# CULTURAL RESOURCES SURVEY LETTER REPORT – POSITIVE FINDINGS

**Live Oak Springs Water System Improvements Project**
**1024806**

**Lead Agency:**

**County of San Diego**
**Department of Public Works**
**Environmental Services Unit**
**Contact: Gail Getz**
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**Preparer:**

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**Donna Beddow, RPA**

**Project Proponent:**
**County of San Diego**
**Department of Public Works**
**5510 Overland Avenue, Suite 410**
**San Diego, CA 92123**

**December 2021**

## National Archaeological Data Base Information

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| **Client/Project Proponent:** | County of San Diego, Department of Public Works,<br>Environmental Service Unit<br>Contact: Gail Getz<br>5510 Overland Avenue, Suite 410<br>San Diego, CA 92123 |
| **Report Date:** | December 2021 |
| **Report Title:** | Cultural Resources Survey Letter Report – Positive Findings for the Live Oak Springs Water System Improvements Project |
| **Type of Study:** | Intensive Pedestrian |
| **New Sites:** | I-LOS-1 |
| **Updated Sites:** | None |
| **USGS Quad:** | Live Oak Springs |
| **Acreage:** | 75.6 acres |
| **Key Words:** | Prehistoric, Isolate, Flake, Metavolcanic |

December 2021

Department of Public Works
Environmental Services Unit
Attn: Gail Getz
5510 Overland Avenue, Suite 410
San Diego, CA 92123

RE: Cultural Resources – Positive Findings

Ms. Getz:

Please be advised that a survey has been conducted for the above referenced project. It has been determined that cultural resources are present on this property. The project and cultural resources have been plotted on the attached USGS 7.5-minute topographical map for your information.

**County:** San Diego
**USGS 7.5' Quad:** Live Oak Springs; **Date:** May 2021
**Section:** 13, 14, 23, 24; **Township:** 17S **Range:** 06E
**Address:** Live Oak Springs, Unincorporated San Diego County
**City:** San Diego; **State:** California
**Thomas Brothers:** 1299/G3, H3
**Other Locational Data:** From Interstate 8 East, take the Crestwood Road exit. Turn right (south) onto Old Highway 80 and continue for approximately 2 miles. The Live Oak Springs community is on the left. The project is divided into the western and eastern portions. To access the western portion of the project site, from Old Highway 80, turn left onto Live Oak Trail, and turn left onto Royal Road, which will turn into Oak Place. Continue to the end. The western portion of project site begins just west of the last residence. The first phase of the project will occur on the western portion. The eastern portion of the project site is primarily the residential area of the Live Oak Springs community.

**Assessor Parcel Number(s):** 609-050-03-00, 609-050-06-00 (portion), and Community of Live Oak Springs

**UTMs:** 11S; -116.338287 mE/32.691278 mN
**Elevation:** 1,163–1,205 feet above mean sea level

**Owner and Address:** County of San Diego
5510 Overland Avenue, Suite 410
San Diego, CA 92123

**Survey Type:** Intensive Pedestrian
**Date of Survey:** May 12, 2021
**Field Crew:** Donna Beddow, RPA

## Background

## Project Location and Description

The County of San Diego (County) Department of Public Works (DPW) is proposing improvements and upgrades to the potable water distribution system (project or proposed project) on approximately 75.6 acres in the subcommunity of Live Oak Springs in the Boulevard Community Planning Area of San Diego County, California. The potable water distribution system (water system) is located in and serves the subcommunity of Live Oak Springs, at 37820 Old Highway 80, Boulevard, California 91905. The project site is northeast of Old Highway 80, south of Interstate 8, and west of Live Oak Trail (Figure 1, USGS Topographic Map). The site is in the 7.5-minute Live Oak Springs quadrangle in Township 17 South, Range 6 East. The project site is divided into the western and eastern portions (project area). The western portion includes undeveloped parcels and parcels developed with the existing water system, and the eastern portion consists of the rural residential subcommunity of Live Oak Springs. The project site is surrounded by the Campo Indian Reservation to the north, east, and west. Land uses to the south and southwest include semi-rural residential and agricultural uses, as well as undeveloped lands.

The goals of the proposed project are to bring the existing water system up to the State Water Resources Control Board's current standards and to upgrade the system to provide a reliable source of water for the community. The proposed project would be completed in phases. The project components include construction of a new well, upgrade and replacement of existing water system components, installation of a backup generator for the water system, and an increase in water distribution capacity by 25 percent. These improvements would provide a reliable source of fire suppression to the community and redundant infrastructure to ensure the continued availability of water to the community, and accommodate the additional forecasted demand for water.

The project proposes improvements in phases. Phase I is currently designed and funded and would consist of improvements to convert a pilot well to a secondary well and associated infrastructure to secure a reliable source of water for the community. The conversion of an existing pilot well to a secondary well would create a backup for the existing primary potable water production well (primary well). This would involve additional drilling to widen the existing well hole from 6 to 8 inches in diameter to make the secondary well operational. No additional depth drilling would occur. Phase I would also include installation of up to 50 feet of underground piping to connect the secondary well to the existing water system, installation of electrical and control upgrades and connections, installation of a diesel emergency generator within the existing water system's footprint as backup power to the water system, and placement of gravel, fencing, and a gate around the new well site. Phase I improvements would occur within the existing County-owned parcel, and construction is anticipated to last approximately 4 months.

### *Water Tanks and Booster Pump Station*

- Construction of two aboveground 100,000-gallon water storage tanks and a booster pump station is anticipated. The new vertical water tanks would replace two existing horizontal 20,000-gallon water tanks on the western end of the site. The new tanks would either replace the current tanks within the same footprint or be built nearby and at similar elevation. To transition from the existing tanks to new ones, temporary aboveground water

tanks may be used, if needed. Construction of the water tanks and the pump station would also require installation of an underground pipeline system to connect various water system components. Sensitive vegetation would be avoided.

***Water Distribution Piping***

- Other potential future improvements to meet the anticipated demand for potable water and fire suppression include installation of 1,200 linear feet of new piping and realignment or replacement of 400 linear feet of existing underground potable water piping throughout the County-owned parcel. The existing 4-inch water system piping would be replaced with 6-inch lines. The water distribution piping improvements on the County parcel may also include installation of a new water line that would extend south to create a loop within the water system. This would allow distribution of potable water to the adjacent residential community from either the north or the south and would reduce the number of water service interruptions when repairs are needed. These improvements would require excavation to install the new water lines.

- Additional improvements may involve replacement of 50 linear feet of an existing aerial water line that crosses Campo Creek through a suspended support system. Current pipeline may be replaced in the same location with a more stable and secure utility bridge supported by concrete pier structure, or the waterline may be undergrounded. The undergrounding could potentially result in temporary impacts to Campo Creek if an open-trench method is used. This could result in temporary loss of vegetation and possible dewatering of Campo Creek for the duration of construction.

- Other long-term proposed work includes replacement of existing underground potable water distribution system piping throughout the Live Oak Springs residential community to increase capacity for fire suppression and potable water distribution flows. This work would consist of excavation and replacement of up to 10,000 linear feet of underground water lines.

***Driveway Entrance Off Old Highway 80***

- To formalize a portion of the existing dirt driveway and access road from the main, northern entrance from Old Highway 80 to the current well site, a concrete driveway is proposed within the existing footprint.

***Culvert Crossing Royal Drive***

- Other associated improvements include replacement of an existing culvert under Royal Drive, located in the southeastern corner of the County-owned parcel. The Campo Creek crossing in this area currently functions as an Arizona crossing because the culvert is almost completely blocked with sediment and the pipe is undersized and, thus, unable to handle an expected 100-year storm event. Therefore, the culvert would be replaced within approximately 20 feet of its current location and designed to convey low flows from Campo Creek with a stabilized road surface to ensure that the road does not wash out during larger rain events. Culvert replacement work could result in temporary impacts to Campo Creek due to excavation and temporary loss

of vegetation; however, it is anticipated that no net increase of fill would occur in the creek; therefore, no permanent impacts are expected to occur.

***Additional Water Well***

- Finally, other improvements may include buildout of an additional well to replace the current secondary well, at which time the secondary redundant well would become primary and the present primary well may be decommissioned.

Construction duration of future phases would vary; however, collectively, they are anticipated to last approximately 12 to 18 months. Construction of the project phases would largely occur either on the County-owned parcel or within the existing County water line easements. If needed, temporary construction access would be coordinated with the surrounding property owners.

The project area is composed of western and eastern portions (Figure 2, Project Aerial). The boundaries of the western portion run from the Campo Reservation to the north, Live Oaks Trail to the south, Old Highway 80 to the west, and Royal Road and the northeastern boundary of Live Oak Springs to the east, and the limits of the eastern portion are from the Campo Reservation to the north, Live Oaks Trail and the southeastern boundary of Live Oak Springs to the south, Royal Road and the northeastern boundary of Live Oak Springs to the west, and the eastern boundary of Live Oak Springs to the east (Figure 3, Project Improvements). The western portion of the project site contains Campo Creek, its tributaries, three freshwater ponds, vegetation in the form of sensitive and non-sensitive upland and wetland vegetation communities, and developed areas. An existing culvert facility is present within the wetland area adjacent to the easternmost trail. The western portion of the project site is relatively flat and primarily undeveloped, with portions that are disturbed. The eastern portion of the project site is developed with residential uses and contains slopes radiating out from the center of the community. The project site has an elevation ranging from 1,163 to 1,205 feet above mean sea level and is within the Live Oak Springs U.S. Geological Survey (USGS) Quad, Sections 13, 14, 23, and 24 of Township 17S, Range 06E.

The archaeological investigation described in this letter report was implemented to support the County's responsibilities under the California Environmental Quality Act (CEQA) to incur no significant impacts to cultural resources resulting from the project and in compliance with Section 106 of the National Historic Preservation Act (NHPA) and the National Environmental Policy Act (NEPA). The latter was required because the project may impact U.S. Army Corps of Engineers jurisdictional waters and, therefore, is subject to these federal regulations. The project is an undertaking as defined in Section 106 of the NHPA. Section 106, as implemented (36 CFR Part 800), requires federal agencies to identify cultural resources within the project area to assess impacts to resources found eligible for the National Register of Historic Places (NRHP) and to mitigate adverse effects to eligible resources.

## Cultural Setting

### Prehistoric

Cultural resources are found throughout the County and are reminders of the County's 10,000-year-old historical record. Cultural resources are the tangible or intangible remains or traces left

by prehistoric or historical people who inhabited the San Diego region and encompass both the built (post-1769) and archaeological environments, as well as traditional cultural properties. They are typically in protected areas near water sources and multiple ecoregions and can include traditional cultural places, such as gathering areas, landmarks, and ethnographic locations.

The following provides a brief cultural background for the County.

### *Paleoindian Period (pre-5500 BC)*

Several terms are used for the early occupation of the San Diego region and include Paleoindian period, Early Archaic period, Initial period, and Scraper Maker period (Moratto 1984). This period dates from 9000 to 5500 BC (Chartkoff and Chartkoff 1984; Moratto 1984; Rogers 1966; Taylor and Meighan 1978; Warren and True 1961). Early humans have been characterized as an early nomadic, hunting culture whose settlements were located on mesas and ridge tops and in deserts (Erlandson and Colton 1991; Rogers 1966; Wallace 1978; Warren et al. 1961). During this period, inhabitants relied on large game for subsistence (Rogers 1966; Warren et al. 1961) and produced "finely worked blades, spear points, choppers, and scrapers out of fine-grained volcanics" (Carrico 1977). In addition, leaf-shaped knives, foliate to ovoid bifaces, foliate to short-bladed shoulder points, crescents, engraving tools, core hammers, pebble hammers, and cores were part of the tool assemblage (Moratto 1984; Wahoff and Dolan 2000). Pottery and milling stones were missing from the assemblage, confirming the assumption that hunting was an economic focus for the culture (Moriarty 1967; Warren and True 1961). Because the tool assemblage was similar to desert cultures of the Mojave Desert, it is believed that this culture migrated west from the desert into California (Gallegos 1995; Rogers 1939). However, no single hypothesis is universally accepted. Other hypotheses identify the movement of people into California from the south and north down the coast (Taylor and Meighan 1978; Chartkoff and Chartkoff 1984).

### *Archaic Period (8000 BC–AD 500)*

According to Hale et al. (2018), "the more than 1500-year overlap between the presumed age of Paleoindian occupations and the Archaic period highlights the difficulty in defining a cultural chronology in the San Diego region." The Archaic period is also known as La Jollan, Millingstone Horizon, and Encinitas Tradition. This period is characterized by the presence of dart points, milling, equipment, scattered hearths, shell middens, and flexed burials (Carrico 1977). Subsistence strategies placed an emphasis on gathering, possibly as a result of environmental change (Wahoff and Dolan 2000; Wallace 1978). The assemblage was composed of milling implements and cobble/core-based tools. The flaked tools do not appear to be as refined as those of the Paleoindian period. Mortuary goods included shell beads and ornaments, projectile points, and milling implements. Wallace (1978) interpreted archaeological sites of this period as an indication of an increase in population and permanence. Site types included coastal shell habitation bases, quarries, resource exploitation, and milling (Gallegos 1995). The sites are typified by an abundance of shellfish remains and are situated near sloughs and lagoons and on the open coast (Carrico 1977; Masters and Gallegos 1997; Moratto 1984; Wallace 1978). An inland manifestation identified as the Pauma complex is known to have existed (True 1958). Unlike the coastal people, this complex occupied "transverse valleys and sheltered canyons of inland San Diego county, ha[d]

an emphasis on hunting and gathering, had a greater diversity of tool types, and lacked shellfish remains" (Masters and Gallegos 1997:12).

Similar to the Paleoindian period, controversy surrounds the origins of the Archaic culture. Several hypotheses have been postulated. Kaldenberg (1976) and Moriarty (1967) proposed that the transition from the Paleoindian to the Archaic culture was an in-situ adaption. In contrast, Warren (1961) viewed this transition as a migration from the desert to the coast due to the adverse environmental condition of the Altithermal. Taylor and Meighan (1978:36) did not take a single position regarding the transition to the Archaic culture but, rather, incorporated all of the hypotheses as identified below:

> The artifact inventory and cultural activities argue strongly that this stage began in the desert inland and spread toward the Pacific Coast, reaching it about 8,500 years ago. There is no evidence to show whether the Milling Stone Stage involved movement of the people or a conquest of earlier residents; perhaps the early hunters simply adopted this way of life as game animals became scarce.

The population of this period focused on lagoonal resources and also moved up and down the river valleys, exploiting a variety of inland and coastal resources (Masters and Gallegos 1997).

***Late Prehistoric (AD 500–1769)***

The Late Prehistoric period is an antecedent to Spanish contact (AD 1000–1769). It was a "time of cultural transformations brought about by trait diffusion, immigration, and *in-situ* adaptation to environmental changes" (Moratto 1984:153). Subsistence strategies involved a focus on terrestrial collection and hunting (Christenson 1992); however, shellfish and other maritime resources were also used. Settlement included large villages near permanent water sources, temporary campsites, quarries, and resource exploitation sites. Small triangular points, pottery, and Obsidian Butte obsidian are characteristic of this period (Christenson 1992; Masters and Gallegos 1997; True 1966, 1970). Cremations replaced flexed inhumations and mortuary goods became more elaborate (Wallace 1955). Cremations are believed to have been introduced into the area during the Late Prehistoric period and are the result of Shoshonean intrusion (1500 BP) from the deserts (True 1966) into northern San Diego County. However, in the southern part of the County, this practice has been attributed to a "Colorado River origin that may have had an influence as far reaching as the Hohokam [current day Pima people and Tohono O'odham Nation] in southwestern Arizona" (True 1970:58). Kaldenberg (1976:67) had a different opinion on the origin and timing of the entrance of cremation practices into the region. He noted that the practice of cremation was introduced at the terminus of the Archaic culture (3000 BP) with the "migration of Yuman people into the San Diego coastal region." By 2000 BP, inhumations were replaced by cremations (Kaldenberg 1976).

Two complexes (San Luis Rey and Cuyamaca) are identified with the Late Prehistoric period. True (1966) believed that the San Luis Rey complex was a precursor to the ethnographic Luiseño. Similarly, he suggested that the Cuyamaca complex was the predecessor to the ethnographic Kumeyaay. Through the examination of both geographic regions, True identified

specific characteristics unique to each; however, he noted that, although geographically similar, these two cultures were distinctly different.

## Ethnohistoric Period (post-AD 1769)

The Ethnohistoric period begins with the first permanent European settlements. Early Ethnohistoric accounts and mission documents have been used to reconstruct this period (Hale et al. 2018). Florence Shipek (1993) delineated the boundaries between the Luiseño and the Kumeyaay as follows:

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

The Kumeyaay (also known as Ipai, Tipai, Diegueño, and Kamia) lived in small villages, or rancherias, and would inhabit multiple locations throughout the year. According to Cline (1984), the typical settlement included two or more seasonal villages with temporary camps farther away from the main central villages. Hunting and gathering were the main economic focus, consisting of small game, acorns, grass seeds, and other plant resources. Similar to the Prehistoric period, a wide range of tools (chipped and ground stone) that were made from locally available materials were used. Exotic materials, such as obsidian and chert, were imported from the deserts to the north and east. In addition to lithic tools, the Kumeyaay produced baskets and pottery.

## Historical Period (post-AD 1542)

The Historical period can be divided into three phases (Spanish, Mexican, and American). Each phase is identified with a change in political power. Common goals in each phase included land gain, assimilation of the native population, and the attainment of wealth. However, these periods were dissimilar in the rationale behind these goals. Rationale included defense (Spain), independence and secularization (Mexico), and expansion and economics (United States). Assimilation of Native Californians was a desire of each government that came to power; however, the greatest misfortune of this period was the large decline in Native American populations (Phillips 1981).

### *Spanish Period (AD 1769–1821)*

Although the first Spanish contact occurred in 1542, it was not until 1769 that the first permanent settlement was established. The Spanish period was a time of European expansionism and is typically identified with the mission system. In addition, presidios (military defense) and pueblos (city government) played an important role in the structuring of the community (Campbell 1977). The mission system was the institution designated for the assimilation and exploitation of native people (Campbell 1977; Cline 1979; Jackson and

Castillo 1995; Phillips 1981). Jackson and Castillo (1995:6) identified this exploitation as an extension of the "sixteenth-century policy of *congregacion/reduction*." In contrast, Costo (1987) noted that the transference of the Spanish Inquisition (originally established in 1478) to the New World was the mechanism for this exploitation because the Inquisition contained economic and religious incentives. The Spanish stronghold in California declined with Spain's loss of the Napoleonic Wars (1803–1815), which eliminated funding to the mission.

### *Mexican Period (AD 1821–1850)*

Mexican independence from Spain occurred in 1821, and in 1833 Mexico secularized the missions. After secularization, large tracts of land were granted to private citizens. "The secularization of the missions during the Mexican period is usually regarded as a watershed in California History because it resulted in the replacement of one Hispanic institution by another – the rancho for the mission" (Phillips 1981:33). Like the mission, the rancho became the institution of native exploitation. This period experienced an increase in cattle ranching and the hide and tallow trade (Gallegos 1995; Wahoff and Dolan 2000). The passage of the Treaty of Guadalupe Hidalgo that ended the Mexican-American War in 1848 was the final event that culminated the Mexican period in California.

### *American Period (Post-AD 1850)*

The concept of a two-ocean economy and the California Gold Rush were the impetus that brought about the annexation of California (1850) to the United States. A large number of immigrants entered California with the discovery of gold and the availability of free land with the passage of the Homestead Act (1863). This population increase caused the displacement of Native Californians and brought about a deterioration in their rituals and traditions (Carrico 1986; Gallegos 1995). During this period, the ranchos experienced a decline primarily in response to their inability to validate land ownership as a result of the California Land Claims Act of 1851. "With the discovery of gold, the building of the transcontinental railroad, and the development of crops and cities, people in massive numbers from all parts of the world began to inhabit the region" (Phillips 1981: editors' introduction).

### *Live Oak Springs*

Live Oak Springs Resort was developed primarily in the 1940s. Over the years, the campground and other facilities were built. Homes were added that brought about the beginning of the Live Oak Springs community. The addition of the A-frame cabins in the early 1960s was the last major improvement in the area. At the time the cabins were built, the major highway from Arizona to San Diego (Old Highway 80) was in front of the community. Today, Interstate 8 is the major transportation route, leaving the community relatively quiet. The resort has not changed since the early 1960s, and the restaurant has had a sporadic history of openings, closings, and name changes. (Fleming 2008).

**Applicable Regulations**

The regulatory framework and methods for determining impacts to cultural resources include compliance with the requirements of CEQA, as defined in Section 15064.5 of the CEQA Determining the Significance of Impacts to Archaeological and Historical Resources Guidelines (CEQA Guidelines), and with County Guidelines for Determining Significance of Cultural Resources: Archaeological and Historic Resources (County of San Diego 2007), and may require compliance with federal regulations if jurisdictional waters/wetlands are identified. The County is the lead agency for compliance with the CEQA Guidelines and regulations. If required, the U.S. Army Corps of Engineers would be the lead agency for compliance with Section 106 of the NHPA and NEPA. Both sets of these guidelines require the identification of cultural resources that could be affected by the project, the evaluation of the significance of such resources, an assessment of the project impacts on significant resources, and a development of a research design and data recovery program to avoid or address adverse effects to significant resources.

**Federal Regulations**

The project may be an undertaking as defined in Section 106 of the NHPA. Section 106 of the NHPA, as implemented (36 CFR Part 800), requires federal agencies to take into account the effects of their undertakings on historic properties. A key consideration for management is whether the cultural resources within the project area are eligible for inclusion in the NRHP. A resource must qualify under one or more criteria in order to be considered eligible for listing.

A property that qualifies for the NRHP is considered significant in terms of the planning process under the NHPA, the NEPA, and other federal mandates. The NRHP Criteria for Evaluation (36 CFR 60.4) provide guidance in determining a property's eligibility for listing on the NRHP. This states that the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and must meet one or more of the following criteria (36 CFR 60.4):

A. Is associated with events that have made a significant contribution to the broad patterns of our history; or
B. Is associated with the lives of persons significant in our past; or
C. Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
D. Has yielded, or may be likely to yield, information important in prehistory or history.

Further, a property must be evaluated within an important historic context and retain integrity of those features necessary to convey its significance.

The NRHP identifies seven aspects of integrity—location, design, setting, materials, workmanship, feeling, and association—that help define the character and significance of a cultural resource. A historic property will possess and maintain several, if not most, of these

aspects. Aspects of integrity are defined in National Park Service National Register Bulletin 15 as follows (National Park Service 1997):

- Location—is the place where the historic property was constructed or the place where the historic event occurred.
- Design—is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting—is the physical environment of a historic property.
- Materials—are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- Workmanship—is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling—is a property's expression of the aesthetic or historic sense of a particular period of time.
- Association—is the direct link between an important historic event or person and a historic property.

Cultural resources that are less than 50 years of age may be eligible for NRHP listing if they are found "exceptional" on the local, regional, or national level; in addition, they must meet one or more of the NRHP criteria and retain integrity as described above (Criterion Consideration G).

The integrity of a historic property can be adversely affected by an undertaking (36 CFR 800.5). An adverse effect is one that alters, "directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association" (36 CFR 800.5[1]).

Adverse effects on historic properties include but are not limited to the following (36 CFR 800.5[2]):

(i) Physical destruction of or damage to all or part of the property;
(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;
(iii) Removal of the property from its historic location;
(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Cultural isolates (isolated artifacts) are not considered significant because they lack characteristics that would qualify them for listing on the NRHP.

## State Regulations

As stated above, the project is also subject to the CEQA Guidelines. Significant resources, also called historical resources, are those cultural resources (whether prehistoric or historic) that have been evaluated and determined to be eligible for listing in the California Register of Historical Resources (CRHR).

According to the CEQA Guidelines, Section 15064.5(a), a historical resource includes the following:

1. A resource listed in, or determined to be eligible for listing on, the CRHR.
2. A resource included in the local register.
3. A resource that an agency determines to be historically significant. Generally, a resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Places (California Public Resources Code, Section 5024.1; California Code of Regulations, Title 14, Section 4852) including the following:
   A. Is associated with events that have made a significant contribution to the broad patterns of California's history or cultural heritage;
   B. Is associated with the lives of persons important in our past;
   C. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of an important creative individual, or possesses high artistic values; or
   D. Has yielded, or may be likely to yield, information important to prehistory or history.
4. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR or a local register does not preclude a lead agency from determining that the resource may be an historical resource as defined in California Public Resources Code, Sections 5020.1(j) or 5024.1.

A resource must meet one of the above criteria and must have integrity; that is, it must evoke the resource's period of significance, or in the case of Criterion D, it may be disturbed, but it must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues. Most archaeological sites typically qualify for listing under Criterion D.

## County Regulations

The San Diego County Local Register of Historical Resources includes resources with any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
2. Is associated with the lives of persons important to the history of San Diego County or its communities;

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

## Historic Maps and Aerial Photographs Review

Historic aerial photographs were reviewed to determine changes in the project area over time. The earliest aerial photograph is from 1928 and displays dirt roads and a small amount of residential development. The 1953 photograph displays more defined roads, including Old Highway 80, and additional development. The remaining roads and development as they currently exist are identified on the 2019 aerial photograph. No changes have occurred since then (County of San Diego 2021; Nationwide Environmental Title Research 2021).

## Native American Heritage Commission

The Native American Heritage Commission (NAHC) was contacted via a Sacred Lands File search letter requesting the identification of spiritually significant and/or sacred sites or traditional use areas (Confidential Appendix E). The NAHC response letter, dated August 25, 2021, notes that the Sacred Lands Files search was negative. Additional details can be found in the Native American Consultation section below.

## Guidelines for Determining Impacts to Significant Cultural Resources

As stated in the Code of Federal Regulations, Title 36, Section 800.5(a)(1), criteria of adverse effect:

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Section 4.2 of the County Guidelines for Determining Significance of Cultural Resources: Archaeological and Historic Resources (County of San Diego 2007) indicates that, if applicable, any of the following would be considered a potentially significant environmental impact to cultural resources:

1. If the project causes a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that causes it to be significant in a manner not consistent with the Secretary of the Interior's Standards.

2. If the project causes a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
3. If the project disturbs any human remains, including those interred outside of formal cemeteries.
4. If the project proposes activity or uses damaging to significant cultural resources as defined by the Resource Protection Ordinance and fails to preserve those resources.

**Methods, Analysis of Project Effects, and Recommendations**

**Description:** An intensive pedestrian survey was conducted in the western and eastern portions of the project site (Figure 4, Survey Areas) to relocate known cultural resources identified as CA-SDI-85 and to determine if additional resources are present. On May 12, 2021, Donna Beddow, Harris & Associates (Harris) senior archaeologist, and Shuuluk Linton, Red Tail Environmental Kumeyaay Native American monitor, conducted an intensive pedestrian survey. CA-SDI-85 was not relocated. However, one new isolate (I-LOS-1) was identified in the western portion of the project site.

**Prior Research:** Staff conducted a records search of the surrounding area using the California Historic Resources Inventory System (Confidential Appendix B). In total, 19 studies (Table 1, Previous Studies within a 0.5-Mile Radius) have been conducted within a half-mile radius, and five sites (Table 2, Previously Recorded Cultural Resources within a 0.5-Mile Radius) were identified. According to the National Park Service's National Register Bulletin 15 (National Park Service 1997), historic properties were identified within the project area; however, they were not relocated. Historic properties were identified within a half-mile radius of the project boundary. Of the previously recorded sites, one site is prehistoric (CA-SDI-85/P-37-000085), three sites are historical (CA-SDI-12267/P-37-12267, P-37-024023, and P-37-036677), and one site is multicomponent because it includes both prehistoric and historical components (CA-SDI-23083/P-37-039473).

One previously recorded site (CA-SDI-85) is within the project area, and three sites (P-37-012267, P-37-024023, and P-37-039473) are adjacent to the project area. One site (P-37-036677) is approximately 0.2 mile southwest of the project area. CA-SDI-85 is within the project area and was originally recorded in the 1940s as a ceramic scatter by Adan Treganza. This site was revisited in 2016 (Hector & Williams) and 2020 (Zepeda-Herman) and was not relocated. The area that was surveyed by Hector and Williams for CA-SDI-85 was a plowed field adjacent to Campo Creek on its western side, and no evidence of the site was identified. Site P-37-012267 is adjacent to the project area and is a residential structure that was constructed in 1923. It was evaluated by Roman Beck and Joyce Joyner (1991) and determined not to be a significant resource. P-37-024023 is Old Highway 80, which is also adjacent to the project area and has been recorded numerous times. It is identified as eligible for listing in the NRHP. P-37-039473 (adjacent to the project site) is a scatter of lithic debitage and historical to modern refuse. This site was recorded in 2021 by ASM Affiliates (Jordan, Rochester, and Brown).

The study conducted by RECON (Zepeda-Herman 2020) identified one new prehistoric site (CA-SDI-23150/P-37-039596) and one isolate (P-37-039595). Isolate P-37-039595 consisted of two fine-grained porphorytic metavolcanic flakes, and site CA-SDI-23150 is a bedrock milling feature containing four milling slicks. Site CA-SDI-23150 was not tested for significance. As such, significance is assumed. The RECON survey did not relocate the previously recorded site (CA-SDI-85). The area surveyed by RECON was not a part of this supplemental survey, and therefore, this survey did not include efforts to relocate the resources identified by RECON (CA-SDI-23150, P-37-039595) (Figure 4).

**Table 1. Previous Studies within a 0.5-Mile Radius**

| Report ID | Title | Author | Year |
|---|---|---|---|
| SD-01147 | An Archaeological Reconnaissance of a 60 Acre Parcel on the Campo Indian Reservation Near Live Oak Springs, San Diego County, California. | Leach, Larry | 1978 |
| SD-01256 | An Archaeological Reconnaissance of a 60 Acres Parcel on the Campo Indian Reservation Near Live Oak Springs, San Diego County, California. | Johnson, Melissa J. and Roy E. Pettus | 1978 |
| SD-01621 | Final Report Campo Indian Reservation Cultural Resource Inventory | WESTEC Services, Inc. | 1982 |
| SD-01756 | Archaeological Reconnaissance on the Campo Indian Reservation, San Diego County, California | Napton, L. Kyle and Elizabeth A. Greathouse | 1979 |
| SD-04255 | An Archaeological Survey of the Camp Indian Reservation of Rental and Mutual Help Housing Projects | Crouthamel, Steven J. | 1995 |
| SD-04365 | Final Report & Campo Indian Preservation-Cultural Resource Inventory | Taylor, Clifford | 1982 |
| SD-08282 | Historic Property Survey Report for Old Highway 80, San Diego County, CA | Rosen, Martin | 2001 |
| SD-09456 | Archaeological Survey Report for the Kumeyaay Wind Energy Project, San Diego County, California | McGinnis, Patrick, Kathryn Bouscaren, and Michael Baksh | 2004 |
| SD-09467 | Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California | McGinnis, Patrick | 2005 |
| SD-10066 | Live Oak Springs Subregional Analysis and Draft Environmental Impact Report for TPM 10677, File No. 74-21-29201 | Environmental Development Agency, County of San Diego | 1975 |
| SD-11741 | Cultural Resources Survey of the ETS 7018, Wood to Steel Pole TL6931, Boulevard Project, California | Zepeda-Herman, Carmen | 2008 |

**Table 1. Previous Studies within a 0.5-Mile Radius**

| Report ID | Title | Author | Year |
|---|---|---|---|
| SD-12421 | Final: A Cultural Resources Inventory of the Proposed AT&T / PF. Net Fiber Optics Conduit Ocotillo to San Diego, California | Cook, John R., Deborah Huntley, and Sherri Andrews | 2000 |
| SD-14175 | Letter Report: ETS 21541- Cultural Resources Survey for 18 Pole Replacement/Improvement Locations and Two Staging Areas, Crestwood/Live Oaks Area, San Diego County, California - IO 7011102 | Bowden-Renna, Cheryl | 2011 |
| SD-14592 | Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California | McGinnis, Patrick and Hillary Murphy | 2008 |
| SD-14601 | Cultural Resources Survey Report for the Campo Homes Project, Campo Indian Reservation, San Diego County, California | McGinnis, Patrick | 2005 |
| SD- 17354 | Archaeological Survey and Job Walk for the SDG&E C445 Firm Project, Section B, Campo (Non-BIA), San Diego County, California (SDG&E ETS #29428 ASM Project #23001.08) | Williams, Brian and Kent Manchen | 2018 |
| SD-17370 | Letter Report: ETS 35928 – Cultural Resources Monitoring Report for Vegetation Management SDWP Intrusive Inspections, San Diego County, California - IO 29109 | Cooley, Theodore G. | 2018 |
| SD- 17507 | Letter Report: ETS 35928 – Cultural Resources Monitoring Report for Vegetation Management SDWP Intrusive Inspections, San Diego County, California - IO 29109 | Cooley, Theodore G. | 2018 |
| SD-18290 | Historic Properties Management Plan/Historic Properties Treatment Plan for the Cleveland National Forest Master Special Use Permit and Permit to Construct Powerline Replacement Projects, Final Version | Hector, Susan and Brian Williams | 2016 |

**Table 2. Previously Recorded Cultural Resources within a 0.5-Mile Radius**

| Primary Number | Trinomial | Chronological Placement | Site Type | Size |
|---|---|---|---|---|
| P-37-000085 | CA-SDI-85 | Late Prehistoric | Ceramic Scatter | 100x100 meters |
| P-37-012267 | CA-SDI-12267 | Historical | Residence | 31x21 feet |
| P-37-024023 | NA | Historical | Road – Old Highway 80 | NA |
| P-37-0036677 | NA | Historical | Fencing | 1,320x190 feet |
| P-37-039473 | CA-SDI-23083 | Multicomponent | Lithic Scatter<br>Historic to Modern Refuse | 30x30 meters |

**Notes:** NA = not applicable

**Methodology:** The goal of this survey was to provide a supplemental survey to the survey that was completed by RECON (2020) and to identify the location of a known archaeological site CA-SDI-85. Donna Beddow, Harris senior archaeologist, and Shuuluk Linton, Red Tail Environmental Kumeyaay Native American monitor, conducted the pedestrian survey on May 12, 2021. The field survey was conducted using standard archaeological procedures and techniques. The project area was surveyed under clear skies and warm temperatures. Ground visibility was poor with only 10–20 percent of the ground visible. The survey area included the entirety of parcel 609-050-03-00, a portion of parcel 609-050-06-00, and the roads and rights-of-way for the community of Live Oak Springs. At the request of Sandi Hazlewood, the survey was expanded and included the culvert facility within parcel 609-050-06-00, near the easternmost trail that is adjacent to the on-site creek. Continuous parallel transects (5-meter) were walked primarily in an east–west direction for parcel 609-050-03-00 and in a north–south direction for parcel 609-050-06-00. The project area was inspected for evidence of archaeological remains. Trails, dirt roads, and cleared areas were inspected. The two parcels that were surveyed on the west side of the project area are vegetated with dense cover in the form of non-native grasses. As such, visibility was limited in areas outside of the dirt roads/trails and cleared areas.

The eastern portion of the survey included the community of Live Oak Springs. The survey in this area was limited to the roadways and road right-of-way. Some roads are paved (asphaltic concrete) while others are composed of dirt with a decomposed granite overlay. Cut banks and cleared areas were surveyed for the presence of resources. No resources were identified in the eastern portion of the project.

The survey area was photographed (Appendix A) to document the environmental setting. California Department of Parks and Recreation (DPR) site forms were completed for the identified isolate (I-LOS-1) (Confidential Appendix D). The DPR forms and maps (Confidential Appendix C) were submitted to the South Coastal Information Center.

**Native American Consultation:** The California NAHC was contacted on July 13, 2021, requesting a Sacred Lands File check, to determine whether Sacred Lands are present on site.

As stated earlier in the letter report, the NAHC response letter dated August 25, 2021, notes that the Sacred Lands Files search was negative (see Confidential Appendix E). The NAHC recommended contacting the list of Tribes provided who might have an interest in the project. The County staff sent letters and emails for the purpose of Sacred Lands and Assembly Bill (AB) 52 consultation to the identified Tribal representatives on November 8 and 9, 2021, and followed up via email and telephone call on November 19 and December 6, 2021. As of November 29, 2021, two Tribes requested AB 52 consultation, Viejas Band of Kumeyaay Indians (Viejas Band) and San Pasqual Band of Mission Indians (San Pasqual Band); one Tribe requested Sacred Lands consultation, La Posta Band of Diegueño Mission Indians (La Posta Band); and one Tribe requested both AB 52 and Sacred Lands consultation, Kwaaymii Laguna Band of Mission Indians (Kwaaymii Laguna Band).

The County staff consulted with the Viejas Band and concurred with the Tribe's request to have a Kumeyaay Native American cultural monitor on site during the initial ground-disturbing activities and agreed to notify the Tribe in the event of inadvertent discovery of cultural artifacts, cremation

sites, or human remains. The County staff will also provide to the Viejas Band copies of the project's cultural reports as soon as drafts are available. The County consulted with the La Posta Band and concurred to having a Native American cultural monitor on site during the initial project ground-disturbing activities. Consultation with the San Pasqual Band and the Kwaaymii Laguna Band is in progress, is ongoing, and will continue throughout the processing of the project.

At this time, at the request of multiple Tribes during consultations and as originally planned, the County will provide a qualified archaeologist and a Kumeyaay Native American monitor during the initial ground-disturbing construction activities and vegetation clearing and grubbing at the project site. Additionally, the County will use environmentally sensitive area fencing during construction to avoid impacts to the CA-SDI-23150 cultural site.

**Results:** An isolate (I-LOS-1) was found during the survey of the western portion of the project site. Shuuluk Linton, the Native American monitor, identified the isolate in the existing dirt trail/road east of the on-site existing facilities. The isolate is a tertiary metavolcanic flake. The flake was evaluated in the field, and no use wear was evident**.** The isolate likely was moved to its current location as a result of historic agricultural use and development of the area with the water system. The isolate was recorded and photographed and left in place. Site CA-SDI-85 was not relocated. It is possible that it is within the vegetated area that had very limited visibility. No evidence of this site was found within the dirt roadways/trails or cleared areas. No resources were identified in the eastern portion of the project site. Based on the results of the survey, background information, and discussion with the Native American monitor, there is a potential for the presence of buried cultural resources.

**Resource Importance:** Isolates (I-LOS-1) are by definition not a significant resource, and site CA-SDI-85 was not relocated. Site CA-SDI-85 is determined to be not significant due to the lack of identified artifacts and/or cultural materials. However, there is the potential for CA-SDI-85 to contain buried resources. As identified in the Impact Identification and Project Effects section below, with implementation of a monitoring program during clearing and grubbing and during initial construction, impacts would be less than significant.

## Impact Identification and Project Effects

Pursuant to Section 4.2 of the County Guidelines for Determining Significance of Cultural Resources: Archaeological and Historic Resources (County of San Diego 2007), if applicable, any of the following would be considered a significant impact to cultural resources:

1. If the project causes a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that causes it to be significant in a manner not consistent with the Secretary of the Interior's Standards.
    - Because P-37-012267, P-37-024023, and P-37-039473 are adjacent to and not within the project area, the project would not result in a substantial adverse change in the significance of these historical resources.

- P-37-036677 is approximately 0.2 mile southwest of the project boundary and is not within the project area. The project would not result in a substantial adverse change in the significance of this historical resource.
- CA-SDI-23083/P-37-039473 is approximately 170 feet south of the project boundary and is not within the project area. The project would not result in a substantial adverse change in the significance of this multicomponent resource.

2. If the project causes a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
   - Because site CA-SDI-85 was not relocated, the project will not cause a substantial adverse change in the significance of this prehistoric resource. However, there is the potential for the presence of buried resources. With implementation of a monitoring program during clearing and grubbing and during initial construction, impacts would be less than significant.
   - Because artifact I-LOS-1 is a cultural isolate and isolates are not considered significant because they lack characteristics that would qualify them for listing on the NRHP, the project would not cause a substantial adverse change in the significance of this prehistoric resource.
   - CA-SDI-23083/P-37-039473 is approximately 170 feet south of the project boundary and is not within the project area. The project would not result in a substantial adverse change in the significance of this multicomponent resource.
3. If the project disturbs any human remains, including those interred outside of formal cemeteries.
   - It is assumed that the project will not disturb any human remains. There was no evidence of human remains on the surface or in the test excavations.
4. If the project proposes activities or uses damaging to significant cultural resources as defined by the Resource Protection Ordinance and fails to preserve those resources.
   - This is not applicable because the proposed project is a public project and, therefore, is exempt from the Resource Protection Ordinance as stated above.

**Application of Criteria of Adverse Effect and Recommendations**

As stated in the Code of Federal Regulations, Title 36, Section 800.5(a)(1), criteria of adverse effect:

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

**Recommendations:** It is recommended that ground-disturbing activities avoid known cultural site CA-SDI-23150 (identified by RECON 2020). The project would install fencing during construction to avoid this environmentally sensitive area. In addition, due to the poor visibility and sensitivity of the area (multiple sites present within and adjacent to the project area), it is recommended that both an archaeological monitor and a Kumeyaay Native American monitor be engaged to provide monitoring during clearing and grubbing and during the initial ground-disturbing construction activities.

If you have any questions, please contact me at (619) 236-1778.

Sincerely,

DONNA BEDDOW, RPA
Senior Archaeologist

Attachments
USGS Topographical Map – Live Oak Springs
Appendix A – Photographs
Confidential Appendices – Under Separate Cover:
- Appendix B – CHRIS Background Data
- Appendix C – Confidential Maps
- Appendix D – DPR Forms
- Appendix E – Sacred Lands File Check and Assembly Bill 52 Consultation

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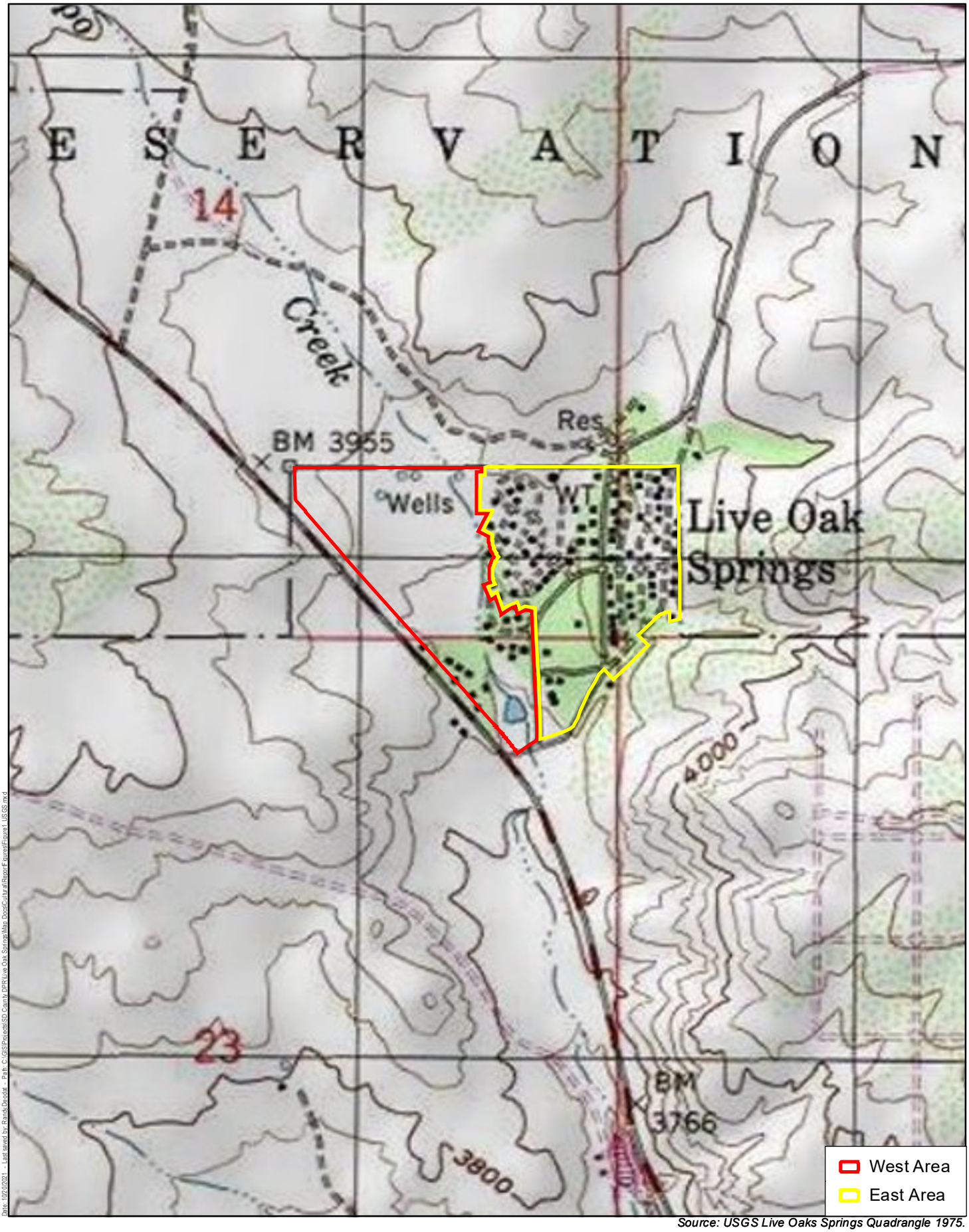


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*Source: USGS Live Oaks Springs Quadrangle 1975.*

Harris & Associates

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**Figure 1**

USGS Topographic Map

Live Oak Springs

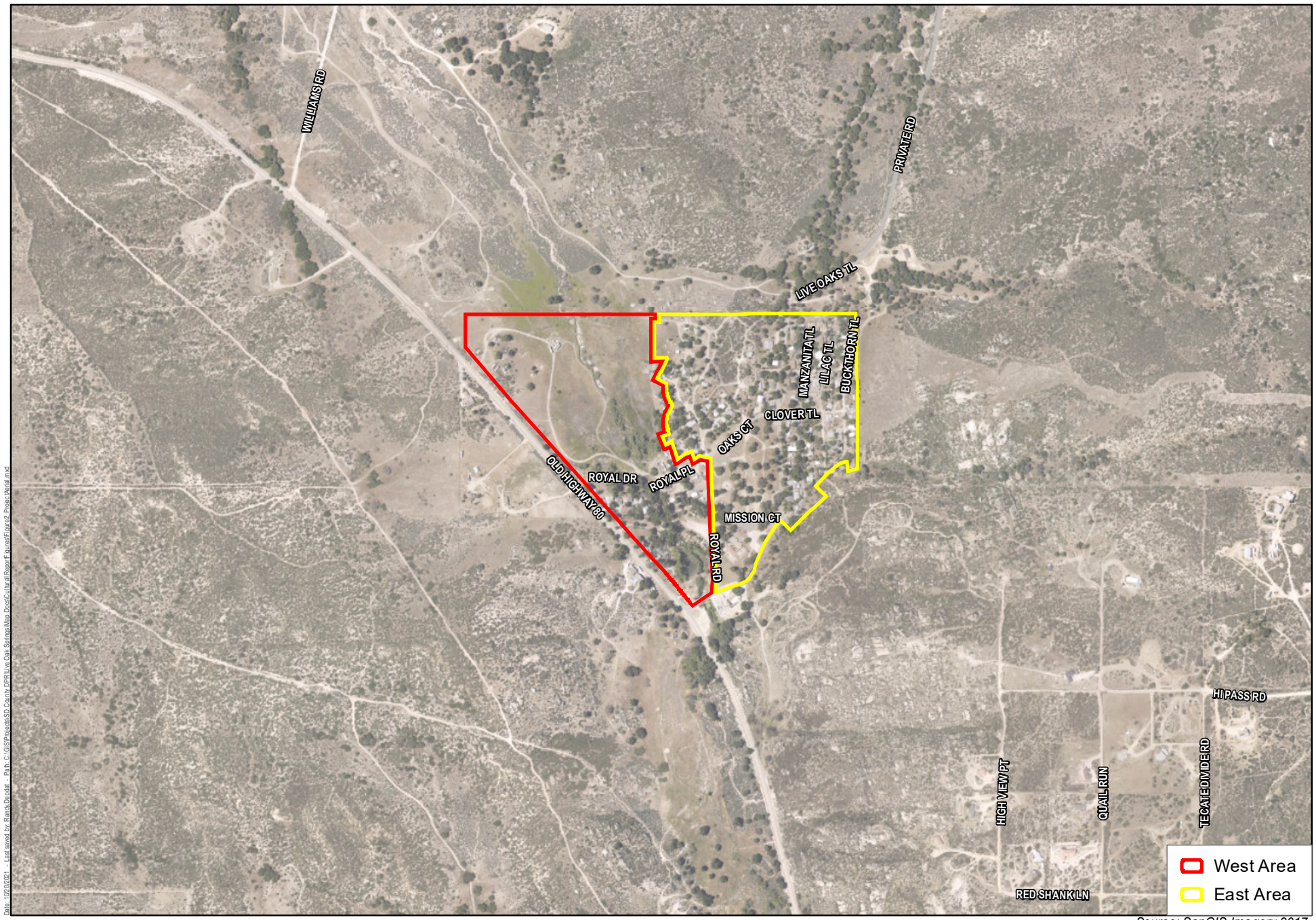


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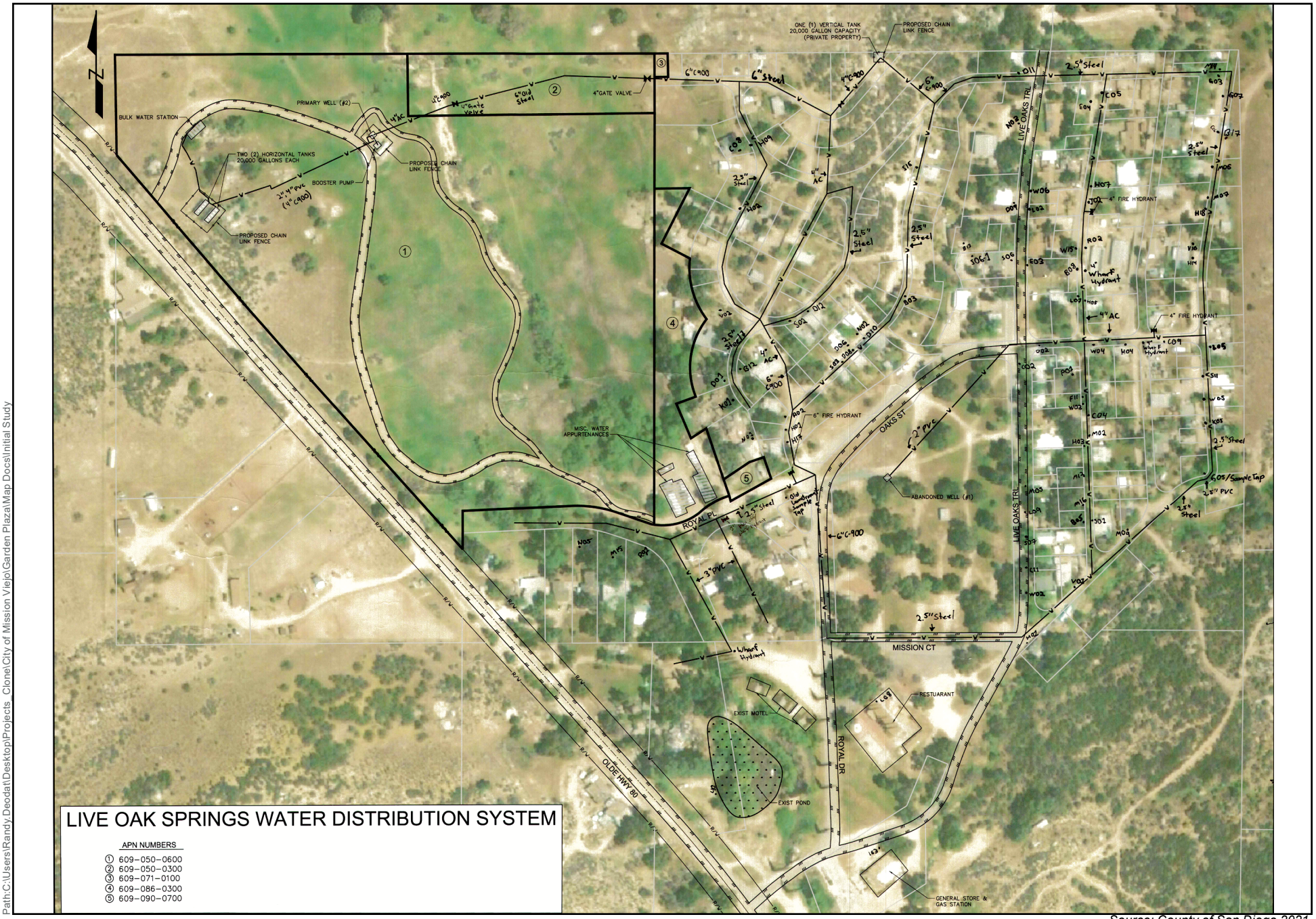
**Figure 2**

Project Aerial

Live Oak Springs

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*Source: County of San Diego 2021.*

Harris & Associates

**Figure 3**

Project Improvements

Live Oak Springs

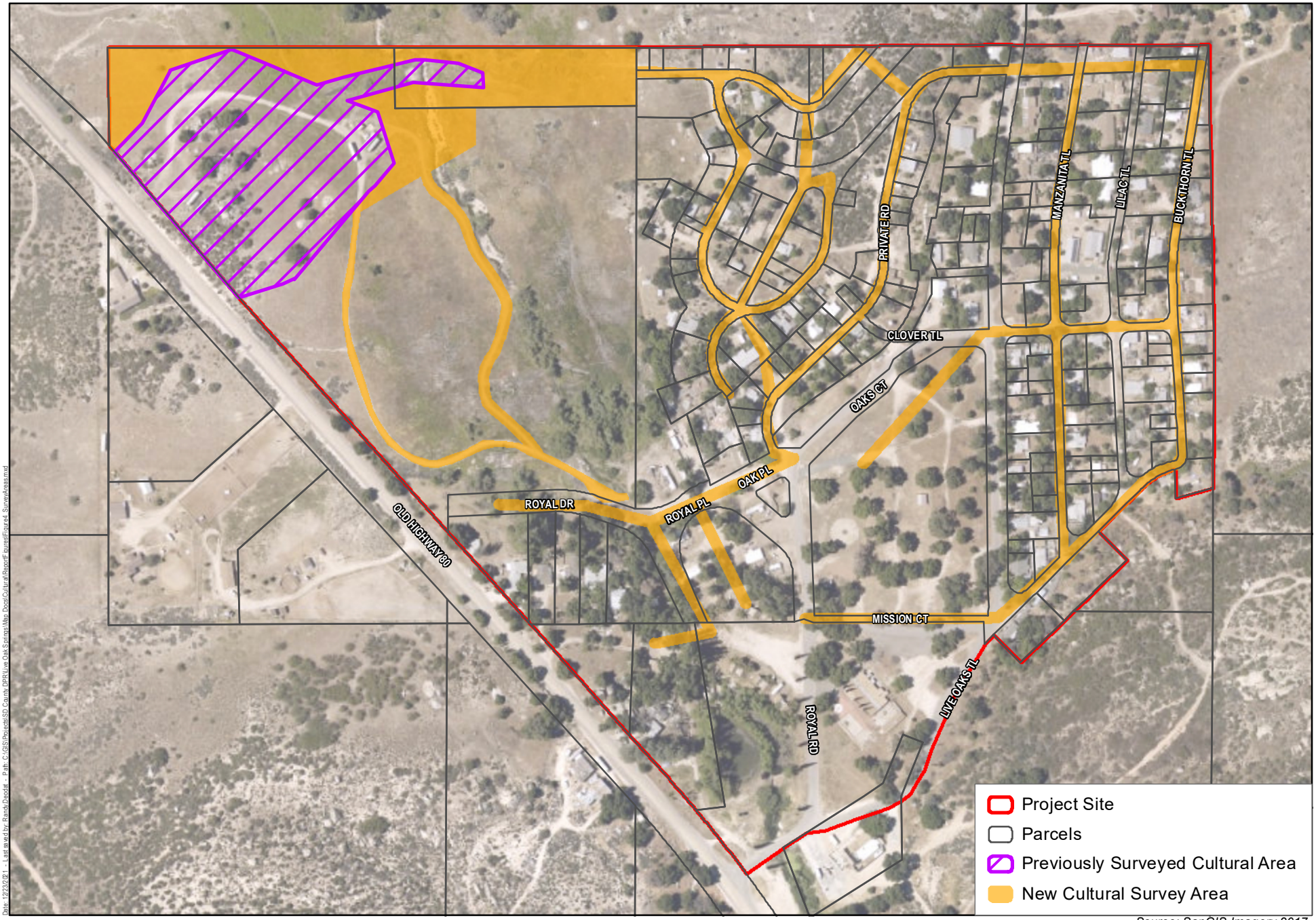


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**Figure 4**

Survey Areas

Live Oak Springs Water System Improvements Project

# Appendix A. Photographs

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**Photograph 1:** Western Portion of Survey

**Photograph 2:** Campo Creek near Culvert – Western Portion

**Photograph 3:** Park Area in the Center of Live Oak Springs Community – Eastern Portion

**Photograph 4:** Typical Live Oak Springs Residence – Eastern Portion

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