3.4 Cultural Resources

Overview of Impacts

The analytical approach taken by this Subsequent EIR is described in Section 3.0 (Introduction to Environmental Analysis). The following section provides a description of existing cultural resources in the SSJID area, identifies cultural resource plans and regulations applicable to the project, and assesses the potential impacts on cultural resources. An analysis of cumulative impacts from other past, present and reasonably foreseeable projects is included in Section 5 (Cumulative Impacts) of this Subsequent EIR. Applicable goals and policies of local jurisdictions are also addressed in Section 8 (Consistency with Relevant Plans and Policies).

This table summarizes the cultural resource impacts for each of the four actions evaluated in this EIR.

Cultural Resources	Municipal Services Review	Expanded Sphere of Influence	Proposed 80-acre Annexation	Updated Plan to Provide Retail Electric Service
Impact 3.4-1: Cause a substantial adverse change in the significance of historical resources or unique archaeological resources, or disturb human remains	No Impact	No Impact	Less than Significant	Less than Significant with Mitigation

3.4.1 Environmental Setting

The Sphere Plan and MSR describe existing and planned services provided by SSJID, and these services are considered preexisting or previously approved for the purposes of this EIR. Section 2.0 describes the activities outlined in the Sphere Plan and MSR that are considered preexisting or previously approved activities rather than part of the proposed project. Activities supporting SSJID's existing services are either considered part of the baseline, to the extent that they have already been undertaken, or included in the cumulative impacts analysis as reasonably foreseeable projects, to the extent that they have yet to be implemented.

Relevant to the analysis of cultural resource impacts, SSJID is obligated to extend its services to anyone who requests service within the SSJID boundary, subject to standard terms and conditions. Infrastructure necessary to provide utility services occurs primarily at or adjacent to existing facilities. Linear facilities constructed to provide and extend SSJID services are sited along parcel edges, roads, or other existing public utility easements or rights-of-way (ROW) to avoid conflicting with parcel land uses. SSJID takes all practical steps to conduct construction activities entirely within the public ROW and adjacent to paved surface of roadways.

3.4.1.1 Prehistory

The proposed project area lies in the San Joaquin Valley, the southern half of the Central Valley, which extends approximately 500 miles north-south from the Cascade Range to the Tehachapi Mountains. Playas throughout the Central Valley are remnants of the extinct lakes and are currently used for agriculture. The enormous size of the Central Valley of California, coupled with its location, created an ideal setting to bring different groups of early peoples into contact with one another (Moratto, 1984).

Due to a lack of intact stratified prehistoric sites and no history of systematic local research, the prehistory of the project area is generally derived from that of the neighboring Stockton area of the San Joaquin Valley, an area that has received much attention in the history of archaeological investigation in California. The San Joaquin Valley offered ideal living conditions for thousands of years, and there is evidence of occupation from ca. 3000 B.C. to A.D. 1850, with a 500-year hiatus between ca. A.D. 1000 and 1500 (Moratto, 1984).

In the vicinity of the project, an apparent village site was recorded located on the riverbank just east of the City of Ripon. To date, the site has only been tested by auger (Gerry and Oglesby, 1994). The City of Ripon protected the site by capping and incorporating the capped site into a park. A handful of prehistoric sites have been reported west of the project area on the west side of Interstate 5 all located in the vicinity of the San Joaquin River. Most of these are burial mounds that have suffered destruction, either by removal years ago for use as fill (*e.g.*, CA-SJO-255), or by archaeological investigation that failed to produce a technical report for the California Historical Resources Information System (*e.g.*, CA-SJO-3) (Gross, 2003). Prehistoric sites are known to exist in southern San Joaquin County, primarily near the natural sources of water, but the lack of systematic investigation and reporting has hampered the development of a locally relevant prehistory.

Because the river and sloughs attracted many of the animals, birds, fish, and shellfish and produced many of the plant species used by Native Americans throughout prehistory, the majority of known prehistoric sites can be found close to these water sources in the valley, usually on a knoll or small hill to avoid springtime flooding. Many of these, if not most, are large mounded sites that represent long periods of intensive occupation presumably by large numbers of people. Other sites, such as short-term hunting camps or seasonal acorn collecting and processing sites, could be found in the valley but the more recent historic and modern era agricultural use of the land has played a significant role in destroying most of these more ephemeral and less substantial archaeological sites. On a geological spatial and temporal scale the valley is a depositional zone and sediments from many sources have been brought to the valley floor and deposited by various geomorphological processes such as periodic flooding and transport by wind. Therefore, it is possible that more ancient sites exist deeply buried below the agricultural plow zone.

Archaeological investigations of the Stockton area indicate that there were three main periods of Native American occupation (Moratto, 1984:181-183). These periods more or less follow one another in time, but have been found to overlap suggesting that they more accurately represent different sets of cultural activities. The extent to which they represent different groups of peoples who may or may not be related continues to be a subject of debate. These three periods exhibit some traits in common but for the most part are distinguishable one from the other in the archaeological record. The three periods occur with some variations throughout central California and carry different names derived from the place in which they were first identified in each sub-region. In the Stockton area the archaeological cultures are named the Windmiller (early), the Cosumnes (middle), and the Hotchkiss (late). A brief description of the archaeological traits of each culture is presented here to provide a context for evaluating the prehistoric sensitivity of the project area.

Windmiller sites are identified by burials lying flat on their stomachs (and occasionally on their backs) with the head pointing in a westerly direction. Many of the burials are associated with items presumably placed with the deceased at the time of burial. Red ocher is often found in the graves. Grave goods can include large spear points (projectile points), rectangular beads fashioned out of abalone, various shapes of beads made for the *Olivella* shell, stones of a size easily held in the hand that have been ground and

pecked into shapes with perforations (charmstones), and occasionally, artifacts made of bone or baked clay.

Cosumnes deposits are identified by burials placed in a flexed or fetal position with the head pointing in various directions. Sometimes the deceased has been cremated. Fewer burials are associated with objects in the graves. When grave goods are present they can include beads made from the *Olivella* shell (but in different shapes than in the Windmiller); objects made from green rather than red abalone shell, charmstones that are usually not perforated and take different forms, notably asymmetrical and "fishtail," than in the Windmiller; a higher percentage of bone tools and ornaments; perforated teeth; and mortars made from cobbles. The use of wood mortars has been inferred from the style of stone pestles associated with the Cosumnes. Projectile points are large as in the Windmiller, and baked clay objects persist.

Hotchkiss assemblages also have the flexed form of burial but show an increased frequency of cremations. New forms of *Olivella* shell beads appear, disk-shaped beads of clam shell are introduced, and abalone shell ornaments become elaborate. Projectile points become smaller, presumably from the replacement of thrusting and throwing spears and darts with the bow and arrow. Mortars made of stone are often shaped with the same techniques that charmstones are formed. Tubes made of bird bone, sometimes elaborately carved with geometric designs and pipes in the shape of a flanged tube made of soft stones such as steatite (soapstone) or schist are associated with this later culture.

3.4.1.2 Ethnography

The time of first European contact came in the late 1700s when Spaniards passed through the area during exploration of coastal and central California scouting for places to establish missions. By this time the primary inhabitants of the study area were the Northern Valley Yokuts (Wallace, 1978a). Population estimates for the eighteenth century put the number of Yokuts living in the San Joaquin Valley at around 41,000. The missions introduced a host of fatal diseases, which along with armed conflict or massacres devastated the Yokut population.

A brief description of Yokuts ethnography is presented here to provide some background for expectations of what to encounter and how to interpret any findings during the course of the project. The Yokuts occupied portions of the San Joaquin Valley from the Tehachapi Mountains in the south to Stockton in the north. Plains Miwok lived to the north. Bay Miwok and other Costanoan peoples lived to the west in the greater East Bay Area. Yokuts territory included the Sacramento River Delta.

The Yokuts relied primarily upon the acorn, supplemented by wild seeds and other plant foods, aquatic resources such as fish, shellfish and turtles, birds and mammals such as deer, antelope, and rabbit (Cook, 1955a; Baumhoff, 1963). Trade had been well established by the time of European contact. The most desirable material for projectile points, obsidian, did not occur within Yokuts territory and had to be obtained through trade to the east as far as the eastern Sierra and to the north in the Napa Valley. The shell used for beads and ornaments came from the coast (Davis, 1974).

Yokuts villages were often located near water ways. Houses were made by excavating semi-circular shallow pits and covering these with tule plants that grew in the marshes associated with the rivers and sloughs. Archaeologists have found that housepit depressions ranged from 3 to 18 meters in diameter (Latta, 1949:87-89; Kroeber, 1925:521-523).

By the end of the first half of the 1800s at least 75 percent of the local Yokuts population had been wiped out by a combination of diseases, movement into missions, and conflict (Cook, 1955b).

3.4.1.3 History

The region that would become San Joaquin County was visited by Spanish expeditions repeatedly in the early 19th century, and men such as Father Narciso Duran and Luis Arguello followed the San Joaquin River at least as far as the Stockton Channel in 1817. Reportedly, Gabriel Moraga had named the river only a few years before their expedition. Today, the name refers not only to the river, but to the region that surrounds it (Kyle, 1990:348). Although Spanish missions were located along the California coast, the effects of their activities were felt far inland. Flowing along the southern border of San Joaquin County is the Stanislaus River. It was the backdrop for a series of encounters between Native Americans and the Mexican soldiers who replaced the Spanish after Mexican independence in 1821. In May and June of 1829, an Indian leader known as Estanislao led his followers in rebellion against the men who now governed California. Estanislao's life spanned a time of dramatic change in California. Although he fought against the Mexican government, he had been educated at Mission San Jose and baptized with the name of a Catholic saint. In the end, Estanislao and his people were defeated by General Mariano G. Vallejo and his men, but the river where he chose to fight still bears his name (Kyle, 1990:349).

The rivers and sloughs of the region proved to be a valuable resource for the men who made their living hunting and trapping to obtain skins for the lucrative fur trade. As in many other locales, the Hudson's Bay Company established a presence in the region well before the time of statehood. French Camp, located four miles south of Stockton, was established in about 1832 to serve as a post for French-Canadian hunters working for the Hudson's Bay Company. The camp was occupied seasonally by the men and their families until 1845. The camp was located along an early travel route and became a stopping point for travelers throughout the region (Kyle, 1990:349).

Men such as Charles M. Weber and William Gulnac, who had passed through French Camp in the early years, would eventually come to settle the town of Stockton and encourage further settlement of the area. Like many settlers in the first half of the 19th century, Gulnac married a Mexican woman and obtained Mexican citizenship. He petitioned for a land grant and he and others received the land that became known as *Rancho del Campo de los Franceses* in January 1844. With a title secured, Weber and Gulnac encouraged others to follow their lead. The years immediately following were difficult for the men and their families. Disease hit the small community and the Native Americans that remained in the region were determined to see them leave (Kyle, 1990:350).

The discovery of gold in 1849 resulted in thousands of miners passing through the Central Valley on their way to the southern mining districts. Nearly 1,000 people had settled in Stockton by the winter of 1849, and the growing community began to serve as a link between San Francisco and the mines. Those who chose not to mine served the miners with freight and staging businesses, moving men and goods throughout the region (Kyle, 1990:350).

Reliable travel routes, both by water and land, became essential to the region's prosperity. When the Mariposa Road became impassable in wet weather, the sandier French Camp route served as the primary thoroughfare for freight and travelers in the region. Twenty-one miles of the Mariposa Road were eventually paved in 1910 and 1911, with the French Camp Road not far behind (Hillman and Covello, 1985:95). Highway 120, now the primary entrance to Yosemite, was originally known as Big Oak Flat Road, and served as another important route through the region. The Atlanta Women's Club building stands at the Five Corners, the intersection of French Camp, Jack Tone, and Lone Tree roads. The structure was built in the 19th century as a Methodist church. The old Protestant Cemetery is not far away on Lone Tree Road (Kyle, 1990:352).

Though Stockton became the county seat, the communities of Manteca, Ripon, and Escalon, situated within the project area, gradually grew in the southern portion of San Joaquin County. In the first years after settlement, Manteca was known as Cowell Station. Joshua Cowell established the first farm on the site of the future town, and made his home at what is now the corner of Yosemite and Main. When the Central Pacific Railroad was constructed through the region in 1873, the track was laid through Cowell's holdings. The future town of Manteca was not the only stop known as Cowell Station, and soon the name was changed to Manteca. By 1910 the population of Manteca had reached only 100 people (Manteca Chamber of Commerce, 2010). Until 1920, Manteca high school students attended school in Stockton. In 1920 they began meeting in temporary accommodations in Manteca. By 1923, the city had constructed a high school of its own. Other local industry included the Manteca Canning Company, organized in 1914, and the well-known Spreckels Sugar Co., which opened its doors only a couple of years later (Manteca Chamber of Commerce, 2010).

The nearby community of Escalon grew up around regional transportation routes as well. It became well-connected to the surrounding area when the San Francisco-San Joaquin Valley Railroad was completed in 1896, and even more so when the Tidewater-Southern came through town in 1915 (Hillman and Covello, 1985:95). Escalon grew largely as the result of efforts by the Swedish Colonization Society, and in 1914, 40 percent of the 650 residents had been born in Sweden (Hillman and Covello, 1985:96). While rail lines linked Escalon to the surrounding area, Ripon got its start as a ferry crossing along the Stanislaus River. Taylor's, Clark's, and Murphy's ferries were established to serve passengers. It soon became a trading center for the wheat and barley being shipped from the Central Valley (Hillman and Covello, 1985:87).

Although the Gold Rush had been an important catalyst for early settlement, the region did not experience significant further growth until water conveyance systems made regular irrigation possible. In 1909 the South San Joaquin Irrigation District was formed, and soon after water began to be diverted from the Stanislaus River. Electricity was available in the area as early as 1911. By 1914 the South San Joaquin Irrigation District had constructed lateral ditches and was able to irrigate every 40-acre parcel in the area (Manteca Chamber of Commerce). Farmers who had primarily looked to grain crops and cattle ranching were now able to successfully grow orchard and nut crops as well.

Growth within the project area and the cities of southern San Joaquin County remained limited throughout the first half of the 20th century. The area retains its rural character today, although it has been impacted by the increased demand for housing and jobs created by the many men and women drawn to northern California during and after World War II. Manteca and the surrounding communities have become a bedroom community for the San Francisco Bay Area.

Much of the natural geography and topography in the project area has been altered in the past 100 years due to modern and historical agricultural practices and residential and commercial development. Additionally, roads, railways, canals, sidewalks, and other infrastructure improvements (*e.g.*, gas, sewer, water, power lines, etc.) have been variously constructed around and adjacent to the electrical distribution system and substation sites.

3.4.1.4 Previous Recorded Cultural Resources

A records search was conducted by staff at the California Historical Resources Information System (CHRIS) Central California Information Center (CCIC) in Turlock, California on November 8, 2010 (CCIC, 2010; CCIC File # 7822 L). This records search was performed as an update to the previous records search for SSJID's Plan to Provide Retail Electric Service in 2005 (CCIC, 2005; CCIC File # 5960 LN). The areas of proposed con-

struction activities are located on six different USGS 7.5-minute quadrangle maps in San Joaquin and Stanislaus Counties including Avena, Escalon, Lathrop, Manteca, Stockton West, and Vernalis. The records searches covered a half-mile corridor centered on all linear areas of proposed construction activities, such as new underground distribution lines, and a quarter-mile radius around isolated centers of construction such as the proposed Jack Tone Substation. Maps on file at the CCIC were reviewed to locate known cultural resources as well as reports of past cultural resources investigations (CCIC, 2005 and 2010).

The records searches (CCIC, 2005 and 2010) also included a review of the National Register of Historic Places, the California Register of Historical Resources, the *California Inventory of Historic Resources* (1976), the *California Historical Landmarks* (1996), and the *California Points of Historical Interest* listing (May 1992 and updates), the Directory of Properties in the Historic Property Data File (HPDF; Office of Historic Preservation current computer list dated 10-05-2010), the Archaeological Determinations of Eligibility (ADOE; Office of Historic Preservation current computer list dated 09-30-2010), the *CALTRANS State and Local Bridge Surveys* (August 2010), the *Survey of Surveys* (1989), and historic USGS and GLO Plats. Other pertinent historic data available at the CCIC included information on the towns of Escalon, French Camp, Manteca and Ripon from *Cities and Towns of San Joaquin County*, by Hillman and Covello (1985), and information on the local public schools from *Public Schools of San Joaquin County 1852-1990*, provided by the San Joaquin County Superintendent of Schools (1991). A search of *Historic Spots in California* edited by Kyle (1990) yielded information on the history of French Camp as well as the Rancho del Campo de los Franceses.

The CCIC records searches indicate that 27 cultural resources have been previously recorded within the areas of expected construction activities. All of the resources are from the historic era including three existing or discontinued railroad lines, three canal segments owned by SSJID, two road segments, an industrial complex, an industrial building, a school and 16 residential structures. The railroad segments have been evaluated and found not eligible for listing on either the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). SSJID's three canals have been evaluated and found to be not eligible for the NRHP. One road segment has been evaluated and found to be not eligible for the NRHP while the other has not been evaluated but will not be impacted by the proposed project. The industrial complex has been evaluated and found to be not eligible for the NRHP. The school, industrial building and the residential structures have not been evaluated but will not be impacted by the proposed project. The known cultural resources are presented in Table 3.4-1 below.

Table 3.4-1. Known Cultural Resources in the Areas of Proposed Construction Activities in 2010

Site	Site Type/Constituents	Cultural/ Temporal Affiliations	National or California Register Status
P-39-2; CA-SJO-250H	Southern Pacific Railroad mainline	Historic	NRHP: Not eligible
P-39-15; P-39-4186; CA-SJO-256H (also P-39-446)	Tidewater Southern Railroad segment	Historic	NRHP: Not eligible; CRHR: Not eligible
P-39-98	Western Pacific Railroad	Historic	NRHP: Not eligible
P-39-102	Segment of Canal R	Historic	NRHP: Not eligible
P-39-103	Segment of Canal	Historic	NRHP: Not eligible
P-39-354	Kaiser Permanente Metals Corporation Magnesium Plant	Historic	NRHP: Not eligible
P-39-394	Segment of French Camp Road frontage road	Historic	Not evaluated

Table 3.4-1. Known Cultural Resources in the Areas of Proposed Construction Activities in 2010

Site	Site Type/Constituents	Cultural/ Temporal Affiliations	National or California Register Status
P-39-4233; P-39-4246	SSJID Main distribution canal	Historic	NRHP: Not eligible; may become contributing element to NRHP district that has not been fully documented; CRHR: Not evaluated
P-39-4612	Residence	Historic	Not evaluated
P-39-4613	Residence	Historic	Not evaluated
P-39-4614	Residence	Historic	Not evaluated
P-39-4621	Residence	Historic	Not evaluated
P-39-4624	Industrial building	Historic	Not evaluated
P-39-4625	Duplex	Historic	Not evaluated
P-39-4626	Residence	Historic	Not evaluated
P-39-4627	Residence	Historic	Not evaluated
P-39-4628	Duplex	Historic	Not evaluated
P-39-4629	Duplex	Historic	Not evaluated
P-39-4630	Residence	Historic	Not evaluated
P-39-4631	Residence	Historic	Not evaluated
P-39-4632	Residence/Restaurant	Historic	Not evaluated
P-39-4633	Residence (demolished)	Historic	Not evaluated
P-39-4635	Residence	Historic	Not evaluated
P-39-4636	Residence	Historic	Not evaluated
P-39-4638	Quadruplex	Historic	Not evaluated
P-39-4646/CA-SLO-316H	Segment of historic French Camp Road	Historic	NRHP: Not eligible
N/A	Castle School	Historic	Not formally recorded or evaluated

Source: CCIC, 2005 and 2010. Note that properties included in the 2005 records search results that are no longer within one-quarter mile of areas proposed for construction in the current project are not included in the table. See also Archaeological Survey and Cultural Resources Assessment, Appendix E of this EIR.

The records search includes any previous cultural resources study that has covered any part of the areas proposed for construction activities in the current project, and it also includes any previous cultural resources study that has covered any portion of the expanded search area. As described above, the expanded search area includes a half-mile corridor centered on all linear segments of proposed construction activities and a quarter-mile radius around any isolated center of proposed construction. The search area is expanded beyond the areas proposed for construction activities in order to provide both specific information on the areas proposed for construction activities and more general information on the project vicinity. This is useful for developing a historical context and understanding of the immediate vicinity so that known cultural resources can be evaluated for their significance and also to assess the likelihood that unknown cultural resources (*e.g.,* buried historic era privies or prehistoric burial grounds) might be discovered during the course of the project. In other words, the expanded search is necessary to develop an understanding of the archaeological sensitivity of the areas proposed for construction activities. This expanded search may also become useful for the future evaluation of alternate areas for construction activities if any of the proposed areas for construction become problematic. Likewise, the expanded search was helpful given the revisions of the 2005 proposed construction areas. Finally, any areas proposed for construction activities that have been investigated within the past 5 years by archaeologists meeting the Professional Qualifications Standards maintained by the Office of Historic Preservation (OHP) do not require further investigation.

The records search results indicate that less than 25 percent of the area where proposed construction activities would occur has previously been surveyed or investigated for cultural resources (excluding William Self Associates' 2005 survey for SSJID's Plan to Provide Retail Electric Service). A total of 65 past investigations touched within the expanded search area. These investigations are listed in Table 3.4-2 below.

Table 3.4-2. Cultural Resource Reports that Include Portions of the Expanded Search Area in 2010

USGS Quad	Report	Author	Date	Report Title
Manteca, Lathrop, Stockton West	SJ-729	Chavez	1981	Cultural Resource Evaluation for the Manteca Wastewater Project
Lathrop	SJ-731	Cleland, Christenson, Woods, & Smith	1987	An Archaeological Overview and management Plan for the Sharpe Army Depot, Lathrop, California
Lathrop	SJ-732	Cleland & Christenson	1987	Appendix B, An Archaeological Overview and Management Plan for the Sharpe Army Depot, Lathrop, California
Manteca	SJ-740	Dondero	1989	Negative Archaeological Survey Report 10-SJO-120 8.4/9.2 Left Turn Pockets at 120/Jack Tone Road Intersection
Lathrop	SJ-815	Orlins	1979	A Cultural Resource Assessment of Sharpe Army Depot, Lathrop, San Joaquin County, California
Lathrop	SJ-1435	Hill	1992	Historic Architecture Survey Report; Track Consolidation and Realignment, Modesto, California
Lathrop	SJ-1450	Napton	1992	Cultural Resources Investigation of the Rouse Property, 80 Acres in Manteca
Lathrop	SJ-1836	Harmon, Bard, Garaventa, Rossa, & Yelding-Sloan	1992	Negative Archaeological Survey Report; Modesto Track Consolidation Corridor, Lathrop, San Joaquin County and Modesto, Stanislaus County, California
Manteca, Lathrop	SJ-1900	Napton	1993	A Preliminary Cultural Resources Investigation of the South Manteca Area Plan, 7,800 Acres
Lathrop	SJ-2245	Building Technology Incorporated & National Park Service	1984	Historic Properties Report – Sharpe Army Depot, Lathrop, California
Manteca	SJ-2262	Napton	1994	Cultural Resources Investigation of the Proposed Tidewater Bikeway Project, City of Manteca
Lathrop	SJ-2515	Caruso & MacDougall	1994	Cultural Resources Investigation of PG&E's Proposed Lathrop Area Increase
Ripon, Manteca	SJ-2528	Gerry & Oglesby	1994	Cultural Resources Assessment of the North Point Annexation Water Treatment Project, City of Ripon
Escalon	SJ-2544	Page	1992	Department of Transportation Negative Archaeological Survey report, District 10, San Joaquin County Route 120, Post Mile 17.0/21.2, Pavement Rehabilitation
Escalon	ST-2545	Page	1992	Department of Transportation Negative Archaeological Survey report, District 10, Stanislaus County Route 120, Post Mile 0.0/5.9, Pavement Rehabilitation
Manteca, Ripon	SJ-2759	Hatoff, Voss, Waechter, Wee, and Bente	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project
Lathrop	SJ-2936	Eidsness	1996	Archaeological and Architectural Inventory and evaluation for the DDJC-Sharpe Site, San Joaquin County, California
Manteca	SJ-3061	Levy	1995	Negative Archaeological Survey Report (10-SJO-99) Seismic Retrofit of Two Bridges on State Route 99 at French Camp Road
Manteca	SJ-3103	Derr	1997	Pacific Bell Mobile Services: 3668 East French Camp Road, Manteca
Manteca	SJ-3116	Derr	1997	Pacific Bell Mobile Services: 11230 East Venture Way, Manteca

Table 3.4-2. Cultural Resource Reports that Include Portions of the Expanded Search Area in 2010

USGS Quad	Report	Author	Date	Report Title
Lathrop	SJ-3141	Napton	1998	Cultural Resources Investigations of the Proposed Delicato Intertie Project
Manteca	SJ-3149	Levy	1997	Section 106 Checklist/Memo to File, Changeable Message System
Manteca	SJ-3362	City of Manteca	1994	Historic Property Survey Report – Proposed Tidewater Bikeway Project in the City of Manteca
Manteca	SJ-3653	Wooten	1999	Archaeological Survey
Avena, Manteca	SJ-3654	Wooten & Wulf	1999	Archaeological Survey Report for the Proposed Road Rehabilitation and Shoulder Widening, on California State Highway 120 Between Jack Tone Road and Escalon
Avena	SJ-3802	Jensen	1999	Archaeological Inventory Survey, Ripon-Escalon Electrical Transmission Line Project, c. 11.5 Mile Corridor near Escalon and Ripon
Avena	SJ-3847	Wulf & Wooten	1999	Department of Transportation Supplemental Negative Archaeological Survey Report
Manteca	SJ-3995	Nelson	2000	Cultural Resources Survey for the Level 3 Communications Long Haul Fiber Optics Project; Segment WS04: Sacramento to Bakersfield
Stockton East and West	SJ-4029	Jensen	2000	Archaeological Inventory Survey: Proposed 450 Acre Neilsen Industrial Park Project Area, Stockton, San Joaquin County, California
Lathrop	SJ-4161	Peak & Associates	2004	Cultural Resource Overview for the Lathrop road UPRR Grade Separation Project, City of Lathrop, California
Avena, Manteca	SJ-4203	Wooten	2000	Historic Property Survey Report for a Proposed Road Rehabilitation on State Highway 120 between Jack Tone Road and the City of Escalon, San Joaquin County, California
Avena, Manteca	SJ-4204	Fisher	2000	Historical Architectural Survey Report for a Road Improvement/ Widening Project on State Route 120 between Jack Tone Road and the City of Escalon, San Joaquin County
Manteca	SJ-4216	Keefe	2004	Department of Transportation Negative Archaeological Survey report: 10-San Joaquin-5 and 99, CU 10-171, EA 10-3A9001, Installation of Changeable Message Signs and Traffic Management Devices
Manteca	SJ-4219	Keefe	2000	Department of Transportation Historic Property Survey Report, Widen Existing Roadway and Install Traffic Signals
Manteca	SJ-4564	Billat	2001	Nextel Communications Wireless Telecommunications Service Facility – San Joaquin County, CA-1817D/246 Elm Ave., Manteca
Manteca	SJ-4599	Billat	2001	SBA Communications Wireless Telecommunications Service Facility – San Joaquin and Stanislaus Counties, California: North Ripon, 1230 Colony Rd., Ripon
Manteca	SJ-4662	Billat	2000	Nextel Communications Wireless Telecommunications Service Facility
Manteca, Lathrop	SJ-4786	Windmiller & Napoli	2002	City of Manteca – General Plan Update, Background Reports: Archaeological Resources, Historical Resources, Records Search Results
Escalon	SJ-4879	Francis	2002	Historic property Survey Report (and) D.O.T. negative Archaeological Survey Report for River Road Bridge (29C-316) at South San Joaquin Irrigation District Main Distribution Canal
Escalon	SJ-4883	Baxter	2001	Historic Resource Evaluation Report for the Proposed River Road Bridge No. 29C-316 across South San Joaquin Irrigation District Canal Bridge Replacement Project, Federal Aid Project No, BRLO 5929 (120), San Joaquin County, California

Table 3.4-2. Cultural Resource Reports that Include Portions of the Expanded Search Area in 2010

USGS Quad	Report	Author	Date	Report Title
Escalon	SJ-4884	Baxter	2001	Bridge Evaluation Report for the River Road Bridge No. 29C-316 across South San Joaquin Irrigation District Canal Bridge Replacement Project, Federal Aid Project No, BRLO 5929 (120), San Joaquin County, California
Lathrop	SJ-4896	Windmiller & Napoli	2003	Airport Way-Yosemite Avenue Specific Plan, Background Reports: Archaeological Resources, Historical Resources, Record Search Results
Lathrop	SJ-4901	Windmiller & Napoli	2003	Southwest Manteca Area Specific Plan, Background Reports: Archaeological Resources, Historical Resources, Records Search Results
Lathrop	SJ-5003	Gross	2003	Cultural Resources Assessment for the Lathrop Water Recycling Plant No. 1, Phase I Expansion Project.
Manteca	SJ-5138	McLean & Marvin	1999	Historic Property Survey Report for the Jack Tone Road/State Route 99 Interchange Project in the City of Ripon
Avena	SJ-5170	Love & Tang	2001	Historical Resources Compliance Report: the Burlington Northern and Santa Fe Railway Company San Joaquin Corridor Capacity Improvements Project
Manteca	SJ-5309	Baloian, Baloian & Nettles	2004	Cultural Resources Investigations for the South San Joaquin Irrigation District
Lathrop, Manteca	SJ-5840	Busby	2004	Letter Report: Archaeological Resources – Manteca Properties (9-Parcel project area)
Lathrop	SJ-6064	Cheever & Berryman	2006	Addendum Architectural Evaluation for the DDJC-Sharpe Site, San Joaquin County, CA
Lathrop	SJ-6146	Pacific Legacy, Inc.	1999	Archaeological Monitoring Plan DDJC Sharpe Site
Lathrop	SJ-6147	Eidsness	1998	Historic Preservation Plan for DDJC-Sharpe Site, California
Manteca	SJ-6322	Jensen	2006	Archaeological Inventory Survey, Manteca Annexation Project, c.60 acres adjacent to Union Road and S.R. 120, San Joaquin County, California
Lathrop, Manteca	SJ-6345	SWCA Environmental Consultants	2006	Cultural resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California
Manteca, Stockton East and West	SJ-6355	Kaptain, Gerike, & Matzen	2007	A Cultural and Paleontological Resources Study for the Tidewater Crossing Project, Stockton, San Joaquin County, California
Lathrop	SJ-6506	ECORP Consulting, Inc.	2006	Cultural Resources Survey Report, South Lathrop, North Village, San Joaquin County, California, Project 2006-011
Avena, Escalon, Lathrop, Manteca	SJ-6625	ASI Archaeology and Cultural Resource Management	1998	Cultural Resource Survey, South County Surface Water Project, San Joaquin County, California, South San Joaquin Irrigation District
Manteca	SJ-6894	Siskin & Cox	2008	Cultural resources Inventory report for gas line 108 Replacement Project for Compliance with section 106 of the National Historic preservation Act, City of Manteca, San Joaquin County, CA
Lathrop	SJ-6906	Konzac	2008	A Cultural and Paleontological Resources Study for the Lathrop Road/Union Pacific Railroad Westerly Grade Separation Project
Manteca	SJ-6924	Harris	2008	Cultural Resources Constraints Study for the Replacement of 22 poles on the Manteca No. 1 High Voltage transmission line, San Joaquin & Stanislaus Counties, CA
Lathrop	SJ-6925	Dougherty	2008	Cultural resources Constraints Study for the Replacement of 6 Poles on the Tesla-Saludo-Manteca High Voltage Transmission Line, Stanislaus and San Joaquin Counties, CA

Table 3.4-2. Cultural Resource Reports that Include Portions of the Expanded Search Area in 2010

USGS Quad	Report	Author	Date	Report Title
Lathrop	SJ-6971	Jensen	2009	Archaeological Inventory Survey, Lathrop Arsenic Treatment Plant and Pipeline Project, c.2.3 Mile Linear Corridor and 12-Acre parcel, San Joaquin Co., CA
Avena	SJ-6975	Tang	2009	Historic property Survey Report, San Joaquin Corridor Capacity Improvements, Escalon to Stockton Double Tracking Project
Lathrop	SJ-7063	Jensen	2009	Archaeological Inventory Survey, Gateway Business Park project, San Joaquin County, CA
Manteca	SJ-7214	Travers	2009	Cultural Resources Analysis, Downtown Manteca/CN 1926 1115 West Yosemite Ave., San Joaquin County, Manteca, California
Manteca	SJ-7221	U.S. Department of Transportation, FHA & Caltrans	2010	State Route 99 Manteca Project on State Route 99 from Austin Road Interchange to the Arch Road Interchange 10-SJ-99-PM 4.9/15.0, 10-0E6100 SCH#2009112045 Initial Study with Mitigated Negative Declaration/Environmental Assessment

Source: CCIC, 2005 and 2010. Note that properties included in the 2005 records search results that are no longer within one-quarter mile of areas proposed for construction in the current project are not included in the table. See also Archaeological Survey and Cultural Resources Assessment, Appendix E of this EIR.

All reports refer to San Joaquin County, California, unless otherwise noted.

According to the records search, there are 25 cultural resources that have been recorded within the expanded search area but do not fall within the areas proposed for construction activities, as these are defined in 2010. These are listed in Table 3.4-3 below. Of these 25 resources, all are from the historic period. These resources are included here to provide a historic context for the proposed project.

Table 3.4-3. Historic Properties within Expanded Search Area but Not within the Areas Proposed for Construction Activities in 2010

USGS Quad	Description	National or California Register Status
Avena	P-39-112; P39-445: Atchison, Topeka & Santa Fe Railroad	NRHP: Not eligible
Avena	P-39-4185: Farm	NRHP: Not eligible; CRHR: Not eligible
Avena	P-39-4245: Historic-era telegraph line	NRHP: Not eligible
Escalon	P-39-439: Electrical distribution lines	NRHP: Not eligible
Escalon	P-39-4232: Bridge #29C-316, Old River Road Bridge	NRHP: Not eligible; CRHR: Not evaluated
Lathrop	P-39-133: Sharpe Army Depot Railroad Complex	Not evaluated
Lathrop	P-39-612: Sharpe Army Depot	NRHP: Needs to be reevaluated
Lathrop	P-39-4615: Residence	Not evaluated
Lathrop	P-39-4616: Duplex	Not evaluated
Lathrop	P-39-4618: Industrial Bldg.	Not evaluated
Lathrop	P-39-4619: Residence	Not evaluated
Lathrop	P-39-4622: Residence	Not evaluated
Lathrop	P-39-4623: Residence	Not evaluated
Lathrop	P-39-4637: Residence	Not evaluated
Manteca	P-39-95: Segment of Canal T	NRHP: Not eligible
Manteca	P-39-99: Canal T lateral and drainage canal	NRHP: Not eligible
Manteca	P-39-111: East Union Cemetery	NRHP: Eligible under Criterion A
Manteca	P-39-364: Cutler Salmon House	Not evaluated; existing Monument of the Native Daughters of the Golden West on property
Manteca	P-39-4378: Residence	NRHP: Not eligible

Table 3.4-3. Historic Properties within Expanded Search Area but Not within the Areas Proposed for Construction Activities in 2010

USGS Quad	Description	National or California Register Status
Manteca	P-39-4380: Residence	NRHP: Not eligible
Manteca	P-39-4381: Residence	NRHP: Not eligible
Manteca	P-39-4400: Residence	NRHP: Not evaluated; CRHR: Not eligible
Manteca	P-39-4401: Residence	NRHP: Not evaluated; CRHR: Not eligible
Manteca	P-39-4402: Residence	NRHP: Not evaluated; CRHR: Not eligible
Manteca	Atlanta Women's Club Building	Not formally recorded or evaluated
Manteca	Protestant Cemetery	Not formally recorded or evaluated

Source: CCIC, 2005 and 2010. Note that properties included in the 2005 records search results that are no longer within one-quarter mile of areas proposed for construction in the current project are not included in the table. See also Archaeological Survey and Cultural Resources Assessment, Appendix E of this EIR.

The list of properties within the vicinity but not within the areas of proposed construction activities presents a context that includes a historic era farm, residences, an industrial building, an army depot, cemeteries, railroads, canals, a bridge, telegraph and electrical lines. None of these resources within the quarter-mile of the project have been listed on either the NRHP or the CRHR. Only one, the East Union Cemetery, is considered eligible for listing on the NRHP.

3.4.1.5 Results of Native American Heritage Commission Consultation

The Native American Heritage Commission (NAHC) was contacted on December 2, 2010 with a Sacred Lands File Request Form describing the project and requesting that the NAHC provide information on any known Native American cultural resources in the areas of proposed construction activities, as well as a list of interested individuals and organizations who may have knowledge of cultural resources in the mapped area. A response was received on November 12, 2010 stating that there are no known and recorded Native American cultural resources in the immediate project vicinity. The NAHC provided a list of nine individuals/organizations with knowledge of and interest in the project area. (This correspondence is on file at the William Self Associates, Inc. (WSA) office in Orinda, California.)

3.4.1.6 Results of Field Survey

Archaeologists from the project team with qualifications meeting or exceeding the Professional Qualifications Standards of the California Office of Historic Preservation (OHP) conducted a field survey of the areas proposed for construction activities October 26 and 27, 2005. Specific field survey results were documented in Appendix C of the 2006 Final EIR. Since the publication of the 2006 Final EIR, the design of the plan to provide retail electric service has been revised, and the revised construction plan is considered in this Subsequent EIR.

To capture the changes in retail electric service project design since the publication of the 2006 Final EIR, a field reconnaissance survey was conducted on November 19 and 22, 2010 by WSA. No new cultural resources were observed during field reconnaissance. A detailed description of the 2010 field survey identifying cultural resources for specific elements of the retail electric service plan is found in Farnsworth (2010), which is provided as Appendix E of this Subsequent EIR.

Archaeologists performed intensive surveys in 2005 and 2010 in the areas that would experience ground disturbance associated with the removal and installation of new electric distribution poles, installation of underground lines by trenching, and construction of the proposed Jack Tone Substation. Areas that

would not experience ground disturbance (*e.g.*, reconductoring of existing lines) or areas that had been surveyed since 1995 by qualified professionals meeting the Professional Qualifications Standards of the OHP were not resurveyed.

Wherever possible, a 50-foot corridor was surveyed under existing distribution lines with proposed modifications, along proposed new lines and along proposed underground routes. Along roadways and railways, archaeologists walked the corridor at 10-foot intervals examining exposed ground surface for evidence of prehistoric and historic debris that could indicate the presence of buried cultural deposits. The 50-foot corridor often extended into the paved roadways on one side and into fenced private yards on the other and as a practical matter, the actual surveyed corridor was narrower than the 50-foot planned survey corridor. Paved asphalt roadways are dangerous to survey on foot and yield no useful information for the cultural resource specialist unless they themselves qualify as a historic resource. SSJID has not identified a need to alter private buildings or structures as a result of the project, so the properties of private landowners were not surveyed, and private yards and residences were not trespassed upon beyond the public utility easements (PUE) for the survey.

Prehistoric evidence for occupation includes but is not limited to groundstone, flaked stone, concentrations of charcoal and shell, animal bone, fire-affected rock, and even human bone. Evidence that might indicate a historic resource includes but is not limited to foundations, ditches, fence lines, non-native vegetation, nails, bricks, glass, metal, or ceramics whose manufacture appears to be older than 45 years.

Archaeologists also made note of any standing structures, buildings, railroads, major canals, roads, or other built or landscape features within the 50-foot corridor. Built features were noted but not recorded, as the construction for the electric distribution system would be limited to the PUE and the existing roadbed and would not disturb any existing structures or buildings other than the distribution facilities already in place. Ten segments of six previously recorded sites were located in the survey area (Table 3.4-4). All previously recorded segments of these sites have been recommended as not eligible for the National Register, primarily due to lack of historic integrity. All of the site segments encountered in the 2010 survey also lack historic integrity and are recommended not eligible for the National Register.

Table 3.4-4. Previously Recorded Cultural Resources in the 2010 Survey Area

Site	Site Type/Constituents	Cultural/ Temporal Affiliations	National or California Register Status*	Number of Segments in Survey Area
P-39-2; CA-SJO-250H	Southern Pacific Railroad Mainline	Historic	NRHP: Not eligible	2
P-39-15; P-39-4186; CA-SJO-256H (also P-39-446)	Tidewater Southern Railroad	Historic	NRHP: Not eligible; CRHR: Not eligible	2
P-39-102	Canal R	Historic	NRHP: Not eligible	1
P-39-354	Kaiser Permanente Metals Corporation Magnesium Plant	Historic	NRHP: Not eligible	1
P-39-4233; P-39-4246	SSJID Main Distribution Canal	Historic	NRHP: Not eligible; may become contributing element to NRHP district that has not been fully documented; CRHR: Not evaluated	1
P-39-4646/CA-SLO-316H	Historic French Camp Road	Historic	NRHP: Not eligible	3

*CCIC, 2005 and 2010.
Source: Farnsworth, 2010. See also Archaeological Survey and Cultural Resources Assessment, Appendix E of this EIR.

The majority of the proposed modifications follow existing distribution lines that parallel existing roadways. Poles are set back from roadway curbside anywhere from less than 5 feet to 15 feet. The ground surface visibility along road shoulders ranges from excellent to poor depending on the ground cover (*i.e.*, vegetation, roadside trash, and gravel). Within towns, roadside shoulders are covered with cement sidewalks and some landscaping. Outside of towns, roadside shoulders are unpaved and kept relatively clear with the exception of occasional gravel, sparse weedy vegetation, and modern trash.

No concentrations of prehistoric or historic debris were observed on the ground. Irrigation features occurred sporadically along the routes outside of town and usually consisted of small board-formed cement boxes housing cement and metal pipes, isolated metal and/or cement standpipes and valves used to service active orchards, and occasionally, cement-lined canals.

A number of residences appear to have been constructed prior to 1965. The majority of these have lost any integrity due to modifications of the original structure. Non-native vegetation can be found within the 15-foot PUE corridor and includes olive trees, fruit trees, ivy covered fences, manicured lawns, and other species commonly used in landscaping.

To investigate historic electric distribution facilities that may be affected by the project, a field reconnaissance survey was conducted of all existing power poles that are proposed for new underbuild lines on November 19, 2010 by archaeologists from WSA. This encompassed about 12 miles of pole line. The dates for poles with date nails were recorded, and for those without a date nail, an estimate was made as to whether they were less than 20 years old, between 20 and 45 years old, or older than 45 years. Of the 299 poles surveyed there are 37 poles, representing 12.4% of the total, that are 45 years or older (including poles estimated to be older than 45 years). There are only two locations where three or more adjacent poles are over 45 years old. On French Camp Road north of Prescott there are 4 poles in a row covering 0.1 miles, while on Lone Tree Road between Sexton and Brennan there are 5 poles in a row covering 0.27 miles. In addition to the large numbers of poles that are younger than 45 years, the lines and insulators throughout the survey area, as well as most of the above-ground structure supporting them, are younger than 45 years even on poles that are older.

3.4.1.7 Applicable Federal and State Regulations

The following regulations from the State Public Resources Code and the State CEQA Guidelines apply:

- Title 14, Public Resources Code (PRC), Section 5020.1 defines terms, including the following: (f) "DPR Form 523" means the Department of Parks and Recreation Historic Resources Inventory Form; (i) "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California; (j) "local register of historical resources" means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution; (l) "National Register of Historic Places" means the official federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture as authorized by the National Historic Preservation Act of 1966 (Title 16 United States Code Section 470 *et seq*.); (q) "substantial adverse change" means demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired.
- Title 14, PRC, Section 5024.1: establishes a California Register of Historic Places; sets forth criteria to determine significance; defines eligible properties; lists nomination procedures.

- Title 14, PRC, Section 5097.5: establishes that unauthorized removal of archaeological resources on sites located on public lands is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, or public corporation, or any agency thereof.
- Title 14, PRC, Section 5097.98: prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn; sets penalties.
- Title 14, PRC, Section 21083.2: establishes that the CEQA lead agency determines whether a project may have a significant effect on unique archaeological resources. If a potential for damage to unique archaeological resources can be demonstrated, such resources must be avoided; if they can't be avoided, mitigation measures shall be required. This section also: discusses excavation as mitigation; discusses cost of mitigation for several types of projects; sets time frame for excavation; defines "unique and non-unique archaeological resources," provides for mitigation of unexpected resources.
- Title 14, PRC, Section 21084.1: establishes that a project may have a significant effect on the environment if it causes a substantial change in the significance of a historic resource; the section further describes what constitutes a historic resource and a significant historic resource.
- Title 14, Penal Code, Section 622.5: establishes that anyone who damages an item of archaeological or historic interest is guilty of a misdemeanor.
- CEQA Guidelines, Section 15064.5: specifically addresses effects on historic and prehistoric archaeological resources, in response to problems that have previously arisen in the application of CEQA to these resources. This section outlines a definition of "historical resources" that includes, but is not limited to, resources listed in, or eligible for listing in, the California Register of Historical Resources (per PRC, Section 5024.1, Title 14 CCR, Section 4850 *et seq*.). CEQA Guidelines Section 15064.5 also establishes in subsection (b)(1) that a "Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."
- CEQA Guidelines contain provisions regarding the preservation of historic and prehistoric cultural sites. Section 15126.4, subsection (b) directs public agencies to "avoid damaging effects" on an archaeological resource whenever feasible. If avoidance is not feasible, the importance of the site shall be evaluated to determine impact significance and develop mitigation measures.

3.4.2 Environmental Impacts and Mitigation Measures

3.4.2.1 Significance Criteria

In considering impact significance under CEQA, the significance of the resource is determined first. The State CEQA Guidelines Section 15064.5 states: Generally, a resource shall be considered by the lead agency to be historically significant if the resource meets the following criteria for listing on the California Register of Historical Resources (PRC Section 5024.1, Section 4852):

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;

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

CEQA Guidelines Section 15064.5 also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under PRC Section 5097.98.

Impacts on unique archaeological resources are considered under CEQA, as detailed under PRC Section 21083.2. A unique archaeological resource implies that an archaeological artifact, object or site meets one of the following criteria:

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

If an archaeological site does not meet the criteria for inclusion on the CRHR but does meet the definition of a unique archaeological resource as outlined in the Public Resources Code (Section 21083.2), it may be treated as a significant historical resource. Treatment options under PRC Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under PRC Section 21083.2 include excavation and curation, or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more criteria for defining a "unique archaeological resource").

For historic buildings, Section 15064.5(b)(3) of the CEQA Guidelines indicates that a project that follows the Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), shall mitigate impacts to a level of less than significant. Potential eligibility also rests upon the integrity of the resource. Integrity is defined as the retention of the resource's physical identity that existed during its period of significance. Integrity is determined considering the setting, design, workmanship, materials, location, feeling and association of the resource.

A non-unique archaeological artifact, object, or site is one that does not meet any of the above criteria. Impacts on non-unique archaeological artifacts, objects or sites receive no further consideration under CEQA.

Archaeological site evaluation assesses the potential of each site to meet one or more of the criteria for "significance" or "uniqueness" based upon visual surface and subsurface evidence (if available) at each site location, information gathered during the literature and record searches, and the researcher's knowledge of and familiarity with the historic or prehistoric context associated with each site. Potential impacts on identified cultural resources need only be considered if the resource is "significant" or "unique" under the provisions of CEQA cited above.

The following significance threshold for cultural resources was derived from Appendix G of the State CEQA Guidelines. The proposed project would have a potentially significant effect on cultural resources if it would:

- Cause a substantial adverse change in the significance of historical resources (as defined in CEQA Guidelines §15064.5) or unique archaeological resources (as defined in PRC 21083.2), or disturb human remains.

The potential to destroy any unique paleontological resource or site is discussed in Section 3.5, Geology, Soils, and Paleontology, of this Subsequent EIR.

3.4.2.2 Impacts and Mitigation

The following section analyzes the impacts to cultural resources of the four separate actions:

- Sphere Plan and Municipal Services Review,
- Proposed Expanded Sphere of Influence,
- Proposed 80-acre annexation, and
- Updated Plan to Provide Retail Electric Service.

Sphere Plan and Municipal Services Review

This analysis discusses the potential impacts associated with the Sphere Plan and MSR that can be identified during this programmatic review, and separate discussions follow disclosing the impacts related to the other adoption and approval actions: the proposed SOI expansion, proposed 80-acre annexation, and plan to provide retail electric service. Projects that would occur with or without the adoption and approval of the Sphere Plan and MSR, such as the Water Transfer Renewal Project, Phase II of the South County Water Supply Program (SCWSP), the supply of drinking water to Escalon and Ripon, and the Division 9 Project were subject to or will in the future be subject to separate environmental review. These infrastructure improvements are analyzed as part of this EIR as foreseeable projects for potential cumulative impacts (Section 5, Cumulative Impacts). Improvements associated with the proposed retail electric service plan that appear in the Sphere Plan and MSR are analyzed below as part of the Updated Plan to Provide Retail Electric Service.

The Sphere Plan and MSR describe a variety of infrastructure investments necessary to provide an adequate level of service within the SOI. The analysis of the Sphere Plan and MSR discusses the general types of site-specific impacts that could occur. However, no construction activities are proposed for approval with the potential adoption of the Sphere Plan and MSR. Any construction related to these infrastructure investments would occur with or without the adoption and approval of the Sphere Plan and MSR.

The MSR, technically, is not a plan that commits SSJID to any particular course of action; rather, it is a review of services provided within a particular area, with the idea that it will provide information useful to LAFCo as it makes decisions. The following presents a general discussion of whether the service requirements under the Sphere Plan and MSR would create an adverse effect on cultural resources. The analysis of the Sphere Plan and MSR is a programmatic environmental assessment.

Impact 3.4-1: Cause a substantial adverse change in the significance of historical resources or unique archaeological resources, or disturb human remains

Above-Ground Historical and Built-Environment Cultural Resources

While the Sphere Plan and MSR describe the maintenance and improvement of infrastructure, adopting the Sphere Plan and MSR would not involve alteration or demolition of any historic buildings, structures, railways, canals, or roads. As part of SSJID providing previously approved services, installation of SSJID facilities occurs in publicly owned property interests, including existing public utility easements (PUEs) or exist-

ing rights-of-way (ROWs). SSJID avoids altering any architectural qualities of existing buildings such as residences that convey historical significance. Some work occurs within roadways if the public utilities easement, located in the first 15 feet from curbside of properties that face public roads, is already filled to capacity with buried utilities, as in some areas of downtown Manteca. Construction in the vicinity of railways and roads is limited to overhead crossings (for railways) or boring under the railroad or road right-of-way. As the infrastructure maintenance and improvements activities described in the Sphere Plan and MSR occur under the SSJID's current activities, adoption of the Sphere Plan and MSR would not result in any changes to above-ground cultural resources. No impacts would occur.

Buried Historical and Archaeological Cultural Resources

Similarly, although infrastructure maintenance and improvements activities are described in the Sphere Plan and MSR, no construction proposal or change in action would occur. Activities related to existing and previously planned services are located on previously disturbed areas. To date, no buried cultural resources (*e.g.*, historic era privies, trash dumps, foundations, filled-in wells, or prehistoric era groundstone, flaked stone, worked bone and shell, concentrations of charcoal, ash, shell, or animal bone, or fire affected rock) have been recorded during SSJID operation and maintenance activities. As the infrastructure maintenance and improvements activities that would occur under the Sphere Plan and MSR already occur under the SSJID's current activities, adoption of the Sphere Plan and MSR would not result in any changes to below-ground cultural resources, and no impacts would occur.

Mitigation for Impact 3.4-1

No mitigation is required.

Proposed Expanded Sphere of Influence

The following presents a general discussion of whether the proposed expanded sphere of influence (SOI) would create an adverse effect to cultural resources. This analysis is a programmatic assessment of the proposed SOI expansion described in Section 2.3.2.

The expanded SOI would make the SOI boundaries consistent with the Manteca city limits. This proposed SOI requires no construction or operation activities. Because there would be no construction or operation activities related to the SOI, the proposed SOI would not result in ground-disturbing activity that may damage previously cultural resources.

Proposed 80-Acre Annexation

The following presents a discussion of whether the 80-acre annexation would create an adverse effect to cultural resources. This analysis is a project-level assessment of the annexation. This annexation has been proposed as a separate action wholly independent of and for distinctly different reasons than SSJID's proposed plan to provide retail electric services, and it is not dependent in any way upon SSJID's separate proposal to provide such electric services.

The proposed 80-acre annexation is described in Section 2.3.3 and would be located at the intersection of French Camp Road and Austin Road. Minor construction would be required to install a sprinkler sump from the existing SSJID irrigation facilities to the 80-acre property. This construction would be limited in nature and is expected to take one month or less to complete. Construction would occur only at the existing SSJID District Lateral Q or existing Lateral Qk.

Impact 3.4-1: Cause a substantial adverse change in the significance of historical resources or unique archaeological resources, or disturb human remains

Any potential to impact cultural resources during installation of the sprinkler sump would be limited to as yet undiscovered below ground cultural deposits. It is possible that buried cultural deposits could be encountered during ground disturbing project activities required to install a sprinkler sump. However, the ground disturbance would be minor and would occur in an area previously disturbed by agriculture activities and adjacent to an existing canal. Because the ground disturbance would be minor and would occur at areas previously mechanically disturbed, impacts to undetected cultural resources would be adverse but less than significant.

Mitigation for Impact 3.4-1

No mitigation is required.

Updated Plan to Provide Retail Electric Service

The following presents a discussion of whether the updated plan to provide retail electric service would create an adverse effect related to cultural resources within the SSJID territory. This analysis is a project-level assessment of the updated plan.

SSJID has no immediate plans to annex areas within Area "D" or Area "E" (Figure 2-2 in the Project Description) or to provide retail electric service in these areas. These areas are outside the current SSJID territory, but inside its current and proposed SOI. If the current proposal for retail electric service is approved and if the areas are annexed in the future, SSJID would likely expand this service to Area "E" within 10 years and to Area "D" within 30 years. Foreseeable future impacts from this possible expansion of SSJID's retail electric service are addressed generally in the discussion below of programmatic impacts. The mitigation measure that applies to the proposal for retail electric service would likely also apply to the future expansion of electric service within the SOI. Approval of the proposed project, however, would not commit SSJID to exactly these mitigation measures for possible future annexations because considerations may arise within 30 years that would make the near-term measures obsolete or outdated. Specific proposals for annexations or service beyond SSJID's existing territory may need to undergo the project-level environmental review process and other required approvals should SSJID decide to pursue such an annexation or service expansion in the future.

Impact 3.4-1: Cause a substantial adverse change in the significance of historical resources or unique archaeological resources, or disturb human remains

Recent surveys of areas of where ground disturbance would be required, did not identify any historical resources or unique archaeological resources that would be affected by the project. Even if new resources are discovered, implementing the retail electric service plan would not involve demolition, destruction, relocation, or alteration of any historical resources (as defined in CEQA Guidelines Section 15064.5) such that their significance would be substantially adversely changed.

Above-Ground Historical and Built-Environment Cultural Resources

The retail electric service plan would not involve alteration or demolition of any historic buildings, structures, railways, canals, or roads.

Installation of overhead or underground electricity distribution lines would occur in existing public utility easements (PUEs) or existing rights-of-way (ROWs), and outside private property boundaries. Any archi-

tectural qualities of existing buildings such as residences that convey historical significance would not be damaged or materially altered. Some work may occur within roadways if the public utilities easement, located in the first 15 feet from curbside of properties that face public roads, is already filled to capacity with buried utilities, as in some areas of downtown Manteca. Construction in the vicinity of railways and roads would generally be limited to overhead crossings (for railways) or boring under the railroad or road right-of-way.

Only some of the proposed construction related to the retail electric service plan would have the potential to impact above-ground cultural resources. These include installation of new overhead lines, installation of underground cables, the construction of the proposed Jack Tone Substation, and the long-term improvements needed to respond to the customer base as it experiences future growth and development within the SOI. Some new underground and overhead lines would be installed in places where there previously were none, and some existing overhead lines would have poles replaced or new poles installed along the existing line. Trenches for undergrounding would normally be excavated within the PUE, and trenching would not come within 12 inches of any existing fence, wall, or outbuilding associated with an adjacent property. A survey of about 12 miles of line proposed for new underbuild found that only 12.4% of the poles are, or may be, over 45 years of age, and only two segments had any number of consecutive old poles. Even in these segments, the wires, conductors and parts of the above-ground structure were younger than the poles. Therefore, neither of these line segments retain historic integrity. Overall, none of the lines proposed for underbuild retain integrity. Therefore, these line segments are not historically significant and there is no potential to adversely impact the physical condition of existing above-ground cultural resources. The only potential to adversely impact existing above-ground cultural resources would arise from a change in the visual setting of the property due to the addition of taller poles or new poles and new overhead lines, depending on location. Since overhead power lines have been present on the southern San Joaquin County landscape since 1911, and there are no built resources older than this around the areas of proposed construction, the presence of new line segments would not adversely affect the aesthetics of historic residences. Because ground disturbing activities associated with this project would be limited to railroad and road right of ways and the PUE, a formal recording and CRHR evaluation of any above-ground cultural resources was deemed unnecessary.

A detailed description of the 2005 field survey results identifying above-ground cultural resources for specific elements of the retail electric service plan is in Appendix C of the 2006 Final EIR. A detailed description of the 2010 field survey results identifying above-ground cultural resources for specific elements of the retail electric service plan is found in Farnsworth (2010), which is provided as Appendix E of this Subsequent EIR. Above-ground activities foreseeable under the proposed retail electric system modifications would not cause any adverse impacts to above-ground cultural resources.

Providing retail electric services over the 30-year time frame of the SOI and building the necessary long-term improvements to meet the needs of future growth and development within the SOI are analyzed at a programmatic level, and these long-term improvements needed to respond to the customer base as it experiences future growth and development within the SOI could impact above-ground cultural resources. Damage to previously unidentified above-ground historical resources would be a potentially significant impact of long-term improvements. However, SSJID's would take precautions to avoid any substantial adverse changes to the significance of historical resources. Mitigation Measure 3.4-1a outlines procedures for handling any unexpected sensitive resources. With the implementation of this mitigation measure, impacts to above-ground cultural resources would be less than significant.

Buried Historical and Archaeological Cultural Resources

Any potential for the project to impact cultural resources would be limited to as yet undiscovered below ground cultural deposits. It is possible that buried cultural deposits could be encountered during ground disturbing project activities including trenching for the installation of underground cables, during ground disturbance associated with the replacement or installation of new poles, or ground disturbance associated with the construction of the new substations.

As described above no buried cultural resources (*e.g.*, historic era privies, trash dumps, foundations, filled-in wells, or prehistoric era groundstone, flaked stone, worked bone and shell, concentrations of charcoal, ash, shell, or animal bone, or fire affected rock) have been recorded in the areas of proposed construction activities to date. The likelihood of activities associated with the project to encounter buried prehistoric deposits is low based on distance of activities from the San Joaquin River and the Walthall Slough, local areas of high archaeological sensitivity. All recorded prehistoric resources within southern San Joaquin County are located near these water sources and fall outside of the expanded study area for the areas of proposed construction activities. The likelihood of activities associated with the project to encounter intact buried historic deposits is low as the project follows roadways and railways established in the historic era and avoids cutting across portions of town that were established more than 45 years ago and therefore might have the potential for intact buried deposits. Buried historic resources such as privies and dumps are typically located towards the rear fence line or near the rear or side of residential structures or small commercial buildings. The project does not pass through any such areas. A detailed description of the 2010 field survey results identifying cultural resources for specific elements of the retail electric service plan is found in Farnsworth (2010).

Unknown and potentially significant cultural resources could exist below ground surface. Although the potential for discovering subsurface historic deposits during construction of the proposed retail electric system modifications is low, the potential still exists for the discovery of intact cultural resources below ground. Activities that result in ground disturbance, no matter how shallow, may damage previously undetected cultural resources. In accordance with State law, if any cultural resources or deposits are found during construction, work would be required to stop and the lead agency (San Joaquin County, Community Development Department) and a qualified professional archaeologist would need to be consulted to determine the importance and appropriate treatment of the find. Mitigation Measure 3.4-1a, which is identified below, would establish a procedure for inadvertent finds.

Destruction of potentially significant below-ground cultural resources, particularly buried historical resources or unique archaeological resources, without mitigation would be a potentially significant impact. However, SSJID's proposed construction would avoid any substantial adverse changes to the significance of historical resources, and SSJID would take precautions to minimize and mitigate potential impacts to unique archaeological resources. Mitigation Measure 3.4-1a formalizes these procedures and also includes procedures for halting work if human remains are discovered. With the implementation of this measure, impacts to buried historical and unique archaeological resources would be less than significant. .

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" (Figure 2-2 in Chapter 2, Project Description) would be similar to these impacts described for the proposed project; however, there are no plans for this possible expansion currently under consideration. Mitigation Measure 3.4-1a or a similar measure developed during the project-level environmental review process would likely also apply to these future, programmatic impacts.

Mitigation for Impact 3.4-1

3.4-1a **Develop and Implement a Cultural Resources Treatment Plan (CRTP).** Prior to the start of ground disturbance for the plan to provide retail electric service, SSJID shall develop a CRTP for dealing with potential cultural resources where new construction and/or modification of existing facilities require ground-disturbing activities. The CRTP shall identify general and specific measures to minimize potential impacts to unexpected sensitive cultural resources and human remains. Copies of the CRTP shall reside with the Cultural Resource Specialist (CRS), each monitor, and the SSJID's on-site construction manager.

The CRTP shall also include procedures for the following:

- *SSJID shall obtain the services of a Cultural Resources Specialist*. Prior to the start of ground disturbance for the plan to provide retail electric service, SSJID shall hire a professional cultural resources specialist (CRS) whose training and background conform to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61 (36 C.F.R., part 61). The CRS shall manage all monitoring, mitigation, curation and reporting activities, and have the authority to halt construction in the immediate vicinity of buried archaeological materials. SSJID shall ensure that the CRS makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that may be impacted by the proposed project. The CRS and other discipline specialists shall meet the Professional Qualifications Standards mandated by the California Office of Historic Preservation (OHP).

- *The CRS shall evaluate all project footprints for potential cultural resources and recommend avoidance, minimization, and mitigation measures as appropriate.* SSJID shall provide the CRS with maps and drawings showing the footprints of all linear facility routes, all access roads, and all laydown areas for proposed projects that will have the potential to impact above-ground cultural resources or involve ground disturbing activities at least 60 days in advance of proposed construction activities. CRS shall determine whether there are any previously recorded cultural resources within the project area or immediately adjacent to it, and whether the project area has been previously surveyed for cultural resources. If the project area has not been previously surveyed, the CRS shall ensure that the area is surveyed in advance of proposed construction activities. If cultural resources are detected either prior to or during construction, they shall be identified and evaluated against the criteria set forth in CEQA Guidelines section 15064.5, subdivision (a), in order to determine whether they are "historical resources" and the criteria set forth under Public Resources Code section 21083.2, subdivision (g), in order to determine whether they qualify as "unique archaeological resources." If the resources are determined not be either historical resources or unique archaeological resources, then no further consideration of these resources is required. If the cultural resources, including Native American burials, are determined to be either historical resources or unique archaeological resources, the CRS shall advise SSJID of such determinations and shall recommend appropriate measures to protect or mitigate impacts to the resource, such as avoidance through project redesign, monitoring to avoid unintended impacts, and/or archaeological data recovery to reduce the impact to a less than significant level. SSJID shall carry out these recommendations to the extent feasible; in no event shall SSJID permit an identified

historical resource to be impacted to such a degree as to cause a substantial adverse change in the significance of the resource (*e.g.,* through demolition or destruction of the resource). See Cultural Resources Mitigation and Monitoring Plan (CRMMP) below.

- *SSJID shall minimize ground disturbance to the extent feasible.* SSJID shall minimize the areal and vertical impacts of ground disturbing activities associated with construction and/or modification of existing facilities in order to limit potential impacts to unexpected historical resources or unique archaeological resources under the provisions of CEQA, including Native American burials.
- *Construction personnel shall be trained in proper identification and treatment of cultural resources, particularly buried resources.* SSJID shall provide Worker Environmental Awareness Program (WEAP) training to all new workers involved in the construction and/or modification of existing facilities that require ground-disturbing activities within their first week of employment. The training shall be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS shall be available (by telephone or in person) to answer questions posed by employees. WEAP training shall be repeated annually for all workers involved in the construction and/or modification of existing facilities that require ground-disturbing activities.
- *SSJID shall ensure immediate reporting of any discovery of buried archaeological materials.* SSJID shall ensure that anyone discovering buried archaeological materials during ground-disturbing activities (Discovery) shall immediately report the Discovery to their supervisor, who is responsible for reporting it to the construction supervisor. In the event of Discovery, construction shall be halted and the CRS shall either evaluate, in person, on the project site, whether the Discovery constitutes an historical resource or unique archaeological resource or shall supervise the evaluations by an appropriate cultural resources technical specialist of the historical significance of the discovery, also in person, on the project. Archaeological materials may include, but are not limited to, such items as whole or fragmentary flaked or ground stone tools, stone flaking debris, discolored, fire-altered rock, animal bone, charcoal, ash, discolored, burned earth, rocks and minerals not common to the project site, and fragments of ceramics, glass, or metal. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor, in a manner agreed to by the CRS. In the event that historical resources or unique archaeological resources are found, or impacts to such resources can be anticipated, construction shall be halted or redirected in the immediate vicinity of the Discovery so that the resource is protected from further impacts or other feasible mitigation can be formulated.
- *The CRS shall ensure that construction is immediately halted should anyone discover human remains*. In the event of the Discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of 100 feet of the find shall halt immediately, the area of the find shall be protected, and the San Joaquin County Coroner shall be immediately notified of the find and the provisions of PRC Section 5097 with respect to Native American involvement, burial treatment, and re-burial, shall be complied with if necessary. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils-disturbing activity shall comply with applicable State laws. In the event of the coroner's determination

that the human remains are Native American, notification of the Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The SSJID, the CRS, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. State law allows 24 hours to reach agreement on these matters. If the MLD does not agree on the reburial method, the project will follow Section 5097.98(b) of the California Public Resources Code which states, "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance." Work may resume once the area is protected or the body is removed.

- *In the event of Discovery of an historical resource or a unique archaeological resource, the CRS shall develop and implement a Cultural Resources Mitigation and Monitoring Plan.* If historical resources or unique archaeological resources would be impacted by the proposed project, regardless of when they are discovered, the CRS shall write a Cultural Resources Mitigation and Monitoring Plan (CRMMP). If there is a discovery of any such resources, the CRS shall notify SSJID that the initiation of monitoring is necessary for portions of the project site or linear facilities. SSJID shall ensure that the CRS or an appropriate cultural resources technical specialist monitor full time on the portions of the project site and linear facilities that the CRS has specified to ensure that there are no impacts to further undiscovered resources that may be historical resources or unique archaeological resources, and to ensure that, to the extent feasible, newly discovered historical resources or unique archaeological resources are not further impacted.

  The CRMMP shall stipulate that historical resources and unique archaeological resources shall be avoided through alterations in project design, when feasible, though in no event shall SSJID permit an identified historical resource to be impacted to such a degree as to cause a substantial adverse change in the significance of the resource. SSJID project design/redesign will seek to avoid any and all historical resources and unique archaeological resources under the provisions of CEQA, including Native American burials, identified before or during construction activities. If avoidance is not possible for a unique archaeological resource that is not also an historical resource, then an archaeological data recovery program shall be conducted in accord with an approved archaeological data recovery plan (ADRP) to reduce the impact to a less than significant level under the provisions of CEQA.

  In the event that avoidance of historical resources or unique archaeological resources is not possible via project design modifications, the plan shall outline the appropriate mitigation which shall be required. Under CEQA, preservation-in-place is the preferred manner of mitigating impacts to unique archaeological resources. Preservation in place for such resources may be accomplished by, but not necessarily limited to, a suite of approaches such as: (1) Planning construction activities to avoid historical resources; (2) Incorporation of resources within parks or other open spaces; (3) Covering the archaeological resource with a layer of chemically stable soil before building

facilities on top of the site; and/or (4) Preserving the resource in a permanent conservation easement.

If preservation in place is not feasible for any unique archaeological resources that are not also historical resources, the plan shall stipulate what further recordation, data recovery, or monitoring shall be required. The CRMMP shall include a statement requiring that results of all literature reviews, surveys, and data recovery shall be included in a cultural resources report for each project. The report shall be prepared according to California Office of Historic Preservation Archaeological Resource Management Report (ARMR) guidelines and submitted to the California Historical Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO).

[Updated from 2006 Final EIR Mitigation Measure 3.4-1a]

3.4.3 Conclusion

With implementation of the Cultural Resources Treatment Plan in Mitigation Measure 3.4-1a, all of the potential impacts of the project related to cultural resources would be reduced to less than significant levels.

3.4.4 Mitigation Monitoring Program

Table 3.4-5 shows the mitigation monitoring, compliance, and reporting program for Cultural Resources.

Table 3.4-5. Mitigation Monitoring Program – Cultural Resources

IMPACT 3.4-1	**Cause a substantial adverse change in the significance of historical resources or unique archaeological resources, or disturb human remains**
MITIGATION MEASURE	**3.4-1a: Develop and Implement a Cultural Resources Treatment Plan (CRTP)**
Location	All areas of proposed electric distribution facility construction
Monitoring / Reporting Action	SSJID shall prepare a monitoring report upon completion of construction.
Effectiveness Criteria	Previously undetected cultural resources in designated sensitive areas are identified by the SSJID archaeological monitor. Previously undetected resources are properly managed after identification by the archaeological monitor as outlined in the CRTP.
Responsible Agency	South San Joaquin Irrigation District, San Joaquin County
Timing	Before and during construction related to the plan to provide retail electric service

3.4.5 References

Baumhoff, Martin A. 1963. "Ecological Determinations of Aboriginal California Populations." Berkeley: University of California Publications in American Archaeology and Ethnology 49(2):155-236.

Beardsley, Richard K. 1954. "Temporal and Areal Relationships in Central California Archaeology (parts I and II)." Berkeley: University of California Archaeological Survey Reports 24, 25.

CCIC (Central California Information Center). 2010. Records Search Update for the 2010 SSJID Plan to Provide Retail Electric Service, Central California Information Center (CCIC), California Historical Resources Information System (CHRIS), California State University, Stanislaus, Department of Anthropology, Turlock, California, November 8, 2010 (CCIC File No. 7822 L).

_____. 2005. Records Search for the 2005 SSJID Plan to Provide Retail Electric Service, Central California Information Center (CCIC), California Historical Resources Information System (CHRIS), California State University, Stanislaus, Department of Anthropology, Turlock, California, October 18, 2005 (CCIC File No. 5960 LN).

Cook, Sherburne F. 1955a. "The Aboriginal Populations of the San Joaquin Valley, California." Berkeley: University of California Press Anthropological Records 16(2).

_____. 1955b. "The Epidemic of 1830-33 in California and Oregon." Berkeley: University of California Publications in American Archaeology and Ethnology 43(3):303-326.

Davis, James T. 1974. "Trade Routes and Economic Exchange Among the Indians of California." Ballena Press Publications in Archaeology, Ethnology and History No. 3 (reprinted from University of California Archaeological Survey Reports 54:1-71, 1961). Ramona, California: Ballena Press.

Farnsworth, Paul. 2010. "Archaeological Survey and Cultural Resources Assessment of the South San Joaquin Irrigation District Project, San Joaquin County, California." Unpublished report prepared by William Self Associates, Inc.

Gerry, Robert A. and James R. Oglesby. 1994. "Cultural Resources Assessment of the North Point Annexation Water Treatment Project, City of Ripon, San Joaquin County, California." Unpublished report SJ-2528 on file at Central California Information Center, California State University, Stanislaus, Department of Anthropology, Turlock, California.

Gilbert, Frank T. 1968. *Reproduction of Thompson & West's History of San Joaquin County*. Berkeley: Howell-North Books.

Gross, C. H. 2003. "Cultural Resources Assessment for the Lathrop Water Recycling Plant No. 1, Phase I Expansion Project." Unpublished report SJ-5003 on file at Central California Information Center, California State University, Stanislaus, Department of Anthropology, Turlock, California.

Hillman, Raymond W. and Leonard A. Covello. 1985. *Cities & Towns of San Joaquin County since 1847.* Fresno: Panorama West Books.

Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Washington: Bureau of American Ethnology Bulletin 78.

Kyle, Douglas E. 1990. *Historic Spots in California*. Stanford: Stanford University Press.

Latta, F. F. 1949. *Handbook of Yokuts Indians*. Oildale, California: Bear State Books.

Manteca Chamber of Commerce. 2010. *History of Manteca.* http://www.manteca.org.

Moratto, Michael J. 1984. *California Archaeology*. New York: Academic Press.

San Joaquin County Superintendent of Schools. 1991. *Public Schools of San Joaquin County 1852-1990.* Stockton: San Joaquin County Superintendent of Schools.

Wallace, William J. 1978. "Northern Valley Yokuts." In *Handbook of North American Indians, California*, *Volume 8*. William G. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution.