

Section 3.5

3.5 CULTURAL RESOURCES

This section describes existing conditions and the potential cultural and paleontological resource impacts associated with the construction and operation of the Proposed Project and alternatives.

CULTURAL RESOURCES

Cultural resource studies were conducted from June to August of 2005. Supplemental studies occurred between April 2006 and January 2007 to address changes in project scope. For the purposes of this study, a cultural resource is defined as any physical remains of human activity greater than 45 years old. The cultural resources assessment, included records searches, archival research, pedestrian surveys, and evaluations of the built environment for the Proposed Project and alternatives. This section is adapted from the cultural resource technical study and a supplemental cultural resource technical study prepared for the project.

In addition to archival research and field investigations, the Native American Heritage Commission (NAHC) was contacted via a letter in September 2005. The NAHC responded, providing both a contact with the Morongo Band of Mission Indians and a list of Native American contacts that may have knowledge of additional resources in the study area. Detailed information regarding research methods and personnel involved in this cultural resource assessment may be found in the technical studies.

3.5.1 Existing Conditions

At the western end of the study area in the San Timoteo Canyon the land use is predominantly agricultural, along with livestock grazing. The eastern end of the canyon is becoming increasingly residential, with large-scale housing developments in various stages of construction. In addition, there is recreational development in the form of golf courses and off-road vehicle parks. To the east toward the San Gorgonio Pass, residential development is replacing agriculture. In the cities of Beaumont and Banning, more residential development is occurring. Two retail outlet malls were recently built in the community of Cabazon. Cabazon is also the headquarters of the Morongo Indian Reservation. The economy of the reservation has moved from an agricultural base to one based on gaming; the tribe recently completed a resort and casino complex. The Morongo Band of Mission Indians also owns the Hadley's Fruit Orchard Company, which maintains a store between the outlet malls and casino.

Transportation networks in the area include the Union Pacific Railroad, which traverses San Timoteo Canyon and the San Gorgonio Pass; two major highways that join in the Beaumont area (Interstate 10 [I-10] and State Route 60 [SR-60]) and a general aviation airport in Banning.

3.5.1.1 Cultural Setting

3.5.1.1.1 Prehistory

The development of a regional chronology marking the major stages of cultural evolution in the Southern California area has been an important topic of archaeological research. In general, cultural developments in Southern California have occurred gradually and have shown long-term stability; thus, developing chronologies and applying those to specific locales have often been challenging. Southern California researchers have used changing artifact assemblages and evolving ecological adaptations to divide regional prehistory into four stages. Wallace (1955; 1978) and Warren (1968) have developed the two chronologies most commonly cited. Wallace (1955) uses major cultural developments to divide area prehistory into four time periods, or “cultural horizons”: the Early Period, the Milling Stone Period, the Intermediate Period, and the Late Period. The following overview is based primarily on Wallace’s chronology, which has been revised slightly by Koerper (1981), and Koerper and Drover (1983).

The Early Period (Prior to 6000 BC). The Early Period (also known as the Hunting Period) covers the interval from the first presence of humans in Southern California until post-glacial times (5500 to 6000 BC). Artifacts and cultural activities from this period represent a predominantly hunting culture; diagnostic artifacts include extremely large, often fluted bifaces associated with use of the spear and the atlatl. In Southern California, important Early Period sites have been found near prehistoric Lake Mohave and along the San Dieguito River (Wallace 1955, 1978:27; Moratto 1984:81, 93–99).

The Milling Stone Period (6000 BC–3000 BC). The transition from the Early Period to the Milling Stone Period is marked by an increased emphasis on the processing of seeds and edible plants and is estimated to have occurred between 6000 BC and 3000 BC. According to Wallace (1978:28), wild seeds and edible plants formed the primary food source during this period, with only limited use of shellfish and faunal resources; plant resources were processed using deep-basined mill and hand stones, hence the term Milling Stone Period. Milling Stone Period settlements were larger and were occupied for longer periods of time than those of the Early Period, and mortuary practices included both flexed and extended burials as well as reburials. Grave offerings were few, although rock cairns were sometimes placed over the bodies (Wallace 1955:192).

The Intermediate Period (5000 to 1450 B.P.). By the onset of this period, the inhabitants of Southern California were utilizing a very broad array of food resources including seeds and edible plants, shellfish and fish on the coast, and a wide variety of terrestrial fauna. In interior southern California, the return of cooler, moister weather led to increased populations along streams and lakes. Artifacts common in Intermediate Period sites include the mortar and pestle (indicating the use of oily seeds such as acorns and pine nuts), small projectile points

(coinciding with the introduction of the bow and arrow in the later portion of the Intermediate Period), and circular shell fishhooks in coastal sites (Elsasser, 1978; Strudwick, 1986; Wallace, 1978). Overall, however, early Intermediate Period sites resemble Millingstone Period sites and later Intermediate Period sites resemble Late Period sites. As such, it is difficult to distinguish Intermediate period sites based on artifacts alone, and most of these sites have been identified using radiocarbon dating.

The Late Period (1450 to ~200 B.P.). During the Late Period, the concentration of people within settlements increased, as did the breadth and intensity of food resources used. Increasingly different artifact assemblages throughout Southern California, linguistic reconstructions (based on ethnohistoric and linguistic information), and elaboration of mortuary customs are interpreted as indicating the development of regional subcultures. Elaboration of mortuary customs including abundant grave goods is often interpreted as indicative of increased social differentiation in many parts of Southern California. Artifacts indicative of the Late Period include increased use of the bow and arrow as well as the mortar and pestle; steatite containers; bone tools; many temporally indicative types of beads made from shell, bone, and stone; use of asphaltum as an adhesive and caulk; and in the study area, an increased use of obsidian (Bean and Smith, 1978; Elsasser, 1978; Hall, 1988; Moratto, 1984; Wallace, 1955).

Many of the cultural elements found in Southern California during this period are thought to be linked to the migration of Uto-Aztecan speaking people from the Great Basin. This migration probably occurred in successive waves over a long period of time, and has been dated by various anthropologists and archaeologists to as early as 4000 B.P. and as late as 1300 B.P. Linguistic evidence suggests that the migrations took place between 2000 B.P. and 1500 B.P. (Kroeber, 1925; Koerper, 1979; Moratto, 1984), but it is possible that technology and cultural practices may have diffused from the Great Basin long before any large-scale migrations took place.

3.5.1.1.2 Ethnography

The study area is located near the intersection of the traditional tribal boundaries of the Serrano, Cahuilla, and Gabrielino. The study area in San Timoteo Canyon and the San Gorgonio Pass is traditionally in Cahuilla territory. The term 'Cahuilla' is a Spanish version of the Native word *káwiya*, meaning 'master' (Bean 1978). The territory of the ethno historic Serrano included the San Bernardino Mountains east of the Cajon Pass, extending eastward to the Twenty-nine Palms region and north toward Victorville (Bean and Smith 1978). The Mill Creek study area is on the border between the territories of the Serrano and Cahuilla. 'Serrano' is a Spanish word meaning mountain dweller. The Serrano village called *Yukaipa't* was located near the present city of Yucaipa after which it was named. Gabrielino territory included the watersheds of the San Gabriel and Santa Ana Rivers, the Los Angeles Basin, and the coast from Aliso Creek at the south to Topanga Creek at the north, as well as the

southern Channel Islands. Bean and Smith (1978a: 538) show Gabrielino territory extending to the City of San Bernardino.

3.5.1.1.3 History

Mission Period (1771-1834). In 1769 a mission was established in what is today the city of San Diego, ushering in the Mission Period of California history. Near the study area, Mission San Gabriel Arcángel was established in the San Fernando Valley in 1771. Subsequently, several *estancias* (ranchos) were established throughout the surrounding area to provide the missions with agricultural goods. One such *estancia* was *Guchama*, originally built in present-day Loma Linda in 1819, but relocated to the head of the San Timoteo Canyon in 1830. The second location included a 14-room adobe and timber complex.

In 1821, Mexico won its independence from Spain, and Spanish California became Mexican California.

In 1823, the *San Gorgonio Rancho* was established northwest of the modern city of Banning at the highest point of the San Gorgonio Pass. The rancho was used for grazing livestock, but not for other agricultural activities. The location of this rancho placed it on the path traveled to bring salt from the Salton Sink to Mission San Gabriel and the pueblo of Los Angeles.

Rancho Period (1834-1848). With the secularization of the missions, the Mission Period came to an end and the Rancho Period began. The Mexican Governor began to grant land throughout California. Only one grant was made in the study area (the San Timoteo Rancho land grant). The holder land grant began cattle ranching.

The more notable ranchos and settlements include San Timoteo and San Gorgonio. While these ranchos were owned by, and had parts rented by or given to, Mexican and occasionally American settlers, much of the manual labor was performed by former mission Indians.

In 1842, the Lugo family, who owned Rancho San Bernardino northwest of the Study Area, enlisted the help of the Cahuilla leader Juan Antonio to help protect their lands from Indian raids. Juan Antonio would remain in the San Timoteo Canyon area until his death in 1862 and maintain control over between 20-30 Cahuilla villages. He would prove an important figure in reducing raids by Ute Indians and outlaws, as well as keeping the Cahuilla out of trouble with the Mexican and American authorities.

American Period (1848-1900). Following the signing of the Treaty of Guadalupe Hildago in 1848, the United States took possession of California. The treaty bound the United States to honor the legitimate land claims of Mexican citizens residing in captured territories. The Land Act of 1851 established a board of Land Commissioners to review these records and adjudicate claims and charged the Surveyor General with surveying confirmed land grants. In order to investigate and confirm titles in California, American officials acquired the

provincial records of the Spanish and Mexican governments, located in Monterey. Those records, most of which were transferred to the U. S. Surveyor General's Office in San Francisco, included land deeds and sketch maps (Gutierrez et al. 1998).

From 1852 to 1856, a board of Land Commissioners determined the validity of grant claims. Rejected land claims reverted to public domain, and the land then became available for squatters. Ranch titles represented little as collateral. Although the claims of some owners were eventually substantiated, many of the owners lost their lands through bankruptcy or the inability to meet the exorbitant interest on their legal debts (Atkinson 1933). Many of the original rancho owners eventually lost their land to the United States. Unsurveyed land boundaries created a loophole through which squatters could occupy plots on the fringes of land grants and eventually come to own those plots through squatters' rights (Gutierrez et al. 1998).

3.5.1.1.4 San Timoteo Canyon

Duff Weaver. The residence of Duff Weaver is likely to be within the project area. Weaver is long considered to be one of the first Anglo settlers of San Timoteo Canyon. Born in 1823, Weaver came to California in the spring of 1849 following in the footsteps of his brother Paulino Weaver who had already established a residence nearby in the area known as Highland Springs. Duff Weaver's lands consisted of 1000 acres, which he used to graze cattle, sheep, and horses. In 1853, Weaver married Amanda Applegate, the daughter of important local Zina Ayers. The Weavers had eight children (Ingersoll 1902:669).

Weaver became best known for his friendship with Chief Juan Antonio. During the nineteenth century, there was a general hostility between Indians and whites, who both perceived the other as encroaching on territory. However, Weaver and Juan Antinio became good friends and neighbors. Weaver often acted as a mediator between the Native Americans and the white men. (Christian 2002:166).

During the fall of 1862, a smallpox epidemic struck Los Angeles and southern California. The Indians were especially hard hit. In order to assist his friend, Weaver brought the Indians food and whatever comfort he could provide (Smith et al. 1960; Phillips 1975), hiring a Mexican who was immune to the disease to care for Juan Antonio and his tribesmen (Smith et al. 1960). Unfortunately, Weaver could not do enough for his friend and Juan Antonio died near the end of February 1863. Juan Antonio was buried at *Sahat'pa* near the historic San Timoteo Schoolhouse.

Weaver continued to live in San Timoteo Canyon until his death in 1869. The Goldsworth 1872 Plat records Weaver house between Acosta and Noble in San Timoteo Canyon in the vicinity of Site 33. His ranch remained relatively modest in size, compared to the other ranches in the canyon during the period.

San Timoteo Rancho. The Land Commission initially failed to confirm the Johnson Grant; however, after Rubidoux filed a land claim in 1860, the District Court reversed the decision (Hughes 1938:6). In July of that same year the census taker noted Rubidoux's son Pascal (aged 21), Pascal's wife Maria (aged 16), and their son Alfredo (2 months) as living on the San Timoteo property, residing in the household adjoining Duff Weaver (brother of Paulino), who lived about one mile to the north. Also residing with Pascal Rubidoux were three laborers (Manuel Mean, 46, Mexico; Victor Alvares, 30, Sonora; and Bicente, 35, Italy). In 1862 Rubidoux's San Timoteo Ranch was noted as "known as the Mitchell or Lennon property," possibly tenants. By 1870 Pascal Rubidoux was residing on his father's Rancho Jurupa, suggesting that he resided on the San Timoteo Rancho for only a brief period.

The San Timoteo Rancho remained in the possession of the Rubidoux family until the death of Luis Rubidoux in 1867. That year the "valuable rancho" was listed for sale with the notation that it was "well watered with never failing springs; a handsome Dwelling House, and Out-Houses attached, and known as the 'Robidoux Rancho'" (*The Guardian*, July 6, 1867).

On February 14 of the following year his widow, Guadalupe Garcia de Rubidoux (signed with an X), sold the entire rancho to James Singleton. The deed described the location of the property as:

"The tract of land situated in the County of San Bernardino, State of California known as "San Timoteo Rancho" being the same tract of land granted to Santiago Johnson March 22nd A.D.1843 by Manuel Micheltorena Governor of California, containing one square league and confirmed to said Louis Rubudoux claimed by the United States District Court for the Southern District of California February 29th A.D. 1860 (County of San Bernardino Deeds Book: I-619)."

The sale noted that she was doing so as the administrator of the estate of Rubidoux, and that it would be deeded when title was confirmed to the heirs of Rubidoux (County of San Bernardino Deed Book: I-619). The selling price was \$3,000 for the 6,000 acres (*The Guardian*, February 8, 1868).

James Singleton. James Singleton, an engineer and native of England, his wife, Ann, and their two children, William and Ann, moved onto the San Timoteo Rancho shortly after purchasing it for \$3,000 in 1868. The family had arrived in New Orleans in 1853, and then traveled to Salt Lake City by wagon train. They arrived in the San Bernardino Valley in 1857, and by 1860 were residing in San Salvador Township. With James were his wife Ann, son William, a farmer; their 18-year old daughter Ann, married to Henry Wilshire, a teamster born in England, and their young daughter Martha (U.S. Federal Census 1860).

In March of 1871 the ranch was surveyed by Goldsworthy and is described as the "Tract Between San Jacinto and San Gorgonio" and comprised of 4,439.57 acres.

The following year, on August 13, 1872, the San Timoteo tract was patented to the heirs of Louis Rubidoux, and then transferred to James Singleton (Patent Book A:66; Gunther 1984:462). The Singleton family resided in a house located on the east side of the northern portion of the ranch, west of present I-10 (Goldsworthy 1871, Perris 1880). By July of 1870, William married Lydia Brooks, and the couple had a three-month-old son named John J. William and Lydia were residing in a separate household from his parents; James Singleton was living with his wife, their daughter Ann (Wilshire apparently no longer in the picture), and her children: Martha, aged 11, and son William, aged 9.

After the San Timoteo Ranch was surveyed in 1871 and determined to include 4,400 acres instead of the supposed 640, James Singleton forced off, or made tenants of, the settlers who believed they had established their homesteads on government land. Most of these ranchers were located on the San Timoteo Canyon side of the property and included the families of Duff Weaver, Smith Humphrey, Manuel Acosta, Diego Lovetta (Lobatta, Livatt), William Kennedy, and others (Goldsworthy 1871, U.S. Federal Census 1870). In July of this same year, Ann Singleton Wilshire was married to Hiram H. Haskell, and the couple had three children.

Sometime in the 1870s, after the squatters had departed, James Singleton built a large two-story frame house on the west side of the property, approximately 1.2 miles northeast of the Haskell Ranch, where Singleton Road joined San Timoteo Canyon Road (Christian 2002:180). The house faced west and was located at the junction of Singleton/Woodhouse Road, where it turned south to the present Haskell Ranch. In 1880 James was residing in his new house with wife Ann, now bedridden, daughter Ann (now listing her name as Singleton and probably divorced), grandchildren Martha, and William H. Wilshire, and James, Robert, and Elvira (Ella) Haskell, children of Ann's marriage to Hiram H. Haskell. Both James and William H. Singleton were noted as farmers (U.S. Federal Census 1880).

James and Ann's son, William, and his wife Lydia were still residing on the east side of the ranch with their children, Annie J., William James, Martha Ellen, Thomas Henry, and Charles Edwin, along with two farm laborers (Christian 2002:181, U.S. Federal Census 1880). Their home, also a two-story frame house (Christian 2002:181), was located at a bend in the ranch road near the present 1920s sheds. Although two of the Singleton children married, neither had any children and the branch died with them (Haskell 2004a).

James Singleton appropriated all of the water in San Timoteo Creek, an act that initiated an 1880s lawsuit by ranch owners below the property and resulted in a ruling that allowed alternating use of the water by Singleton and other ranchers on a five-day cycle. The lawsuit was not settled until 1884, three years after the death of James Singleton (Frink 1936, Christian 2002, Stickland 2002).

By 1886, when they registered to vote, William Singleton (son of James) listed his occupation as farmer, while his nephew, originally William Henry Wilshire, who had by then changed his last name to Singleton, listed his occupation as dairyman and age as 21. This was apparently the entry of the Singleton and Haskell clan into the dairy business. By this date Ann Singleton Haskell had divorced her second husband (perhaps he died), as he was no longer listed as residing with the family. In 1910, Hiram H. Haskell is listed as a “boarder” and single in the household with his ex-wife and her son, William H. Singleton (U.S. Federal Census 1910).

In 1893, both William Singletons noted their occupation as dairymen in the Riverside County Directory, suggesting that both sides of the ranch were now working in the dairy business (Bynon 1992). In 1900, however, William again listed his occupation as farmer. His nephews, William H. Singleton and James Haskell, were noted as dairymen. William H. was noted as head of the household and residing with his mother, Ann; Katie Leeper, a cook; and Roy Cox, a dairyman. James Haskell was residing on a mortgaged farm with his wife, Annie. The only other family residing in the area was that of Welshman Samuel Evans and his family, where he worked near the Haskell residence as a dairyman and lived in a rented house (U.S. Federal Census 1900).

Although it is not known exactly where James Haskell and Samuel Evans were residing, it appears probable that at least one of them was living in the Clough house while working on the Singleton dairy, as Sarah Clough had moved to Los Angeles with her daughter and son-in-law. William H. Singleton was evidently then residing in his one and one-half story frame house, built about 1897 at the junction of the Woodhouse/Singleton Road, where it turned south toward the Noble/Clough Ranch (Haskell 2004a).

In 1908 the “Singleton Dairy Company of Redlands” was awarded the contract to provide fresh butter to the State Hospital at Patton near San Bernardino (*Los Angeles Times*, January 13, 1908). Two years later William H. Singleton listed his occupation as operator of a dairy farm, owning it free and clear. Residing in his household was his mother, Ann, her divorced husband, Hiram H. Haskell, and Lee Yung, a cook from China. James S. Haskell, noted as a butter maker and dairy farm worker, was residing in the adjoining household with his wife, Helena, and sons Lewis and Kelsey. A dairy farm laborer, Mathias Amon, was residing with his family in the household adjoining the Haskells and evidently working for the family (U.S. Federal Census 1910).

According to Nara Haskell, the Singleton family made cream in a big wooden butter churn turned by hand. The butter was then packed in wooden boxes and carried to Redlands twice a week. From there it was put on the Red Car to be taken to San Bernardino for market. The ranch was known for its hospitality and its old “Buttermilk Hall” (the barn), where Saturday night dinners and dances were held, with people journeying by horse and wagon from Beaumont, San Bernardino, and Redlands to attend (Nara Haskell 1970).

In 1911, the same year that the Singletons and Haskells purchased the Noble/Clough Ranch (the southern portion of the original San Timoteo Rancho), they sold the Singleton Ranch to a group of investors and incorporators, including C.A. Puffer, Henry Fuller, R. Holtby Myers, J. H. Fisher, Dr. Hoell Tyler, and J.J. Suess. The deal was made through a Los Angeles real estate company. The group also purchased the 114-acre Vanderverter Ranch and the 116-acre Goetting Ranch, a total of 2,966 acres. The intent of the company was to operate the ranches on the “intensive plan,” with the Singleton Ranch continuing to be operated as a dairy and the remainder of the land devoted to the growing of grain and breeding all kinds of livestock (*Los Angeles Times*, June 4, 1911).

Four years later the syndicate decided to place part of the ranch on the market as the Redmont Fruit Farms (*Los Angeles Times*, February 7, 1915). By 1919 it was noted that the El Casco Land Company (owners of the old Singleton Ranch) and the El Casco Water Company were selling their water rights to the ranchers in the Moreno Valley. The ranchers formed a mutual organization to buy out the entire property and deliver its developed supply of water through the construction of a four-mile tunnel from the Singleton Ranch to the Moreno Valley. The new owners of the El Casco property were to develop the land by sinking several new wells to augment the supply from the four flowing wells, thus supplying the Moreno Valley with enough water to irrigate 2,500 acres.

Dudley Pine/Smith Humphrey. One of the earliest documented settlers in San Timoteo Canyon was Dudley Pine. Pine settled near the northwestern boundary of the Rubidoux land grant, presumably around 1851, when the Mormons were acquiring the San Bernardino Rancho. Pine built a large adobe on the property and established an apple orchard near a creek. In July of 1860, when the census taker visited the property, Pine was noted as a farmer, aged 39, and a native of New York. Residing in the household were his wife Elizabeth, aged 30 and a native of England; James Maldemon, 30, a laborer from Sonora, Mexico; and William Stowek, 16, a laborer from Pennsylvania.

Samuel Pine, evidently a brother, was residing in the adjacent household. He was noted as aged 32, and a farmer. Jane, the wife of Samuel, was aged 23, and was born in Ohio. The three oldest of their children, Samuel, 3; Adelia, 7; and Frances, 2, were born in Utah. A one-month-old infant was born in California, suggesting that the family arrived in San Timoteo Canyon ca. 1859.

Sometime between 1860 and 1862, Pine sold the land to Smith Humphrey and returned to San Bernardino to operate several successful hotels. Despite never actually holding legal claim to the land, Humphrey purchased the land from Pine and moved his family into the adobe (Christian 2002:162, Frink 1936). Humphrey, noted both as a native of Massachusetts and Rhode Island, was living in the Utah Territory in 1850, aged 45, occupied as a farmer, and residing with his wife Eliza, aged 50, a native of Pennsylvania; son John P, a laborer,

aged 20 and daughter Maria, aged 17, both born in Canada; and two laborers from Missouri (U.S. Federal Census 1850).

By 1860, Humphrey was residing in San Bernardino City and working as a farmer. With Smith and his wife Eliza were their son John P, his wife Martha from Illinois or Kentucky, and their children Margaret, 6, and John P., aged 3 (U.S. Federal Census 1860, 1870). Two years later Smith Humphrey and his son were assessed for the Pine property in San Timoteo Canyon.

By 1870 the family had expanded to include two more children of John and Martha. The Humphreys remained on the land until the early 1870s, when the San Timoteo Rancho was resurveyed and the property was found to be within the limits of the Singleton Ranch. Singleton promptly evicted all the residents he found to be squatting on his property. Singleton kept the adobe on the property, presumably using it as a storage shed. A newspaper article about the ranch in 1932 reported that the adobe had been covered with wood siding to protect it from the elements (Ewing 1932).

Woodhouse. The land on which the James Singleton house stood, on the west side of the original ranch near San Timoteo Canyon Road, was sold to Los Angeles residents Rush and Ethel Woodhouse in 1927. Living on the property in 1930 were Rush L. Woodhouse, aged 53, a native of Iowa; his wife Ethel, aged 32, born in Michigan; and her brother, Stanley Hoisington, aged 19. Woodhouse listed his occupation as “cattle farmer.” Residing in the adjoining household was Ed Spences, a 68-year old native of Connecticut who was working on the farm (U.S. Federal Census 1930).

Woodhouse built the new log house on the property, razed the old Singleton house, and used the timbers for the log house and lumber, doors, windows, etc., to build the two guest houses on the ranch. Woodhouse farmed about 750 acres, with additional land for pasturage. His “hobby” was raising Hereford cattle, of which he had 120 head. In a 1932 interview he noted:

Double profit can be made by producing one’s own feed. We never buy a penny’s worth. We have alfalfa, oats, and barley, all we need. I am also interested in hogs and have about 100 head of Poland China and Durocs (Ewing 1932).

The exact location of the original Dudley Pine/Smith Humphrey adobe is unknown, but a photograph depicted in a 1932 (Ewing) article noted that it had been covered with wood to preserve it. Based upon the photograph and the building’s location near the barn, the knowledge of the correct location of the Singleton house and other features, and historic photographs, its location may be determined. It appears possible that it is subsumed beneath one of the extant guest houses on the ranch.

Vanderventer Ranch. In 1865 the family of Michael Van der Venter (generally spelled Vanderventer) moved to San Timoteo Canyon near El Casco Lake from its earlier home near

present Beaumont. Known as “Mich,” Vanderverter was a native of New York and of Dutch descent. Vanderverter had come to California by way of New Mexico, where he married his wife Frances Diaz. In 1860, the couple was residing in a household with their two children, Michael Jr. and James, as well as with John Cate, a laborer from Missouri (U.S. Federal Census 1860). This household was located near that of Newton Noble, who was residing in the Potrero at that time, so possibly Noble followed him to San Timoteo Canyon.

By 1870, Vanderverter was noted as living in San Timoteo Canyon and working as a farmer. Several other children had been added to the family as well, and the family included Michael Jr., aged 14; Eugene, 13; M, a nine-year old male; Delos, 7; James, 3; and Frances, aged two months (U.S. Federal Census 1870). Mich Vanderverter began freighting from San Bernardino to the Colorado River, was wounded by an Indian arrow on one of his trips, and died shortly thereafter (Christian 2002:156). In 1880 son Eugene was listed as the head of the household, occupied as a farmer, and residing with his mother Frances and siblings Byron, James, and Frances (U.S. Federal Census 1880).

In 1882, Singleton sold a portion of his ranch located southwest of the William Singleton Residence to Eugene Maclove (E.M.) Vanderverter. Born in 1857, E.M. Vanderverter was the second son of Michael Vanderverter and Francisca Diaz. As a teenager, E.M. Vanderverter was employed as a stagecoach driver, like his father, Mich. E.M. Vanderverter led a freight team from Spadra (near present-day Pomona) to the Colorado River (Christian 2002:156). In 1881, E.M. Vanderverter married Martha Jane Wilshire, the daughter of Ann Singleton (and granddaughter of James Singleton) and her first husband, Henry Wilshire (Lewis). Vanderverter established a residence and ranch on the property and grazed cattle (Ewing 1932). Vanderverter, assisted by local farmers, built the San Timoteo School House in 1883 and was the Secretary of the San Timoteo School District (Shanks 1994).

In 1911, the E.M. Vanderverter ranch was sold to the same syndicate that purchased the Singleton Ranch, with plans to raise livestock and grain on the property. By 1930 the ranch was owned by Edward A. Pearson, a Pennsylvanian, and his family. Pearson noted his occupation as grain farmer, although he also raised over 100 head of hogs. He produced all of the barley and alfalfa needed for feeding, kept a few chickens, and had a “fine kitchen garden” (U.S. Federal Census 1930; Ewing 1932).

Manual Acosta. One of the earliest settlers to San Timoteo Canyon was Manual Acosta (sometimes misspelled as Costa or Cota). Acosta came to San Bernardino with the Lugo family, along with many other Spanish and Mexican families. He built an adobe home in the canyon and planted fields of vegetables (Beattie and Beattie 1951:41, Christian 2002:101). Little else is known about Acosta; he is documented as residing in the canyon during the 1860s and 1870s, near the Indian Village of Juan Antonio. It is possible that he occupied the canyon as early as the 1850s, when fellow member of the Lugo party, Maria Armenta settled

in the canyon. In 1874, Acosta was reported as having one taxable possession; his Spanish horse (County of San Bernardino 1874).

San Timoteo Canyon Road. San Timoteo Canyon Road was one of three early routes that provided access to Southern California before the State was admitted to the Union. In 1819, Mission fathers from San Gabriel established the “rancho” of Guachama near present-day Redlands at the mouth of San Timoteo Canyon hoping for a route that would pass through the settlement and proceed to San Gabriel Mission (Beattie and Beattie 1939:12). When other routes were found to be difficult, the fathers established a trail through San Timoteo Canyon, San Jacinto, and Aguanga. This route was known as the San Bernardino-Sonora Road (now San Timoteo Canyon Road), while another branching route connected Aguanga to San Gabriel through Temecula and is known as the Los Angeles-Sonora Road. During its years of operation, the San Bernardino-Sonora Road was the dominant route into the area, especially for merchandising (Haenszel 1968: 9, Strickland 2000:1-2).

Within San Timoteo Canyon, the early road did not follow the now-established paved route into Beaumont. Beginning in present Loma Linda near the original Guachama and later the Asistencia, the route traveled up through present San Timoteo Canyon, then known as San Gorgonio Valley (Goldsworthy 1871), meandering to and through the important ranches, coming out of a side canyon on the west flank of Cherry Valley. Two miles east of Frink’s Ranch (El Casco), the road turned north along what is now called Woodhouse/Singleton Road, passing across present Interstate 10, and continued easterly up the canyon to Paulino Weaver’s adobe in Cherry Valley, then along the south side of the hills to Highland Springs north of Beaumont, Gilman’s Ranch in Banning, Whitewater, and the desert beyond (Johnston 1987:116-117).

A stone building on Singleton Road, located east of present Interstate 10, was recorded as a State Point of Historical Interest in 1967 and attributed to Noble. A marker was unveiled at the site in 1970, but is no longer extant. The building was later used as a school and as a post office and was remodeled in the early 1900s with the addition of a residence on the southwest front. It appears unlikely, however, that it was built by Noble, as the land on which the building is located is east of the boundaries of his ranch, and nowhere near where his residence as depicted on the Goldsworthy map (Goldsworthy 1871).

In the days of the horse and wagon, people tended to travel via the easiest and most direct routes between locations, so several other roads traversed the valleys north and south of San Timoteo Canyon. One of these coursed southwest/northeast from just south of present El Casco to Yucaipa, through what was known as San Timoteo Canyon in the early 1870s (Goldsworthy 1871). This road would have provided a more direct route to the canyon from the Yucaipa adobe of Diego Sepulveda, which was built by James Waters in 1858.

Surveys of the San Gorgonio Pass were conducted as early as 1853 to find the best route for a railroad line to the Pacific coast (Robinson 1957:17). Later in that decade, the Butterfield Overland Mail operation used the San Bernardino-Sonora Road for its route, crossing the project area. When gold was discovered in La Paz, Arizona, in 1862, a new trail, known as the Bradshaw Road, was established for travelers from San Bernardino to the gold fields (Beattie and Beattie 1939:399-400). This road also followed the Woodhouse/Singleton Road from San Timoteo to Cherry Valley (Johnston 2004). Rapidly, numerous freight, stage, and mail lines also used the route through San Timoteo Canyon, bringing the first wave of settlers to the area.

By 1871, the present road through San Timoteo Canyon had been established, probably by Newton Noble who was busy building roads and bridges all along the route from San Bernardino to the mines in the desert. The route was probably realigned by Noble so that it ran through his ranch, thus allowing him to establish a stage station and provide sustenance to travelers on their way to the mines in the Panamint (Johnston 2004).

During the late 1890s, several roads were depicted on a map of the area coursing from San Timoteo Canyon easterly to Yucaipa, Calimesa, Cherry Valley, and Beaumont. One of these went from El Casco to Calimesa, with a branch to Yucaipa, another along present Woodhouse/Singleton Road, and one through the Noble Ranch toward Beaumont (USGS 1901, surveyed 1897-98). All of these roads are visible on the ground, and although earthen, are drivable today. Another historic road traverses southeast/northwest through the canyon, easterly of the San Timoteo Road and the railroad, connecting historical ranches and settlements. It may have been used during the wet season when San Timoteo Creek flooded. With the advent of the automobile, the need for these roads greatly diminished, as travelers would have used the paved routes, and they simply became ranch roads.

Southern Pacific Railroad. Now operated by Union Pacific, the survey team who laid out this railroad first arrived in the San Gorgonio Pass in 1853 and reported the pass as an ideal route for the railroad in their report to congress in 1856 (LSA Associates, 2006). The railroad was constructed in this area in 1875. When Chinese laborers died of heat exposure, they were replaced with Indians (*The Railroad Gazette*, 1875).

Stewart Ranch. Reznor P. Stewart purchased land south of Banning in 1884 and established a grain and hay farm. Several buildings and features were built to serve the agricultural needs of the ranch.

Gilman Ranch. The land that would become the Gilman Ranch was first established as a headquarters for the *vaqueros* working on Isaac Williams' Ranch. In 1854, Joe Pope took charge of Williams' interests and in 1863 sold it to a French sheep farmer by the name of Chapin. Newton Noble purchased the property from Chapin and established a stagecoach

stop on the ranch and opened the first post office in San Gorgonio Pass in 1868 (Gunther, 1984).

In 1869, Noble sold the 160-acre Williams/Chapin Ranch to James Gilman. Gilman took up residence in Pope's adobe. After Gilman married, he built a new home and converted the adobe into a blacksmith shop. In addition to ranching and the businesses surrounding the stagecoach stop, Gilman also established a sawmill and the area's first general store, and also provided pastureland for nearby farmers (Swope, 1987; Hughes, 1938).

Stage Coach Road. Sometime prior to 1869, a stagecoach road was built to connect Beaumont to the San Jacinto Valley. The stagecoach provided mail service and easier travel to the outside. Prior to the railroad, the stagecoach was the main cultural umbilical cord for many frontier communities in the western United States.

Pre-WWII (1900-1941). By 1900, agriculture was firmly entrenched in the study area. In addition to ranching, orchards and row crops had become commonplace. Given the limited water of the area, dry farming was increasingly practiced.

Many of the previously independent ranches and farms were bought by a syndicate that planned on intensive agricultural activity, utilizing various ranches to support each other's needs as well as produce meat and produce for the market.

As railroad traffic increased, diesel-powered locomotives became more common, and the steam-powered models began to be phased out; more sidings were added to allow the faster, more powerful trains to move more efficiently in both directions along the railroad tracks.

The railroad also continued to be a factor in the growth of the communities of the area in the early 20th century, but, as automobiles became more common, trucks became a principle form of transportation for the farmers and ranchers of the study area. By 1930, dairy farmers were routinely trucking their products to the creamery in Redlands. As telephones became more common, telegraph offices, located locally within the train stations, began to close down. By 1930 the El Casco train station no longer accepted freight (Record of Station Changes, n.d.).

By 1915, the town of Banning had a population of 1,500. Facilities and services available included a goods store, grammar and high schools, multiple churches, hotels, a sanitarium, a theatre, a bank, and a newspaper. The local fruit orchards provided employment indirectly through the canning industry and fruit-packing houses (LSA Associates, 2006). During the Great Depression, the establishment in Banning of a field headquarters for the Los Angeles Metropolitan Water District provided a much-needed economic stimulus.

Several historic resources from the first half of the 20th century are located within Banning. All but one of these are residences that are of special interest because of their architecture, or

else are connected to notable residents of Banning. The one exception is a canal that stands as testament to the presence of the Works Progress Administration programs of the Great Depression.

Beaumont continued its slow but steady growth in the early 20th century. By 1914, Beaumont was home to several businesses, and, like Banning, was a beneficiary of the fruit-growing industry, employment being available through a fruit-packing house (Southern California Panama Pacific Exposition, 1915, cited in LSA Associates, 2006).

Post-war (1941-Present). Though the period under consideration here includes the WWII years, it is referred to as “post-war” because the majority of the development in the study area took place after the war.

The post-war population growth of the Los Angeles area spilled over into surrounding regions, including the study area. The cities of Banning and Beaumont saw increases in population and business. The growth of the interstate highway system, improvements to the electrical grid, and other infrastructure changes, additions, and improvements has impacted all of California, including the study area.

More recently, this growth has accelerated as California’s population has boomed. In the past two decades, Riverside County’s population has increased by 76%, making it the fastest growing county in the state (Riverside County, n.d.).

3.5.1.2 Native American Consultation

The Native American Heritage Commission (NAHC) was contacted via letter on September 6, 2005. The NAHC responded in a letter dated September 21, 2005, providing both a contact with the Morongo Band of Mission Indians and a list of Native American contacts that may have knowledge of additional cultural resources in the area.

3.5.1.3 Site Specific Conditions

3.5.1.3.1 Proposed Project

No cultural resources are present at the Banning or Zanja Substations.

Southerly 115 kV Subtransmission Line Route

There are nine previously recorded and 11 newly recorded resources along the proposed southerly 115 kV subtransmission line route. CA-RIV-3946 contains prehistoric elements.

Previously Recorded Resources

CA-RIV-3946. Located west of Beaumont, this site is a scatter of prehistoric and historic artifacts overlooking a prominent drainage to the south. Avina and Doty revisited the site in 1999 and relocated it 1,000 feet to the southeast. Since Avina and Doty's visit, the site appears to have been destroyed.

CA-RIV-4715 *The Stage Coach Road.* The stagecoach road through this area was built prior to 1869. This road followed the north-south direction of the present Highway 79. Most of the original road has been paved or destroyed. It does not appear to be eligible for listing in the National Register or to be a historical resource for the purposes of CEQA.

33-8344 *W. E. Jones House.* This residence is located on East Barbour Street in Banning. It is a Vernacular wood frame house constructed ca. 1915. It is listed in the Riverside County Historical Resources Inventory as eligible for local listing or designation.

33-8399. This residence is located on east Wesley Street in Banning. It is a Vernacular wood frame home constructed ca. 1920's. It is listed in the Riverside County Historical Resources Inventory as eligible for local listing or designation.

33-8400 *J. R. Fountain House.* This residence is located on east Wesley Street in Banning. It is a Vernacular wood frame home and associated barn, constructed in 1888. It is listed in the Riverside County Historical Resources Inventory as eligible for local listing or designation.

33-13778. This site is a series of buildings and features associated with the Stewart Ranch complex, southwest of Banning. The site is in poor condition as was determined by previous researchers to be ineligible for inclusion on the National Register.

33-13779. This site is a series of water-runoff control features associated with livestock raising on the Stewart Ranch complex, southwest of Banning. The site is in poor condition and was determined by previous researchers to be ineligible for inclusion on the National Register.

33-9498 (CA-RIV-6381H). Union Pacific (formerly Southern Pacific) Railroad. This is the transcontinental route from Los Angeles to New Orleans built by the Southern Pacific Railroad in 1875-76. It was recorded by Ashkar in 1999. A portion of the mainline in Indio was updated by Christeen Taniguchi of Galvin and Associates in 2005. The railroad parallels San Timoteo Canyon Road within San Timoteo Canyon.

Previously Recorded Cultural Resources within the Study Area: Lincoln Street, City of Banning

33-9150. This house is located at 1222 West Lincoln Street in the City of Banning. The house was recorded in 1983 as part of a Historic Resources Inventory by Michael Rounds of the Riverside County Historical Commission. The house is described as a minimal traditional wood frame home with a hipped cross-gable roof. It was described as a typical example of this type of residence in Banning.

Minnesota Street, Beaumont. No buildings greater than 45 years in age were observed. The Maraschino Substation was constructed in 1971.

Newly Recorded Resources

East Gilman Home Channel. This is a resource traversing Banning on a North-South axis. It is a V-shaped drainage canal constructed by the WPA in the 1930's. Severe floods in 1937 and 1938 required the channel to be rebuilt.

Livestock Pen. This collapsed livestock pen is located south of Beaumont. Based on its height and design, it appears to have been built for sheep or goats. The pen includes fence-posts, fence boards and barbed wire, and seven unformed concrete pads measuring approximately one meter by one meter.

Wesley Street. Five previously unrecorded residences on Wesley Street are over 50 years old. These properties are: a California Ranch style home at 371 E. Wesley Street, a California Ranch style home at 315 E. Wesley Street, a California Ranch style home at 291 E. Wesley Street, a Craftsman style home at 243 E. Wesley Street, and a Minimal Tradition style home at 185 E. Wesley Street.

425 E. Charles Street. This is a Minimal Tradition style home built in 1927.

Barbour Street. Three previously unrecorded residences on Barbour Street are over 50 years old. These properties are: a California Ranch style home at 390 E. Barbour Street, a Spanish Revival style home at 410 E. Barbour Street, and a Minimal Tradition style home at 421 E. Barbour Street.

None of the newly recorded resources in this portion of the project area is recommended eligible for listing on the NRHP or is considered to be a cultural resources for the purposes of CEQA.

El Casco Substation (Site 33)

No previously recorded cultural resources are known in the location of Site 33. A pedestrian survey showed the presence of a water conveyance feature, and a eucalyptus grove that dates earlier than 50 years ago. The conveyance feature may be associated with the historic Vanderventer Ranch (CA-RIV-2262) located 2,000 feet west of the study area. This site has not been evaluated for Register eligibility. There is potential for buried archaeological deposits in this location. Analysis of historic maps indicates that structures from the historic Weaver Ranch may have stood in this location.

33-13428. This site is the remains of an irrigation system that consisted of a 12-inch concrete pipe with associated stand pipes and feed pipes, with terra cotta outflow pipes. It was recorded by Eckhardt and Carrico in 2004. The site is recorded within the Substation Alternative No. 33 study area.

None of the newly recorded resources on this portion of the project area are recommended eligible for listing on the NRHP or considered to be cultural resources for the purposes of CEQA.

Fiber Optic System

A records search and pedestrian survey were completed for the Mill Creek Telecommunications Site while only a records search was conducted for the fiber optic route. Because the fiber optic circuits would be installed on and within existing SCE structures, there would be minimal ground disturbing activity. Therefore, the records search was conducted to determine general cultural resource sensitivity in the area.

Mill Creek Communications Site**Previously Recorded Resources**

One cultural resource [the Mill Creek Hydroelectric System: powerhouse fore bay (pond) and aqueduct] is recorded adjacent to the Mill Creek Communications Site. The Mill Creek powerhouse fore bay and aqueduct are contributing elements to the Mill Creek Hydroelectric System, which is listed in the National Register of Historic Places. The property is significant because it is the oldest operating hydroelectric facility in the United States and because it is the first hydroelectric system to use multiphase alternating current (AC) generators which later became the standard.

No other cultural resources were identified during the pedestrian survey of the area and the potential for any subsurface archaeological materials to be present is very low.

El Casco Substation to San Bernardino Substation Fiber Optic Segment

Approximately 40 percent of the study area has been previously surveyed. Thirty-eight cultural resource studies and/or surveys cover portions of the fiber optic segment. Forty-two cultural resources are recorded within this study area. Five are prehistoric archaeological resources.

Previously Recorded Resources

CA-SBR-6847H (P36-006847). The site is part of the remains of the old Atchison, Topeka, and Santa Fe Railroad line between Highland Junction and the community of Mentone, a popular late 19th and early 20th century railroad excursion route. This train route has been gradually abandoned and removed since the 1950's. The site was originally recorded by Romani et al. of Greenwood and Associates in 1990 as a historic railroad grade and train bridge. The site consists of three poured concrete footings for the railroad bridge; historic railroad debris and modern debris; and two sets of parallel standing, stepped concrete bridge walls (separated by approximately 43 meters of old railroad grade). Segments of the site have been updated by M. Horne and C. Inoway of Applied EarthWorks, Inc. in 1998 and M. Robinson of Applied EarthWorks, Inc. in 2000. M. Robinson (2000) notes that part of the route is listed on the National Register as part of the Patton State Hospital Complex.

CA-SBR-7139H (P36-007139). Marigold Farms is a dairy, farming, and ranching operation that dates from 1915 to the present. The southern portion of the site consists of a historic milking barn, a presumed modern equipment storage shed, a cluster of residences west of the barn (now destroyed), wooden structures located at the south central portion of the property (thought to post date the historic period), a red fired-brick standpipe, the Marigold railroad siding (now destroyed), and reservoirs (now destroyed). The northern section consists of a small tenant house, large barn/utility building, weigh scale and scale house, a small corrugated metal building, a large open shed, a set of gas pumps, twin concrete silos, several equipment storage areas, several modern trailers, a pump house and well, three additional silos, a small concrete reservoir, and numerous irrigation standpipes and junction boxes. Most of the buildings are in poor condition and the irrigation system is abandoned. This resource is not eligible for listing in the National Register but is locally significant. Hatheway (1991) states that "The five silos are unique to the Redlands area, and they clearly have local interest and significance.

CA-SBR-7765H (P36-007765). The site was originally recorded by J. Paulson and P. Singer of Chambers Group, Inc. in 1993 as an agricultural site and former residence of Cora English, ca. 1915. The site consists of an orange grove (now removed), remnants of a standpipe irrigation system, a stone and concrete open irrigation flume, and a sparse scatter of debris (possibly modern).

CA-SBR-7766H (P36-007766). The site was originally recorded by J. Paulson and P. Singer of Chambers Group, Inc. in 1993 as an agricultural and residential site. The site consists of a

concrete driveway and concrete slab, an orange grove, and stand-pipe irrigation system. The site contained a house, now demolished, occupied as early as 1895.

CA-SBR-7767H (P36-007767). The site was originally recorded by J. Paulson and P. Singer of Chambers Group, Inc. in 1993 as an agricultural and residential site. The site consists of a concrete and asphalt driveway, a low wall (1 foot high) and some trees that were associated with a house that is now destroyed. The house was occupied by Silas Williams as early as 1896. The orange grove has also been removed and only parts of a stand-pipe irrigation system remain. A sparse scatter of debris (historic and modern) is also located on the site.

CA-SBR-7768H (P36-007768). The site was originally recorded by J. Paulson and P. Singer of Chambers Group, Inc. in 1993 as an agricultural and residential site. The site consists of a concrete driveway, concrete steps, foundations of out buildings, a red-brick and concrete irrigation flume, and a sparse scatter of historic debris. The site contained a house dating to 1890, now demolished, occupied by H.H. Sinclair, who was instrumental in developing hydroelectric power in southern California.

CA-SBR-8135H (P36-008135). The site was originally recorded by Laurie White of Archaeological Associates in 1995 as a series of five masonry irrigation flumes constructed of granite cobbles/field stones and set in cement mortar. Four of the five flumes are situated in orange groves which date ca. 1905 and two of the flumes have been filled in with debris and abandoned.

CA-SBR-8137H (P36-008137). The site was originally recorded by Laurie White of Archaeological Associates in 1995 as an early 20th century farm complex. The site has since been destroyed.

CA-SBR-9991H (P36-009991). The site was originally recorded by Bai Tang of CRM Tech in 2000 as rural historic landscape. The site consists of rows of tall Mexican Fan Palms lining various segments of the streets in the area. Local oral historical accounts claim that the trees were planted well before 1927 by local citrus growers with the hope of using them as windbreaks. Tang recommends that the site is not eligible for listing on the National Register or the California Register, but “warrants special consideration in local planning as a distinctive and well-known landmark”.

36-011504 (CA-SBR-11504H). The site was originally recorded by Riordan Goodwin of LSA Associates, Inc. in 2003 as a historic farm (ca. 1909). The site consists of a historic house, garage/shed, equipment and storage sheds, carport, two modern buildings, and associated remnant orange groves/standpipe irrigation system.

36-011760 (CA-SBR-11760H). The site was originally recorded by J.S. Alexandrowicz and S.R. Alexandrowicz of Archaeological Consulting Services in 1999 as an irrigation site. The site consists of one stone and concrete irrigation ditch or flume. The ditch appears to date to the late 19th century, probably associated with the ca. 1882 homesteading activities of the

area. Alexandrowicz and Alexandrowicz (1999) recommend that the resource be evaluated for significance.

36-011770 (CA-SBR-11770H). The site was originally recorded by J.S. Alexandrowicz and S.R. Alexandrowicz of Archaeological Consulting Services in 1999 as an irrigation site. The site consists of an irrigation ditch, a concrete standpipe, and two metal irrigation ditch gates. The ditch appears to date from the late 19th century to the early 20th century. Alexandrowicz and Alexandrowicz (1999) recommend that the resource be evaluated for significance.

36-011772 (CA-SBR-11772H). The site was originally recorded by J.S. Alexandrowicz and S.R. Alexandrowicz of Archaeological Consulting Services in 1999 as an agricultural and residential site. The site consists of a foundation of a former residence (early 20th century residence/citrus farm), garage foundation, an outdoor fireplace/refuse burner, a barn foundation and cobblestone and concrete wall fragments, a cobblestone and concrete well, a cistern or privy, a wood lined privy, and a refuse dump. Alexandrowicz and Alexandrowicz (1999) recommend that the resource be evaluated for significance.

36-011807 (CA-SBR-11807H). The site was originally recorded by Cary Cotterman of Chambers Group, Inc. in 2003 as 19 associated residential and agricultural features. The site consists of a stone house foundation (the house was constructed at the turn of the 20th century or earlier and demolished in 1990), foundation slab for a later addition to the same house, footings for another building near the northern portion of the property, six wind machines, five rows of irrigation standpipes, an unlined drainage ditch, an active grove of grapefruit/orange trees, and a sparse scatter of historic debris. Cotterman (2003) recommends that the resource is not eligible for listing on the National Register or the California Register.

36-012468 (CA-SBR-12260H). The site was originally recorded by Laurie Taylor of CRM Tech in 2006 as a historic water conveyance system. The site consists of four concrete and stone flumes and associated features such as weir boxes. The flumes are no longer in use and are in a state of disrepair. Taylor (2006) recommends that the resource is not eligible for listing on the National Register or the California Register.

36-012852 (CA-SBR-12386H). The site was originally recorded by J. Sanka of Michael Brandman Associates in 2006 as an agricultural site. The site consists of a water conveyance system, historic orchard, and a sparse refuse scatter. Features consist of a brick and concrete mortar weir and a local stone and concrete mortar irrigation flume and standpipe.

P1063-50H. The site is the historic Berry-Roberts ditch (1876-8) and has never been properly recorded.

PSBR-22H. The site is the historic Judson-Brown ditch (1881-2) and has never been properly recorded.

CA-SBR-8546H (P36-008546). The site was originally recorded by James Schmidt of Greenwood and Associates in 1996 as a historic water conveyance system, originally

constructed by the East Redlands Water Company (ca. 1877). The site consists of a concrete canal and six associated control or diversion structures. Schmidt (1996) states "Portions of the canal are to be protected in place while others are to be reconstructed to allow for pipeline installation".

CA-SBR-5976H (P36-005976). The site was originally recorded by R. Paul Hampson and Margaret A. Doyle of Greenwood and Associates in 1987 as two historic water barriers. The water barriers are used to protect the power station (Mill Creek 1 substation) located downstream.

CA-SBR-5977H (P36-000977). The site was originally recorded by R. Paul Hampson, Roderic S. Brown, and Margaret A. Doyle of Greenwood and Associates in 1987 as an existing operational powerhouse (Mill Creek 1 substation), a fish hatchery (largely demolished), a temporary chlorination plant (in disuse), and the remains of an earlier structure with associated features.

CA-SBR-8092H (NRHP-L-77-329, CHL 43, and Engineering Landmark 21). The Mill Creek Zanja is a historic water conveyance system built during the Spanish mission period of California history. Construction began in 1819 by Native Americans from the Guachama Rancheria and the first diversion was made in time for the spring planting in 1820 at about the present site of SCE's powerhouse No.1. The Mill Creek Zanja is the oldest irrigation ditch in San Bernardino County and represents the first engineering project of any kind in the area. Portions of the Zanja remain in use today. The Mill Creek Zanja is listed on the National Register, California Historical Landmark, and as an Engineering Landmark.

P1064-51H. The site is a structure reported to be a Pony Express Station. The structure has never been properly recorded.

CA-SBR-911. The site was originally recorded by G. Smith in 1971 as a prehistoric food processing location. The site consisted of manos, a metate, and hammer stones. The site has since been destroyed by the construction of homes.

P1064-45. The site is a potential Native American campsite. The AIC was contacted by a non-archaeologist that this site exists; however, it has never been confirmed or recorded by an archaeologist.

CA-RIV-179. The historic Cahuilla village of *Sahat'pa* was recorded in 1960 by Johnston and Johnston. The site was listed on the 1871 plat map of the Tract of Land between San Jacinto and San Gorgonio and is mentioned in James (1960) as the village site of *Sahat'pa* and the burial place of Cahuilla leader Juan Antonio. The site form was updated in 1983 by Lerch. The burial of Juan Antonio was discovered in 1956 when a check dam was built, but no other investigations have occurred on the site (Lerch 1983). The site has never been excavated (other than the discoveries of the burials at the check dam) and its location is known only from the historical record and plat map and has not been confirmed

archaeologically. The site boundaries are unknown as well as whether there are any subsurface manifestations.

CA-RIV-794 Historic Indian Village. This site was recorded by Smith (n.d.), updated by Lerch in 1983, and again by Lawson in 2004. The site was noted on the 1871 plat map as an “Indian Village” and it is probable that it is associated with the village of *Sahat’pa*. Smith recovered a projectile point and Lerch recovered pottery sherds, ground stone, faunal remains, and historic material. This site is listed as a State Historic Landmark.

CA-RIV-3448H. The site consists of a concrete foundation, a square nail, purple glass fragments, bricks, and a trash scatter. This site is adjacent to the railroad tracks and may be associated with the El Casco Depot site. It was recorded in 1988 by Apple et al.

CA-RIV-3449 El Casco Depot. The site consists of concrete foundation and footings, fragments of amethyst glass, clear glass, glass bottles, a glass marble, and ceramics. This site is adjacent to the railroad tracks. It was recorded in 1988 by Apple et al.

33-9498 (CA-RIV-6381H) Union Pacific (formerly Southern Pacific) Railroad. This is the transcontinental route from Los Angeles to New Orleans built by the Southern Pacific Railroad in 1875-76. It was recorded by Ashkar in 1999. The railroad parallels San Timoteo Canyon Road within San Timoteo Canyon and into Beaumont and Banning, crossing the study area in both the El Casco to Yucaipa and the Banning to M17-T1 segments.

33-7292 San Timoteo Canyon Schoolhouse. Listed in the National Register in January 2001 under Criterion A. The school was built between 1890 and 1895 by E.M. Vanderverter to replace an adobe structure built in the 1850s. The one-room school is a wood-frame building with an end gable roof with a bell tower over the entry.

CA-RIV-7294. This resource is described as Fisherman’s Retreat. It was previously known as the Silas Cox Ranch. It consists of two vernacular wood frame houses with hipped roofs. The site was recorded in 1983 by Nara Haskell as part of the Riverside County Historical Commission Historic Resources Inventory.

CA-RIV-7296 Woodhouse Ranch. The site consists of three wood-frame houses and one wood-frame barn. It was recorded in 1983 by Nara Haskell as part of the Riverside County Historical Commission Historic Resources Inventory. The ranch was updated by LSA in 2004. LSA proposed placing the Woodhouse Ranch in a district along with the Singleton Ranch, which is located outside the study area. A draft District Record was prepared (form DPR523B). The district includes the ranch houses of the Singleton and Woodhouse families and employees, barns and silos, water conveyance systems, trash scatters, and an isolated farm implement. Subsequent research by LSA (McLean et al. 2006) indicates that that CA-7296 does not qualify as a district, however there is potential for buried resources (Pine/Humphrey and Lovetta adobes).

33-12641. This isolate was recorded by Dames and Moore in 1988 consisting of an artifact scatter consisting of eight pieces of amethyst glass and one thin white ceramic sherd.

33-12642. This isolate was recorded by Dames and Moore consisting of five fragments of amethyst glass (all appearing to be from a drinking glass).

33-12643. This isolate was an amethyst glass bottle fragment. It was found between the railroad and highway. It may be associated with the railroad and was recorded in 1988 by Apple et al.

33-12644. The isolate consists of fragments of amethyst glass and ceramics. They were found adjacent to the railroad tracks and may be associated with the railroad. The isolate was recorded in 1988 by Apple et al.

33-12690. The isolate consisted of fragments of clear and amethyst glass and a ceramic fragment. They were found adjacent to the railroad tracks and may be associated with the railroad. The isolate was recorded by Apple et al. in 1988.

CA-SBR-915. This site was first recorded in 1976 by Gerald Smith who noted that the area had been graded, revealing the presence of ground stone artifacts at a depth of approximately 20 ft, and additional piles of rock. The field was actively planted at the time of discovery and future survey was recommended. The site was assessed in October 1976 by Daly and Rector who noted the hilltop had been bulldozed, and the construction of the I-10 freeway had likely cut through the site.

CA-SBR-428. The site was recorded in 1934 by Gerald Smith, as a potential prehistoric campsite. The property owners reported that previous to 1934 the site had been destroyed by the property owners as a result of construction development.

CA-SBR-12605. This site, recorded in 2006 by D. McDougall of Applied Earthworks, consists of a prehistoric ceramic scatter of 10 small body sherds and two highly burned faunal fragments.

36-12836. This is the site of the historic Tenderfoot Bar, constructed in 1946, consisting of three buildings. The front of the primary building was clad in stucco, embedded with random rocks. The site was recorded by Judith Marvin in 2002 and determined to be ineligible for listing on the National Register.

El Casco Substation to Banning Substation Fiber Optic Segment

The results of the records search show that approximately 90 percent of the segment between El Casco Substation and Maraschino Substation has been previously surveyed. Fourteen cultural resources are recorded within this study area. One of these is a prehistoric archaeological site.

Previously Recorded Resources

CA-RIV-2639. This resource, recorded in 2000 by R.E. Reynolds, consists of four prehistoric mortars located on a conglomerate bedrock outcrop. The outcrop had been flagged for preservation but was removed in April 1999 during construction.

CA-RIV-3447H. This site was recorded by Dames and Moore in 1988 as a sparse scatter of historic debris adjacent to the Southern Pacific Railroad tracks, located on the shoulder of San Timoteo Canyon Road. The artifact scatter contains amethyst glass fragments, an old machine-made glass bottle neck, 15+ brick fragments, 10+ white ceramic sherds, and a couple of rusted can fragments, all artifacts date to the early twentieth century.

CA-RIV-5246. This site consists of historic refuse.

33-7295. This resource is the historic Haskell Ranch Complex recorded by Judith Marvin in 2004. The ranch complex consists of the architectural remnants of a large cattle and dairy ranch that operated from ca. 1870 through the 1960s. The buildings and structures, which date from ca. 1911 to ca. 1950s, include: three primary residences, two workers' residences, a foreman's house, a bunkhouse, a hay barn, a blacksmith shop, a milk house, a milk/feed storage building (separator house), calf pens, silos, grain storage bins, concrete-lined reservoir, and several sheds and associated garages.

33-10792. This resource is a pre-1950 flood control structure, as recorded by R.E. Reynolds in 2000. The flood control structure consists of a spillway underlain by two stacked, 3-foot diameter corrugated pipes in a poured concrete box, and poured concrete control walls with concrete support beams 10 to 12 feet in length. The control walls decline and widen downstream from the spillway. Metal pipe sockets on the spillway may have held a brush gate. Construction material and technique suggest the structure was built prior to 1950.

33-12639. Historic refuse associated with railroad.

33-12640. This resource consists of historic refuse including one amethyst bottle base, one amber bottle neck (machine made) with a cork, and one aqua glass fragment.

33-12641. This isolate was recorded by Dames and Moore in 1988 as an artifact scatter consisting of eight pieces of amethyst glass and one thin white ceramic sherd.

33-13720. House constructed ca. 1950's.

33-15002. This site consists of an extensive irrigation and water distribution system which provided water to the Singleton Ranch. It includes numerous wells, reservoirs, dams, spillways, tunnels, weirs, slow control devices pipes, ditches, concrete pump footings, and water troughs which fed from several northeast/southwest trending seasonal drains that fed into San Timoteo Canyon. This resource was recorded and evaluated by LSA in 2004 to be ineligible for inclusion in the California Register.

33-6167. House constructed ca. 1930.

33-9150H. This house is located at 1222 West Lincoln Street in the City of Banning. The house was recorded in 1983 as part of a Historic Resources Inventory by Michael Rounds of the Riverside County Historical Commission. The house is described as a minimal traditional wood frame home with a hipped cross-gable roof. It was described as a typical example of this type of residence in Banning. This building is listed in the Historic Property Data File. This resource was determined historically significant by local government.

33-13778. This site was recorded in 2004 by Michael Brandman Associates as consisting of five structural remains of a 1920s house that was associated with an old homestead site.

13779 (CA-RIV-7544H). This site was recorded in 2004 by Michael Brandman Associates as consisting of a series of approximately 40 historic (large and small) water conveyance features; irrigation hardware; and associated masonry walls.

Banning Substation to Tower M17-T1 Fiber Optic Segment

The results of the records search show that approximately 5 percent of the segment between Banning Substation and tower M17-T1 has been previously surveyed. Four cultural resources are located within this study area

Previously Recorded Resources

33-8347H. This resource is recorded as the Rose House, a 1915 vernacular wood framed house which was typical of the single family residences during the early 1900s in Banning. This building is listed in the Historic Property Data File as being significant at the local level. This building is listed as historically significant by local government.

33-9498 (CA-RIV-6381H) Union Pacific (formerly Southern Pacific) Railroad. This is the transcontinental route from Los Angeles to New Orleans built by the Southern Pacific Railroad in 1875-76. It was recorded by Ashkar in 1999. A portion of the mainline in Indio was updated by Christen Taniguchi of Galvin and Associates in 2005. The railroad parallels San Timoteo Canyon Road through San Timoteo Canyon into Beaumont and Banning, crossing both the El Casco to Yucaipa and the Banning to tower M17T1 segments.

33-15193. This resource was recorded by Judith Marvin in 2006 as a single story 1920 Craftsman home. The home is recommended as not eligible for the National or California Registers

33-15195. Recorded by Judith Marvin in 2006, this resource is a single story Minimal Traditional 1947 residence. The home is recommended as not eligible for the National or California Registers.

El Casco Substation to Tower M30-T2 Fiber Optic Segment

The entire segment has been surveyed as part of this study. Two cultural resources [the Woodhouse Ranch (CA-RIV-7296) and Fishermans Retreat (CA-RIV-7294)] are located within this segment of the fiber optic route. Both resources are described in the El Casco Substation to San Bernardino Substation fiber optic segment section.

3.5.1.3.2 Alternatives**Northerly 115 kV Subtransmission Line Route Alternative**

There are 3 previously recorded and 45 newly recorded resources within the northerly 115 kV subtransmission line route alternative. Of these, all are historic, except the previously recorded prehistoric site of CA-RIV-99.

Previously Recorded Resources

CA-RIV-99. Recorded in 1959 by F.J. and P.H. Johnston, this is a prehistoric site associated with the Gilman Ranch site north of Banning. The recorders observed broken metates, manos, and various worked stones. This site is located along the eastern bank of a stream. The stream is located near the Gilman Ranch property and may be associated with it. Brumgardt (1975) in his National Register nomination of the ranch noted the stream, permanent spring, and many artifacts that have been found on the ranch property. The 1959 site survey record sketch map for the site is unclear as to whether the site is in the study area. Swope (1987) discovered an aboriginal hearth below the Pope Adobe. Swope also recovered Native American artifacts including groundstone, flaked stone, and ceramics during her excavations. The line corridor is approximately 300 feet south of the Pope Adobe excavations.

33-1701 Gilman Ranch. The remains of this ranch consist of several historical ranch buildings, including an adobe. It also rests on top of a prehistoric village site (CA-RIV-99). This site is listed on the National Register of Historic Places, and is a California Point of Historic Interest (PHI-RIV-004) (Brumgardt, 1975).

33-9140 Pratt Residence. This house, located on West Gilman Street in Banning, is a Craftsman Bungalow residence constructed ca. 1915. It is listed in the Riverside County Historical Resources Inventory as eligible for local listing or designation.

Newly Recorded Resources

Isolated Mano. An isolated mano was found near the Gilman Ranch. It may be connected to the archaeological site CA-RIV-99.

Brinton Ranch. This resource consists of a ranch complex constructed by John Brinton in the 1940's. Buildings present include residences constructed in the Minimal Traditional Style that have been heavily modified since original construction, barns (including a large front gabled barn), sheds, wood grain bins, fences, livestock pens, and troughs.

East Gilman Home Channel. This is a resource traversing Banning on a North-South axis. It is a V-shaped drainage canal constructed by the WPA in the 1930's. Severe floods in 1937 and 1938 required the channel to be rebuilt.

33-6018 Indian Canyon Channel. This resource is a rock and mortar channel constructed during the 1930's by the Works Progress Administration (WPA). It was recorded in 1995 by Archaeological Associates and described as a typical example of a common resource type. A visual inspection of this linear resource revealed that it is very similar in construction to the East Gilman Home Channel. In 1938 the two channels were connected at Williams Street to Wilson Street through an underground segment (LSA Associates, 2006).

Gilman Street. Gilman Street in Banning hosts 23 residences that were built more than 50 years ago. These homes are residences built in the minimal traditional style at 56, 53, 125, 158, 190, and 624 West Gilman Street; residences built in the California Ranch style at 73, 174, 265, 378, 425, 501, 505, 575, 609, 666, and 694 West Gilman Street; and homes built in the Craftsman style at 93, 94, 99, 130, and 619 West Gilman Street.

San Gorgonio Road. Three residences on North San Gorgonio Road, Banning are more than 50 years old. These include a Minimal Tradition style home at 1190, a California Ranch style home at 1212, and a Spanish Revival style home at 1221.

Allesandro Road. Two residences in the California Ranch style were constructed at 1114 and 1250 Allesandro Road, Banning.

Hoffer Street. Two Post-WWII homes stand at 385 and 388 East Hoffer Street, Banning. Both were built in the California Ranch style.

George Street. Four California Ranch style homes dating from the 1920's through the 1950's stand at 370, 355, 417, and 418 East George Street.

Drury Lane. Three homes built in the Minimal Traditional style and dating to the 1930's stand at 416, 436, and 482 Drury Lane. Two Homes built in the California Ranch style, and also dating to the 1930's, stand at 464 and 494 Drury Lane.

Williams Street. California Ranch style homes built during the 1940's stand at 403-411 East Williams Street, Banning. A Minimal Traditional style home built in 1947 stands at 381 East Williams Street.

380 E. Nicolet Street. A 1920's Craftsman style home stands at this address.

Ramsey Street. Two 1920's Craftsman style homes stand at 390 and 402 East Ramsey Street.

None of the newly recorded resources on this portion of the project area is recommended eligible for listing on the NRHP or is considered to be a cultural resources for the purposes of CEQA.

Site 38 (Alternate Site)

The only cultural resource on or around the land chosen for Site 38 is 33-7296, the Singleton/Woodhouse Ranch. This resource is a ranch complex comprised of buildings and the remains of buildings built ca. 1900-1930. The resources consist of several residences, a collapsed barn, building foundations, and associated features. It is also suspected that the remains of two unrecorded adobes are present in the southern portion of this land. This site does not appear to be eligible for either the National Register of Historic Places, or as a historical resource under CEQA. However, if the adobes are discovered, then it is possible that they might be considered eligible as resources likely to yield information valuable to scientific research.

3.5.2 Significance Criteria

Impacts to cultural resources are considered potentially significant if the project:

- Causes a substantial, adverse change in the significance of a cultural resource that is listed or eligible for listing in the California Register of Historic Resources or local registers (a historic resource).
- Causes a substantial change in the significance of, or destroy, a unique archaeological resource, or disturb human remains. In addition, if human remains are discovered and are determined to be of Native American origin, then the Native American Graves Protection and Repatriation Act (NAGPRA) may come into effect.

3.5.2.1 California Register of Historic Resources

Cultural resources include archaeological and historical objects, sites and districts, historic buildings and structures, and sites and resources of concern to local Native Americans and other ethnic groups. Cultural resources which meet the criteria of eligibility to the California Register of Historic Resources (CRHR) are termed "historic resources." Archaeological resources which do not meet CRHR criteria, may also be evaluated as "unique"; impacts to such resources could be considered significant as described below.

Before impacts or mitigation of impacts can be addressed, a site must first be determined to be an historic resource or a unique resource. For archaeological resources subsurface testing

will be necessary to determine if a subsurface component is present, whether the areal extent of surface and/or subsurface materials will be affected by the proposed action, and to determine if the resource(s) in question have the potential to answer local and regional research questions. If a resource is determined to be an historic resource or unique resource, a program to mitigate anticipated impacts must be implemented. Sites not determined to be historic resources or unique resources need not be addressed as to mitigation of impacts.

A site meets the criteria for inclusion on the CRHR if:

- It is associated with events that have made a significant contribution to the broad patterns of California's History and Cultural Heritage.
- It is associated with the life or lives of a person or people important to California's past.
- It 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.
- It has yielded, or may be likely to yield, information important to prehistory or history.

3.5.2.2 Unique Archaeological Resources

Impacts to "unique archaeological resources" are also considered under CEQA, as described under PRC 21083.2. A unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

- Contains information needed to answer important scientific questions and there is a demonstrable public interest in that information
- Has a special and particular quality, such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person

A non-unique resource is one that does not fit the above criteria.

3.5.3 Proposed Project Impacts

3.5.3.1 Construction Impacts

Construction of the southerly 115 kV subtransmission line route could impact a historic structure (33-8344) within the City of Banning, which is eligible for listing in the local register. It is possible that the structure could be damaged when new poles are erected.

However, implementation of mitigation measure CUL-1 would reduce potential impacts to less than significant.

There is potential for buried archaeological deposits at Site 33. Analysis of historic maps indicates that structures from the historic Weaver Ranch may have stood in this location. Construction of the proposed substation could impact potentially significant cultural resources. However, implementation of mitigation measure CUL-2 would reduce potential impacts to less than significant.

In general, construction activities could disturb previously unknown buried resources. A mitigation measure (CUL-3) is proposed for unanticipated discoveries to ensure that potential impacts are reduced to less than significant.

Cultural resources are located along portions of the fiber optic routes. However, since the fiber optic cable would be installed on or within existing SCE facilities and structures and because the fiber optic installation would cause minimal ground disturbance, cultural resources within the fiber optic routes can be avoided. With the implementation of mitigation measure CUL-4, impacts to cultural resources in the area would be less than significant.

In summary, project construction impacts would be less than significant with the implementation of mitigation measures.

3.5.3.2 Operational Impacts

Following construction, the operation of the new and existing substations and subtransmission lines or routine maintenance and repairs of the Proposed Project would not result in direct or indirect impacts to cultural resources.

In summary, impacts to cultural resources due to operation of the Proposed Project would be less than significant.

3.5.3.3 Applicant Proposed Mitigation Measures

CUL-1. New poles would be erected at a sufficient distance from site 33-8344 to prevent damage to the building, its foundations, or supporting structures.

CUL-2. There is a high potential for buried cultural resources at Site 33, including possible structures and features from the historic Weaver Ranch. Prior to construction, a subsurface exploration program such as ground-penetrating radar, would be conducted to search for buried resources. Should resources be found by this means, they would be evaluated for CRHR-eligibility. Appropriate mitigation measures would be devised for eligible resources. Additionally, ground disturbing activity would be monitored by a qualified archaeologist.

CUL-3. In the event that unexpected cultural resources are encountered during the course of project construction, work is to be halted in that location until a qualified archaeologist is able to evaluate the resource.

CUL-4. Cultural resource surveys would be conducted in areas that have not been previously surveyed and surveys would be conducted to relocate previously recorded cultural resources once construction and staging areas are called out in final engineering. Any identified resources would be recorded and evaluated. If a cultural resource is identified within a construction/staging area then the construction/staging location would be shifted to avoid cultural resources. If construction/staging areas cannot avoid a significant resource, then appropriate mitigation measures would be developed to reduce any impacts to less than significant and all ground disturbing activities would be monitored by a qualified archaeologist.

3.5.4 Alternatives

3.5.4.1 Northerly 115 kV Subtransmission Line Route Alternative

The selection of the northerly 115 kV subtransmission line route would result in construction impacts to the following cultural resources:

CA-RIV-99 and the Gilman Ranch. The Gilman Ranch is listed on the NRHP and the CRHR and it contains significant historic and prehistoric resources that may be impacted by construction activities.

33-9140. This historic structure within the City of Banning is eligible for listing in the local register. It is possible that the structure could be damaged when new poles are erected.

Operation of the northerly 115 kV subtransmission line route would not significantly impact cultural resources.

In summary, impacts to cultural resources due to the construction and operation of the subtransmission line route alternative would be less than significant with the implementation of mitigation measures.

3.5.4.1.1 Applicant Proposed Mitigation Measures.

CUL-5. CA-RIV-99 and the Gilman Ranch. A subsurface cultural investigation would be completed to determine the extent of the resource within the impact area prior to any construction activities. It is suggested that ground-disturbing activities on and within a 0.25 mile radius of the ranch be monitored by a qualified archaeologist who has the authority to halt work.

In the event that a cultural resource is found during either monitoring or sub-surface investigation, the resource would be evaluated by an archaeologist to determine the resource's significance.

CUL-6. 33-9140. New poles would be erected at a sufficient distance from this property to prevent damage to the building, its foundations, or supporting structures.

3.5.4.2 Site 38 (Alternate Site)

The selection of the Site 38 substation location alternative would result in construction impacts to the Singleton/Woodhouse Ranch (33-7296). The buildings of this ranch are in poor condition, and many have been destroyed. As a result, the visible and known surviving ranch lacks integrity, and the known structures are therefore not eligible for the National Register of Historic Places or for definition as a historic resource under CEQA. Nonetheless, there is a high probability for the presence of buried significant cultural deposits, including building foundations, trash pits, privies, and the like that may yield important information about the lives of early Euro-American settlers in this area.

Operation of the substation at the Site 38 location would not significantly impact cultural resources.

In summary, impacts to cultural resources due to the construction and operation of the substation at the Site 38 site alternative would be less than significant with the implementation of mitigation measures.

3.5.4.2.1 Applicant Proposed Mitigation Measures

CUL-7. 33-7296 Singleton/Woodhouse Ranch. There is a high probability for buried deposits, including building foundations, trash pits, privies, and the like that may yield important information about the lives of early Euro-American settlers in this area.

The Pine/Humphrey and Lovetta adobes may be present within the project area, and these resources and associated features may yield information regarding the settlement, development, and growth of farming in San Timoteo Canyon.

If Site 38 is chosen, near-surface geophysical studies (remote sensing) are recommended to locate the adobes and any buried features.

It is also recommended that an archaeologist monitor ground-disturbing activities in this area since the area is highly sensitive. The monitor would have the authority to halt work if a cultural resource is identified. If cultural resources are identified during either monitoring or sub-surface investigation, then the resource would be evaluated by an archaeologist.

PALEONTOLOGICAL RESOURCES

Paleontological resources are defined as the fossilized remains of prehistoric plants and animals and are non-renewable resources that may include fossilized bones, teeth, shells, tracks, trails, and casts, to name a few. Paleontological analysis for the project area was conducted in order to determine the sensitivity of the project area and the potential for the presence of such resources, in accordance with the California Environmental Quality Act of 1970 (13 PRC, 2100 et seq.), and the Public Resources Code, Section 5097.5 (Stats, 1965, c 1136, p. 2,792). This analysis also complies with guidelines and significance criteria specified by the Society for Vertebrate Paleontology (SVP).

Research was conducted for Site 33, Site 38, and the 115 kV subtransmission line routes to determine whether sensitive paleontological resources are within or adjacent to the APE. A literature review was conducted by the San Bernardino County Museum and by paleontologist Robert E. Reynolds. The literature review included the published documents, and maps relevant to the study area. The results of the literature review indicated that the project area had not been previously surveyed but that paleontological resource sites have been recorded to the north, southwest and southeast. Two geological formations, the San Timoteo Formation, and the underlying Mount Eden Formation occur in the project area. More than 50 distinct paleontological localities are known in both of these formations.

Additionally, a review of the Paleontological Sensitivity Map of Riverside County indicates that both formations are considered to have a high potential to contain significant non-renewable paleontological resources.

3.5.5 Existing Conditions

Mount Eden Formation

The Mount Eden Formation crops out two miles south of the Proposed Project. Fossil species in conjunction with magnetic polarity studies (Albright 1999); date the formation in the Late Miocene Epoch. This formation contains varied fauna including fossil horse, rhinoceros, peccary, camel, deer, mastodon, giant ground sloth, tortoise, cat, bear, badger, raccoon, and rabbit.

San Timoteo Formation

This formation dates to the Plio-Pleistocene period. Portions of this formation are exposed in the west and central portions of the study area. Sediments consist of siltstones, sandstones, and gravel fanglomerates. This formation contains both plant and animal fossils. Fossils include muskrat, porcupine, tapir, horse, big-cone spruce, black cottonwood and sugar pine.

3.5.6 Significance Criteria

Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, past history of the rock unit in producing significant fossils, and fossil localities that are recorded from that unit. Paleontological sensitivity is derived from the fossil data collected from the entire geologic unit, not just from a specific survey.

A three-tiered classification system for paleontological sensitivity, recommended by the Society of Vertebrate Paleontologists (SVP) and recognized in California is listed below:

- High sensitivity – Indicates fossils are currently observed onsite, localities are recorded within the study area, and/or the unit has a history of producing numerous significant fossil remains.
- Low sensitivity – Indicates significant fossils are not likely to be found because of a random fossil distribution pattern, extreme youth of the rock unit and/or the method of rock formation, such as alteration by heat and pressure.
- Indeterminate Sensitivity – Unknown or undetermined sensitivity indicates that the rock unit has not been sufficiently studied or lacks good exposures to warrant a definitive rating. This rating is treated initially as having a high sensitivity or potential. After study or monitoring, the unit may fall into one of the other categories.

CEQA does not include significance criteria specific to paleontological resources. However, the SVP has developed criteria to determine which fossils have scientific value. Fossils are considered to be scientifically valuable if they meet or potentially meet any one or more of the following criteria:

- Taxonomy – fossils that are scientifically judged to be important for representing rare or unknown taxa, such as defining a new species.
- Evolution – fossils that are scientifically judged to represent important stages or links in evolutionary relationships, or fill gaps or enhance under-represented intervals in the stratigraphic record.
- Biostratigraphy – fossils that are scientifically judged to be important for determining or constraining relative geologic (stratigraphic) age, or for use in regional to interregional stratigraphic correlation problems.
- Paleocology – fossils that are scientifically judged to be important for reconstructing ancient organism community structure and interpretation of ancient sedimentary environments.
- Taphonomy – fossils that are scientifically judged to be exceptionally well or unusually or uniquely preserved, or are relatively rare in the stratigraphy.

3.5.7 Proposed Project Impacts and Alternatives

Sites 33 and 38 are both located on or within one-half mile of paleontological resource localities. Excavation associated with the construction of the substation at either site and the access roads to the 115 kV subtransmission lines has the potential to impact paleontological resources.

There is a high probability that paleontological resources, including datable organic materials, would be encountered within the project area at surface exposures or during excavation associated with substation and 115 kV subtransmission line construction.

In summary, impacts to paleontological resources due to the construction and operation of the Proposed Project and alternatives would be less than significant with the implementation of mitigation measures.

3.5.7.1 Applicant Proposed Mitigation Measures

PALEO-1. Conduct a paleontological field assessment of the finalized right of way for the substation location.

PALEO-2. Prior to construction a paleontologist would salvage known exposed paleontological resources. This would consist of collecting standard samples of fossiliferous sediments.

PALEO-3. A paleontological monitor would be present during ground disturbing activities within the project area. The monitor would be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts.

PALEO-4. Upon encountering a large deposit of bone, salvage of all bone in the area would be conducted in accordance with modern paleontological techniques.

PALEO-5. All fossils collected would be prepared to a reasonable point of identification. Itemized catalogs of all material collected and identified would be provided to the museum repository along with the specimens. A specimen repository would be arranged in writing with a museum prior to initiation of construction excavation.

PALEO-6. A report documenting the results of the monitoring and salvage activities and the significance of the fossils would be prepared.