Results of Cultural Resources Survey of the Dogwood Road at Villa Avenue Project, Imperial County, California

Prepared for
City of El Centro
Community Development Department
1275 Main Street
Imperial County, California
Contact: Norma Villicaña

Prepared by
RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101
P 619.308.9333

RECON Number 8757
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Harry J. Price, Principal Investigator

NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

Author:	Harry J. Price
Consulting Firm:	RECON Environmental, Inc. 1927 Fifth Avenue San Diego, CA 92101-2358
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USGS Quadrangle Map:	El Centro California, quadrangle, 1979 edition
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This report summarizes the results of the cultural resources field and archival investigation of the Dogwood Road at Villa Avenue Project (project) site, in the County of Imperial, California. The approximately 330-acre project site is located south of East Villa Road, west of Cooley Road, east of North Dogwood Street, and north of the Holton Interurban Railroad. The site is currently located within the County of Imperial (County) and is directly adjacent to the City of El Centro (City). The Assessor's Parcel Number for the site is 044-450-038. A records search was conducted of the archaeological databases maintained at the California Historical Resources Information System, South Coastal Information Center at San Diego State University. Five cultural resources were mapped within or adjacent to the current project site. They are P-13-009015 (a segment of the Alder Canal), P-13-009091 (a section of the Central 3 Drain), P-13-009092 (a segment of an unnamed east–west canal), P-13-009016 (a portion of a power line), and P-13-009037 (a segment of the Holton Interurban Railroad).

No previously unrecorded prehistoric resources were found during the survey. New historic-period resources 8757-HCL-1 (a portion of the Dogwood Canal) and 8757-HJP-1 (a set of irrigation canals within the project) were identified. Portions of previously recorded P-13-009037, P-13-009091, and P-13-009016 were also identified on the project. It was determined that 8757-HCL-1, 8757-HJP-1 , P-13-009091 and P-13-009016 do not meet any of the criteria for listing on the California Register of Historic Places and are therefore not significant historic resources under California Environmental Quality Act. P-13-009037 qualifies under Criterion B for listing on the California Register of Historic Resources (CRHR) at the local level because of its association with W. F. Holt, who was significant in the early development of the El Centro area of the valley

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CONFIDENTIAL ATTACHMENT (bound under separate cover)

1.0 Management Summary

This report summarizes the results of the cultural resources field and archival investigation of the Dogwood Road at Villa Avenue Project site, in the County of Imperial, California. The project is located east of North Dogwood Street and north of the Holton Interurban Railroad, immediately north and east of the city of El Centro boundary.

A records search was conducted of the archaeological databases maintained at the California Historical Resources Information System, South Coastal Information Center at San Diego State University (SCIC). The files at SCIC show five cultural resources mapped within or adjacent to the current project site. They are P-13-009015 (a segment of the Alder Canal), P-13-009091 (a section of the Central 3 Drain), P-13-009092 (a segment of an unnamed east-west canal), P-13-009016 (a portion of a power line), and P-13-009037, (a segment of the Holton Interurban Railroad).

No previously unrecorded prehistoric cultural resources were found during the survey. Two previously unrecorded historic-period resources, a section of the Dogwood Canal and a set of concrete-lined canals servicing the project property, were recorded using California State Parks Department of Parks and Recreation (DPR) 523 Primary site forms. In addition, continuation sheets were filled for a newly identified section of the Holton Interurban Railroad and the Central 3 Drain Canal.

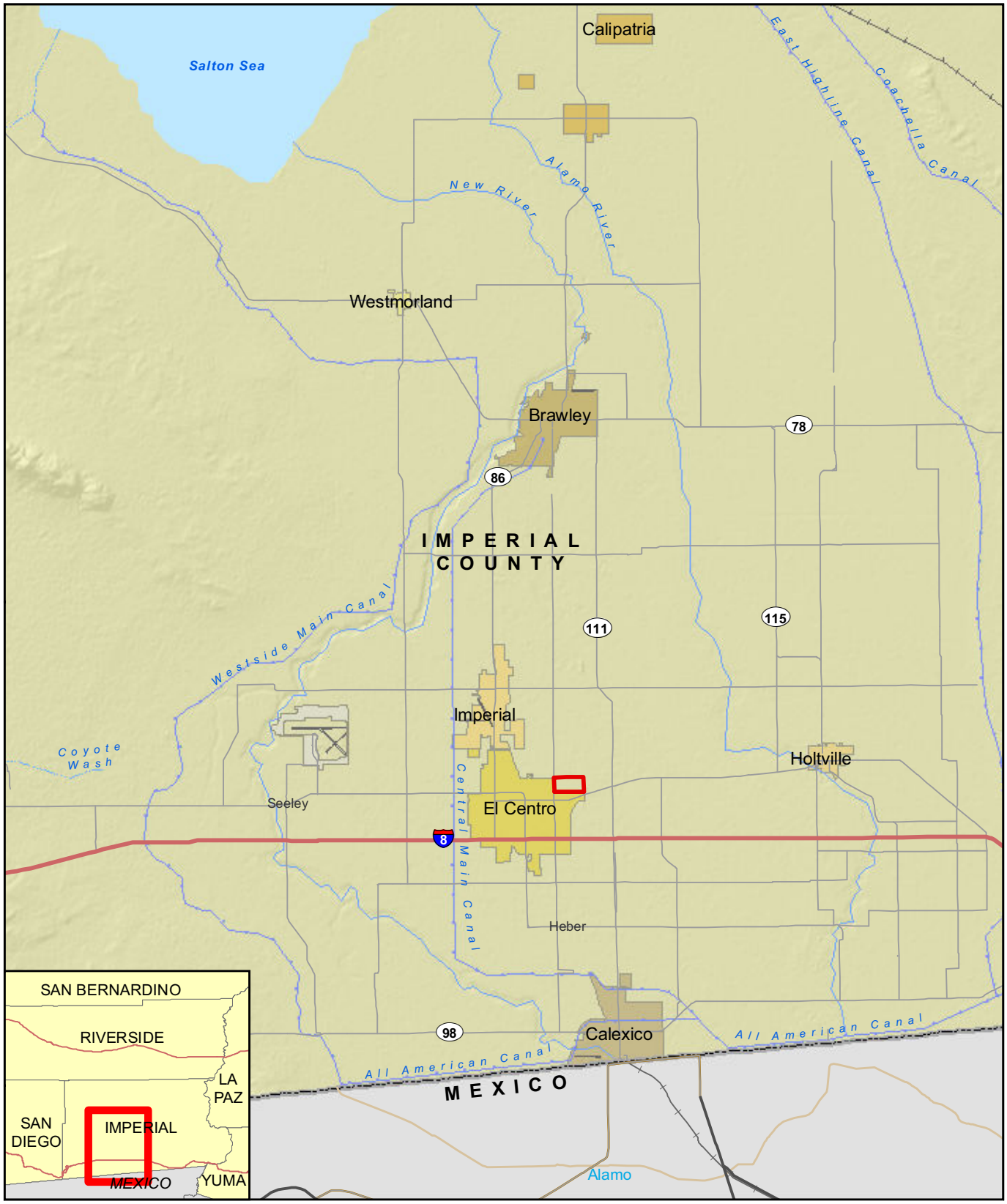
8757-HCL-1 (Dogwood Canal), 8757-HJP-1 (the system of interior concrete canals), portions of P-13-009037 (Holton Interurban Railroad), and P-13-009091 (Central 3 Drain) on the project do not meet any of the criteria for listing on the California Register of Historic Places and are therefore not significant historic resources under California Environmental Quality Act (CEQA). Because none of these resources are significant historic resources under CEQA, there will be no adverse effect on historical resources as a result of the project.

P-13-009037 qualifies under Criterion B for listing on the California Register of Historic Resources (CRHR) at the local level because of its association with W. F. Holt, who was significant in the early development of the El Centro area of the valley.

2.0 Introduction

This report describes the results of the cultural resources survey conducted for the Dogwood Road at Villa Avenue Project (project). The site is south of East Villa Road, west of Cooley Road, east of North Dogwood Street and north of the Holton Interurban Railroad, in the county of Imperial (Figure 1). The Assessor's Parcel Number is 044-450-038. The project site is on the U.S. Geological Survey 7.5-minute topographical map series, El Centro quadrangle 1979, in section 46, Township 15 South and Range 14 East (Figure 2). The project is currently fallow agricultural land (Figure 3).

The project consists of the annexation of the site from the County to the City, a General Plan Amendment (GPA) and a Pre-zone.



Project Boundary

RECON

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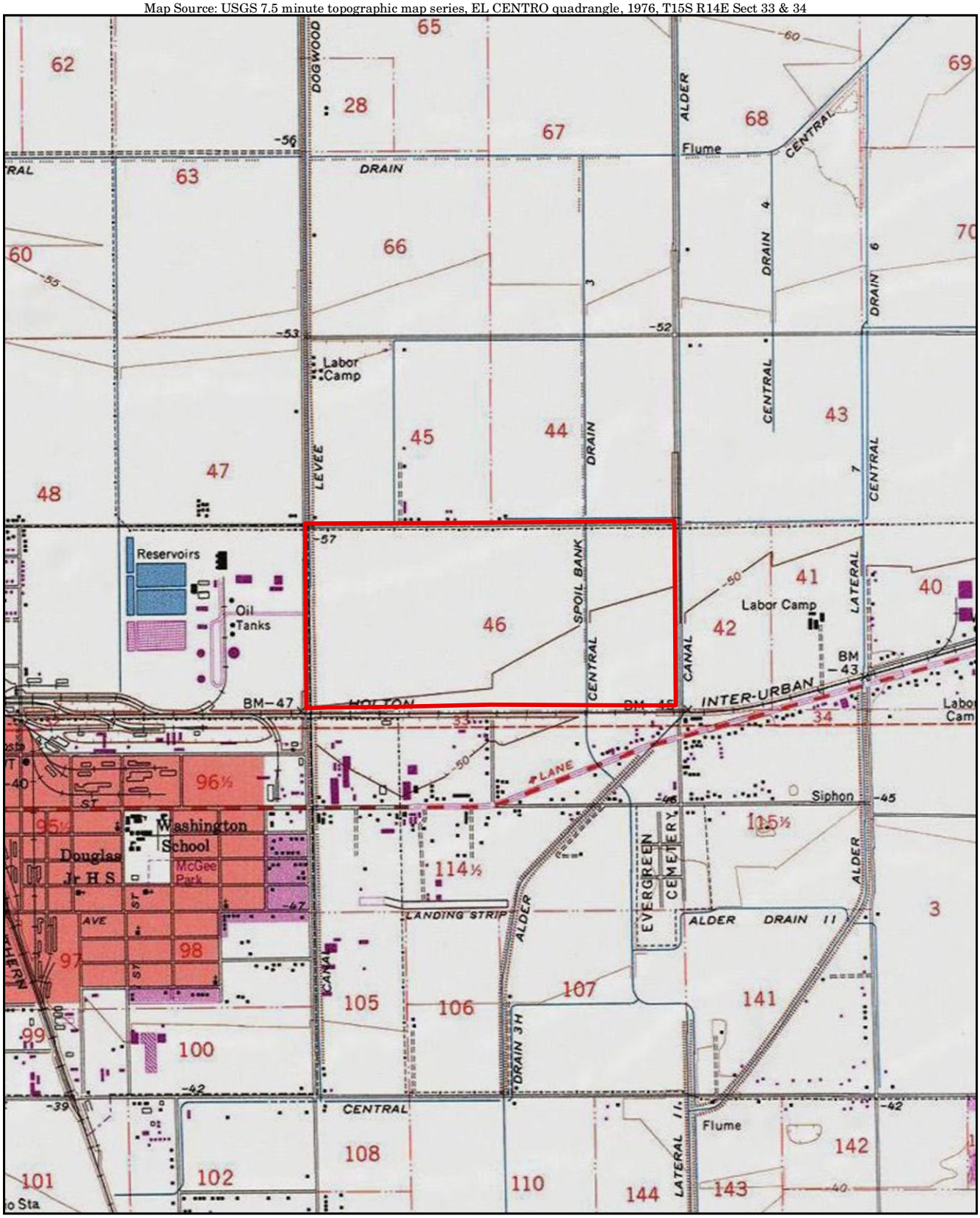
FIGURE 1

Regional Location

Map Source: USGS 7.5 minute topographic map series, EL CENTRO quadrangle, 1976, T15S R14E Sect 33 & 34



0 Feet 2,000

Project Boundary

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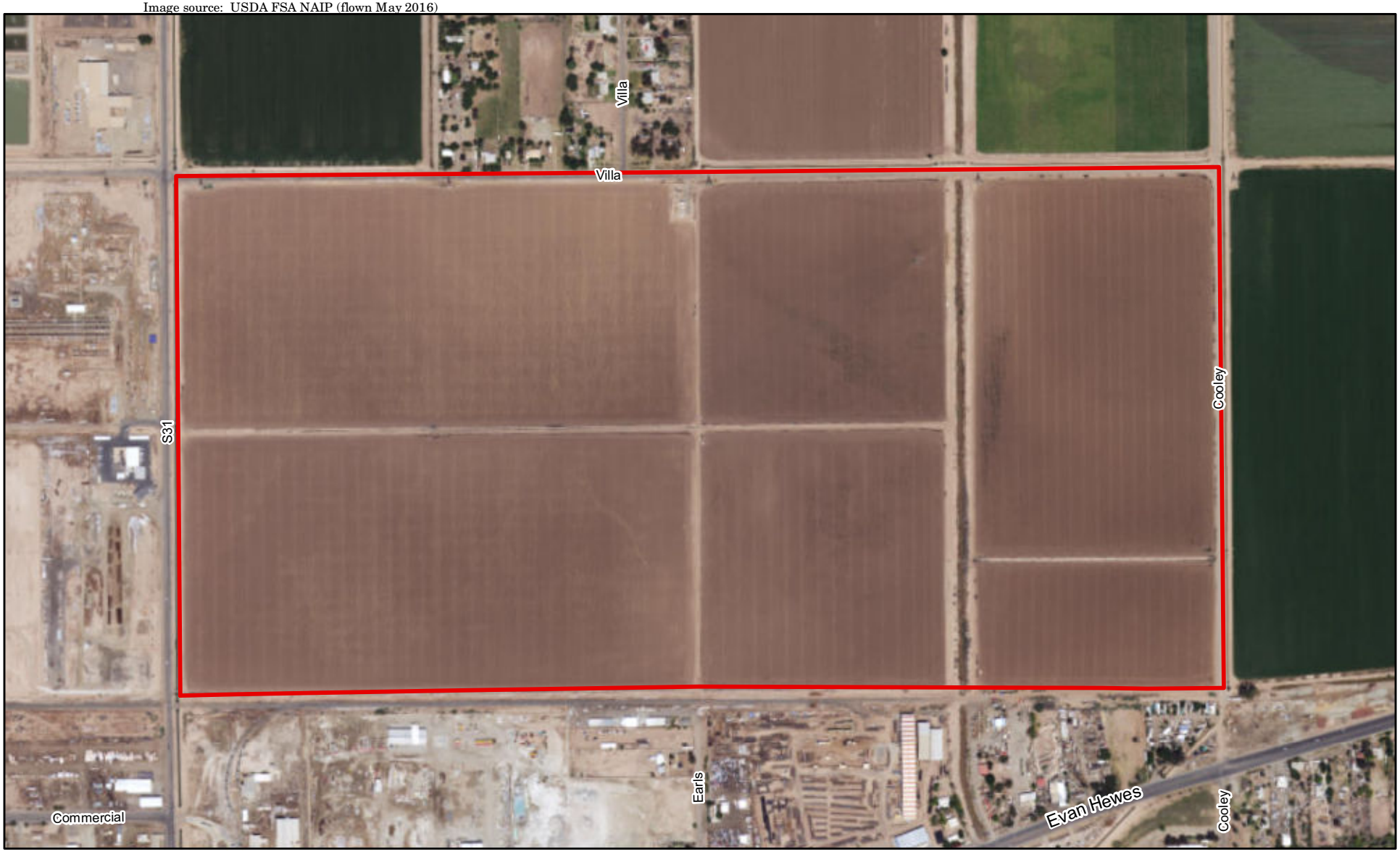
FIGURE 2

Project Location on USGS Map

Image source: USDA FSA NAIP (flown May 2016)



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Project Boundary

FIGURE 3

Project Location on Aerial Photograph

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2.1 General Plan Amendment

The project proposes a GPA to designate the site as General Industrial. The General Industrial designation includes three subcategories; Light Manufacturing, General Manufacturing, and Planned Industrial. The project proposes General Manufacturing, which allows for a maximum floor area ratio (FAR) of 0.45:1 and an average FAR of 0.35:1. This designation requires that operations do not create "offensive, obnoxious, or dangerous conditions which are detectable beyond the boundary of the land use designation borders".

2.2 Pre-zone

The site is currently zoned A2U Agriculture-Urban Area by the County of Imperial. The proposed City pre-zone would zone the site as MG General Manufacturing. Per the City's Municipal Code Section, this zone does not include any minimum lot sizes or setbacks with the exception of 50-foot rear and side setbacks from adjacent residential zones. This zone allows for buildings up to 75 feet tall, with one parking space per 500 square-feet.

2.3 Future Development

Based on the proposed General Plan designation and zoning, the maximum buildout of the site could include up to 5 million square feet of manufacturing warehouse space. To support the manufacturing warehouse space, the project is also anticipated to include parking, landscaping, solar energy system, a large detention basin, an Imperial Irrigation District (IID) substation, loading docks, a connection to the railroad to the south, and utility connections to existing infrastructure in the adjacent roadways. The project proposes to retain the Dogwood and Alder canals, and provide minimal improvements such as a culvert for driveway access, fencing, and/or slope stability improvements.

Due to the size of the project, future buildout would be split into five phases. Each phase would include approximately 1 million square feet and would generate approximately 1,000 employees. Mass grading would occur in the first phase of the project, with fine grading occurring for each subsequent phase. Buildout of the site could take up to 5 years, with each phase taking approximately 1 year for construction.

3.0 Physical and Cultural Setting

3.1 Physical Setting

The approximately 330-acre project site is located at the southeast corner of Dogwood Road at Villa Avenue, Imperial County, California (see Figure 1). The project site is relatively flat, and consists of agricultural fields, dirt roads, a sewer lift station, and a segment of the unlined Central 3 Drain (see Figure 2). Project elevation is approximately 50 feet below sea level. Existing surrounding uses include agricultural fields and rural residential to the north and east, industrial and rural residential uses to the south, and the civic IID facility

to the west (see Figure 3). The IID facility includes power plant facilities with battery storage.

The project area is underlain by deep deltaic alluvial fills deposited by the Colorado River. Soils in the Area of Potential Effect (APE) are described as Imperial silty clay (114) and Imperial–Glenbar silty clay, 0 to 2 percent slopes (115). The Imperial silty clay is characterized by pinkish gray and light brown silty clay to a depth of 60 inches or more. Efflorescences of gypsum and brown stains are common in the cracks and pores. In some places the surface layer is silty clay loam or clay loam. Similarly, Imperial–Glenbar typically has a surface layer that is pinkish gray silty clay loam to about 12 inches. The underlying material is pinkish gray and light brown silty clay to a depth of 60 inches. Efflorescences of gypsum and brown stains are common in the cracks and pores (U.S. Department of Agriculture 1981).

3.2 Cultural Setting

The prehistory of Imperial County may be divided into three major temporal periods: Paleoamerican, Archaic, and Late Prehistoric. These time periods have regional expression through various regional archaeological complexes or archaeological cultures.

3.2.1 Paleoamerican Period

The earliest part of the Paleoamerican Period in the region is represented by the Fluted Point Tradition. Fluted points have been well documented and dated for the Rocky Mountain and Great Plains areas (Haury 1975; Hester 1972; Jennings 1978; McGuire and Schiffer 1982). In these regions, they are often associated with big game kill sites and are interpreted to reflect a Big Game Hunting Tradition. In the Great Basin and California, however, their dating is more problematic. They are typically found along the shorelines of Pleistocene playas, along fossil streams, and in passes connecting such places (Fredrickson 1973; Riddell and Olsen 1969). Some researchers suggest that this reflects a lacustrine or riparian adaptation ancestral to the Western Pluvial Lakes Tradition or San Dieguito–Lake Mojave Complex that developed after about 12,000 Before Present (BP) (Moratto 1984).

The San Dieguito–Lake Mojave Complex is thought to have existed approximately 10,000 to 7,000 years ago during a time of greater rainfall than the present in southeastern California (Warren and Crabtree 1986). The assemblage consists of heavy percussion, core, and flake-based tools: domed and keeled choppers, planes, and scrapers. One also finds light-percussion flaked spokeshaves, flaked-stone crescentics, and leaf-shaped projectile points. In the Mojave Desert, one also finds the distinctive Lake Mojave and Silver Lake stemmed projectile points. Milling equipment is apparently rare or absent (Warren and Crabtree 1986:184). Subsistence is generally thought to have been focused on highly ranked resources such as large mammals. This subsistence strategy may have encouraged a pattern of relatively high residential mobility. Some cleared circles, trails, and geoglyphs in the Colorado Desert have been tentatively included in the San Dieguito–Lake Mojave Complex. Temporal placement of these sites is based on degree of embeddedness in desert

pavements and patination, a dating method that has not been proven reliable (Hayden 1976; McGuire and Schiffer 1982; Rogers 1939).

3.2.2 Archaic Period

The early Archaic Period is represented by the Pinto Complex (7,000 to 4,000 BP) in the Colorado Desert. There is an apparent shift to a more generalized economy and a gradually increased emphasis on the exploitation of plant resources. The ground stone artifacts associated with this complex are typically thin slabs with smooth, highly polished surfaces, not the basin metates and manos typical of later times. Rogers (1939:52-53) argued that the thin, polished "slab metates" were not milling stones, but rather were used to process fibrous leaves or skins (Susia 1964; Wallace 1962; Warren 1984). Projectile points consist of the distinctive Pinto Series atlatl points made by hard hammer percussion technique. The assemblage also includes scrapers, knives, scraper-planes, and choppers. The mixed core-based tool assemblage of the Pinto Complex may indicate a range of adaptations to a more diversified set of plant and animal resources brought about by a generalized desiccating trend in the West, punctuated by occasional, more mesic times. In general, archaeological sites dating to this period are rare in the Colorado Desert (Cleland et al. 2003).

According to Schaefer (1994), Indian Hill Rockshelter (CA-SDI-2537), located in the eastern foothills of the Jacumba Mountains, is the only well-documented site in the Colorado Desert of this period. This site contained rock-lined features, Elko points, core tools, hammerstones, manos reused as cooking stones and in hearths, brown ware and buff ware ceramics, ceramic pipes, and shell beads (MacDonald 1992). The ceramics were found in the upper levels of the deposit and date to a later site component. MacDonald (1992) suggests that Indian Hill Rockshelter was a multi-component site used as a food storage facility with numerous rock-lined features, occupied during the winter and spring.

Following the Pinto Complex is the Gypsum Complex, or Amargosa Complex (4000 to 1500 BP). This complex is characterized by the presence of fine pressure-flaked Elko and Humboldt series and Gypsum-type projectile points. The assemblage also contains leaf-shaped points; rectangular-based knives; flake scrapers; T-shaped drills; and occasional large scraper-planes, choppers, and hammerstones. Manos and basin metates become relatively common, and the mortar and pestle were introduced late in the complex (Warren 1984:416). The diversity of tool types and the refinement of milling equipment suggest a more generalized and effective adaptation to desert conditions in the Greater Southwest (Warren and Crabtree 1986).

3.2.3 Late Prehistoric Period

The Late Prehistoric Period, also known as the Patayan Complex, begins by approximately 1500 BP. The Patayan Complex is characterized by dramatic cultural change and an expanded population in the Salton Trough. Paddle and anvil pottery was introduced, probably from Mexico by way of the Hohokam Complex of the middle Gila River area (Schroeder 1975, 1979; Rogers 1945). Lower Colorado Buff Ware, as described in the

Patayan Complex, appears by about 1250 BP in the Colorado Desert (Waters 1982; Hildebrand 2003). Tizon Brownware, found in San Diego County, northern Baja California, and the western Salton Basin, occurs slightly later (Griset 1996).

The Patayan Complex is divided into three phases: Patayan I, II, and III. The terms Yuman I, II, and III—as termed by M. Rogers (1945)—coincide with the three Patayan periods with slight differences in terms of ceramic types and are defined by changes in ceramic types and the filling and desiccation of Lake Cahuilla (Waters 1982; Weide 1976).

The settlement system of Patayan I (1250–950 BP) is characterized by small mobile groups living in dispersed seasonal settlements along the Colorado River. Hunting and gathering was the subsistence strategy used by these mobile groups. A subsistence shift to floodplain horticulture occurred along the Colorado River and perhaps along the Alamo River and New River during the Patayan II Period (950–450 BP) (Baksh 1994; Forde 1931). Like elsewhere in the Southwest, principal crops were maize, beans, and squash, but mesquite was actually more important to the diet. Fish from the Colorado River was the main source of protein (Castetter and Bell 1951). The shift to Patayan II coincides with the various filling–recession episodes of Lake Cahuilla and the lacustrine environment created by the lake. Yuman II also spanned from 900 to 450 BP and is characterized with an expansion into large settlement areas because of filling of Lake Cahuilla (Rogers 1945). During Patayan III (450–20 BP), there was a population shift because of the final desiccation of Lake Cahuilla (Rogers 1945; Waters 1982). Rogers (1945) also mentioned this population shift during his discussion of the Yuman III Period.

Smaller projectile points signifying the advent of the bow and arrow appear about 1050 BP in the Colorado Desert. Also during this period, burial practices shifted from inhumations to cremations. Other culture traits generally associated with this period include increasingly elaborate kinship systems, rock art including the famous geoglyphs or ground figures found along the Colorado River, and expanded trading networks as evidenced by the presence of shell from the Pacific Ocean and Gulf of California in Colorado Desert sites (Davis 1961; McGuire and Schiffer 1982; Warren 1984; Schaefer 1994).

The greatly increased number of Late Period archaeological sites suggests an expansion of population. The settlement pattern is characterized by small mobile groups living in seasonal settlements along the Colorado River floodplain. These locations were influenced by the filling and desiccation of Lake Cahuilla at least four times during this period (Schaefer 1994).

3.2.4 Ethnohistory

The project area was utilized prehistorically by a variety of Native American groups, including the Kumeyaay (the Kamia are a subset of this group), the Cocopah, and the Quechan. These three groups speak the language of the Yuman family of the Hokan language stock (Kroeber 1920). Short descriptions of their individual ethnographic context are outlined below.

At the time of the Spanish occupation, the Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County and Imperial County. The term Kamia refers to the desert Kumeyaay while Ipai refers to the Kumeyaay north of Agua Hedionda to the San Luis Rey River and Tipai refers to the Kumeyaay south of Agua Hedionda to Todos Santos Bay, Mexico, and east to the Imperial Sand Dunes. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. A settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984).

The Kumeyaay economic system consisted of hunting and gathering, with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools was made of both locally available and imported stone, including scrapers, choppers, flake-based cutting tools, and biface knives. Ground stone objects include mortars and pestles, and manos and metates typically made of locally available fine-grained granite. The Kumeyaay made fine baskets of either coiled or twined construction. The Kumeyaay also made pottery, using the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brownware, but some were decorated (May 1978; Meighan 1954; Spier 1923).

Trade was an important feature of Kumeyaay subsistence. Coastal groups traded salt, dried seafood, dried greens, and abalone shells to inland and desert groups for products such as acorns, agave, mesquite beans, and gourds (Almstedt 1982:10; Cuero 1970:33; Luomala 1978:602). Travel and trade were accomplished by means of an extensive network of trails. Kumeyaay living in the mountains of eastern San Diego County frequently used these trails to travel down to Kamia settlements trade and socialize in winter (Castetter and Bell 1951; Gifford 1918:168; Spier 1923:300; Woods 1982).

The Kamia traditional territory included the southern Imperial Valley from the latitude of the southern half of the Salton Sea to well below what is the U.S.–Mexico international border (Forbes 1965; Luomala 1978:593). Their main settlements were along the New and Alamo rivers (Gifford 1931).

Subsistence among the Kamia consisted of hunting and gathering, and floodplain horticulture (Barker 1976; Gifford 1931). In normal years, the Colorado River would overflow its banks in the spring and early summer and fill rivers such as the New and Alamo. When the floodwater receded, the Kamia would plant in the mud. A dam was maintained at *Xatopet* on the east/west portion of the Alamo River to control water flow and allow farming in years when water flow was insufficient (Castetter and Bell 1951:43). Gifford (1931:22) and Castetter and Bell (1951:43) suggested these were recent adaptations and not traditional life ways. Bean and Lawton (1973), Lawton and Bean (1968), and Shipek (1988) argue that irrigation was indigenous.

The Kamia's major food staple was mesquite and screwbean (Gifford 1931:23). Seeds of the ironwood (*Palo fierro*) and palo verde were also used. Acorns were at times an important food. They were gathered in the mountains to the west of Kamia territory in October and acquired through trade from the southern Kumeyaay (Gifford 1931).

Small game, primarily rabbits, was most frequently taken, using bow and arrow or rabbit stick (*macana*). Sometimes fires were set along sloughs to drive rabbits out. Individuals with bow and arrow also hunted deer and mountain sheep. Fish were also taken in sloughs with bow and arrow, by hand, hooks, basketry scoops, and seine nets (Gifford 1931:24).

The Cocopah lived on the west side of the Colorado River delta from the tidewater area, north from a little above the latitude of Volcano Lake or Cerro Prieta to several miles south of the U.S.–Mexico border (Castetter and Bell 1951:52; Gifford 1933:261; Kroeber 1920). Like other river Yumans, the Cocopah settlements were dispersed residential areas or rancherias, not close-knit villages (Castetter and Bell 1951:53).

Cocopah subsistence was similar to other river Yuman people, although their location in the Colorado River delta area had a somewhat different environment from that of the upstream tribes. The Colorado River frequently changed course within the general floodplain throughout the area below the Grand Canyon, requiring settlement and field movement among the Cocopah and other delta peoples (Castetter and Bell 1951; Sykes 1937). Mesquite and screwbean grew in profusion and formed a dietary staple of the Cocopah. Other important wild food sources of the delta region were "wild rice or wild wheat," and *quelite* or amaranth (Castetter and Bell 1951:192). The Cocopah planted a variety of maize, pumpkins, tepary beans, cowpeas, muskmelons, watermelons, and *heshmicha* (grain resembling wheat), and sugar cane (Gifford 1933).

Hunting was relatively unimportant and was confined primarily to the hills and mountains. The Cocopah fished in the Colorado and Hardy rivers, and occasionally parties would fish along the Gulf of California. Fish were also taken with bow and arrow, as well as by spears, gill nets, and dip nets (Castetter and Bell 1951:216; Gifford 1933:268).

The Cocopah frequently visited the mountainous Paipai territory west of the delta to trade and to gather pine nuts and acorns. Tobacco, mescal (roasted agave), and mountain sheep skins were obtained from the Paipai in exchange for delta foodstuffs. The Cocopah also obtained tobacco and eagle feathers from the Kumeyaay (Castetter and Bell 1951:54; Kelly 1977; Sample 1950:22). At times, the Cocopah traded seashells to the Kamia (Gifford 1931:37).

The Quechan (*Kwatsan*) were formerly called the Yuma Indians. Their territory was centered at the confluence of the Gila and Colorado Rivers (present-day Yuma, Arizona), but extended north on the Colorado about 60 miles and 30 miles up the Gila. According to Quechan tradition, the northern boundary was in the vicinity of Blythe, California; the southern boundary reached into Baja California and Sonora, Mexico. Their neighbors on the northwest were the Cahuilla and Luiseño, and to the west the Kamia. Their eastern boundary was just west of Gila Bend, Arizona (Miguel n.d., cited in Bee 1982:37).

The Quechan had a relatively large population. The next visitor to the area, Juan Oñate, estimated a population of about 4,000 in 1604 (Bee 1983; Forbes 1965:343). He mentioned a stable horticultural and gathering economy. Throughout winter and spring, the Quechan lived in large seasonal settlements or rancherias located on terraces above the Colorado River floodplain. These winter settlements were moved from time to time (Bee 1982:40-44,

1983:87; Forde 1931:101). When the floodwaters of spring receded, the Quechan left their winter villages on the river terraces and dispersed into camps near their 2- to 3-acre horticultural plots distributed along the river floodplain. Extended families resided in these camps. Major crops included maize, squash, pumpkin, watermelon, and wheat (Castetter and Bell 1951). Wheat was introduced by Kino in 1700 (Castetter and Bell 1951:123). After the fall harvest season, the Quechan would reconvene in villages on terraces above the river to avoid seasonal flooding (Bee 1983:88; Forde 1931:101).

Quechan villages were actually a collection of houses, or rancherias, dispersed along the Colorado and Gila rivers. Households consisted of composite families that lived together and moved, more or less as a unit from place to place within a constantly changing floodplain environment. The Quechan burned the houses and possessions of the dead (Bee 1982, 1983; Forde 1931; Trippel 1889:583), which also contributed to the movement of villages from time to time (Trippel 1889:583).

3.2.5 Spanish/Mexican/American Periods

The Spanish Period (1769–1821) in the Colorado Desert begins with the Alarcon exploration up the Colorado River in 1540 and the land expedition to the Colorado River by Melchior Diaz in the same year. Cabrillo claimed the coast of Alta California for Spain in 1542. It was not until 1769 that a permanent settlement was founded. In that year, the San Diego Presidio and the San Diego Mission—in what is now Old Town—were established (Rolle 1998). Native American culture in the coastal strip of California rapidly deteriorated despite repeated attempts to revolt against the Spanish invaders (Carrico 1987; Cook 1976). One of the hallmarks of the Spanish colonial scheme was the rancho system, in which large land grants were made to meritorious or well-connected individuals to encourage settlement (Rolle 1998).

The first Spanish explorer to actually enter the Imperial Valley was Pedro Fages, who rode along the northwestern edge of the Colorado Desert while looking for deserters from San Diego in 1772. He apparently entered the desert on an Indian trail he discovered, which led through Oriflamme Canyon to Carrizo Creek and the desert floor (Bolton 1930; Lawton 1976:47; Pourade 1961:53-54). Fages was followed by Juan Bautista de Anza. Both of the 1774 and 1775 Anza expeditions (guided by Padre Francisco Garcés) set out from Tubac, Sonora, to Yuma; south into Mexico; then west to Imperial Valley; and stopped at what he called Santa Rosa de las Lajas (Yuha Well). From there the expedition continued north through the Yuha Desert and went to what is now the community of Borrego Springs and north to San Gabriel (Forbes 1965). The route was abandoned in 1781 after the Quechan revolted against two Spanish settlements near Yuma (Forbes 1965). Both Fages and Anza passed west of the project area.

During the Mexican Period (1822–1848), the mission system was secularized by the Mexican government and these lands allowed for the dramatic expansion of the rancho system. The southern California economy became increasingly based on cattle ranching. General Stephen Kearney, guided by Kit Carson, and his troops crossed the Colorado Desert east of the survey area in 1846 following the Native American trails. The famous

Mormon Battalion, under the command of Philip St. George Cook, followed a similar route in 1847. The Mexican Period ended, when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican–American War (1846–1848; Rolle 1998). California became a state in 1850 (Rolle 1998).

A great influx of Americans and Europeans followed the discovery of gold in northern California in 1848. The gold seekers and homesteaders traveled through the Colorado Desert using the same route as Kearny and the Mormon Battalion, then known as the Southern Emigrant Trail in the early 1900s. In 1853 the route was used by the Birch Overland Mail and later in 1858 by the Butterfield Southern Overland Mail Line. After 1861, when the mail route stopped service, the route was used mostly for cattle drives from Mason and Vallecitos valleys to Carrizo Valley and the Fish Creek area in the desert (Cook and Fulmer 1980). In 1890, prospectors in search of minerals in the Anza–Borrego Desert began using the route (Cook and Fulmer 1980). Today this old Indian and pioneer route is called County Route S2, or the Great Southern Overland Stage Route of 1849, which connects Ocotillo at Interstate 8 with Warner Springs to the north.

The segment of the Southern Pacific Railroad that runs west of the project area was constructed in the 1870s (Pourade 1964). Around the turn of the century, the Imperial Valley experienced considerable population growth after the construction of irrigation projects, and agriculture became a prime focus of economic activity. The first canal built was the Imperial Canal. The Westside Main Canal is a 40-mile canal alignment built in 1907 that later became part of the All-American Canal system. The construction of the All-American Canal to transport water from the Colorado River to Imperial Valley between 1934 and 1940 transformed agricultural development and settlement of the Imperial and Coachella valleys. The areas served by the canal have become some of the richest and most important agricultural areas in the U.S. since the completion of the canal in 1938 (Queen 1999).

4.0 Area of Potential Effect

The APE is considered for this report to be all of Assessor's Parcel Number 044-450-038.

5.0 Study Methods

Site record searches were conducted through the California Historical Resources Information System, South Coastal Information Center at San Diego State University (SCIC) (Confidential Attachment 1).

The project site was surveyed August 1 and 2, 2017 by RECON archaeologists Harry Price, Nathanial Yerka, Hillary Llamas, and Alyssa Soto, accompanied by Justin Linton and Shuuluk Linton, Native American Monitors from Red Tail Monitoring. The field inspection was conducted on foot, in conditions varying between overcast skies with moderate winds to bright daylight with almost no wind. The survey area consisted of the entire 330 acres. The

project was covered in north–south transects spaced approximately 15 meters apart. Transects followed the old furrows from previous plowing of the project area.

6.0 Survey Results

6.1 Record Search

The records search obtained from the SCIC identified 26 cultural resources within a one-mile radius of the project site. Five of these resources were mapped within or adjacent to the current project site. They are P-13-009015 (a segment of the Alder Canal), P-13-009091 (a section of the Central 3 Drain), P-13-009092 (a segment of an unnamed east–west canal), P-13-009016 (a portion of a power line), and P-13-009037, (a segment of the Holton Interurban Railroad). The first three are segments of the IID canal and drain system. P-13-009091 is a north–south-trending dirt section of the Central 3 Drain, which runs through the eastern portion of the project. It averages 45 feet wide at the top, approximately 16 feet wide at the bottom, and approximately 18 feet in depth. P-13-009015 is a north–south-trending concrete-lined segment of the Alder Canal running immediately east of the eastern end of the project. The segment averages 8 feet 3 inches in width. There is a concrete headgate at the intersection of Cooley Road and East Villa Road. A single date stamp of 1958 was located. The canal is flanked by dirt roads. P-13-009092 is a segment of an unnamed east–west canal along the northern side of East Villa Road, immediately to the north of the project. This segment of canal is concrete-lined with a flat bottom and sloping sides. P-13-009016 is a portion of an electric transmission line with metal towers. The line runs along the northern edge of the project along East Villa Road. P-13-009037, a section of the Holton Interurban Railroad line, is mapped immediately east of the southeast corner of the project. The railroad is a single track and at the time of recording in poor repair. This line continues west along the southern boundary of the project. Record search results are included as Confidential Attachment 1.

Six historic addresses are listed within one mile of the project site, but none are within or adjacent to the project.

Twenty-three reports have been recorded at SCIC occurring within one mile of the project site. Only one of these has included any portion of the project site. The Final Environmental Impact Statement/Environmental Impact Report and Proposed Land Use Plan Amendment – Volume I and II – North Baja Pipeline Expansion Project includes the northeastern corner of the project site. A list of all reports is included in Confidential Attachment 1.

A letter was sent to the Native American Heritage Commission in Sacramento on August 2, 2017 requesting a search of their Sacred Lands File. The Native American Heritage Commission replied on August 4, 2017, indicating that they had no record of Native American cultural resources in the immediate area of the project. The response letter from the Native American Heritage Commission is included as Attachment 1. The City of El Centro is in the process of completing Assembly Bill 52 consultation.

6.2 Field Survey Results

The field survey was conducted on August 1 and 2, 2017 by RECON archaeologists Harry Price, Nathanial Yerka, Hillary Llamas, and Alyssa Soto, accompanied by Justin Linton and Shuuluk Linton, Native American Monitors from Red Tail Monitoring. The vast majority of the project property is currently fallow agricultural fields, with two small fenced areas along the northern boundary. The Central 3 Drain and two dirt roads run north to south across the project site, approximately 1,250 feet west of the eastern property boundary, while the Dogwood Canal and associated dirt roads abut he western boundary of the project site.

Ground visibility was 99–100 percent across the project site (Photographs 1 and 2). At the time of the survey the property had not been planted, and there was only minimal weed growth. Irrigation pipes were stacked along a dirt road on the west side of the Central 3 Drain, obscuring the ground surface in this one area. The fields appear to have been watered several times since they were last plowed, as the furrows were filled and mounds had flattened. The ground was compact and relatively easy to walk on. The dirt roads adjacent to the Central 3 Drain and Dogwood Canal segments are raised approximately 30 inches above the adjacent fields, and are most probably artificially raised; they were not surveyed (Photograph 3).

No previously unrecorded prehistoric archaeological resources were found during the survey. The five previously recorded historic-period resources mapped within or adjacent to the current project site, P-13-009015 (a segment of the Alder Canal), P-13-009091 (a section of the Central 3 Drain), P-13-009092 (a segment of an unnamed east–west canal), P-13-009016 (a power line segment), and P-13-009037 (a segment of the Holton Interurban Railroad) were relocated. P-13-009015 and P-13-009092are outside the project impact area, and no additional recording was performed.

P-13-009016, the power line segment, was checked to determine if there had been any noticeable changes since it was originally recorded. No apparent changes were observed.

P-13-009091, section of the Central 3 Drain, was checked to determine if there had been any noticeable changes since it was originally recorded. Broken concrete has been dumped along the sides of the drain in some areas, and scattered trees and bushes also grow along the sides of the drain (Photograph 4).

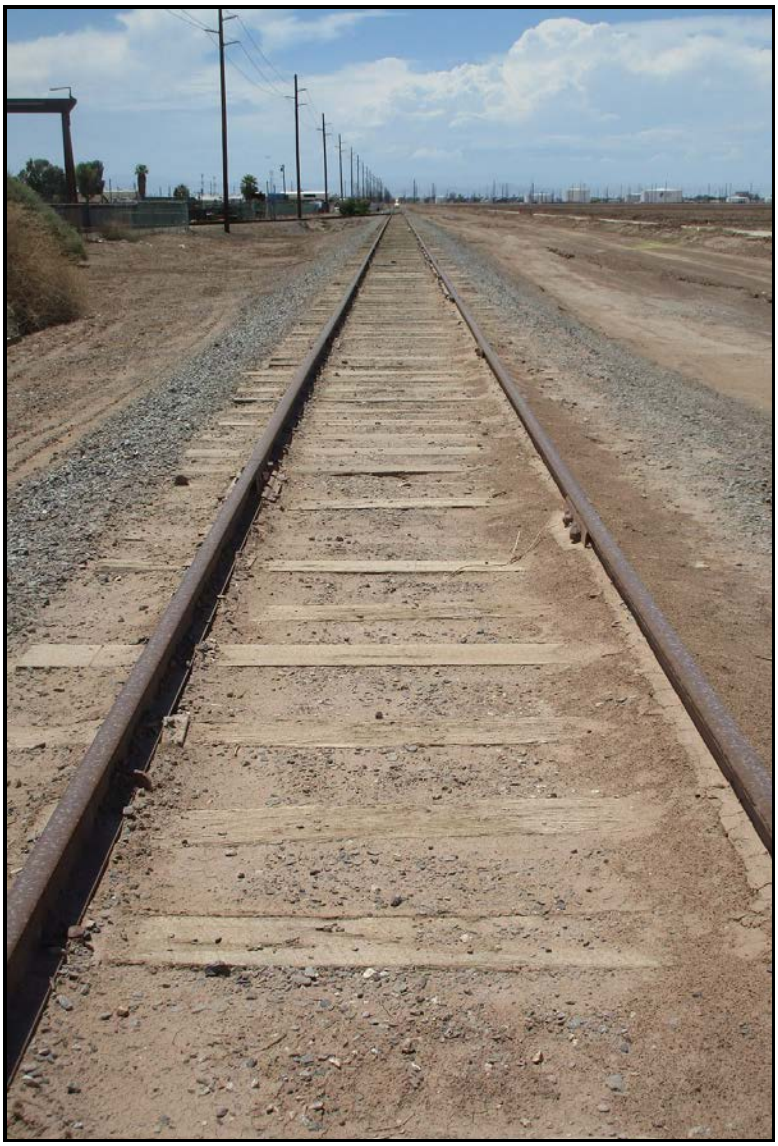
The Holton Interurban Railroad line runs along the southern boundary of the project. A site form was filed for a segment of the railroad line east of the project property, designated P-13-009037. That segment of the railroad line was in poor repair, with track and sleepers missing and the segment inoperable. The approximately 3,850-foot-long segment of track along the southern boundary of the project is fully functioning and in good repair (Photograph 5). The segment begins at the Dogwood Canal and extends east to the Central 3 Drain. The flat-bottomed rail segments are bolted together with jointbars. Sleepers are wood, and the ballast is coarse gravel. The ballast layer is only about 12 inches thick.

PHOTOGRAPH 1
Typical Survey Conditions

PHOTOGRAPH 2
Second Example of Survey Conditions

PHOTOGRAPH 3
Dirt Road Adjacent to the Central 3 Drain

PHOTOGRAPH 4
Looking South down the Central 3 Drain (P-13-009091)



PHOTOGRAPH 5
View Looking West down the
Holton Interurban Railroad Tracks
(P-13-009037)

The railroad was constructed in 1904 by the Holton Power Company to facilitate service between El Centro and the new Holton Power Company plant being built on the Alamo River (also the location of the associated new town of Holtville (U.S. Interstate Commerce Commission 1934). The Alamo River provided sufficient water pressure to operate the new electric generators. The Holton Power Company, incorporated in 1903, provided electrical power to the towns of the Imperial Valley (Harrison n.d.; Farr 1918). The railroad carried both freight and passenger traffic. For a time the railroad ran gas motor cars for carrying passengers, which had a special wheel attachment (the invention of W. F. Holt) permitting the cars to run either on the railroad track or on public streets (Farr 1918). At some time the Holton Interurban Railroad was purchased by the Southern Pacific Railroad.

The company's president was Mr. W. F. Holt, one of its main organizers (Imperial Valley Press n.d.). In addition to the development of the power plant at Holtville, Mr. Holt was also one of the two principal developers of the city of El Centro beginning in 1906, and owned extensive tracts of real estate in the Imperial Valley (Ancestry n.d.). In 1902 Mr. Holt completed a telephone line through the valley and founded the Imperial Valley Press, its first newspaper. He launched the Imperial Valley Gas Company, with headquarters at El Centro, in 1906 (Farr 1918), He also established five banks, several newspapers, dairies, and a number of packing houses in the Imperial Valley (Ancestry n.d.). Mr. Holt supervised the construction of portions of the water system and highway system in the valley.

The Dogwood Canal adjacent to the project has not been previously recoded and was given the temporary designation 8757-HCL-1. The Dogwood Canal is situated between North Dogwood Street and the agricultural fields and is approximately 2,580 feet long. It consists of a trapezoidal concrete-lined canal with a series of gates at its south end and center (Photograph 6). The canal is raised above the adjacent fields and North Dogwood Street by approximately 30 inches The canal is 15 feet wide from edge to edge of the canal banks, and the canal itself is 14 feet wide. The depth could not be determined. Side slope of the canal is approximately 50 degrees. At the south end there is a turnout gate to a canal extending west of the Dogwood Canal (labeled 55) and a turnout gate to a canal extending into the project property (labeled 54). These are poured concrete with aluminum gates on wooden support frames. They are operated manually. One of the gates has a date stamp of 1951. A large double check gate to control the flow in the Dogwood Canal itself is just north of the two side gates (Photograph 7). The gate appears poured in place, with two precast concrete slabs spanning the gate openings. The gates consist of wood planks that slide into a notched slot in the concrete gate structure, supported by wooden frameworks. The gate is operated manually by a ratchet type mechanism and, when raised, some of the planks can be removed to regulate water flow. There is a date stamp of 1958 on the double gate. Approximately 1,360 feet north of the south end are another pair of turnout gates (labeled 54A and 54B) and a double check gate across dogwood Canal. These gates are constructed in the same style as the southern gates. At the north end of the Dogwood Canal segment is a double culvert with pile grates covering the entrances. Dirt roads run parallel to the canal on its east and west sides.

PHOTOGRAPH 6
Looking South along the Dogwood Canal (8757-HCL-1)

PHOTOGRAPH 7
Gates at the South End of Dogwood Canal Segment (8757-HCL-1)

There is also a system of interior concrete canals on the project property temporarily designated 8757-HJP-1. This consists of two east–west and one north–south segments west of the Central Drain and one north–south segment east of the Central Drain (Photograph 7). These segments are trapezoidal in cross section and are poured in place. The various segments consistently measure 8 feet 7 inches from edge to edge, and the canal itself is 7 feet 10 inches across at the top and 24 inches across at the bottom. The sides measure 48 inches and are angled at approximately 50 degrees. There is a hand-inscribed date of 1963 in one segment, and a stamp "MERRILL 1967" on the canal side in another location. There are a few metal check gates scattered in the canal system. In addition, there are small turnout gates set in the sides of the canal. These consist of small pipes leading to the fields covered by metal rectangles that slide in metal channels attached to the concrete canal. The rectangles have long, heavy gage, wire handles. There is a drop-check and turnout complex that connects the eastern and western sets of canals that runs across the Central Drain (Photograph 8). These consist of precast concrete boxes connected by a precast concrete pipe section that spans the Central Canal ditch.

The locations of P-13-009091 (the section of the Central 3 Drain), P-13-009016 (the power line segment), P-13-009037 (the Holton Interurban Railroad), 8757-HCL-1 (the Dogwood Canal), and 8757-HJP-1 (the system of interior concrete canals) are shown on Figure 4.

PHOTOGRAPH 8
Looking west along 8757-HJP-1
Showing Canal and Drop-check and Turnout Complex

RECON

P:\8757\Arc\Photos 8/11/17

Image source: NAIP (flown April 2016)

0 Feet 700

Project Boundary
P-13-009037 Holton Inter-Urban Railroad
P-13-009091 Central 3 Drain
8757-HCL-1 Dogwood Canal segment
8757-HJP-1 Internal Canal System
P-13-009016 Transmission Line

RECON

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FIGURE 4

Location of Cultural Resources on Aerial Photograph

7.0 Guidelines and Recommendations

7.1 California Environmental Quality Act

According to California Environmental Quality Act (CEQA), a significant impact is a project effect that may cause a substantial adverse change in the significance of a historical resource. Adverse changes include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings resulting in the impairment of the resource's significance (Section 15064.5.4b, CEQA Guidelines). Mitigation measures are required for adverse effects on significant historical resources (Section 21083.2, CEQA Code).

State criteria are those listed in CEQA and used to determine whether a historic resource qualifies for the California Register of Historical Resources. CEQA also recognizes resources listed in a local historic register or deemed significant in a historical resource survey. Some resources that do not meet these criteria may still be historically significant for the purposes of CEQA.

A resource may be listed in the California Register of Historical Resources if it is significant at the federal, state, or local level under one of more of the four criteria listed below.

1. Are associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States.

2. Are associated with the lives of persons important to the nation or to California's past.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

4. Has yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

Since resources that are not listed or determined eligible for the state or local registers may still be historically significant, their significance must be determined if they are affected by a project.

7.2 Evaluation of Resources under CEQA Guidelines

P-13-009015 (a segment of the Alder Canal) and P-13-009092 (a segment of an unnamed east–west canal), are adjacent to the project but will not be impacted by project construction. P-13-009016 (a power line segment) runs along the northern edge of the project site but will not be impacted by project construction. Resources 8757-HJP-1 (the

system of interior concrete canals) and P-13-009091 (Central 3 Drain) are in the project property and will be impacted by project construction. Although outside project boundaries, portions of 8757-HCL-1 (Dogwood Canal) and P-13-009037 (Holton Interurban Railroad), and P-13-009091 (Central 3 Drain) will potentially be impacted by construction of project components. They are evaluated below for significance.

- Are the resources associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage?

No information was found that associated 8757-HCL-1, the segment of the Dogwood canal adjacent to the project, with a significant event in history. This particular canal was not a key canal to the overall development of the irrigation system in Imperial Valley, but part of the extensive system that stretched from Calexico to Brawley.

The same is true of P-13-009091, the section of the Central 3 Drain within the project.

The same is true of P-13-009016, (the power line segment running along the northern edge of the project site,

8757-HJP-1 is also not significant under this criterion. The small canal system on the project was constructed to service the specific parcels whose development as agricultural lands was not a significant event in the history of the Imperial Valley or the El Centro area.

P-13-009037, although associated with the development of power in Imperial County, was only a minor facet of that development. The railroad facilitated construction of the power plants in Holtville but was not a part of the power system itself. As part of the transportation network of the Imperial Valley, it serviced a small section of the valley and was soon superseded by the growing use of the automobile.

- Are the resources associated with the lives of persons important in local or California's past?

No information could be found that directly associated 8757-HCL-1, the segment of the Dogwood Canal adjacent to the project, with a person significant in the history of El Centro or Imperial Valley. IID was formed in 1911 under the California Irrigation District Act to acquire the properties of the bankrupt California Development Company and its Mexican subsidiary. The IID was formed as a public agency, acquiring 13 mutual water companies in the valley that had developed and operated water distribution canals. As such the IID canal system itself is not associated with a specific person for its design or development. This particular canal segment cannot be associated with a specific person for its construction. These points are also true of P-13-009091, the section of the Central 3 Drain within the project. Neither are significant under this criterion.

P-13-009016 is also not significant under this criterion. No information was found to associate the development of this power line with a person significant in El Centro or Imperial County history.

8757-HJP-1 is also not significant under this criterion. No information was found to associate the development of this field of agriculture with a person significant in El Centro or Imperial County history.

P-13-009037 qualifies under this criterion at the local level because of its association with W. F. Holt and the development of the Holton Power Company in 1903–1904. W. F. Holt was a major personality in the development of the El Centro, Holtville, and Imperial areas in the early years of the 20th Century. In addition to his development of the first major power plant in the Imperial Valley, and the associated Interurban Railroad and the town of Holtville (named after Mr. Holt), he was instrumental in other aspects of the economic development of the area. He launched the Imperial Valley Gas Company, with headquarters in El Centro, in 1906, was one of the two initial developers of the city of El Centro, and owned extensive tracts of real estate in the Imperial Valley. He also established five banks, several newspapers, dairies, a number of packing houses, and supervised the construction of portions of the water system and highway system in the valley.

- Do the resources embody the distinctive characteristics of a type, period, region, or method of construction? Does it represent the work of an important creative individual, or does it have high artistic values?

8757-HCL-1 and P-13-009091 do not embody distinctive characteristics of canals particular to the Imperial Valley specifically, or to a specific period of time. They also do not have unique methods of canal construction. The canal segment shows construction characteristics typical of canals in the Imperial Valley in its general shape and gate configuration, and gates have construction dates from various times, indicating when they were replaced due to wear. This is particularly true of P-13-009091, which is a dirt ditch with almost no permanent features. The drain has been continually repaired and cleaned out by use of a mechanical excavator for tens of years, and its condition and appearance have changed accordingly. The IID canal system as a whole probably lacks uniqueness in construction methods or design. And, since it has been periodically upgraded since its initial construction in the early 1900s, it lacks distinctive construction characteristics of a specific time period. There is no evident connection to a famous or important architect or builder working in El Centro or Imperial County with the canal design or construction.

The same is true of 8757-HJP-1. The canal segment shows construction techniques and designs typical of canals in the Imperial Valley in its general shape and gate configuration, as well as the use of common materials in its construction. P-13-009016 is also not significant under this criterion. The power line segment shows construction characteristics and materials typical of power lines in the Imperial Valley.

P-13-009037 also does not qualify under this criterion. The existing railroad components do not embody distinctive characteristics of a time, type, or method of construction. They represent common components of standard gage railroads. In addition, servicing of the railroad has resulted in the replacement of many original components by new components throughout its 110-plus-year lifespan. No information was found to associate the railroad

with a creative individual and there are no components, such as a trestle, that would potentially exhibit high artistic values.

- Have the resources yielded, or be likely to yield, information important to prehistory or history?

There is no likelihood that 8757-HCL-1, P-13-009091, or 8757-HJP-1 will yield information important to history or prehistory. The only information available from the canals and drain is the actual construction techniques and materials used in building them. The canal and drain segments on the property are not the original canal structure, but upgrades, and as such, no information about early 1900s canal construction can be obtained from them.

P-13-009016 is also not significant under this criterion.

8757-HCL-1, 8757-HJP-1, and the portions of P-13-009091 in and adjacent to the project, do not meet any of the criteria for listing on the California Register of Historic Places and are therefore not significant historic resources under CEQA. P-13-009037 qualifies under Criterion B for listing on the CRHR at the local level because of its association with W. F. Holt, who was significant in the early development of the El Centro area of the valley. Therefore P-13-009037 is a significant historical resource under CEQA.

7.3 Recommendations

8757-HCL-1 (Dogwood Canal), 8757-HJP-1 (the system of interior concrete canals), portions of P-13-009016, (the power line segment), and P-13-009091 (Central 3 Drain) on the project do not meet any of the criteria for listing on the California Register of Historic Places and are therefore not significant historic resources under CEQA. The project would likely remove 8757-HJP-1 considering its location within the site. 8757-HCL-1 and P-13-009091 may be modified (such as lining the Central 3 Drain with cement or providing culvert crossings) during project construction. Project plans do not include any alterations to P-13-009016. Because none of these resources are significant historic resources under CEQA, there will be no adverse effects to them as a result of project development.

P-13-009037 is a significant historical resource under CEQA. Project plans propose construction of a spur track from the Holton Interurban Railroad (P-13-009037) into the project, which would alter a section of the existing track. The existing portion of the Holton Interurban Railroad is over 100 years old and appears to have been in almost continuous use. As such it has been subject to maintenance, upgrades, and modifications to bring it up to current standards and needs. The current tracks, sleepers, and ballast are replacements resulting from regular maintenance of the tracks, so their replacement in a small section of the route would not be a significant adverse effect. A spur line to the industrial area south of the project has been constructed since 1979 (it is not shown on the 1970 edition of the USGS 7.5 minute El Centro topographic map), altering the original configuration of the route segment being evaluated. The proposed alteration of a siding would not be a significant adverse effect to the integrity or significance of the railroad.

RECON will complete California Department of Parks and Recreation (DPR) primary site forms for 8757-HCL-1 and 8757-HJP-1, and California DPR continuation sheets for P-13-009037, P-13-009091 and submit these to the SCIC. RECON recommends no additional mitigation measures for these resources.

8.0 Certification and Project Staff

This report was prepared in compliance with the CEQA (Section 21083.2 of the Statutes and Appendix K of the Guidelines) and with policies and procedures of the City of San Diego. To the best of our knowledge, the statements and information contained in this report are accurate.

Harry J. Price, Principal Investigator

Resumes for key personnel are on file with the City. The following individuals participated in the field tasks or preparation of this report.

Harry Price	Principal Investigator
Nathanial Yerka	Archaeologist
Hillary Llamas	Archaeologist
Alyssa Soto	Archaeologist
Shuuluk Linton	Native American Monitor
Justin Linton	Native American Monitor
Frank McDermott	GIS Analyst
Eija Blocker	Production Specialist

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ATTACHMENTS

ATTACHMENT 1

Native American Heritage Commission Response Letter

NATIVE AMERICAN HERITAGE COMMISSION
Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710

August 4, 2017

Harry J. Price
Recon Environmental

Sent by E-mail: hprice@reconenvironmental.com

RE: Proposed Dogwood Road at Villa Avenue Project, City of El Centro; El Centro USGS Quadrangle, Imperial County, California

Dear Mr. Price:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contact List
Imperial County
8/4/2017

Barona Group of the Capitan Grande
Edwin Romero, Chairperson
1095 Barona Road — Kumeyaay
Lakeside, CA, 92040
Phone: (619) 443 - 6612
Fax: (619) 443-0681
clloyd@barona-nsn.gov

Campo Band of Mission Indians
Ralph Goff, Chairperson
36190 Church Road, Suite 1 — Kumeyaay
Campo, CA, 91906
Phone: (619) 478 - 9046
Fax: (619) 478-5818
rgoff@campo-nsn.gov

Cocopah Indian Reservation
H. McCormick, Tribal Archaeologist
County 15th & Avenue G — Cocopah
Sommerton, AZ, 85350
Phone: (928) 530 - 2291
culturalres@cocopah.com

Ewiiaapaayp Tribal Office
Michael Garcia, Vice Chairperson
4054 Willows Road — Kumeyaay
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126
michaelg@leaningrock.net

Ewiiaapaayp Tribal Office
Robert Pinto, Chairperson
4054 Willows Road — Kumeyaay
Alpine, CA, 91901
Phone: (619) 445 - 6315
Fax: (619) 445-9126

Iipay Nation of Santa Ysabel
Virgil Perez, Chairperson
P.O. Box 130 — Kumeyaay
Santa Ysabel, CA, 92070
Phone: (760) 765 - 0845
Fax: (760) 765-0320

Iipay Nation of Santa Ysabel
Clint Linton, Director of Cultural Resources
P.O. Box 507 — Kumeyaay
Santa Ysabel, CA, 92070
Phone: (760) 803 - 5694
cjlinton73@aol.com

Inaja Band of Mission Indians
Rebecca Osuna, Chairperson
2005 S. Escondido Blvd. — Kumeyaay
Escondido, CA, 92025
Phone: (760) 737 - 7628
Fax: (760) 747-8568

Jamul Indian Village
Erica Pinto, Chairperson
P.O. Box 612 — Kumeyaay
Jamul, CA, 91935
Phone: (619) 669 - 4785
Fax: (619) 669-4817

Kwaaymii Laguna Band of Mission Indians
Carmen Lucas,
P.O. Box 775 — Kumeyaay
Pine Valley, CA, 91962
Phone: (619) 709 - 4207

La Posta Band of Mission Indians
Javaughn Miller, Tribal Administrator
8 Crestwood Road — Kumeyaay
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
jmiller@LPtribe.net

La Posta Band of Mission Indians
Gwendolyn Parada, Chairperson
8 Crestwood Road — Kumeyaay
Boulevard, CA, 91905
Phone: (619) 478 - 2113
Fax: (619) 478-2125
LP13boots@aol.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Dogwood Road at Villa Avenue Project, Imperial County.

Native American Heritage Commission
Native American Contact List
Imperial County
8/4/2017

Manzanita Band of Kumeyaay Nation
Angela Elliott Santos, Chairperson
P.O. Box 1302 Kumeyaay
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957

Manzanita Band of Kumeyaay Nation
Nick Elliott, Cultural Resources Coordinator
P. O. Box 1302 Kumeyaay
Boulevard, CA, 91905
Phone: (619) 766 - 4930
Fax: (619) 766-4957
nickmepa@yahoo.com

Mesa Grande Band of Mission Indians
Mario Morales, Cultural Resources Representative
PMB 366 35008 Pala Temecula Rd. Kumeyaay
Pala, CA, 92059
Phone: (760) 622 - 1336

Mesa Grande Band of Mission Indians
Virgil Oyos, Chairperson
P.O Box 270 Kumeyaay
Santa Ysabel, CA, 92070
Phone: (760) 782 - 3818
Fax: (760) 782-9092
mesagrandeband@msn.com

San Pasqual Band of Mission Indians
John Flores, Environmental Coordinator
P. O. Box 365 Kumeyaay
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
johnf@sanpasqualtribe.org

San Pasqual Band of Mission Indians
Allen E. Lawson, Chairperson
P.O. Box 365 Kumeyaay
Valley Center, CA, 92082
Phone: (760) 749 - 3200
Fax: (760) 749-3876
allenl@sanpasqualtribe.org

Sycuan Band of the Kumeyaay Nation
Cody J. Martinez, Chairperson
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 445 - 2613
Fax: (619) 445-1927
ssilva@sycuan-nsn.gov

Sycuan Band of the Kumeyaay Nation
Lisa Haws, Cultural Resources Manager
1 Kwaaypaay Court Kumeyaay
El Cajon, CA, 92019
Phone: (619) 312 - 1935
lhaws@sycuan-nsn.gov

Viejas Band of Kumeyaay Indians
Robert Welch, Chairperson
1 Viejas Grade Road Kumeyaay
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337
jhagen@viejas-nsn.gov

Viejas Band of Kumeyaay Indians
Julie Hagen,
1 Viejas Grade Road Kumeyaay
Alpine, CA, 91901
Phone: (619) 445 - 3810
Fax: (619) 445-5337
jhagen@viejas-nsn.gov

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This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Dogwood Road at Villa Avenue Project, Imperial County.

ATTACHMENT 2

Primary Site Forms for 8757-HCL-1 and 8757-HJP-1

CONFIDENTIAL ATTACHMENTS

(Bound Under Separate Cover)