depth

Site No. SDI-5121 Culture(s): Unknown

Description: Large number of artifacts, 1600 sq. meters, thumbnail scraper, cores and frags., primary flakes and scrapers. (Eckhardt, 1977)

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Site No. SDI-5123 Culture(s): Unknown

Description: Only evidence remaining is a single utilized flake. (Eckhardt, 1977)

ite No. SDI-5124 Culture(s): Unknown. May be W-393. "Probably San Dieguito"

Description: Extensive scatter of flakes and hammerstones, 2596 sq. m. (Eckhardt, 1977)

ite No. SDI-5126 Culture(s): Unknown. 1 basalt flake.

Description: "Entire area to be resurveyed in attempt to define the site, because it could not be adequately surveyed at this time." (Eckhardt, 1977)

ite No. SDI-5130 Culture(s): "Encinitas" Widespread distribution of discolored soil,

Description: artifacts, shell & exotic lithic, ca. 15-20 acres, mano-metate frags., choppers, scrapers, flakes- worked and utilized, historic adobe. (Drover, 1977)

ite No. SDI-5131 Culture(s): "Mexican-AmericanHistorical". Melted adobe walls, 15 x15

Description: feet, burned wood house, cement & rock floor foundation of third structure. Early to late 20th c. metal and ceramic artifacts. (Drover, 1977)

te No. SDI-5132 Culture(s): "Encinitas"

Description: Localized shell frags., and exotic lithics, 1 chopper. (Drover, 1977)

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Site No. SDI-5133 Culture(s): "Mexican-American Historical". Several historic structures
Description:& a well. Melted adobe walls show 2 to 3 structures, floor tiles, ceramics glass, butchered bone. (Drover, 1977)

Site No. SDI-5197 Culture(s): "Early Milling". Also historic adobe, 400 x 300 m, possible
Description: midden, cultural debris scattered on knoll top, frags of adobe walls and foundation remain, flakes, debitage and scrapers. (McCoy, 1977)

Site No. SDI-5213 Culture(s): "Late Prehistoric"
Description: Shell midden, 900 x 400 ft., hammerstones, cores, flakes, manos, thermally fractured rock. (Norwood, 1977)

Site No. SDI-5214 Culture(s): "Late Prehistoric"
Description: A shell midden, 2800 sq. meters, hammerstones, cores, flakes, mano, and 1 retouched tool. (Norwood, 1977)

Site No. SDI-5324 Culture(s): Unknown C- Possible milling site & lithic scatter.
Description: A-Two lithic scatters within one site, milling impleme ts, thermally fractured rocks, possible habitation, 45 sq. meters. (Hanna, 1977) B- 1 mano.

Site No. SDI-5325 Culture(s): Unknown
Description: Lithic scatter 2500 sq. meters, felsite, quartz, quartzite, rhyolite, basalt and others. chert point, scraper, burned bone frag. (Hanna, 1977)

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Site No. SDI-5444 Culture(s): Unknown

Description: 2 manos, 10 flakes and 2 flaked stone tools, 40 x 5 meters, severely graded and discked. (Norwood, 1978)

Site No. SDI-5445 Culture(s): Unknown

Description: Light shell covering an extensive area, Donax, Chione and Pecten. (Norwood, 1977)

Site No. SDI-5455 Culture(s): Unknown

Description: Light, ill defined surface scatter of artifacts, cores and flakes. 80 x 50 meters. (Norwood, 1978)

Site No. SDI-5536 Culture(s): Unknown

Description: Light scatter of flakes and 7 possible stone features-cairns?. 2 conical piles, 1 rock alignment, 4 irregular cobble piles. (Hanna, 1977)

Site No. SDI-5593 Culture(s): "La Jollan"

Description: Light lithics and shell scatter, scrapers, cores, mano frag., and hammerstones, 15 x 70 m. (Murray && Bickford, 1978)

Site No. SDI-5594 Culture(s): "La Jollan"

Description: Lithic scatter, scrapers, cores, mano frags., hammerstones and blades, 40 x 100 m. (Murray& Bickford, 1978)

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Site No. SDI-5595 Culture(s): "La Jollan"

Description: Light lithics and shell scatter, scrapers, cores, manos and hammerstones. 25 x 25 m. (Murray & Bickford, 1978)

Site No. SDI-5601 Culture(s): "Late Prehistoric"

Description: Ca. 3 acres encompassing 4 areas of concentration of shell and lithic artifacts. (Graham, 1977)

Site No. SDI-5620 Culture(s): Unknown ref: Hist/Arch. Recon. of Merigan Ranch. Gregg 1978

Description: Milling station consisting of 5 bedrock mortars, sherds flakes. (Gregg, 1978)

Site No. SDI-5652 Culture(s): Historic

Description: "Spanish style" house, stone, leather and brass button. (Edwards, 1977)

Site No. _____ Culture(s): _____

Description: _____

Site No. _____ Culture(s): _____

Description: _____

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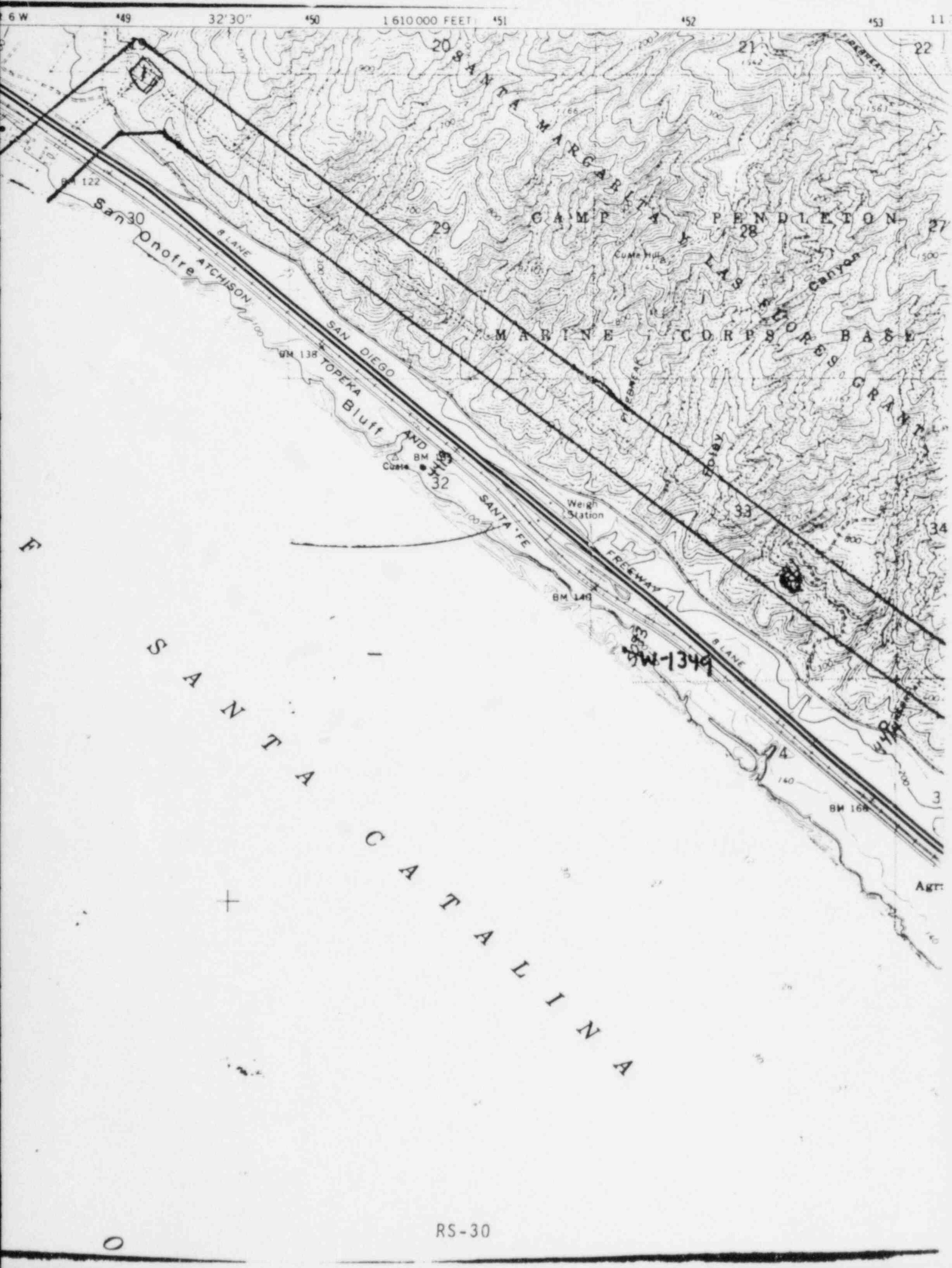

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CAMP PENDLETON
MARINE CORPS BASE
Canyon
Cuate Hill
Cuate
Weigh Station
San Onofre
Bluff
ATCHISON TOPEKA AND SANTA FE
SAN DIEGO FREEWAY
8 LANE
BM 122
BM 138
BM 140
BM 168
20
21
22
27
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29
30
32
33
34
Agr
SANTA CATALINA
TW-1349

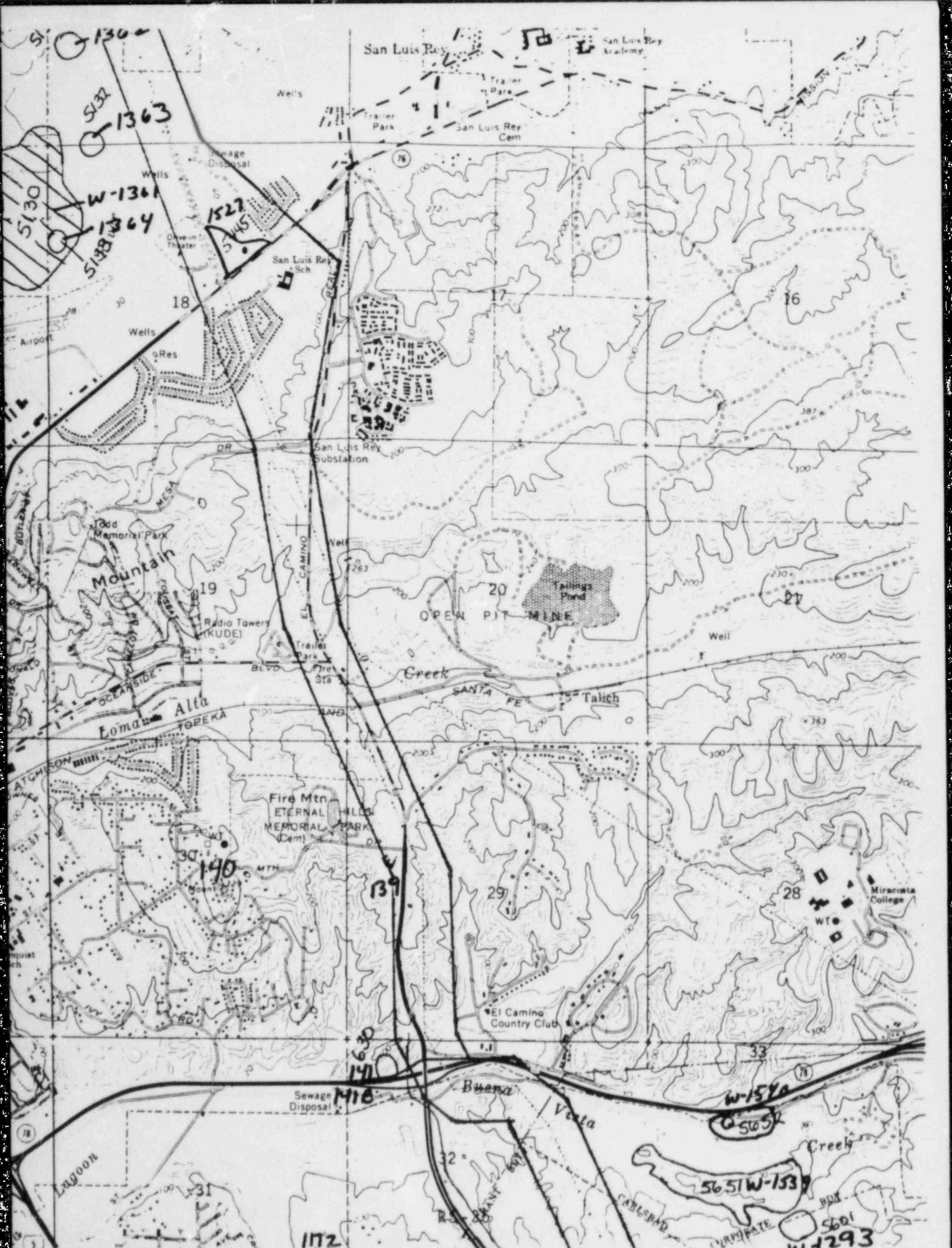

Horno Hill
Canyon
4530
Agra
CAMP
MARINE
SAN DIEGO
ATCHISON
TOPEKA
AND
SANTA FE
FREEWAY
BM 140
Asistencia de
Las Flores
(Ruins)

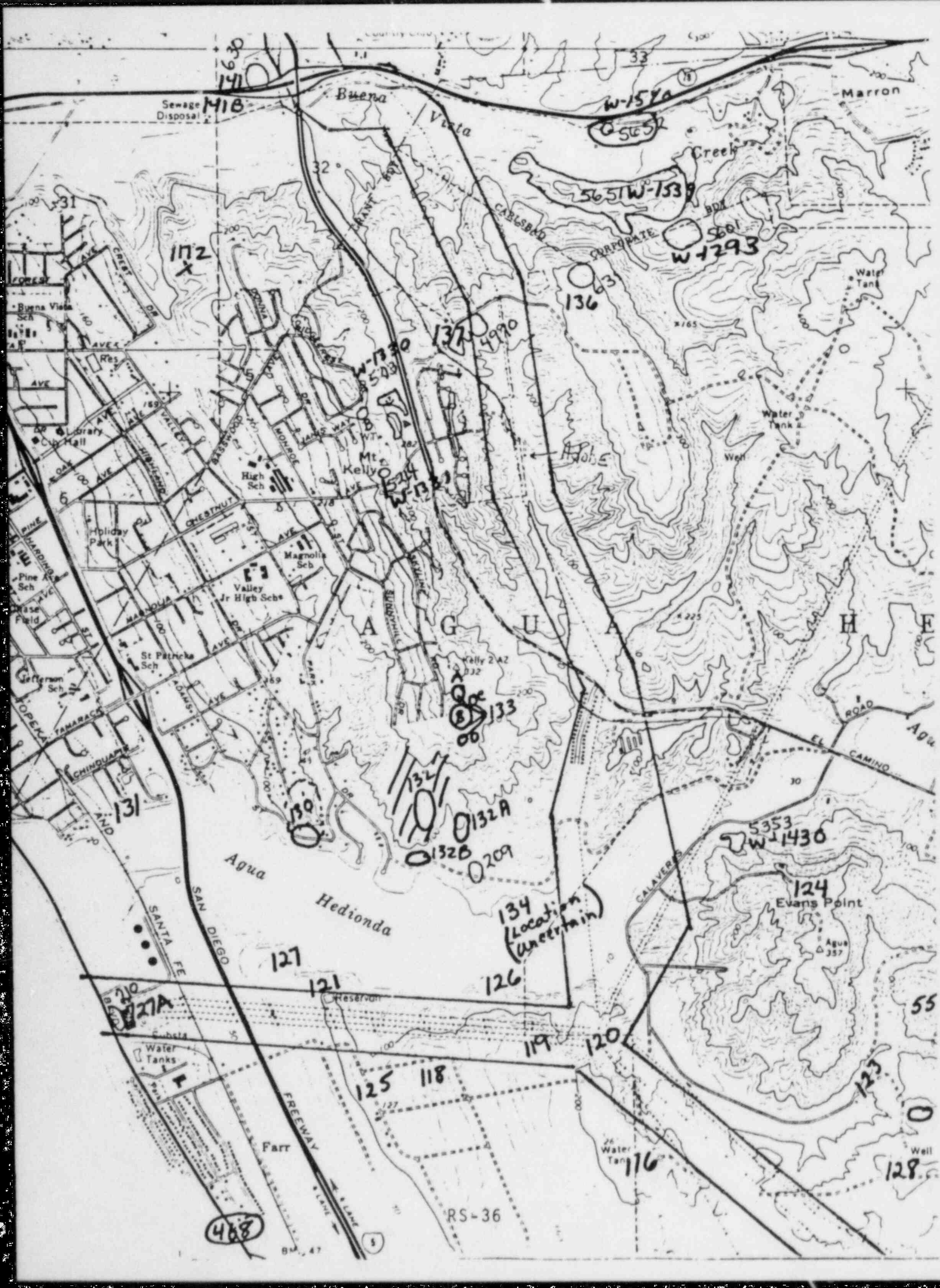

CAMP PENDLETON
MARINE CORPS
SANTA FE
Asistencia de
Las Flores
(Ruins)
Well
Las Flores
Creek
Las Pulgas
Pulgas Lake
Canyon
13
18
19
20
24
23
32

Canyon
RIFLE RANGE
Well
Santa Margarita River
French
Road Knoll
Observation Tower
RIFLE RANGE
Canyon
Newton Canyon
STUART MESA ROAD
SANTA FE
Cocklebur
Well
Stuart Mesa
Stuart
FALLBROOK 14 MI
OCEANSIDE 4.6 MI
INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1970
OCEANSIDE 4.5 MI
117°22'

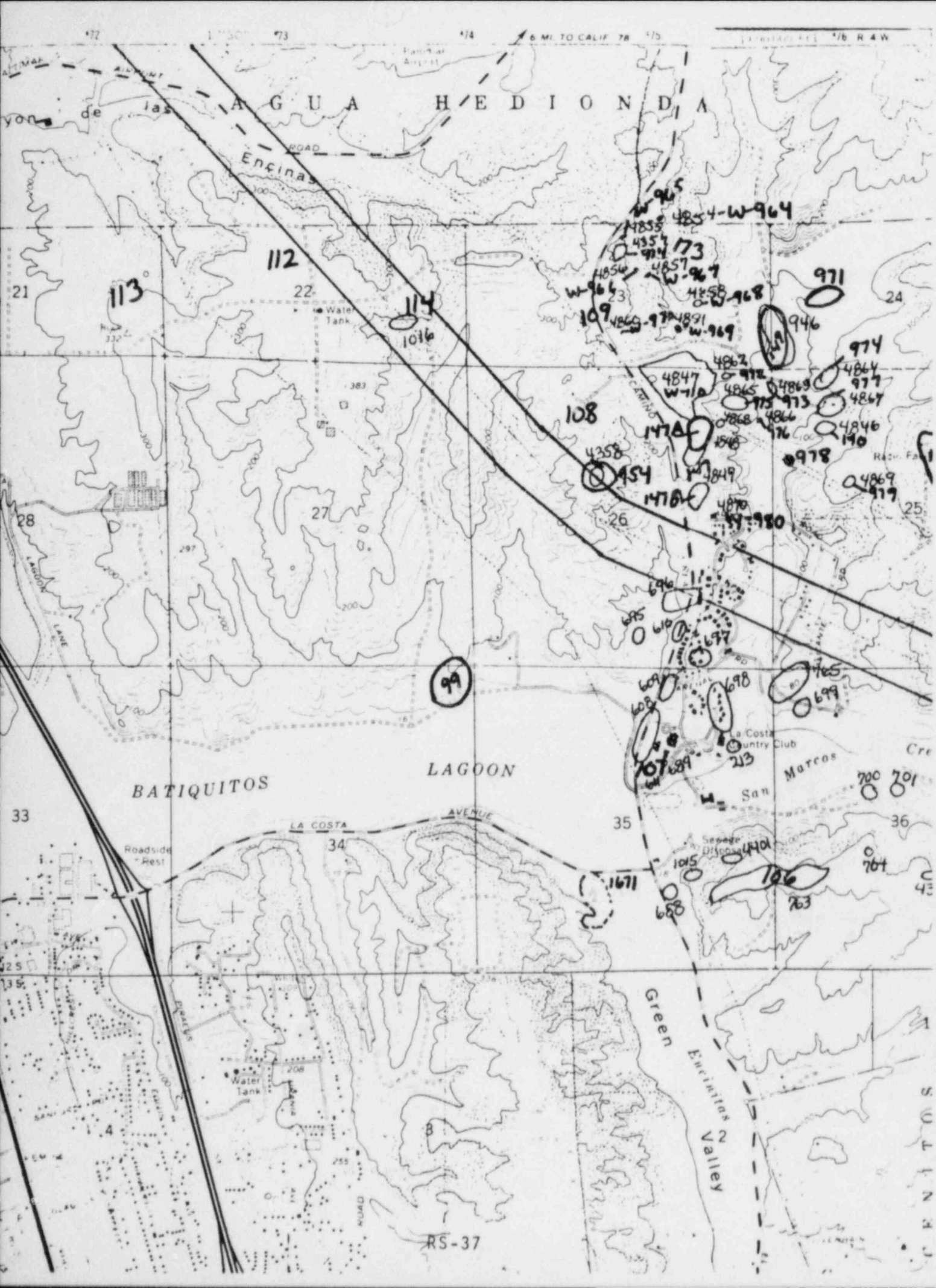
RS-33

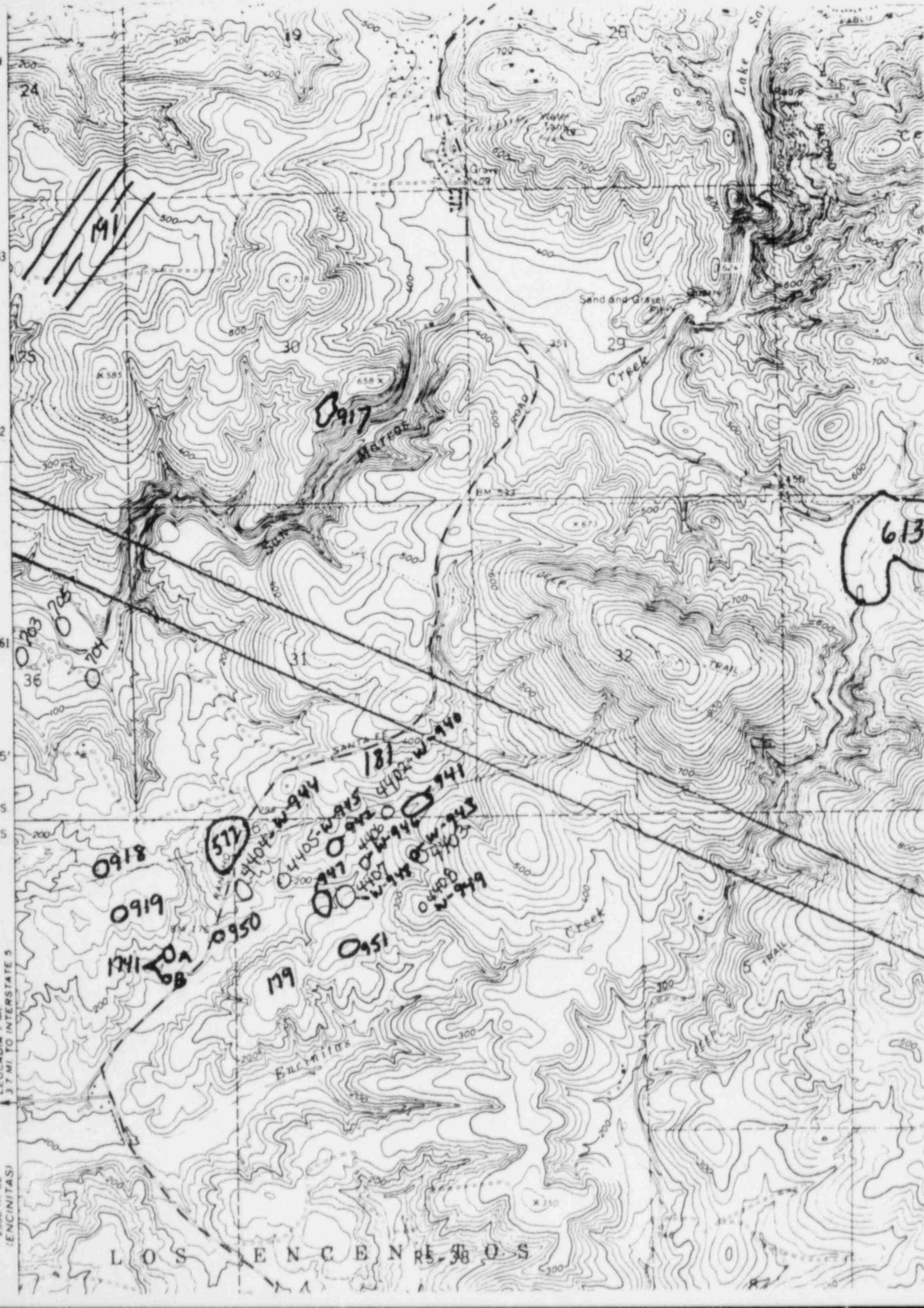

GEOLOGICAL SURVEY
30'
467
R 5W
R 4W
468
20'
2 Ysidora Basin
CAMP PENDLETON
MARINE CORPS BASE
Windmill Lake
Whelan Lake
Storage Bin
Wells
San
San Luis Rey
Trailer Park
Las Flores
Santa Margarita
Wire
Mountain
Hubbert Lake
Canyon
Water Tank
Naval Reservation
Oceanside Airport
San Luis Rey
Well
Fring Range
Jefferson Jr. High Sch
Mission Sch
Mission
Mountain
Shipping Center
Drive-in Theater
Radio Towers (KUDE)
Trailer Park
Fire Sta
Oceanside-Carlsbad Country Club
OCEANSIDE
Fire Mtn
ETERNAL MEMORIAL PARK (Cem)
Loma Alta
Creek
S130
S131
S132
S138
S145
1362
1363
1364
W-1361
1522
BMK 235


San Luis Rey
San Luis Rey Academy
Trailer Park
Wells
Trailer Park
San Luis Rey Cem
Sewage Disposal
Wells
Drive-in Theater
San Luis Rey Sch
18
17
16
Wells
Airport
Res
San Luis Rey Substation
Todd Memorial Park
Mountain
19
20
Tailings Pond
OPEN PIT MINE
21
Radio Towers (KUDE)
Trailer Park
Fire Sta
Creek
Well
OCEANSIDE
BLVD
SANTA FE
Talich
Loma Alta
TOPEKA
AND
ATCHISON
Fire Mtn
ETERNAL HILLS MEMORIAL PARK (Cem)
30
29
28
Miracosta College
El Camino Country Club
33
Sewage Disposal
Buena
Vista
Creek
32
Lagoon
31
CARLSBAD
1363
W-1361
1364
1527
140
139
141
1418
W-1592
5605
5651 W-1533
5601
W-1293
1172



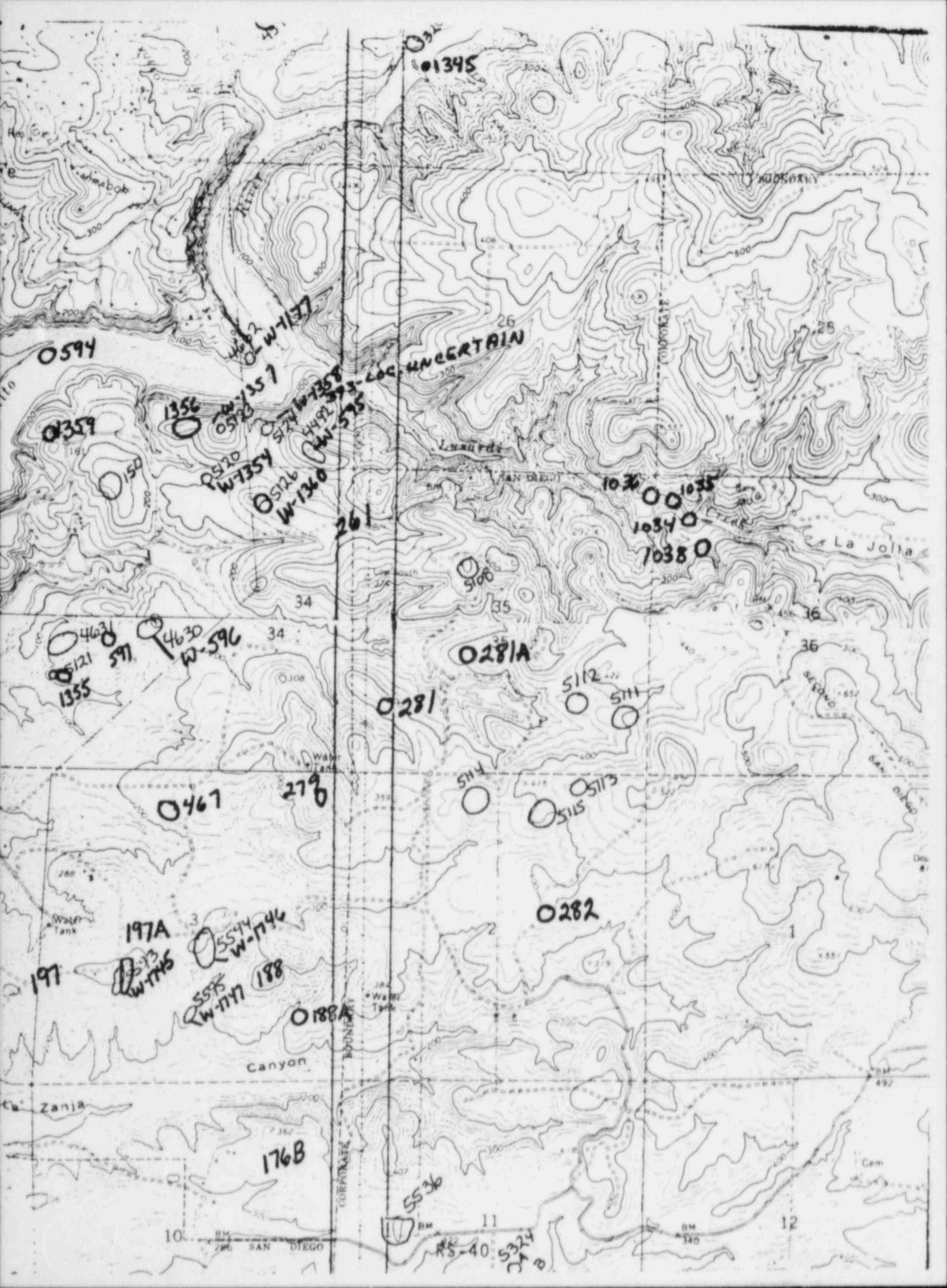
Sewage Disposal
Buena Vista
Creek
Marron
Carlsbad Corporate Bdy
Buena Vista Sch
Res
Library
City Hall
High Sch
Mt. Kelly
Chestnut Ave
Holiday Park
Magnolia Sch
Pine Ave Sch
Valley Jr High Schs
St Patricks Sch
Jefferson Sch
Tamarack
Chinquapin
A G U A H E
Kelly 2 AZ
Agua Hedionda
Santa Fe
San Diego Freeway
El Camino Road
Calaveras
Evans Point
Agua 357
Water Tank
Well
Water Tanks
Substa
Reservoir
Farr
RS-36
141
141B
W-1570
5655
5651 W-1539
5601 W-1293
172
136
137
4990
W-1330
5503
5324 W-1328
Adobe
133
132
132A
132B
209
130
131
134 (Location Uncertain)
127
121
126
127A
119
120
125
118
5353 W-1430
124
123
55
128
116
468


AGUA HEDIONDA
Encinas
LAGOON
BATIQUITOS
LA COSTA AVENUE
Water Tank
Roadside Rest
La Costa Country Club
San Marcos
Green Valley
RS-37

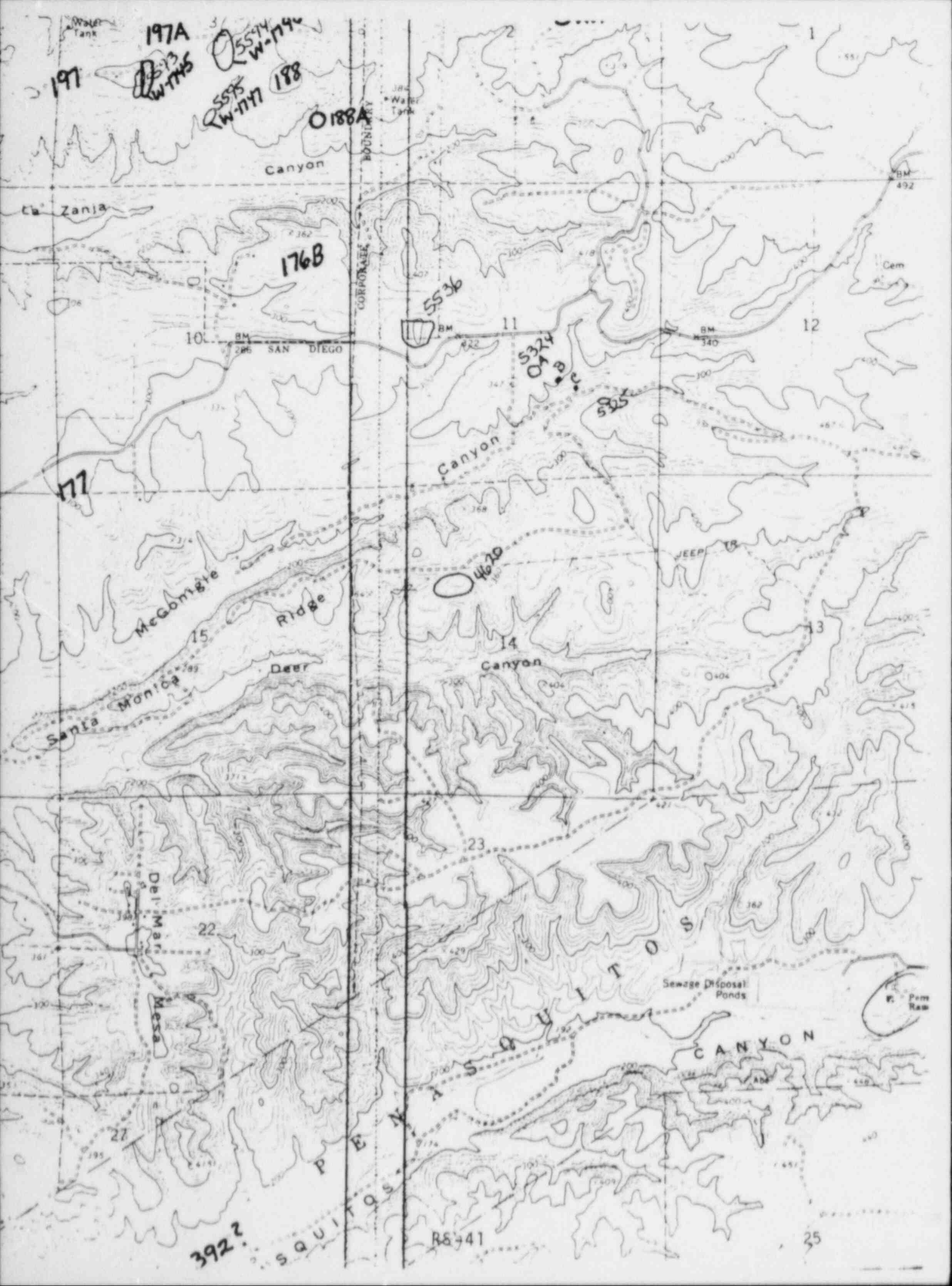


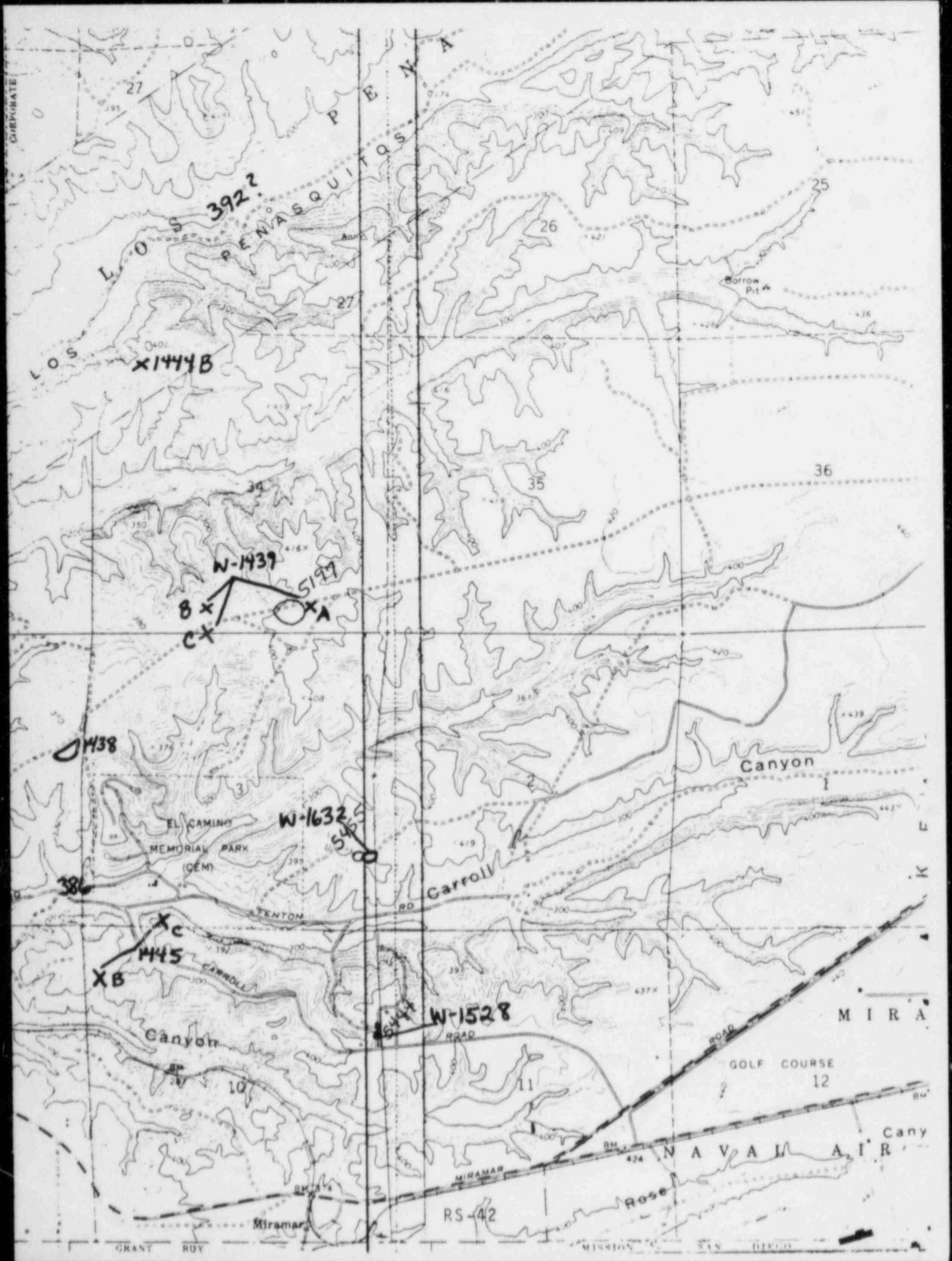
19
20
24
25
29
30
31
32
36
Lake
Sand and Gravel Pits
Creek
ROAD
TRAIL
SANTA FE
Encinitas
Creek
T. 12 S.
T. 13 S.
5'
LEUCADIA 7 MI.
3.7 MI. TO INTERSTATE 5
2550 III SE
(ENCINITAS)
L O S E N C E N I T O S
R5-38
191
917
613
703
705
704
181
W-940
W-941
W-944
W-945
W-942
W-946
W-943
W-947
W-948
W-949
4402
4403
4404
4405
4406
4407
4408
572
0918
0919
0950
0951
1741
179


TRAIL
HARMONY
Creek
156B?
Escondido
Quarry
156B?
SECOND
San Dieguito
Reservoir
156
Siphon
Gaging Station
San Dieguito
147
186
178
319
318
624
185
320
1345
RS-39



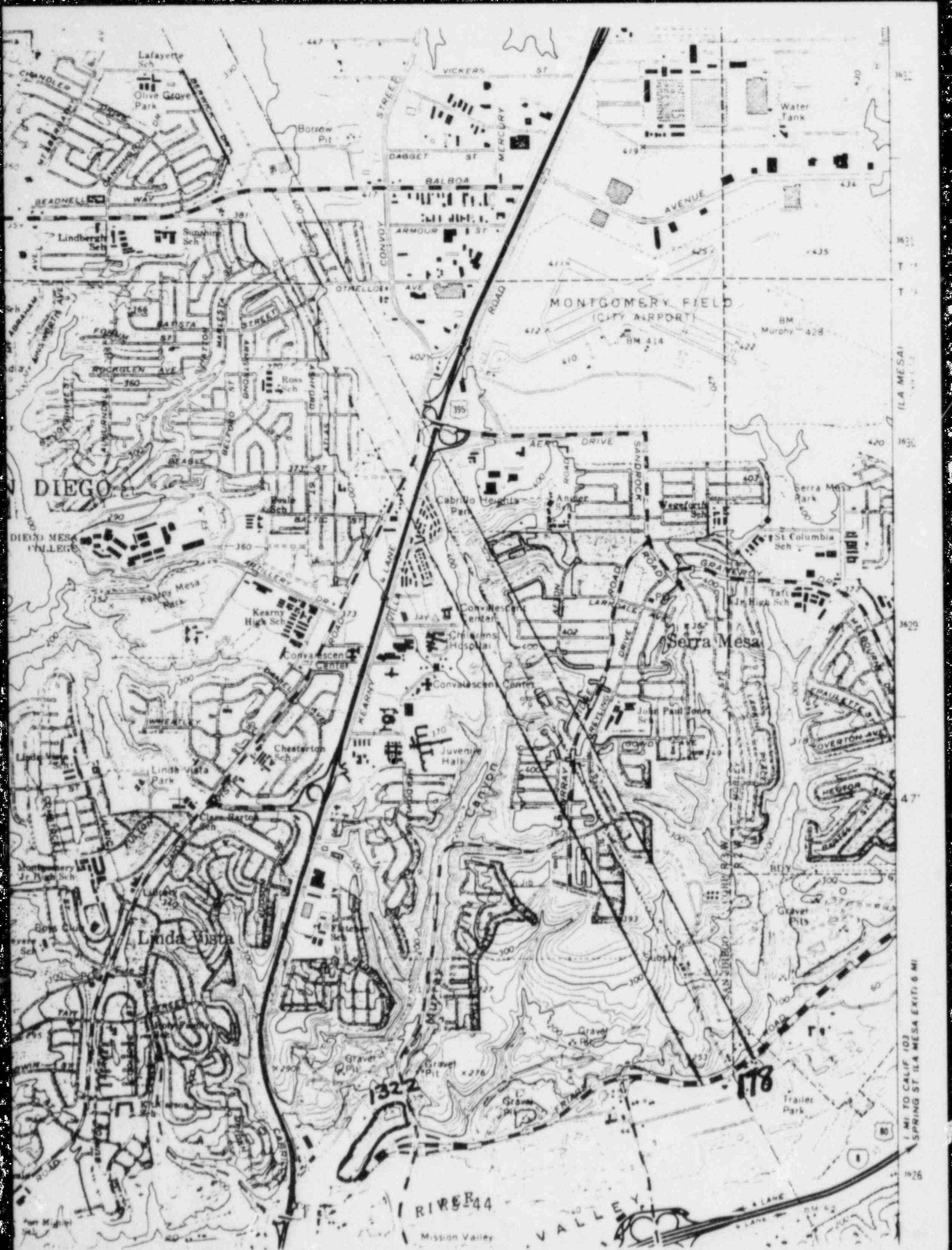
01345
0594
LOC. UNCERTAIN
1356
0359
W-1354
W-1360
261
Lusardi
1036
1035
1034
1038
La Jolla
5108
34
35
36
4630
W-596
0281A
1355
5112
5111
0281
0467
279
5114
5113
5115
0282
197A
197
188
0188A
Canyon
Zanja
176B
5536
11
12
10
SAN DIEGO
RS-40
5324


Water Tank
197A
197
188
O188A
Water Tank
Canyon
BOUNDARY
CORPORATE
La Zanja
176B
5536
10
BM 286
SAN DIEGO
BM
11
BM 340
12
Cem
BM 492
5324
5325
177
Canyon
JEEP TR
4620
McGonigle
Ridge
15
14
13
Deer
Canyon
Santa Monica
23
Del Mar
Mesa
22
27
Sewage Disposal Ponds
PEÑASQUITOS
CANYON
SQUITOS
392?
RS 441
25



LOS PENASQUITOS
PENA
LOS
392?
x1444B
W-1439
5197
8 x
x A
C x
438
W-1632
54
386
x C
1445
x B
W-1528
EL CAMINO MEMORIAL PARK (CEM)
Carroll
Canyon
CARROLL
ROAD
MIRA
GOLF COURSE
NAVAL AIR
Cany
MIRAMAR
Miramar
Rose
RS-42
Borrow Pit
27
26
25
35
36
34
3
2
1
10
11
12

482
483
484
10'
485
Canyon
SANTA FE
Rose
MIR
NAVAL AI
CANYON
SAN CLEMENTE
PARK
M I
Community Center
Hawthorne Sch
Einstein Jr High Sch
MacDowell Sch
Trailer Park
Madison High Sch
CONRAD AVE
BLVD
CLAIREMONT MESA
North Clairemont
Lafayette Sch
Olive Grove Park
Borrow Pit
K E A R N
S A N
RS-43


MONTGOMERY FIELD
(CITY AIRPORT)
Serra Mesa
Linda Vista
DIEGO
Lafayette Sch
Olive Grove Park
Water Tank
Borrow Pit
BALBOA
AVENUE
Lindbergh Sch
Sunshine Sch
Ross Sch
Serra Mesa Park
St Columbia Sch
Kearny High Sch
Kearny Mesa Park
Convalescent Center
Childrens Hospital
Juvenile Hall
Chesterton Sch
Linda Vista Park
John Paul Jones Sch
Montgomery Jr High Sch
Gravel Pit
Trailer Park
Mission Valley
VALLEY
AERO DRIVE
SANDROCK
CONVOY STREET
VICKERS ST
DAGGET ST
ARMOUR ST
Canyon
1322
178
44
(LA MESA)