HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 **tel**
619.462.0552 **fax**
www.**helixepi**.com

April 10, 2019 EMW-17.03

Mr. Alfred Javier
Director of Environmental and Regulatory Compliance
Eastern Municipal Water District
P.O. Box 8300
2270 Trumble Road
Perris, CA 92572-8300

Subject: Judson Tank and Transmission Pipeline Project Cultural Resources Study Report

Dear Mr. Javier:

HELIX Environmental Planning, Inc., (HELIX) was contracted to conduct a cultural resources study for Eastern Municipal Water District's (EMWD) Judson Tank and Transmission Pipeline Project (Project) in the City of Moreno Valley, California. The cultural resources study included a record search, a Sacred Lands File search, tribal outreach, a review of historic maps and aerial photographs, an intensive field survey by a HELIX archaeologist and a Native American monitor, and preparation of this letter report. This letter report details the methods and results of the cultural resources study.

PROJECT DESCRIPTION

The Judson Tank and Transmission Pipeline Project is located in the City of Moreno Valley in northwestern Riverside County (Figure 1, *Regional Location*). The Project site, which is located north of State Route (SR) 60 and east of Interstate 215, is northeast of March Air Reserve Base and northwest of Perris Reservoir. The 8.31-acre parcel is bordered by undeveloped and agricultural land to the north and east, and residential communities are located a short distance to the south of the Project area. The northern terminus of Judson Street is located just south of the southwestern extent of the Project parcel (Figures 2 and 3, *Project Vicinity [USGS Topography]* and *Project Vicinity [Aerial Photograph]*, respectively). The proposed pipeline alignment is within Judson Street (Old Perris Boulevard), running south from the Project parcel to Robin Lane (Figures 2 and 3). The parcel is within Township 2 South, Range 3 West, Section 29, on the U.S. Geological Survey (USGS) 7.5' Sunnymead quadrangle (Figure 2); the pipeline alignment is along the section line between Sections 31 and 32 (Figure 2).

EMWD proposes to construct a 2.5-million gallon potable water storage tank, approximately 2,300 linear feet of 18-inch diameter transmission pipeline, a paved access road, a detention basin, and other associated utilities to support tank operation (Figure 4, *Preliminary Design*). The access road and the

transmission pipeline would connect to the northern terminus of Judson Street and continue onto Perris Boulevard.

The proposed 18-inch diameter pipeline would convey water from the existing transmission line at the intersection of Perris Boulevard and Robin Lane. The off-site alignment of the pipeline would measure approximately 1,300 linear feet; 700 linear feet along Judson Street to the centerline of Pico Vista Way, and 600 linear feet along Old Perris Boulevard to Robin Lane, near the existing Covey Booster Station. This alignment was designed to avoid impacting street improvements in Perris Boulevard and would be located within an existing EMWD right-of-way along the eastern side of Judson Street.

ENVIRONMENTAL BACKGROUND

The Project area is located in the Moreno Valley, in the foothills of Riverside County. The Badlands, San Bernardino and San Jacinto Mountains lie to the east, the Santa Ana Mountains lie to the west, and the Box Spring Mountains are to the north and west; Reche Canyon is located just over 1.5 miles to the north. Based on mapped soils for the Project area, average annual temperatures range from a January low of 45 to 52 degrees Fahrenheit (°F) to a July high of 68 to 80°F (National Cooperative Soil Survey 2003, 2012). The property is located around a southwesterly-trending fingerling knoll at the base of Olive Hill (Figures 2 and 3). The elevation at the highest peak of Olive Hill is approximately 2,066 feet above mean sea level (amsl), and the elevation of the surrounding foothills ranges between approximately 1,967 and 2,000 feet amsl (Google Earth). There are two seasonal drainages that travel through the Project; one crosses through the Project near the northeastern and northwestern corners, the other crosses the southeastern corner. There are numerous other drainages in the vicinity (Figure 2). The property is about 10.25 miles northwest of the current location of the San Jacinto River (the alignment of the river has changed over time) and approximately 7 miles northwest of the Perris Reservoir.

Geologically, a majority of the Project area is underlain by Cretaceous-era tonalite, as are the Badlands to the east; the remainder of the Project is underlain by young axial channel deposits (alluvium) unique to the Moreno Valley and very old alluvial fan deposits from the early Pleistocene (Morton et. al 2001). In general, the floodplain of Moreno Valley is underlain by young alluvium, as is the connecting Perris Valley farther south. Three soil types are mapped for the Project site: Cieneba rocky sandy loam, 15 to 50 percent slopes, eroded; Monserate sandy loam, 8 to 15 percent slopes, eroded; and Terrace escarpments. Cieneba rocky sandy loam comprises about 56 percent of the on-site soils, and Monserate sandy loam comprises about 10 percent (Web Soil Survey 2017). The remaining 34 percent of the Project area contains Terrace escarpments (Web Soil Survey 2017), which generally represent the former position of a flood plain or a lake or sea shore (USDA, NRCS 2003). The Cieneba and Monserate soil series are derived from igneous (granitic) rock and, based on the underlying geology, could be residual or alluvial in context (National Cooperative Soil Survey 2003, 2012). These soils generally support vegetation communities such as chaparral, including chamise, manzanita, California sagebrush, ceanothus, toyon, scattered canyon oaks, annual grasses and forbs, and shrubs (National Cooperative Soil Survey 2003, 2012). HELIX biologists conducted a biological survey of the Project site in August 2016 and observed Riversidean sage scrub and non-native woodland habitats within the property, with Riversidean sage scrub being the predominant vegetation community. Riversidean sage scrub habitat includes vegetation such as California sagebrush, California buckwheat, and purple sage (California Native Plant Society 1997), which would have been used by native populations for food, medicine, tools, and ceremonial and other uses (Bean and Shipek 1978; Hedges and Beresford 1986). Further, the

cismontane setting and the presence of various drainages in the area would have made fresh water accessible to native populations living in and traveling through the area. Many of the animal species living within these communities (such as rabbits, deer, small mammals, and birds) would have been used by native inhabitants as well.

CULTURAL BACKGROUND

The culture history presented here (up to the discussion of the Late Prehistoric period) is based on Wallace's (1978) discussion of the Post-Pleistocene for Southern California (circa 9000 Before Common Era [BCE] to 2000 BCE). The earliest inhabitants of California subsisted mainly by hunting, as attested to by "the finding of projectile points and other stone implements adapted to the chase at ancient campsites" throughout California (Wallace 1978:25). Wallace refers to this early period as Period I: Hunting. It generally equates with the Paleoindian or Lithic stage (Willey and Phillips 1958), in which little diversity of resource exploitation is evident.

Wallace's (1978) Period II: Food Collecting equates with Willey and Phillips (1958) Archaic stage and is often referred to in Southern California as the Early Archaic, Early Milling period, or Milling Stone Horizon. "A changeover from hunting to the collection of seed foods is clearly reflected in the archaeological record for the period between 6000 and 3000 B.C. The importance of seeds in the diet of the prehistoric peoples can be seen in the numbers of food-grinding implements present at their settlements" (Wallace 1978:28).

After about 3000 BCE, a more diversified subsistence strategy is evident throughout Southern California. "Everywhere increased subsistence efficiency in the form of wider exploitation of available food resources can be seen" (Wallace 1978:30). The artifact assemblages changed slowly over time, with a few additions or changes. "By the end of the millennium the new ways and techniques had become firmly established and formed the basis for succeeding cultural traditions" (Wallace 1978:35).

"Perhaps as early as 1500-1000 B.C. the Takic branch of Uto-Aztecan [including the forebears of the Luiseño and Cahuilla people] began to spread westward across the Mojave Desert" (Moratto 1984:560). There is disagreement about the date of the "Shoshonean intrusion" into various parts of Southern California, including Riverside County. Moratto indicated that Kowta (1969:50) "proposed dates of circa 1000 B.C. for the entry of 'Shoshoneans' in the Los Angeles Basin" (Moratto 1984:560). "Considering both linguistic and archaeological data, C. Bull (1977:56) sets the western movement of the 'Luisenic language family' at circa 500 B.C." (Moratto 1984:165).

It must be noted that this interpretation by archaeologists and linguistic anthropologists differs from the beliefs of the Luiseño and Cahuilla people. The creation stories indicate that the Luiseño and Cahuilla people have always been here, not migrating from elsewhere. The creation story of the Pechanga Band of the Luiseño tells that the world was created at Temecula. "The Káamalam [first people] moved to a place called Nachíivo Pomíisavo, but it was too small so they moved to a place called 'exva Teméeku, this place you now know as Temeku. Here they settled while everything was still in darkness (DuBois 1908)" (Masiel-Zamora 2013:2).

While some ethnographers place the area of the Project site in the traditional territory of the Luiseño people (see Kroeber 1976:Plate 57), others show it as within traditional Cahuilla territory (see Bean 1978; Bean and Shipek 1978). Most probably, this is a transitional area between the two related cultural groups.

"During the Spanish Period, Riverside County proved to be too far inland to include any missions or asistencias within its limits. Although both San Luis Rey and San Juan Capistrano claimed a large part of southwestern Riverside County. Mission San Juan Capistrano and San Luis Rey were established in 1776 and 1798, respectively" (Goodwin 2013:6).

The Project area is in proximity to the former Mexican land grant Rancho San Jacinto Nuevo y Potrero, which was granted to Miguel Pedrorena, in 1846. Pedrorena was the son-in-law of Jose Antonio Estudillo, administrator and major domo of Mission San Luis Rey. The land grant was later patented to Thomas W. Sutherland, guardian of the minor children of Pedrorena and his widow.

In the late 1800s, John Butterfield's Overland Mail Company stagecoach route ran through Moreno and Perris Valleys on its way between Tucson and San Francisco via San Diego and Los Angeles. The Moreno Valley, which consisted of small, unincorporated communities, got its name from Frank E. Brown ("Moreno" in Spanish), who formed the Bear Valley Land and Water Company in 1883. Brown built a dam at Bear Valley and provided water to the Perris and Moreno communities until 1899, when he lost a legal suit, and thereby water rights, to the City of Redlands. This litigation and a period of natural drought devastated the local farming communities, forcing families to either move or abandon their homes in favor of better irrigated areas. The few who remained turned to "the dry farming of hay, grain, and grapes" (City of Moreno Valley, n.d.).

The community was revived in 1918, with the construction of March Field in anticipation of America's entry into World War I. It began as a temporary base for training fighter pilots but was established as a permanent base and flight training school in the late 1920s. This led to a population boom in the Moreno Valley, with the Base supporting up to 85,000 troops at a time. The establishment of the Riverside International Raceway in 1958 and the Lake Perris Recreation Area in 1973 led to further population increases until the unincorporated communities of Moreno, Edgemont, and Sunnymead were combined into the City of Moreno Valley in 1984 (City of Moreno Valley, n.d.).

REGULATORY FRAMEWORK

National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP. Revised regulations, "Protection of Historic Properties" (36 Code of Federal Regulations [CFR] Part 800), became effective August 5, 2004.

Historic properties are properties that are included in the National Register of Historic Places (NRHP) or those that meet the criteria for inclusion in the NRHP, as outlined below. If the agency's undertaking could affect historic properties, the agency determines the scope of appropriate identification efforts and then proceeds to identify historic properties in the Area of Potential Effects (APE). The agency reviews background information, consults with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) and others, seeks information from knowledgeable parties, and conducts additional studies as necessary. Districts, sites, buildings, structures, and objects listed in the NRHP are considered; unlisted properties are evaluated against the National Park Service's published

criteria, in consultation with the SHPO/THPO and any Indian tribe or Native Hawaiian organization that may attach religious or cultural importance to them.

If questions arise about the eligibility of a given property, the agency may seek a formal determination of eligibility from the National Park Service. Section 106 review gives equal consideration to properties that have been included in the NRHP and those that have not been but that meet NRHP criteria.

If the agency finds that no historic properties are present or affected, it provides documentation to the SHPO/THPO and, barring any objection in 30 days, proceeds with its undertaking. If the agency finds that historic properties are present, it proceeds to assess possible adverse effects. If adverse effects are identified, they must be resolved.

Section 60.6 of 36 CFR Part 60 presents the criteria for the evaluation of cultural resources for nomination to the NRHP as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, and association, and

(a) That are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) That are associated with the lives of persons significant in our past; or

(c) That embody the distinctive characteristics of a type, period or method or construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) That have yielded, or may be likely to yield, information important in prehistory or history [36 CFR Part 60].

Cultural resources that are eligible for inclusion in the NRHP are defined as historic properties. Impacts to historic properties constitute effects under the NHPA.

California Environmental Quality Act

Under CEQA, any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] §5024.1, Title 14 California Code of Regulations [CCR] Section 4852) including the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

B. Is associated with the lives of persons important in our past;

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

D. Has yielded or may be likely to yield information important in prehistory or history.

Cultural resources eligible for the CRHR are considered significant resources, and impacts to them are significant environmental effects under CEQA.

Section 15064.5 (d) & (e) of the CEQA Guidelines contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

A. When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code §5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

   (a) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).

   (b) The requirements of CEQA and the Coastal Act.

Native American Heritage Values

Federal and state laws mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

Potentially relevant to prehistoric/Native American archaeological sites is the category termed Traditional Cultural Properties (TCP) in discussions of cultural resource management performed under federal auspices. “Traditional” in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices (Parker and King 1998).

Cultural resources can include TCPs, such as gathering areas, landmarks, and ethnographic locations in addition to archaeological districts. Generally, a TCP may consist of a single site, or group of associated archaeological sites (district or traditional cultural landscape), or an area of cultural/ethnographic importance.

A TCP may be considered eligible for the NRHP based on “its association with cultural practices or beliefs of a living community that (a) are rooted in that community’s history, and (b) are important in maintaining the continuing cultural identity of the community” (Parker and King 1998:1). Strictly speaking, TCPs are both tangible and intangible; they are anchored in space by cultural values related to

community-based physically defined “property referents” (Parker and King 1998:3). On the other hand, TCPs are largely ideological, a characteristic that may present substantial problems in the process of delineating specific boundaries. Such a property’s extent is based on community conceptions of how the surrounding physical landscape interacts with existing cultural values. By its nature, a TCP need only be important to community members and not the general outside population as a whole. In this way, a TCP boundary may be defined based on viewscape, encompassing topographic features, extent of archaeological district or use area, or a community’s sense of its own geographic limits. Regardless of why a TCP is of importance to a group of people, outsider acceptance or rejection of this understanding is made inherently irrelevant by the relativistic nature of this concept.

The Traditional Tribal Cultural Places Bill of 2004 requires local governments to consult with Native American representatives during the project planning process, specifically before adopting or amending a General Plan or a Specific Plan, or when designating land as open space for the purpose of protecting Native American cultural places. The intent of this legislation is to encourage consultation and assist in the preservation of Native American places of prehistoric, archaeological, cultural, spiritual, and ceremonial importance. It further allows for tribal cultural places to be included in open space planning. State Assembly Bill (AB) 52, effective July 1, 2015, introduced the Tribal Cultural Resource (TCR) as a class of cultural resource and additional considerations relating to Native American consultation into CEQA. As a general concept, a TCR is similar to the federally defined TCP; however, it incorporates consideration of local and state significance and required mitigation under CEQA. A TCR may be considered significant if included in a local or state register of historical resources; or determined by the lead agency to be significant pursuant to criteria set forth in Public Resources Code §5024.1; or is a geographically defined cultural landscape that meets one or more of these criteria; or is a historical resource described in Public Resources Code §21084.1, a unique archaeological resources described in Public Resources Code §21083.2; or is a non-unique archaeological resource if it conforms with the above criteria.

METHODS

HELIX submitted a record search request of all previously recorded cultural resources, archaeological studies, and historic addresses within the Project area and a one-mile radius to the Eastern Information Center (EIC) on August 1, 2016. The records search was received on August 5, 2016 and is attached to this report as Confidential Appendix A. Historic aerial photographs ranging from 1959 to 2012 (NETR Online 2017) and historic topographic maps were reviewed to assess historic land usage and the potential for historic archaeological resources. A Sacred Lands File search was requested from the Native American Heritage Commission (NAHC) on August 1, 2016. A response was received on August 3, 2016. Letters regarding the Project were sent on March 1, 2017 to the tribal contacts provided by the NAHC. Native American correspondence is included as Confidential Appendix B.

HELIX archaeologist Kristina Davison and William Swan from the Soboba Band of Luiseño Indians (Soboba) surveyed the property for cultural resources on February 28, 2017. The survey was conducted in parallel transects spaced 10 meters (m) apart to the extent feasible; all areas of visible soil, including rodent backfill piles, were carefully examined for cultural resources, as were all exposed bedrock outcrops.

RESULTS

A record search from the EIC for the Project area and a one-mile radius indicated that eight cultural resources had been recorded within the search radius (see Table 1). No cultural resources have been recorded within the Project area itself. Of the recorded resources, three (CA-RIV-001703, -002531, -002752) are single bedrock milling features, two are early twentieth century vernacular wood-frame houses, two are adobe sites, and one (P-33-013711) is a prehistoric isolate. Of the adobe sites, one (P-33-001704) consists of a historic single-room adobe structure and an artifact scatter containing glass bottle fragments, ceramics, and a mano (Drover 1979a). The other adobe site, P-33-001705, is recorded as a rectangular adobe structure, two three-course block-wall structures, and a possible water retention basin or *tenaja* (Drover 1979b). The two resources closest to the Project site are the prehistoric isolate (P-33-013711) and one of the recorded bedrock milling features (CA-RIV-002531). The isolate consists of a bifacial mano fragment (Jefferson and Clough 1974), and the bedrock milling feature is composed of three milling slicks on one bedrock surface (Jenkins 1982).

Table 1
PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN ONE-MILE RADIUS

P-33-#	CA-RIV-#	Site Type	Recorder, Date
001703	001703	Bedrock milling feature (one milling slick)	Drover, 1979
001704	001704	Single room adobe structure with associated artifact scatter (glass, ceramics, mano)	Drover, 1979
001705	001705	Rectangular adobe, two three-course block structures, and a possible water retention structure	Drover, 1979
002531	002531	Bedrock milling feature (three milling slicks on a single boulder)	Jenkins, 1982
002752	002752	Bedrock milling feature (two milling slick on a single boulder)	Salpas, 1983
007286		Vernacular wood frame residence constructed in 1907	Warner, 1983
007287		Vernacular wood frame residence constructed in 1920 with an additional wing added in the 1940s; record further notes that a shed and "unusual trees (tall pines)" are within the property	Warner, 1983
013711		Isolated bifacial mano fragment observed in a modern pile of rocks	Jefferson and Clough, 1974

Based on the records received from EIC, the vast majority of the Project site has not been previously surveyed for cultural resources. The EIC has a record of 10 cultural resource studies that have been conducted within the search radius, only one of which covered a small portion of the Project's northeastern corner. This study (Wirth Associates 1983) includes the public review document and confidential appendices to the cultural resources study for the Devers-Serrano-Villa Park Transmission System Project; the study area is shown as a wide, linear survey area trending northwest/southeast,

primarily focused on the area to the northeast, east, and southwest of the Project area (Confidential Appendix A: *Records Search Maps*). Though not shown as covering the Project site, another of the recorded studies (Drover 1978) was conducted by the Archaeological Research Unit at University of California, Riverside and spanned 225 acres to the west of the current Project area, south of Nectar Avenue; this study's eastern boundary is shown as abutting the current Project's western boundary (Confidential Appendix A). Drover conducted an additional study to the northwest of the Project area for the Box Canyon Ranch Preliminary Plan, during which the two adobe sites within the search radius (CA-RIV-001704 and -001705) were recorded (Drover 1979a, 1979b, 1979c).

A review of historic aerial photographs revealed that the Project property has been generally undisturbed, though the surrounding area has been the subject of increased development. Aerial imagery taken from 1959 to 2012 was reviewed; no earlier historic aerial photographs were available for review. The area to the west of the Project site was used for agriculture from 1959 to 1978, with groves occupying the area closest to the Project property in later years, and was developed between the years of 1978 and 1997 (NETR Online 2017). The existing linear tree line, which travels through the western portion of the Project site, is visible on the 1959 aerial; land to the west of this was used as agricultural fields between 1959 and 1966, during which time a residence was constructed and associated property improvements evident at 11033 Judson Street, outside the Project site (NETR Online 2017). Aerials taken in 1966 and 1967 show that the land directly to the west and northwest of the Project site had been recently tilled, and the existing groves were established when the 1978 aerial photograph was taken of the area (NETR Online 2017). No structures are visible on-site in historic topographic maps from 1901 (USGS 30' Elsinore quadrangle) and 1943 (USGS 15' Perris quadrangle), nor do any appear on the property in historic aerial photographs (NETR Online 2017). Ironwood Avenue, SR 60, Cottonwood Avenue, and Alessandro Boulevard are present in the 1901 topographic map; in addition, an unimproved and unnamed road is visible where present-day Judson Street (Old Perris Boulevard) is located, and the unimproved dirt access road to the northeast of the Project area is also visible.

The Sacred Lands File search results were received from the NAHC on August 3, 2016. The search was negative for any Sacred Lands within the Project vicinity. Letters were sent by certified mail on March 1, 2017 to the tribal contacts indicated by the NAHC. Four responses have been received to date. A letter was received from the Rincon Band of Luiseño Indians on March 13, 2017, indicating that although the Project area is within the Luiseño Aboriginal Territory, it is outside Rincon's Historic boundaries. Based on this, they deferred to the Pechanga Band of Luiseño Indians (Pechanga) or Soboba, who are located closer to the Project area. A letter was received via email from the Agua Caliente Band of Cahuilla Indians (ACBCI) on March 17, 2017. The letter indicated that the project area is within the Tribe's Traditional Use Area and stated, "At this time ACBCI defers to Soboba. This letter shall conclude our consultation efforts". A letter from Soboba was received on March 30, 2017, stating that the Project area falls "within the bounds of our Tribal Traditional Use Areas. This project location is in proximity to known sites, is a shared use area that was used in ongoing trade between the tribes, and is considered to be culturally sensitive by the people of Soboba". Soboba requested to initiate consultation with EMWD, to act as a consulting tribal entity for this Project, and to have Native American Monitor(s) from Soboba's Cultural Resource Department present during any ground disturbing proceedings, including archaeological surveys or testing. The San Manuel Band of Mission Indians (SMBMI) responded by email on April 10, 2017. They, too, requested to initiate consultation with EMWD regarding the Project. The email further noted:

> The proposed project area exists just within Serrano ancestral territory and, therefore, is of interest to the Tribe. This area is known to have been used and lived upon by Serrano ancestors. I have attached a Serrano Ancestral Lands map for your future information. You mentioned that Soboba participated in the cultural resources survey of the project area. We are aware that more than one tribal entity has concerns about the project and would like to respectfully request that during implementation of the project, a monitor from a SMBMI-approved list participate. Tribe has worked with Soboba in the past to work out a cooperative arrangement.

EMWD will be kept apprised of any additional tribal responses. Native American correspondence is included as Confidential Appendix B.

The field survey was conducted on February 28, 2017 by an archaeologist from HELIX and a Native American monitor from the Soboba Band of Luiseño Indians. No cultural resources were observed within the Project area; however, ground visibility was poor throughout a majority of the Project property, with most of the Project site only having approximately 5 to 25 percent of the ground surface visible at the time of the survey. All exposed bedrock outcrops within the Project area were inspected and found to be heavily weathered and exfoliated; no evidence of milling features or rock art was found. The Project's estimated impact area (Figure 4) would disturb several of these weathered outcrops.

IMPACTS AND RECOMMENDED MITIGATION MEASURES

Although the general vicinity of the Project has been occupied/used by the Luiseño, Cahuilla, and Serrano people for thousands of years, there are no previously recorded cultural resources or Sacred Lands within the Project area, and none were identified during the field survey. Based upon these findings, the Project is anticipated to have no effect to cultural resources. However, ground visibility during the survey was extremely low, and only 5 to 25 percent of the ground was visible. Numerous weathered granitic bedrock outcrops are located within the property; these exhibit evidence of moderate to heavy natural exfoliation, and no bedrock milling surfaces were observed. The Project area contains alluvial soils, indicating a potential for buried cultural resources. Further, the Project area appears relatively undisturbed in terms of development. No TCRs have been identified; however, several Tribes have responded that the area is of interest to the Tribe, and Soboba indicated that the area is culturally sensitive. Based on these factors, there is a potential for subsurface cultural resources to be encountered during grading and other ground-disturbing activities. Therefore, the following measures ae recommended:

MM-CUL-1: EMWD shall retain a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards to oversee an archaeological monitor who shall be present during ground- disturbing activities such as clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the Project. A Native American monitor from a Tribe traditionally culturally affiliated with the Project area shall be retained to monitor during all activities requiring an archaeological monitor. The frequency of monitoring shall be determined by the archaeological monitor and the Native American monitor, based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus fill or young versus old soils), the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Excavations into formational materials are not required to be monitored by the archaeologist, as these sediments would not contain cultural material. Full-time field observation can be

reduced to part-time inspections or ceased entirely if determined adequate by the qualified archaeologist and the Native American monitor.

MM-CUL-2: In the event that archaeological resources are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 25 feet shall be established around the find, in which construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by Project construction activities shall be evaluated by a qualified archaeologist and a Native American monitor. EMWD shall coordinate with the archaeologist and the Native American monitor to develop an appropriate treatment plan for the resources if they are determined to be potentially eligible for the CRHR or potentially qualify as unique archaeological resources pursuant to CEQA. The treatment plan may include preservation in place (if feasible) and/or the implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. EMWD, in consultation with the archaeologist and the Native American monitor, shall designate repositories that meet State standards to curate the archaeological material recovered. Project material shall be curated in accordance with the State Historical Resources Commission's *Guidelines for Curation of Archaeological Collections*.

MM-CUL-3: The archaeological monitor shall prepare a final report at the conclusion of archaeological monitoring. The report shall be submitted to EMWD, the EIC, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the Project and required mitigation measures. The report shall include a description of resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the CRHR.

MM-CUL-4: If human remains are encountered unexpectedly during implementation of the Project, State Health and Safety Code Section 7050.5 requires that no further disturbance occurs until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC shall then identify the person(s) thought to be the Most Likely Descendant (MLD). The MLD may inspect the site of the discovery of the Native American remains and may recommend means for treating, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete inspection and make a recommendation within 48 hours of being granted access to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Upon the discovery of the Native American remains, EMWD shall ensure that the immediate vicinity in which the Native American human remains are located is not damaged or disturbed by further development activity until EMWD has conferred with the MLD regarding their recommendations, taking into account the possibility of multiple human remains. EMWD shall discuss all reasonable options with the MLD regarding the MLD's preferences for treatment.

Whenever the NAHC is unable to identify an MLD, or the MLD identified fails to make a recommendation, or EMWD or the authorized representative rejects the recommendation of the descendants and the mediation provided for in Subdivision (k) of PRC Section 5097.94, if invoked, fails to provide measures acceptable to EMWD, EMWD or authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbances.

CONCLUSIONS

In summary, the Project is expected to have no impacts to cultural resources. However, due to the potential for subsurface cultural resources to be encountered during ground-disturbing activities, an archaeological and Native American monitoring program will be implemented, as described in the mitigation measures presented in this report.

If you have any questions, please contact Mary Robbins-Wade at (619) 462-1515.

Kristina Davison
Staff Archaeologist

Mary Robbins-Wade, RPA
Cultural Resources Group Manager

Enclosures:
Figure 1 Regional Location
Figure 2 Project Vicinity (USGS Topography)
Figure 3 Project Vicinity (Aerial Photograph)
Figure 4a Site Plan
Figure 4b Site Plan

Confidential Appendices:
A Records Search Maps
B Native American Correspondence

REFERENCES

Bean, Lowell John

1978 Cahuilla. In *California*, edited by Robert F. Heizer, pp. 575-587. *The Handbook of North American Indians*, vol. 8. William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Bean, Lowell John, and Florence C. Shipek

1978 Luiseño. In *California*, edited by Robert F. Heizer, pp. 550-563. *The Handbook of North American Indians*, vol. 8. William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Bull, Charles S.

1977 *Archaeology and Linguistics, Coastal Southern California*. Unpublished Master's Thesis, Department of Anthropology, San Diego State University.

California Native Plant Society

1997 Riversidean Sage Scrub – Holland Type and Status. Electronic document available at http://davisherb.ucdavis.edu/cnpsActiveServer/holldetails.aspx?HOLLNAME=Riversidean+sage+scrub , accessed February 27, 2016.

City of Moreno Valley

n.d. *About Moreno Valley: History*. Electronic document, available at: http://www.moreno-valley.ca.us/community/about.shtml.

Drover, Christopher E.

1979a P-33-001704/CA-RIV-001704. Site record, on file at Eastern Information Center, UC Riverside.

1979b P-33-001705/CA-RIV-001705. Site record, on file at Eastern Information Center, UC Riverside.

1979c *A Cultural Resource Inventory Box Canyon Ranch Preliminary Plan, Riverside County, California*. Report on file at Eastern Information Center, UC Riverside.

1978 *A Cultural Resource Inventory, Tentative Tract 11902, Riverside County, California*. Archaeological Research Unit, UC Riverside. Report on file at Eastern Information Center, UC Riverside.

DuBois, Constance

1908 *The Religion of the Luiseño Indians of Southern California*. University of California Publications in American Archaeology and Ethnology 8(3):69-186.

Goodwin, Riordan

2013 *Cultural Resources Assessment Stratford Ranch Residential Project, City of Perris, Riverside County California*. LSA Associates, Inc., Riverside, CA. On file at HELIX.

Hedges, Ken, and Christina Beresford
1986 *Santa Ysabel Ethnobotany*. San Diego Museum of Man Ethnic Technology Notes No. 20.

Jefferson, P., and H. Clough,
1974 P-33-013711. Site record, on file at Eastern Information Center, UC Riverside.

Jenkins, D.
1982 P-33-002531/CA-RIV-002531. Site record, on file at Eastern Information Center, UC Riverside.

Kowta, M.
1969 *The Sayles Complex: A Late Milling Stone Assemblage from Cajon Pass and the Ecological Implications of its Scraper Planes*. University of California Publications in Anthropology 6, Berkeley.

Kroeber, A.L.
1976 *Handbook of the Indians of California*. Dover Publications, New York. Originally published in 1925 as *Bulletin 78* of the Bureau of American Ethnology of the Smithsonian Institution, Washington, D.C.

Masiel-Zamora, Myra Ruth
2013 *Analysis of 'Éxva Teméeku, a Luiseño Indian Village Site Named Temeku, Located In Temecula, California*. Master's thesis, Department of Anthropology, San Diego State University.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando.

Morton, Douglas M., Jonathan C. Matti, Van M. Diep, Ursula Edwards-Howells
2001 *Geologic Map of the Sunnymead 7.5' Quadrangle, Riverside County, California: U.S. Geological Survey Open-File Report 01-450*. Electronic document available at https://pubs.usgs.gov/of/2001/0450/, accessed February 27, 2017.

National Cooperative Soil Survey

2012 Cieneba Series. Data provided by the United States Department of Agriculture and the National Resources Conservation Service. Electronic document available at https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CIENEBA.html, accessed February 24, 2017.

2003 Monserate Series. Data provided by the United States Department of Agriculture and the National Resources Conservation Service. Electronic document available at https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MONSERATE.html, accessed February 24, 2017.

NETR Online

2017 Historic Aerials. Nationwide Environmental Title Research, LLC. Electronic document, available at: http://www.historicaerials.com, accessed February 26, 2017.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS)

2003 *National Soil Survey Handbook, Title 430-VI, Part 629: Glossary of Landform and Geologic Terms.* Electronic document available at https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052234.doc, accessed on February 28, 2017.

Wallace, William J.

1978 Post-Pleistocene Archeology, 9000 to 2000 B.C. In *California*, edited by Robert F. Heizer, pp. 25-36. *The Handbook of North American Indians*, vol. 8. W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Web Soil Survey

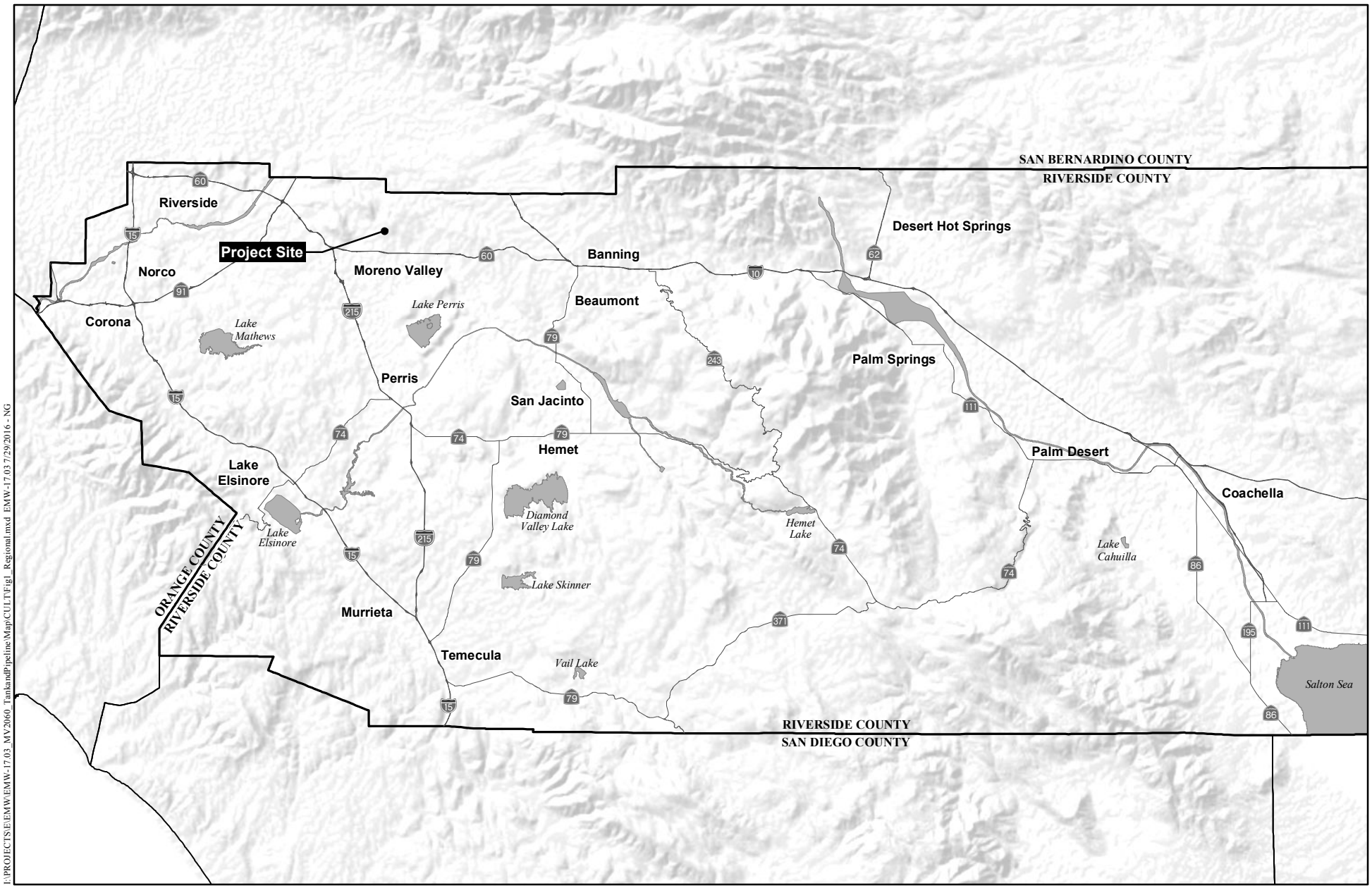
2017 Natural Resource Conservation Service. United States Department of Agriculture. Electronic document, available at: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

Willey, George R., and Philip Phillips

1958 *Method and Theory in American Archaeology*. University of Chicago Press, Chicago.

Wirth Associates

1983 *Devers-Serrano-Villa Park Transmission System Supplement to the Cultural Resources Technical Report – Public Review Document and Confidential Appendices.* Wirth Associates. Report on file at Eastern Information Center, UC Riverside.



I:\PROJECTS\E\EMW\EMW-17.03_MV2060_TankandPipeline\Map\CULT\Fig1_Regional.mxd EMW-17.03 7/29/2016 - NG

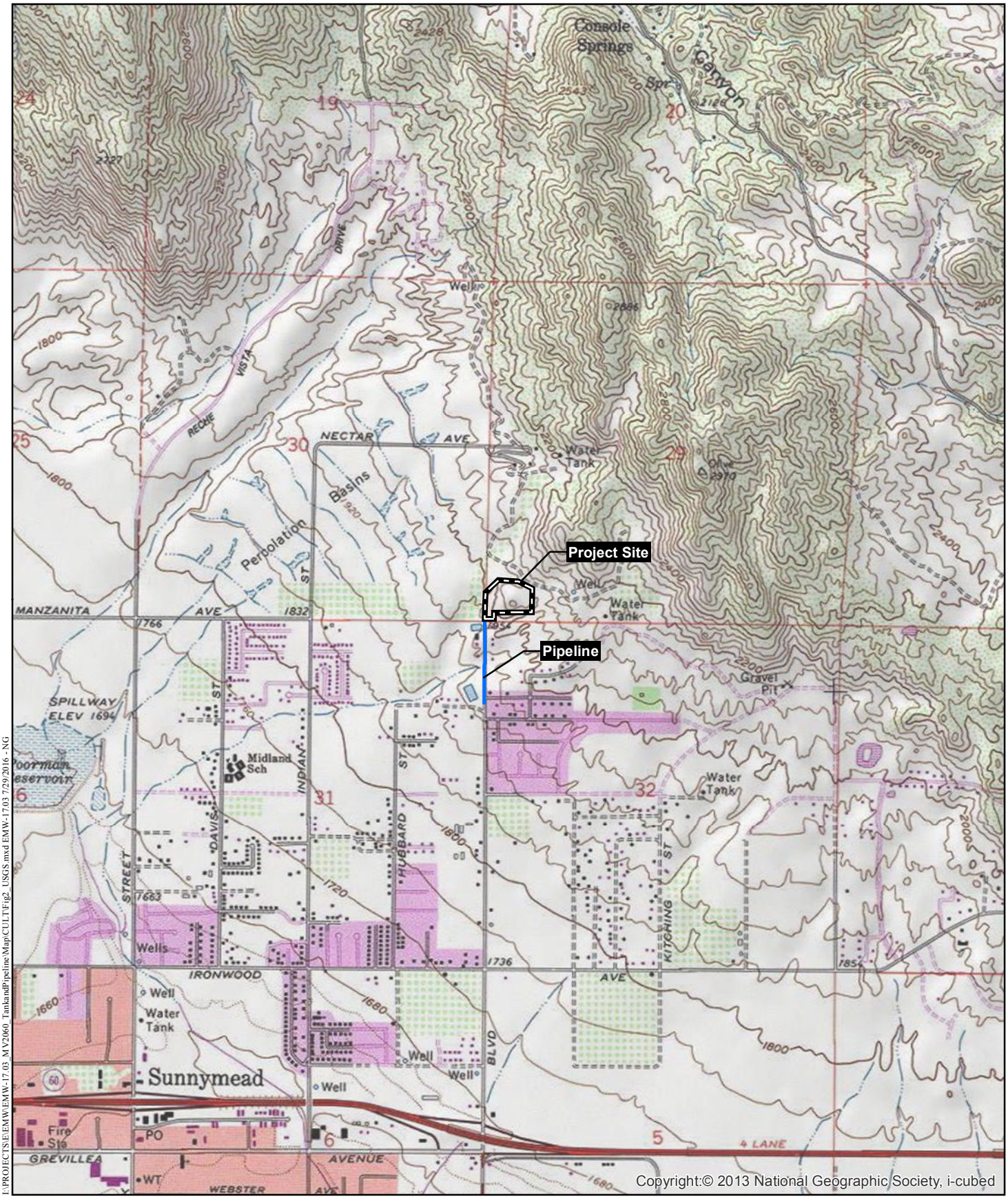
Regional Location

JUDSON TANK AND PIPELINE PROJECT

HELIX Environmental Planning

N 0 10 Miles

Figure 1



I:\PROJECTS\EIE\MWEMW-17.03_MV2060_TankandPipeline\Map\CUL\TFig2_USGS.mxd EMW-17.03 7/29/2016 - NG

Project Vicinity (USGS Topography)

JUDSON TANK AND PIPELINE PROJECT

HELIX Environmental Planning

N 0 2,000 Feet

Figure 2

I:\PROJECTS\E\EMW\EMW-17.03_MV2060_Tank and Pipeline\Map\CULT\Fig3_Aerial.mxd EMW-17.03 4/10/2019 -RK

Project Vicinity (Aerial Photograph)

JUDSON TANK AND PIPELINE PROJECT

HELIX Environmental Planning

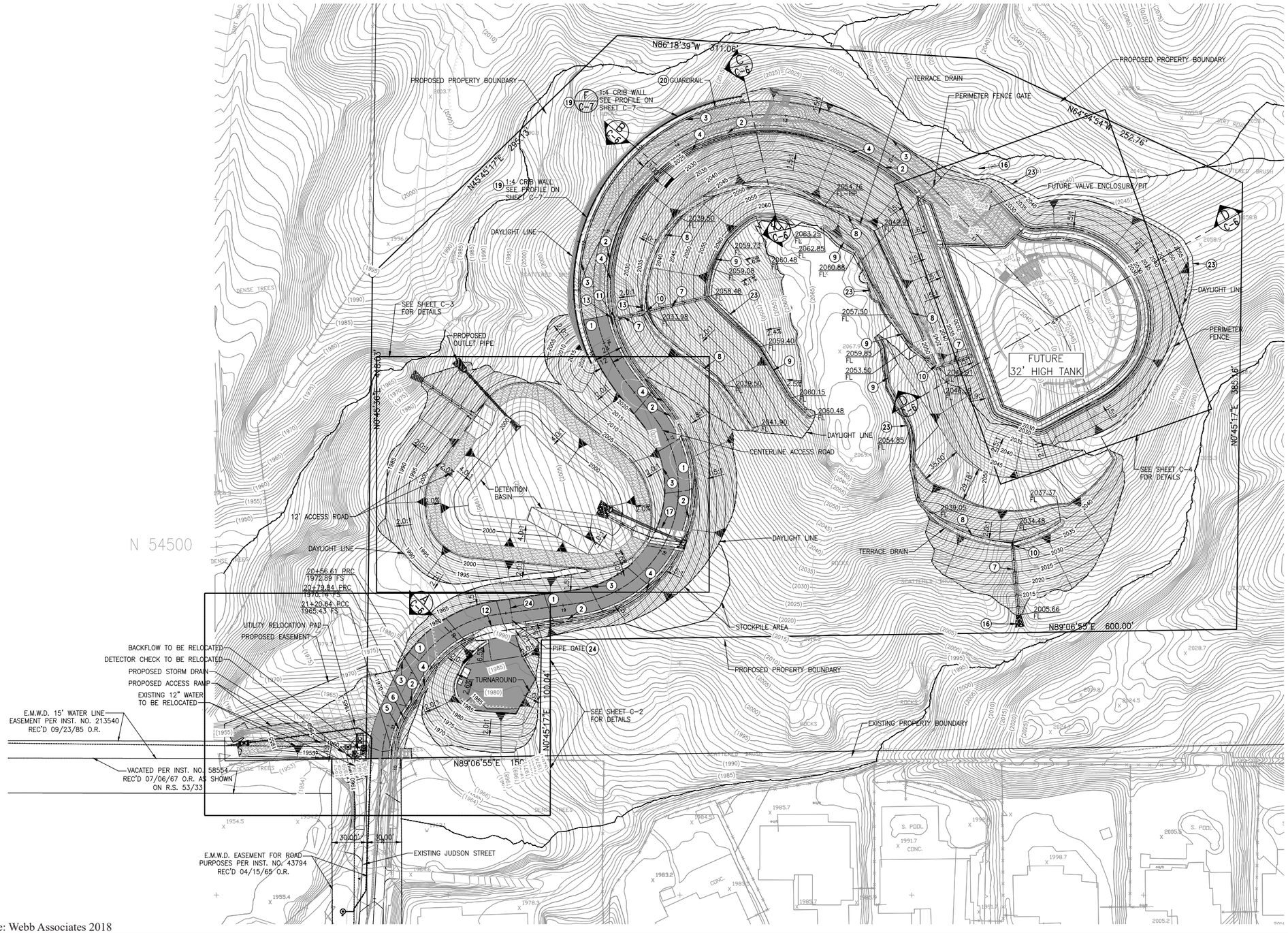
N

0 500 Feet

Figure 3

CONSTRUCTION NOTES

1. 4" ASPHALT CONCRETE OVER 6" AGGREGATE BASE
2. 6" TYPE "A-6" CURB AND GUTTER PER RIVERSIDE COUNTY STD 200
3. TYPE "D-1" CURB PER RIVERSIDE COUNTY STD. 203
4. 5' SHOTCRETE SWALE PER DETAIL 1 ON SHEET C-10
5. 5' CONCRETE U-DITCH PER DETAIL 2 ON SHEET C-10
6. TRANSITION FOR 5' SHOTCRETE SWALE TO 5' CONCRETE U DITCH PER DETAIL 5 ON SHEET C-10
7. DOWNDRAIN PER DETAIL 13 ON SHEET C-11
8. 6' TERRACE DRAIN PER DETAIL 9 ON SHEET C-11
9. INTERCEPTOR DRAIN PER DETAIL 10 ON SHEET C-11
10. TERRACE DRAIN AND DOWN DRAIN INTERSECTION PER DETAIL 7 ON SHEET C-10.
11. DOWNDRAIN TO SHOTCRETE SWALE TRANSITION STRUCTURE PER DETAIL 3 ON SHEET C-10
12. ARIZONA CROSSING FOR 5' SHOTCRETE DITCH PER DETAIL 11 ON SHEET C-11
13. SPLASH WALL PER DETAIL 12 ON SHEET C-11
16. RIP RAP OUTLET PER DETAIL 4 ON SHEET C-10
17. SLOPED ARIZONA CROSSING PER DETAIL 14 ON SHEET C-12.
19. CRIB WALL PER SPECIFICATIONS
20. CRIB WALL GUARD RAIL PER DETAIL 16 ON SHEET C-12
21. RETAINING WALL PER COUNTY OF RIVERSIDE BUILDING DEPARTMENT RETAINING WALLS STANDARD AND PER PLAN AND PROFILE ON SHEETS C-1 & C-7.
23. CHAIN LINK FENCE PER RCFC&WCD STANDARD DRAWING NUMBER M801.
24. PIPE SWING GATE PER RCFC&WCD STANDARD DRAWING NUMBER M820.



Source: Webb Associates 2018

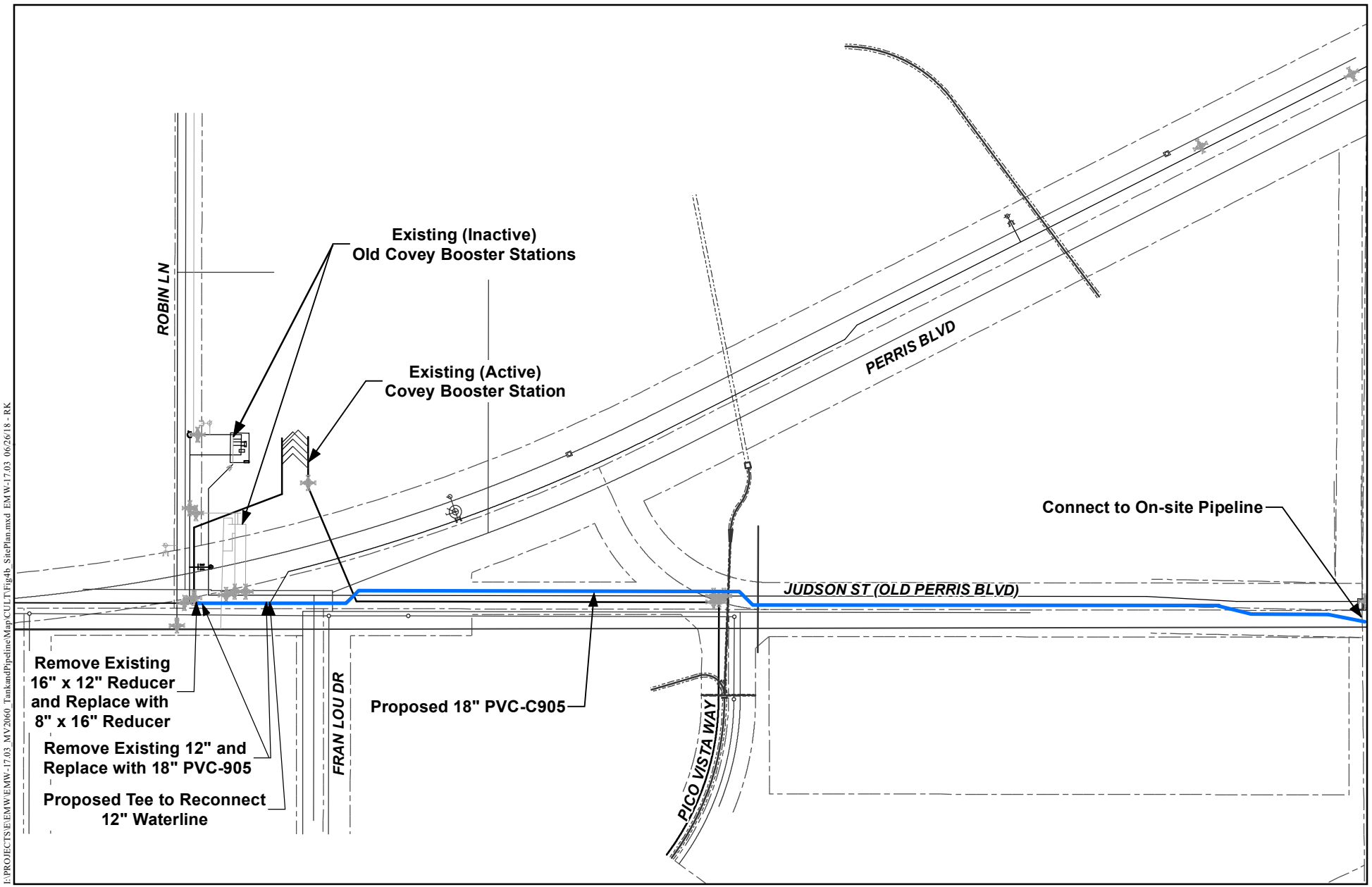
Site Plan

JUDSON POTABLE WATER STORAGE TANK AND TRANSMISSION PIPELINE PROJECT

Figure 4a

HELIX Environmental Planning

I:\PROJECTS\E\EMW\EMW-17.03_MV2060_TankandPipeline\Map\CULTFig4a_SitePlan.mxd EMW-17.03 1/18/19 RK



Site Plan

JUDSON POTABLE WATER STORAGE TANK AND TRANSMISSION PIPELINE PROJECT

HELIX Environmental Planning

0 150 Feet

Figure 4b