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February 9, 2017

Mike Monasmith, Project Manager  
California Energy Commission  
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Subject: Mission Rock Energy Center (15-AFC-02) Response to Data Request 115

Dear Mike:

Mission Rock Energy Center, LLC (the Applicant) submits this response to California Energy Commission Staff Data Request Number 115 for the Mission Rock Energy (15-AFC-02) Application for Certification.

Please contact me at 916-359-4805 if you have questions about this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. M. Davy'.

Douglas M. Davy, Ph.D.  
Project Manager

Attachment

cc: Mitch Weinberg, Calpine Corporation  
Barbara McBride, Calpine Corporation  
Jill Van Dalen, Calpine Corporation  
Samantha Neumyer, Ellison Schneider, Harris, and Donlan, LLP

*DATA REQUEST RESPONSE*

Response to California Energy Commission Staff  
Data Request 115

## Historic Built Environmental Survey Supplement

For the

# Mission Rock Energy Center

15-AFC-02

*Prepared for*

Calpine Corporation



February 2017



CH2M Hill Engineers, Inc.  
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**Citation:**

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# Acronyms and Abbreviations

AFC	Application for Certification
APN	Assessor's Parcel Number
CEC	California Energy Commission
CRHR	California Register of Historical Resources
DPR	California Department of Parks and Recreation
MREC	Mission Rock Energy Center
NPS	National Park Service
NRHP	National Register of Historic Places
MW	megawatt
PAA	Project Area of Analysis
RPA	Register of Professional Archaeologists
SCRVRHD	Santa Clara River Valley Rural Historic District
SHPO	State Historic Preservation Officer

# Introduction

This document responds to California Energy Commission (CEC) Data Request #115 in the application for certification (AFC) proceeding for the Mission Rock Energy Center (MREC) (15-AFC-02).. CEC Staff issued Data Request 115 as part of the CEC's Discovery Phase of the AFC proceeding. Data Request 115 requests certain additional information regarding the historic built environment in the MREC's area of potential effects.

The MREC is a 275 MW natural gas-fired simple-cycle combustion turbine electrical generating facility co-located with 25 MW of battery units for energy storage. It is located in an area zoned for industrial use in the Mission Rock Industrial Park located in unincorporated Ventura County, within the Santa Clara Valley. A 6.6-mile-long generator tie-line will convey power generated at MREC to the grid through the Southern California Edison Company's Santa Clara Substation.

Environmental permitting surveys and analyses conducted as part of preparing the MREC AFC included intensive pedestrian surveys of the approximately 10-acre MREC site and the generator tie-line right of way. Per CEC data adequacy requirements, surveys and analyses have also included historic built environment reconnaissance of an area within one half-mile of the project site boundary and one half-mile of the generator tie-line route centerline. One half-mile is considered by the CEC to be the distance within which visual resources impacts or impacts to setting of historic built environment resources is most likely to occur.

As reported in the AFC, Section 5.3, Cultural Resources, built environment resources of the Santa Clara Valley were comprehensively studied during the 1990s (San Buenaventura Associates 1996; "1996 Study"). The 1996 Study led to the recording of a large number of properties and the definition of a very large historic district, the Santa Clara River Valley Rural Historic District (SCRVRHD), reaching from Santa Paula to Saticoy and from the Santa Clara River into the coast range hills to the north, several thousand acres in area. The 1996 Study identified a rural historic landscape with hundreds of buildings that contribute to the landscape and were recommended as individually eligible for the National Register of Historic Places (NRHP). The area was designated the Santa Clara River Valley Rural Historic District by the recorders and is listed on the Office of Historic Preservation as the Santa Clara River Valley Rural Historic District (SCRVRHD) with the significance code of 3S, ("appears to be eligible for the NRHP from survey evaluation"), under National Register Criteria A and C.

During the built environment survey for MREC, the field team visited as many of these properties as was feasible, given restrictions to access. A total of 34 buildings identified from the previous inventory were identified as being located within the MREC study area (one half-mile from the site and generator tie-line). The field team updated the property site records from the 1996 Study to the extent that the properties were accessible and summarized the built environment data in the AFC and the separate report of cultural resources survey.

The AFC concluded that the MREC generator tie-line would potentially affect the historic setting of some of the individual properties, although it would not result in direct impact (for example, demolition) to any of them and would not significantly diminish the historic significance of the district as a whole. The AFC proposed measures to mitigate any potentially adverse impacts.

As part of the CEC's Discovery process, Staff issued Data Request. In the Data Request, Staff requested that the Applicant make additional efforts to obtain permission from land owners to access parcels to obtain more information to update the existing site records and to document failed attempts to gain access; conduct additional recording of built environment structures and features not emphasized in the 1996 Study, such as road systems, irrigation systems, and landscape features such as eucalyptus tree rows; and

conduct additional research to help guide the overall evaluation of the SCRVRHD and the individual properties within it that are within the MREC study area. This report is the response to this Data Request.<sup>1</sup>

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<sup>1</sup> In support of the final report, updated site records from the properties recorded are also being prepared. The updated site records will be submitted under a repeated request for confidential designation subsequent to the docketing of the final report.



# Property Owner Contact

Data Requests 115 requested that the Applicant make additional efforts to document properties that were inaccessible from public access points during the reconnaissance survey and could not be re-evaluated. Staff requested that the Applicant contact the landowners to request permission to access the properties for site recording and document the efforts to gain permission and whether or not permission was granted. For any properties still not accessible, Staff requested that the Applicant evaluate those using aerial photographs, maps, and other available resources. CEC Staff and the Applicant developed a mutually agreed upon protocol for conducting and documenting property owner contacts. The protocol called for initial contact by certified mail, a visit to the property to request permission if there is no response to the postal contact within a week, and documentation of efforts to obtain access permission, as follows (excerpt from Data Request 115):

### ***Property Owner Contact Protocol***

1. *Obtain parcel/property owner information;*
2. *Draft letter to property owner:*
  - a. *Greetings, Salutations, To Current Property Owner;*
  - b. *Clear indication of the project;*
  - c. *If research indicates that a property contains a likely contributor to the Santa Clara Valley Rural Historic District, then that should be called out as a specific area of interest;*
  - d. *Purpose and need for gaining access;*
  - e. *Identification of any portions of the property where access is needed;*
  - f. *Clear point of contact information;*
  - g. *Letter should not be confused with other project information;*
3. *Send Letters via Certified Mail;*
4. *Wait 1 week and if no contact is made, visit the residence of property owner to request access. If only P.O. Box is known visit residence, if applicable;*
5. *For all letters that are returned to sender, contact Ventura County Assessor and request accurate property owner information;*
6. *When making house visits, be prepared with script of the purpose and need for access. Be prepared for instances where residents do not speak English;*
7. *Document on an excel spreadsheet all steps of the process.*

Mission Rock collected the Assessor's Parcel and parcel owner information for each of the parcels specified by Staff as being within the study area (item 1) and sent a letter via certified mail dated November 11, 2016 (Item 3) to each land owner identifying the applicable parcel number or numbers (some owners hold more than one parcel), describing the project and requesting permission to access the parcel(s) (Item 2). Each letter also included a self-addressed, stamped envelope listing the assessor's parcel numbers for which access was requested, with a "check the box" request for access to the property for the survey. Landowners were requested to check a box indicating permission to access or denial of permission to access, their property.

By January 19, after the field effort had begun, 22 of the 64 owners had responded on behalf of 67 of the 129 parcels (Table 2-1). There were positive responses from 10 owners speaking for 39 parcels.

**Table 2-1. Summary of Property Owner Responses to Requests for Access**

<b>Response</b>	<b>Responses by APN</b>	<b>Responses by Owner</b>
Access granted	40	11
Not granted	28	11
Other response (incl. no box checked)	4	1
Subtotal responses	72	23
No response	60	42
<b>Total</b>	<b>132</b>	<b>65</b>

Attachment B provides a list of all of the parcels with a summary of the responses.<sup>2</sup>

The field team began their work in early January, and left copies of the access request letters in each mailbox of parcels for which there had been no response. This resulted in access to two additional parcels and denial of access at a third parcel. See the project site maps in Attachment A for a map showing parcels for which access was granted and for which it was denied.

<sup>2</sup> Due to privacy concerns, Attachment B has been provided directly to the Project Manager for the MREC.

# Research Design

The Applicant conducted a reconnaissance-level historic architectural survey in October of 2015 that considered the potential effects of the MREC and associated generator tie-line on the setting of properties identified in archival resources as being greater than 45 years of age. During the reconnaissance, a number of these buildings and structures could not be seen from the roadways to update existing site records or create new ones and assess their current condition. The goal of this supplemental study is to conduct a selective, intensive historic architecture survey with additional efforts to obtain access to properties and to record and assess the secondary associated resources of contributing properties to the previously defined SCRVRHD within the MREC Project Area of Analysis (PAA). As stated in the Ventura County Cultural Heritage Survey Phase V: Western Santa Clara Valley survey report (1996 Report), “the mapping and documentation of linear resources, such as irrigation ditches, road, railroads, wind rows, fences and walls” did not previously take place due to time constraints (San Buenaventura Research Associates 1996:14-15). The following is a summary of the known historic context and property types in the PAA. This includes significance criteria, character defining features, and resource specific integrity issues. This research design and review of the property types is informed by the 2015 literature search and survey and also by additional archival research and the field recording effort conducted in 2016 and 2017.

## 3.1 Historic Context

The 1996 Report that initially defined the SCRVRHD includes a detailed historic context and themes statement for the SCRVRHD. CH2M has further refined the historic context statement for the SCRVRHD using newly acquired additional background research and additional archival sources to identify any additional key historical themes that apply within the PAA.

The existing thematic historic context for the SCRVRHD may be found within the Department of Parks and Recreation (DPR) District Record that was completed in 1995 (Stone and Triem, 1995). The district was determined significant under Criterion A, for its historical associations with important agricultural activities between 1860 and 1945, which was defined as its period of significance. The area illustrates the “development of agricultural products and farming techniques, and documents the progression of this land use from the dry farming of grains and row crops, to irrigated tree crops and citrus ranching” (Stone and Triem, 1995). In addition, the district is a good example of a valley used for stock raising and tree crops. The district was also determined significant under Criterion C, “as one of the best preserved examples of a mature Southern California citriculture landscape” (Stone and Triem, 1995). The DPR form includes a historical context for the SCRVRHD and descriptions of the primary types of buildings, structures, sites, development patterns associated with the district. The historical context and descriptions contained on the DPR form are summarized below.

### 3.1.1 Agriculture

An important aspect of the SCRVRHD’s history is how changes in industry and land use affected the social, physical, and economic structure within the Santa Clara Valley, and how that in turn “left a distinct mark on the land” (Stone and Triem, 1995). The earliest American settlers in the Santa Clara Valley faced unique challenges associated with insufficient irrigation and transportation resources. During its early settlement history in the early to mid-nineteenth century “this thinly populated frontier region supported primarily low-intensity cattle ranching, grain production and to a limited extent the more drought-tolerant forms of fruit cultivations” (Stone and Triem, 1995). Settlers mostly grew lima beans and grains, including wheat, barley, flax, and corn. In 1862, George G. Briggs was the first person to try growing peaches and pears

commercially in the western end of Santa Clara Valley; however, Briggs' attempts were largely unsuccessful (Stone and Triem, 1995).

Several important improvements to transportation and irrigation "permitted valley property owners to realize the economic potential of the local soil and climate" (Stone and Triem, 1995). These improvements included: the construction of the wharves at Hueneme and Ventura, California, in 1871 and 1872 respectively; the arrival of the Southern Pacific Railroad line in 1887; the development of the Farmer's Canal and Water Company in 1872; and the development of the Thermal Belt Water Company in 1893. New access to improved water sources and a reliable transportation system allowed farmers to replace grain crops with walnuts, olives, and apricots. However, "it was citrus ranching, in both myth and reality, which was to become thoroughly enmeshed with every aspect of the region's economy, cultural, and popular image" (Stone and Triem, 1995). Nathan W. Blanchard is remembered as the first commercial citrus planter in the western Santa Clara Valley. Since citrus trees require years after planting to produce fruit, Blanchard planted his fruit trees in 1874 but his crop did not become profitable until 1888. Citrus became an increasingly dominant crop in the area in the 1890s; "citrus cultivation progressed in successive waves, from oranges, to lemons and later, avocados, with each of these tree crops wholly or partially replacing the previous one" (Stone and Triem, 1995). New tree varieties emerged as the citrus industry in the region developed, replacing the older species. In 1893, the Limoneira Company was established and soon became the leading commercial citrus orchard in the region (Stone and Triem, 1995).

The citrus industry grew exponentially between 1920 and 1945 and California's volume of citrus production experienced a 150-percent expansion. The sudden dominance and commercial growth of the citrus industry in Southern California led to economic, social, and physical changes that established new perceptions of the area as "almost utopian" (Stone and Triem, 1995). Sometimes the perceived image of the area – "verdant 'citrus belts'" – did not match the arid reality (Stone and Triem, 1995). However, the booming fruit industry resulted in such a drastic transformation within the area that "virtually the entire urban and rural form taken on by the Southern California foothills region can reasonably be attributed directly or indirectly to citrus production" (Stone and Triem, 1995). The thriving citrus industry brought many new residents to the area, including wealthy developers who were able to invest a substantial capital into planting trees that could take years to turn a profit. These farmers and business people became known as "gentlemen farmers" since they could oversee cultivation, packaging, shipping, and marketing of the product without ever dirtying their hands (Stone and Triem, 1995). Large groups of immigrant laborers also moved to the region (Stone and Triem, 1995).

In the decades after World War II, citrus farms became appealing real estate for suburban developers. The pressure on growers to sell their land "was abetted by the 'highest and best use' scheme of property taxation in effect" that increased taxes on undeveloped farm land (Stone and Triem, 1995). In addition, trees that were planted between 1920 and 1945 became less fruitful over time and many crops started to suffer from disease. In combination, these new challenges—development pressures, higher taxes, crops in need of replanting, and infected plants—forced many growers to remove their land from cultivation (Stone and Triem, 1995). Consequently, during the mid-twentieth century, the citrus industry began to fade from prominence in Los Angeles, Orange, Riverside, and San Bernardino counties. Despite this, the "Santa Clara Valley of Ventura County, by virtue of geography, largely escaped these events, however, and retained its citrus landscape largely intact until the 1970s, when strict planning guidelines for the protection of agricultural areas countywide were adopted" (Stone and Triem, 1995). For this reason, "the Santa Clara Valley represents one of the best preserved examples of a mature Southern California citriculture landscape" (Stone and Triem, 1995).

### 3.1.2 Oil Production

Another industry to be found in the region of the project is petroleum production. Native Californians were observed by the Spanish to use asphaltum, a natural tarlike substance for many purposes including sealing plank canoes (*tomols*), as an adhesive for decorating objects and fixing projectile points onto shafts. Later, the Spanish used the naturally occurring asphaltum for sealing seams in their ships. Oil seeps, the source of asphaltum, were discovered in several locations in northern and southern California (DOGGR 2005). With the discovery of oil in 1859 at Oil Creek at Titusville, Pennsylvania the stage was set for oil production as a viable industry in the United States. By the late 1850s, small quantities of oil and asphaltum were being collected in the Mountains around Ventura County and be refined for domestic purposes. By the 1860s, oil was a lucrative venture in California and companies such as the Philadelphia and California Petroleum Company and Union Oil Company had operations in Ventura County (San Joaquin Valley Geology, 2015).

Before the industrial revolution in the United States, “Rock Oil” was prized as a replacement for sperm whale oil as an illuminant. It burned relatively cleanly in existing oil lamps and production costs were cheaper since long, dangerous voyages were not required to procure it. “Rock oil” was eventually sold under the commercial name Kerosene and, along with commercial lubricants, was the chief distillate from petroleum until the beginning of the 20<sup>th</sup> century (Johnson 1970).

California's oil development was separated from the more volatile national oil industry by the costs of transportation and refining heavier oils, which made them only locally viable. Even accounting for these factors, the oil industry in California didn't exist in a vacuum. The opening of the Panama Canal provided new opportunities to market California fuel oil outside the western United States. With the increase in industrialization taking place in the United States at the turn of the twentieth century, a power source was needed to drive industrial growth. In the eastern US that power came from coal. In California, it was fuel oil. Fuel oil was easily distilled from the area's heavy crude and, since it was local, transportation costs made it economically viable. Fuel oil would remain the major demand on California's oil resources until the end of World War I and the advent of the automobile made gasoline the most marketable petroleum product in the United States (Johnson1970).

The area south of Sulphur Mountain has produced oil historically into the modern era. The wells are located close to the fault contact of the Monterey shale and Fernando formation near the heads of Aliso, Wheeler, Salt Marsh, and Adams canyons. Oil seepages are common along the fault and the early method of obtaining oil was by tunneling (DOGGR 2005). Small amounts of oil were taken from this region for a many years, but the terrain, transportation and refining costs were not favorable for the location of wells capable of large-scale production until the early 20<sup>th</sup> century. In 1916, Oak Ridge Petroleum Company put in an exploratory well into the area that produces some 25 barrels a day. By 1942, more than 110 wells had been put into the South Mountain Field. By 1943, gas pressure had dropped sufficiently such that the oil had to be lifted to the surface via a pump and only 93 of the wells were still producing. The field was revived with modern techniques in the 1950s and has been in decline since it peak production in 1955. Oil exploration and production properties related to earlier (pre-World War II) petroleum industry do exist in the Santa Clara Valley region. Historic maps indicate oil pipelines once existed (1920, 1935) along the railroad right-of-way to Telegraph Road and then along Telegraph Road. After review of pertinent maps and in field survey, no surface trace may be found of any pipeline depicted on the 1925 and 1935 regional maps within the project PAA. If these pipelines are indeed extant, they are completely subsurface and will not be affected by the project.

The resources related to oil drilling extant in the PAA appear to be associated with the Saticoy Oil Field. The Shell Oil Company owned and operated the Saticoy Oil Field between 1955 and 1984. The 1967 photo-revised 7.5' Santa Paula topographic quadrangle map and the 1967 aerial photograph show oil sumps and wells around the MREC plant site and associated linear structures. Vintage Production, a subsidiary of

Occidental Petroleum, was the primary producer of the wells that remain in operation until 2016, at which time operation of the remainder was taken over by California Resources Corporation (CRC) Inc. It appears that CRC is largely engaged in methane and other hydrocarbon capturing rather than the crude oil production. The signage on the pipeline states that it is for gas.

## 3.2 Property Types

The period of significance for the SCRVRHD falls between 1860 and 1945. The district includes a concentration of buildings, structures, and sites related to the history of agriculture in Southern California. A number of different buildings types and architectural styles that date from the period of significance can still be found. The variety of type and style “serve to illustrate the development of agriculture as both family farming and agribusiness enterprises” (Stone and Triem, 1995).

Property types are usually defined by a building or structure’s function. Architectural styles are usually associated with particular historical eras and design elements such as construction techniques or materials. The National Park Service (NPS) discusses architectural character in Preservation Brief 17, *Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character*, as a combination of these tangible elements (type, style, construction, and material) and other non-tangible elements, such as “feelings conveyed by the sense of time and place or... [associations] with events or people” (Nelson, 1982). NPS notes that “even though buildings may be of historic, rather than architectural significance, it is their tangible elements that embody its significance for association with specific events or person and it is those tangible elements both on the exterior and interior that should be preserved” (Nelson, 1982).

To be eligible for inclusion in the NRHP, a property must meet the requirements of at least one of the four primary NRHP criteria (National Park Service, 1997):

- Criterion A: Associated with events that have made a significant contribution to the broad patterns of our history; or
- Criterion B: Associated with the lives of persons significant in our past; or
- Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D: Have yielded or may be likely to yield, information important in prehistory or history.

In addition, properties must retain enough integrity to demonstrate their significance under the criteria. The NRHP recognizes seven aspects of integrity, which are listed below. Definitions are provided from the NPS’s National Register Bulletin 15 (National Park Service, 1997):

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

Even if a property meets the criteria, it must retain sufficient integrity to convey that significance in order to be eligible for listing in the NRHP. Generally, properties must be at least 50 years old to be eligible for the NRHP, unless they are proven to have exceptional importance.

Per the guidelines established by the NPS in National Register Bulletin 15, the California State DPR Primary and Building, Structure, Object forms that are completed or updated for each building or structure in the project area will: “define the essential physical features that must be present for a property to represent its significance”; “determine whether the essential physical features are visible enough to convey their significance”; and “determine, based on the significance and essential physical features, which aspects of integrity are particularly vital to the property...and if they are present” (National Park Service, 1997).

Certain property types and architectural styles are expected to be found in the MREC PAA, as determined by archival research and the 2015 and 2017 field surveys. These are described below.

### 3.2.1 Buildings

#### 3.2.1.1 Ranch headquarters, main residences

Historically, residents in the Santa Clara Valley included wealthy growers, pioneers of more limited means, and immigrant laborers. Residential buildings in the area varied depending on family size and income. Ranch houses, which were often constructed on the farm parcel, were typically associated with property owners. As property owners became more successful, they would often replace their modest houses with larger more opulent styles. As families grew, property was often subdivided to provide the next generation with land to build new homes.

The mix of residential buildings and buildings related to production “reflects the family-owned character of large portions of the Santa Clara Valley ranching operations” (Stone and Triem, 1995). Placement of residences within ranching parcels was “probably affected by the sizes and shapes of parcels, crop types, and the building and farming traditions imported by settlers transplanted from elsewhere in the nation” (Stone and Triem, 1995). Typically, the main residence was constructed 50-300 feet from the road with access via a prominent driveway. Outbuildings were often sited in close proximity to the main residence, but in the rear of the property so as not to be immediately visible from the road.

Within the project area, there are several buildings that are considered main residences. Examples include the Italianate Style Sharp-Thille Ranch, the Monterey Style Edwards-More Adobe, the Prairie Style Roger G. Edwards Residence, and the Pyramidal Folk House Style residence on the Sharp-Thille Property. Typical characteristics associated with these styles are listed below:

- Italianate Style (Sharp-Thille Ranch Italian Villa) - Virginia McAlester and Lee McAlester, in their book, *A Field Guide to American Houses*, identify the following features as characteristic of the Italianate Style (1984):
  - Two to three stories
  - Low-pitched roof with deep eaves, often with decorative brackets
  - Tall, narrow windows that are often arched or curved, and often have elaborated crowns
  - Often include a square cupola or tower
- Monterey Style (More Adobe) - McAlester and McAlester identify the following features as characteristic of the Monterey Style (1984):
  - Two stories
  - Low-pitched gable roof

- Second story balcony, often cantilevered or covered by the principle roof
- Sometimes include adobe construction and various cladding on the wall (weatherboard, shingle, or vertical board-and-batten)
- Prairie Style (Roger G. Edwards Residence) – McAlester and McAlester identify the following features as characteristic of the Prairie Style (1984):
  - Low-pitched roof with wide eaves
  - Two stories with one story wings or porches
  - Strong horizontal emphasis
  - Often include large, square porch supports
- Pyramidal Folk House Style (11736 W Telegraph Road, Sharp-Thille Ranch) – McAlester and McAlester identify the following features as characteristic of the National Folk House Style (1984):
  - Pyramidal roof
  - Massed, rectangular plan
  - Wood frame
  - Horizontal wood siding
  - Porch, either extending from the front elevation or under the principle roof

All main residences described above are eligible under Criteria A and C; therefore, their significance is based on a combination of non-tangible historical associations and tangible architectural characteristics. In order to retain sufficient integrity to contribute to the Santa Clara Valley Rural Historic District, each building must retain a majority of features and characteristics associated with the building typology for a main house and with its specific architectural style.

### 3.2.1.2 Employee residences and smaller worker cottages

Historically, housing was provided on family farms and agribusiness ranches for seasonal laborers and permanent laborers. The bunkhouse was a typical building used to house single men while labor camps with many small residences were provided for families. Ranch foremen and labor supervisors tended to occupy individual, free-standing houses (Stone and Triem, 1995). No bunkhouses remain extant within the project area. Typically, employee residences and smaller worker cottages are usually situated together, clustered in a group along a road in the vicinity of the ranch's main residence. Other times, employee residences are set apart from other worker cottages, but still within the vicinity of the main residence.

Employee residences and worker cottages are usually simple buildings that are not necessarily considered an example of a particular architectural style. However, the simplicity of the buildings means that the residences of this type that were constructed during the early twentieth century often have similar physical traits:

- One story
- Wood frame construction
- Small porch
- Wood frame sash windows
- Gabled roofs
- Linear plan



For the most part, employee residences and smaller worker cottages in the project area are potentially eligible for the NRHP under Criterion A for their association with the history and development in the area. Although these smaller residences are not generally considered important architecturally on an individual level, they are also potentially significant under Criterion C as part of a larger collection of their type. In order to retain sufficient integrity to be considered a contributing element to the SCRVRHD, employee residences and small worker cottages must retain a majority of features and characteristics associated with the building typology to retain sufficient integrity of location, setting, feeling, and association. The primary residence, other employee residences or worker cottages, barns or other agricultural-related resources would need to remain extant to provide the physical context that allows these smaller residences to convey their significance. In addition, a majority of original materials would be necessary for this building type to retain sufficient integrity of materials, design and workmanship. In general, residences of this type should retain a substantial number of original characteristics, including but not limited to the original floor plan, original roofline, original openings, or original siding.

### 3.2.1.3 Barns (or packing houses)

Considered an “essential feature of the citrus landscape,” the larger growing operations included private packing houses, while smaller operations used cooperative association packing houses that were shared among members of the Santa Paula or Saticoy communities (Stone and Triem, 1995). The designs of these buildings and their location were dictated by the processes contained within. Barns were a common building type on farm and ranch properties and served multiple functions, depending on what was required for that particular operation. Typically, barns were used for supply or equipment storage or for animal shelter (Stone and Triem, 1995).

The typical features of extant barns within the project area generally include:

- Large, rectangular floor plan
- One-story
- Utilitarian design
- Wood frame construction
- Gabled roofs

Largely unadorned, the integrity of this building type relies on the extant surrounding resources that provide context for the building and original materials that provide the physical integrity necessary to convey their historical associations. In addition, the utility of these buildings is a significant component of their historical significance. Therefore, the current use and condition of the buildings should also be considered.

### 3.2.1.4 Garages, carports, sheds

Other outbuildings were also common on ranches, including secondary garages and carports, and sheds, which are usually associated with primary residences, employee residences, worker cottages, or barns. Typical characteristics of these types of secondary buildings include:

- One story
- Wood frame construction
- Shed or gable roofs
- Utilitarian design
- Rectangular or square plan
- Vehicle bay (either open or with wood doors) for garages
- Roof supported by four posts for carports

Since garages and carports are generally simple, unadorned structures that were constructed to support residential buildings or barns, their integrity relies largely on their setting—namely the existence of the buildings that they are associated with. Therefore, the location and setting of secondary buildings in relation to the primary buildings is a crucial factor in their ability to convey significance. The simplicity of these buildings emphasizes the importance of original design features, such as shape and floor plan, and materials, including siding, floor plans, roof lines, and door openings.

### 3.2.1.5 One-Room Schoolhouses

In addition to those buildings directly associated with ranching operations, the “steadily increasing population of the rural Santa Clara Valley necessitated the construction of schools” (Stone and Triem, 1995). The region was served by two school districts: the Briggs School District and the Eliseo School District. The earliest schools were one-room schoolhouses. The Briggs School District was larger and served the Santa Clara Valley proper. There were a few different school buildings at the site of the Briggs School, which lies outside the project area. “Classes were held in other nearby locations until 1881 when a small school building was moved to the present site. In 1900, a new building was constructed. By the 1920s, with the steady growth of agriculture and especially the economic success of the nearby Limoneira Company, it was decided to build a larger school in 1925.” (Couch and Triem 1993) A second school was built for children of Mexican laborers at Oliveland (Stone and Triem, 1995).

There is one, one-room schoolhouse located within the Edwards Ranch. Constructed in 1869-1870, the building’s defining architectural features include:

- One story
- One room, rectangular plan
- Wood frame construction
- Gable roof
- Symmetrical façade
- Multi-light sash windows
- Wide horizontal siding single-wall construction, but with the studs on the outside

It is believed that the school was moved to its current location in the early twentieth century. The school’s physical integrity is based on a combination of the characteristics included above. The school is no longer used as a school, which has diminished its integrity of feeling and association.

### 3.2.1.6 Office facilities

Ranch offices are located within two properties within the project area. This building type varies in style and construction; however, office facilities are generally located in close proximity to the main residence and employee housing. In addition, they are generally located near the main road. There are two ranch offices within the project area: a small, circa 1920 building located within the Edwards Ranch and a circa 1945 Quonset hut located within the Sharp-Thille Ranch. The integrity of the office facilities depends largely on what primary resources remain extant on the property to provide the setting and overall context.

The circa 1920 office is a simple, wood frame building. Its defining characteristics include:

- Rectangular plan
- Gable roof with wood shingles
- Short exposed rafter tails below the eaves
- Vertical wood siding
- Multi-light windows and front door (which has been replaced since 1995)

Typical characteristics of a Quonset hut are listed below:

- Prefabricated structure, generally of metal construction
- Corrugated steel sheets that form the curved sides and roof
- Ends of the building are flat

The integrity of the office facilities is based on a combination of the architectural characteristics listed above and the buildings' relationship to their surroundings.

### 3.2.1.7 Industrial/commercial buildings

The industrial and commercial buildings within the project area are mostly early to mid-twentieth century buildings located along Mission Rock Road. They are generally situated on large parcels with a primary building facing the main road. Typical characteristics of the primary building include:

- Utilitarian design
- Metal or concrete block construction
- Corrugated metal gable roofs (industrial)
- Rectangular plan
- Large window openings that face the road
- Tall walls or fences that delineate the property's perimeter

Due to the utilitarian nature of these buildings, their use and their setting are often primary components of their significance. Therefore, current use of the building should be considered with evaluating these types of buildings for the NRHP. Alterations are common with industrial and commercial buildings, as a result of changes in industry or technology. However, original floor plans, roof lines, openings, and materials, such as windows and siding, are usually important features for conveying a property's historical significance.

## 3.2.2 Irrigation Structures

Successful orchards depend on the improved water conveyance systems that brought water to thirsty trees. Extensive irrigation infrastructure was one of the main engineering achievements that allowed for the agricultural success in the region. The Santa Clara River and Santa Paula Creek provided the Santa Clara Valley with "relatively reliable, year-round surface water flows," a resource that was not available in other areas of Southern California. Property owners started to construct systems to access these surface water resources starting in 1872. The resulting water system became known as the Farmer's Ditch, "diverting runoff from near the juncture of the Santa Paula Creek and Santa Clara River, eventually extending the system beyond the western edge of the valley" (Stone and Triem, 1995). The Thermal Belt Water Company constructed a system in 1893 to transport water from the Santa Paula Creek to the Limoneira Company property (Stone and Triem, 1995).

Buried pipes replaced the earlier open ditches and flumes. Open ditches, constructed using river rock, remain extant along some roads and are used for rain water collection and irrigation runoff. Weirs, penstocks, reservoirs, and pump houses were all important components of the irrigation system. In addition, water was typically stored in water towers and cisterns, establishing these structures as "common features of the historic landscape" (Stone and Triem, 1995).

Good water management has always been important to California farmers and ranchers. Water shortages from long droughts and water excesses from heavy rainy seasons have helped shape the California landscape and economy. Between 1880 and 1890, the amount of irrigation land jumped from approximately 300,000 acres to 4.1 million acres. In 1902, President Theodore Roosevelt signed the Reclamation Act, also known as the Newlands Act, which allowed for the federal government to fund and construct irrigation projects in 16 states and territories in the West (Pisani 2002).

Various techniques were used to manage water. Early irrigation canals relied on gravity to move water; only lands lying below these flow-control systems could be serviced. Later systems used pumps. Early pipe was constructed of hollowed-out logs. During the nineteenth century, riveted iron pipe was preferred to steel pipe for low-pressure applications such as irrigation. California mutual water companies used both metal and concrete pipes for water distribution as early as the late 1800s. Temporary weirs made of brush and loose rock were more commonly found associated with smaller water delivery systems developed before the late 1800s. Canal construction has varied over time and includes hand-dug, early masonry and tile ditches; horse- or ditches cut with a large horse-drawn excavation device known as a Fresno scraper; and large concrete-lined, machine-formed canals. Historically, wood and masonry (mortared cobble) weirs were more commonly used (JRP and California Department of Transportation, 2000), followed by poured concrete “box” weirs connected to pre-fabricated concrete standpipe irrigation systems beginning in the first decades of the twentieth century. Older water features frequently have been updated or retrofitted to improve water flow or repair damages. Too much or too little water can affect water features. Irrigation-related features within the Mission Rock survey area may include pumping stations, pipelines of concrete and iron, open canals, drainage ditches, headwalls, culverts, tanks, and spillways. To determine if the remaining water features within the survey area are contributors to the overall SCRVRHD, recordation of several water features was completed. Generally, the types of water features expected within the survey area are not individually eligible, but when examined as an entire system for a specific farm or grower, the system could potentially be a contributing element to the overall historic district, and possibly, eligible itself.

A water conveyance system must retain enough integrity to convey the significance of the system to be considered eligible for the CRHR. The integrity requirements for the CRHR are lower than for the NRHP; however, the system should possess at least some of the aspects of integrity, which are location, design, setting, materials, workmanship, feeling, and association. As the layout of any water system is an integral part of how the system worked, location was considered a very important aspect of integrity during the recordation of systems in the survey area. Water features which had been moved from their original location were not considered contributing elements, as it was not possible to determine where they originated. Overall, the main physical features of the water system that were made and used during the period of significance should be present and some parts of the system should be visible (JRP and Caltrans, 2000). Non-contributing elements of a water system include those not present during the period of significance, as well as those that have lost integrity and do not reflect historic character, whether to upkeep or to degradation.

The following eligibility discussion is largely taken from JRP and Caltrans (2001). The evaluation of a water conveyance system may apply to the entire system or it may only apply to the portion of a water system that is located within the project area. If a system lacks integrity, was not present during the period of significance, or lacks potential to contribute to the significance of the larger property where it is located, the system may be found not eligible for listing. A system must meet one or more of the CRHR criteria, as well as retain integrity, to be considered eligible for listing.

Water conveyance systems that are considered eligible under Criterion 1 must be associated with specific important events, such as the development of the irrigated orchards on Orchard Farm or on the Sharp Farm. The water system must be definitively associated with the early development of the orchards; coexistence does not infer eligibility automatically.

To be considered eligible under Criterion 2, a water system must be associated with the life of an important figure within Santa Clara Valley history, such as Thomas More. Generally, water systems are not found eligible under this criterion, and the association between the important figure and the system must be well demonstrated.

Water systems can be eligible under Criterion 3 for their engineering and design values. Water systems can be considered eligible under this criterion if they are designed by a well-known engineer or an acknowledged master in the field; however, none of the systems within the SCRVRHD are known to have been designed by such an individual. Properties that are part of a historic district could be eligible under this criterion. Water systems that have unique aspects or are good examples of a property type, such as orchard irrigation systems, may be eligible. Systems which are the best preserved or sole surviving examples of particular types of water conveyance systems may be eligible. For such a system to be eligible, the system must possess common features or traits of the type, period, or method of construction. If a system possesses such features or traits, it must also illustrate a pattern of features common to a particular class of resources or the variation of features that occurs within that class, or the evolution of that class of resources, or the transition between two different classes of resources. A large water conveyance system with multiple components may also be evaluated as a district, and the district must have a substantial concentration of resources that are definitively associated by either plan or physical development.

Water systems can be considered eligible under Criterion 4, if they have the potential to yield information important to history, such as the development of the orchards and agricultural fields in the SCRVRHD. To be considered to have research potential, the parts of the system must provide the actual information. Water conveyance systems such as those identified within the survey area may yield information about vernacular construction methods and use. There may also be research value which comes from the association of water systems with other features, such as the orchards and agricultural fields. Much of the actual water system works within the survey area, however, are underground, and archived documents and plans exist which show where water features are located within the properties.

The water conveyance systems observed within the Santa Clara Valley date to the early 20<sup>th</sup> century and contain a variety of structures and features. All water delivery systems consist of a diversion structure, some type of conduit for the water, and some method of excess or waste water disposal. Within the survey area, all water systems were associated with agriculture, specifically orchards and row crops.

Water diversion features include weirs, dams, and tunnels or other conduit set at depths below natural water sources. Within the project, no dams were noted. Weirs, which function to elevate water levels high enough to divert adequate water flow without completely blocking the natural flow of water, were also not observed. One diversionary feature was found just outside the survey area and this feature looked similar to a concrete box weir and appeared to serve a similar function, as it is the main connection to the Limoneira Orchard Farms from the Farmer Irrigation pipeline. Several artesian wells are located in the project and appear to be a source of water for the fields and orchards in the project. Pump houses were noted within the survey area, which represents another feature associated with water diversion. Pumping water from sources, such as a river or possibly an artesian well, became viable and frequently used early in the 20<sup>th</sup> century. Storage of this water is also important, possibly less so closer to the Santa Clara River, but one water tower is located within the survey area, as well as storage tanks.

Water is moved through a system via a conduit, which includes open canals, flumes, tunnels, and pipelines. Canals, including ditches, and pipelines appear to be the primary conduits found within the survey area. Irrigation canals are numerous in California and connect diverted or stored water into orchards and agricultural fields. Water transfers from a main canal into laterals, and then, into the orchards or fields. Control gates and check dams control the movement of water from the laterals into the fields or orchards. Many of the early canals and laterals were open earth ditches. After World War I, however, farmed land with irrigation systems jumped in value and efforts were made to improve the transport of water. Concrete pipe prevented water loss due to seepage. Concrete pipe also provided for better means of controlling water distribution and delivery than open earth ditches. Concrete, although more expensive to install than open earth ditches, was relatively cheap and easily acquired as it was widely produced on the West Coast (Stanley, 1921). Orchards represented an investment of both time and money as the trees would not fruit

extensively for the first few years and were more permanent than agricultural rows. Concrete piping was a good method of irrigating the trees (JRP and Caltrans, 2000). Concrete pipe was extensively used in irrigation systems, and appears to have been the preferred method of moving water through the survey area, based on concrete drain pipes and daylighting concrete pipe connecting drain pipes with standpipes. Riveted steel pipe, which could handle greater water pressure, was also used for irrigation systems. Steel pipe, although stronger than concrete pipe, needed to be protected from the elements, by galvanization or an asphaltic coating, to prevent deterioration (Stanley, 1921).

Structures which measure and regulate flow rates, dispose of excess water, and trap debris are also found within the survey area. Gates, valves, check valves, and gauges control water volume at points along the system. Gates are constructed of a variety of materials, wood, metal, sometimes even concrete and the smaller gates are generally controlled by hand. Devices used to measure water flow include Venturi meters, weirs, miner's inch boxes, and automatic registers. Standpipes were built into concrete irrigation systems to remove air in the system. Generally, standpipes were not built very large for average sized pipe and were continuous in action. They were best positioned near the water intake into the system to get rid of any air as soon as possible. Overflow and relief stands are intended to prevent high pressure in concrete lines which cannot pressure build up which may occur when water is diverted and not being delivered into the fields or orchards. Frequently, two vertical open stands of concrete pipe will be cemented together, where one pipe is connected to the inlet and the other will receive overflow which delivers water back to the main canal or lateral, and pressure will be constant, preventing high pressure in the concrete line. Some relief stands, particularly in orchards, will be a single concrete pipe between 6 and 18 feet high with an overflow pipe inside of the larger concrete pipe (Stanley, 1921). Both of these types were found in on Orchard Farm and on Sharp Farm. Distributing hydrants, concrete pipe stands connected to an underground lateral by a short riser, contain outlets where water flows out and into the orchards or fields (Stanley, 1921). These were recorded on the Orchard Farm and the Sharp Farm. Distributing hydrants could also be placed further apart and portable piping connected, which would move water to more specific locations. This was more time intensive, but well suited to agricultural fields which were plowed each season (Stanley, 1921). Spillways are utilized for waste and overflow. One small spillway drain is located along Telegraph in the survey area. Cobble and mortar linings were noted along the barranca near the Sharp Farm. Concrete lining has also been added at other points along the barrancas, presumably related to the orchards and row crop fields.

### 3.2.3 Transportation

#### 3.2.3.1 Roads

Caltrans defines roads as linear features with a discrete beginning and an end that are explicitly geographic; the construction of roads determines the spatial distribution of a community's landscape (Caltrans 2016). Additionally, roads have a specific function which is to move people and goods from location to location. The historic roads in the MREC area were essential in providing access to residents, agricultural and farming entities with outside communities. Roads, were vital in the economic success of agribusiness for the region. In evaluating roads as themes, Caltrans has identified three categories (Caltrans 2016):

- Roads and highways as reflections of culture, responsible for having shaped the cultural history of a community at the local, state and potentially national level.
- Roads and highways as a symbol of commerce and trade, responsible for development of new markets or encouraging trade by providing access to various communities.
- Roads and highways as examples of engineering achievement which could include improvements in the design, materials, durability, and stability.

In evaluation roads for NRHP listing, the elements assessed must:

*be evaluated within its appropriate historic, geographical, or spatial context, whether local, regional, statewide, or national (Caltrans 2016:157).*

*Eligibility Standards:*

A property is eligible within a transportation theme if it:

Character defining features

- Conveys visual sense of historic environment from the period of significance
- Location/alignment is the same as age of construction
- Constructed before 1945
- Was historically used as a road

Integrity Aspects – Required

- Location
- Design
- Feeling
- Setting
- Materials
- Workmanship
- Association

Integrity Considerations

- Realignments
- Upgrades/Maintenance

CRHR/NRHP

- Period of significance – start of community development
- Retains all aspects of integrity
- Demonstrates high quality of design

NRHP District Contributor

- Adds to the district's historic character
- Was constructed within the overall districts period of significance
- Possesses an adequate degree of integrity to convey the significance of the theme

### 3.2.3.2 Railroads

Like roads described above, railroads are a linear feature that generally has a starting point and a terminus (Caltrans 2016). Generally, railroads are transportation features that are used to provide passage to people or goods. Railroad construction and expansion made a great impact in California as well as the nation during the 19<sup>th</sup> century. They filled a significant role with development of communities, economic growth, the expansion of industries such as agribusiness, travel, and general commerce. Railroad systems contain components other than the linear feature and these can be structures, buildings, bridges, utilities and other elements which are employed to function together (Caltrans 2014; PSHPO no date). When recording and evaluating, railroads are typically recorded as historic districts.

*Eligibility Standards:*

A property is eligible within a railroad theme if it:

Character defining features

- Has a discrete start and terminus point
- Conveys visual sense of historic environment from the period of significance
- Location/alignment is the same as age of construction
- Has historically provided use as a railroad
- Is constructed within the period of significance

#### Integrity Aspects – Required

- Location
- Design
- Feeling
- Setting
- Materials
- Workmanship
- Association

#### CRHR/NRHP

- Period of significance for the railroad district
- Retains all aspects of integrity
- Demonstrates high quality of design

#### NRHP District Contributor

- Adds to the district’s historic character
- Was constructed within the overall districts period of significance
- Possesses an adequate degree of integrity to convey the significance of the theme

### 3.2.3.4 Agricultural boundary structures

Properties in the Santa Clara Valley were often delineated using fences, walls, and corrals. These barrier structures were particularly necessary in the stock-raising areas of the canyons, where sometimes boulders were used to form wall structures (Stone and Triem, 1995).

#### Sites

Although the trees themselves are regularly replaced, the Santa Clara Valley’s historic landscape is defined by citricultural patterns that are still visible today: “trees are planted in regularly spaced rows, with shallow irrigation ditches running between; a system designed to permit gravity flood irrigation and drainage. Wider rows are introduced on regular intervals to permit access to the orchards by picking and spraying equipment” (Stone and Triem, 1995). Microclimates have historically determined where various trees were planted, and this continues to be an important factor in the organization of orchards. While lemons, which are intolerant of the cold, are planted near the foothills, oranges, which can sustain colder temperatures, are planted in the lowlands. Avocados tend to be planted on steeper banks and hillsides to avoid frost (Stone and Triem, 1995).

Although citrus was a visually dominant product in the Santa Clara Valley, “crop diversification was a historically common practice amongst growers” (Stone and Triem, 1995). This strategy lowered potential risks of the inevitable uncertainties related to price, weather, and the market. As a result, growers continued to grow a variety of trees, even after citrus became the primary crop. This allowed growers to maintain production during those years when citrus trees were unproductive. Walnuts, apricots, lima beans, sugar, and beets remained important to the production of many of farms and orchards; “These diversification practices remains a characteristic of the valley today” (Stone and Triem, 1995).



Windrows, or rows of large, fast-growing trees to create a protective barrier from the wind, are another characteristic element of citrus orchards. Blue Gum Eucalyptus and Poplar trees were commonly used for windrows, to protect the skin of fruits such as lemons (Stone and Triem, 1995). In addition, many ranch houses included gardens and ornamental landscaping. Fruits and vegetables were grown in gardens for household consumption and “this artifact of the era when farming was essentially a subsistence occupation continues to the present day” (Stone and Triem, 1995). Characteristics of these gardens often provide historical information about the property owners and employees. The types of plants chosen could indicate the cultures and traditions of those that lived on the property, while the size and opulence of the garden often reflected the wealth of the ranch owner. In addition, the gardens “served to validate the romantic aura of plentitude which came to distinguish the image of the Southern California citrus belt communities” (Stone and Triem, 1995).

### **Development patterns**

Early nineteenth century surveys largely determined the property boundaries within the Santa Clara Valley. The 1867 survey that was conducted by W.H. Norway divided the region into approximately 150-acre squares, with the Santa Clara River as the southern boundary. Generally, Norway’s grid was not guided by natural features, positioned at a 45 degree angle to the Public Lands Surveys township and ranges. The grid lines remain apparent, guiding both property boundaries and roads (Stone and Triem, 1995). As land was divided and subdivided for subsequent generations, “location of natural features, such as barrancas, became more important as demarcations of property boundaries” (Stone and Triem, 1995). In 1875, approximately 10 years after Norway’s survey, similar parcel sizes were used to plat the northern edge of the Santa Clara Valley and canyon areas (Stone and Triem, 1995).

## **3.2.4 Oil and Gas**

Although not related to the agricultural theme of the SCRVRHD and outside the period of significance identified in the 1996 survey report, we have developed property types linked to the historical themes necessary to evaluate the historic oil pumps and wells in the Mission Rock and Edwards Ranch areas.

Expected oil and gas infrastructure property types in the MREC PAA include (after Dase 2003):

### **3.2.4.1 Pump Units**

#### **Character-defining Features**

- Metal construction
- Base plate, braces, pitman pipe, casing head, flow line, counter-balanced crank, and walking beam
- Signage identifying associated company or manufacturer

#### **Principal Subtypes**

- Numerous subtypes and styles of pump units exist
- Older units link to power houses
- Later units use electric or gasoline engines for power
- Commonly geared or chain rigged
- Single or double crank

### **3.2.4.2 Separators**

#### **Character-defining Features**

- One or more pumping units
- Tank battery
- Pipeline

- Earthen berms, dikes, and ditches often surround separators and metering stations
- Signage identifying associated company and manufacturer
- Tank battery with metal gun-barrel tanks, metal saltwater tank, and minimum of two metal crude oil tanks situated lower than the pumping unit
- Heater-treater is sometimes present
- Usually in oil fields

### 3.2.4.3 Pipelines

#### Pipeline Fountain Heads

- Steel
- Small diameter
- Light weight
- Increase in size, weight, and length as joined with larger gathering lines

#### Gathering Lines

- Steel
- Medium diameter, usually between 2 and 4 inches
- Medium weight

#### Trunk Lines

- Steel
- Large diameter, usually between 4 and 16 inches
- Heavy weight
- May include main, way, and branch lines
- May include yards, stations, depots, and pump stations

#### Natural Gas Lines

- Wrought or cast iron
- Local lines from 2.0 to 2.5 inches in diameter
- Main lines from 16 to 24 inches in diameter

### 3.2.4.4 Tanks and Tank Farms

#### Character-defining Features

- Wood or steel construction usually on concrete slab
- Cylindrical or spherical
- Ladders or stairways along the exterior of each tank
- Catwalks or runways between tanks
- Signage identifying associated company and manufacturer
- Earthen berms, dikes, and ditches often surround tanks

#### Metal Crude Oil Tanks

- Large pieces of steel bolted or welded together forming cylindrical side walls
- Flat metal covers on bolted models
- Conical metal covers on welded models
- Stairways and runways

#### Tank Farms

- Complex of several to many large tanks storing crude oil
- Berms and ditches surrounding tanks
- Railroad sidings or on main line

#### Integrity Aspects – Required

- Location
- Design
- Feeling
- Setting
- Materials
- Workmanship
- Association

#### Integrity Considerations

- Realignments
- Upgrades/Maintenance

#### CRHR/NRHP

- Period of significance – start of community development
- Retains all aspects of integrity
- Demonstrates high quality of design

#### NRHP District Contributor

- Adds to the district's historic character
- Was constructed within the overall districts period of significance
- Possesses an adequate degree of integrity to convey the significance of the theme

# Archival Research

Members of the research team conducted additional research in order to complement the known thematic historic context and aid in identifying previously unknown contributing resources. CH2M visited the University of California at Santa Barbara Map Library, the Research Library the Museum of Ventura County, the Agricultural Museum, the California Oil Museum and a local libraries. We also visited Limoneira Company headquarters, the United Water Conservation District, and the Farmer’s Irrigation Company. Additionally, project staff attempted to gather property-specific information through the Assessor and Planning Departments. Further access to articles, theses and dissertations was conducted through JSTOR and UC Berkeley Research contact is summarized in Table 4-1.

**Table 4-1. Archival Sources and Repositories Consulted**

Source/Repository	Phone Call	Visit	E-mail	Notes
University of California Santa Barbara Aerial Imagery Research Service Map & Image Lab UCSB Library Santa Barbara, CA Alison Gillum Phone: (805)893-3948 E-mail: <a href="mailto:library-airs@ucsb.edu">library-airs@ucsb.edu</a> <a href="http://www.airscalifornia.com">www.airscalifornia.com</a> <a href="http://www.library.ucsb.edu/mil">www.library.ucsb.edu/mil</a>		12/19/16	12/15/16 12/16/16 12/19/16	Obtained aerials from 1927, 1947, and 1970.
Museum of Ventura County Research Library 100 E Main Street Ventura, CA 93001 Charles Nelson Johnson Phone: (805)653-0323 ext320 E-mail: <a href="mailto:library@venturamuseum.org">library@venturamuseum.org</a>		12/15/16 1/20/17 1/27/17	12/16/16 1/5/17	Closed until January 10 <sup>th</sup> . Reviewed and obtained maps, photographs and other references. Not all maps could be found at time of visit due to a recent reorganization.
Limoneira Company (Archives) 1141 Cummings Road Santa Paula, CA 93060 John Chamberlain Gus Gunderson Phone: (805) 525-5541 E-mail: <a href="mailto:jchamberlain@limoneira.com">jchamberlain@limoneira.com</a>		1/12/17	12/19/16 1/5/17	Reviewed and obtained maps and photographs. Discussed water system.
United Water Conservation District 106 N 8 <sup>th</sup> Street Santa Paula, CA 93060 Dan Detmer Phone: (805)525-4431 ext122 E-mail: <a href="mailto:dand@unitedwater.org">dand@unitedwater.org</a>		12/19/16		Discussed water system.

Source/Repository	Phone Call	Visit	E-mail	Notes
Farmers Irrigation Company 133 N 10 <sup>th</sup> Street Santa Paula, CA 93060  Pete Fallini Phone: (805) 525-5993 E-mail: farmersirrigation@verizon.net	12/16/16	1/24/17		Discussed archival access with secretary. No further communication to date.
California Oil Museum 1001 E. Main Street Santa Paula, CA 93061 Phone: (805) 933-0076		12/15/16		No materials directed related to survey. Historical society maintains space within. Appointment required.
Museum of Ventura County Agricultural Museum 926 Railroad Avenue Santa Paula, CA 93060 Phone: (805) 525-3199		1/27/17		Some reference info on museum exhibits.
E.P. Foster Library 651 East Main Street Ventura, CA93001 Phone:(805) 648-2716		12/19/16		Reviewed and obtained references.
Fillmore Library 502 2nd Street Fillmore, CA93015 Phone: (805) 524-3355		12/19/16		Reviewed and obtained references.
Blanchard Community Library 119 N. 8 <sup>th</sup> Street Santa Paula, CA 93060 Phone: (805) 525-3615		12/15/16		Reviewed and obtained references.
Ventura County Assessor 800 South Victoria Ave Ventura, CA 93009 Phone: (805) 654-2181		1/20/17		Obtained building information for 12 properties in the Mission Rock Road area from the Secured Property Database.
Santa Paula Building and Safety Department/Planning Department 200 S 10 <sup>th</sup> St Santa Paula, CA 93060 (805) 933-4214				Talked with contact at the Ventura County Assessor (1/20/2017), who said that the 12 properties in the Mission Rock Road area are not within the city-proper limits of Santa Paula, so the building department would not likely have additional information.
Ventura County Building and Safety Department 3855 Alamo St. Suite F Simi Valley, CA 93063		1/20/17		Was referred to the Ventura County Planning Department.

Source/Repository	Phone Call	Visit	E-mail	Notes
(805) 582-8064				
Ventura County Planning Department 800 South Victoria Ave Ventura, CA 93009 (805) 654-2488		1/20/17		Permits associated with each property in the Mission Rock Road area were pulled and printed for reference. They do not have any information for buildings constructed before 1947.

Materials at the Museum of Ventura County examined included original maps hand drawn and in pencil, even one on cloth. Maps and documents available at the Research Library:

- M 132 Briggs Sheet No.1 October 1915 (old #14-12).
- M 234 Ventura County, CA, map of 1916 shows roads, old channel Todd Barranca
- (1912) Historical Atlas of Ventura County. By school district.
- No date. Map Showing Course of Ditch Farmers Canal and Water Co. Map file #36 ST Wells, et al.
- MLC 65 Rancho Santa Paula Y Saticoy Map of Part of Lands of Beckwith 1910
- File 215 Farmers Ditch and Irrigation incorporated 1898
- 634.334 Emerson, Gladys C. 1968. Geographical Development of the Limoneira Co. Santa Paula, California. University of California Los Angeles.

Maps Available at Limoneira Company:

- 1904 Map of Orchard Farm displayed on wall. Building and railroad simple layout.
- 1908 Map of Orchard Farm the property of Hannah Mary Edwards, Trustee. Many fences, pastures, alfalfa, beet fields, willows and cleared areas. Beginning of Power's Ditch and Todd Barranca new and old channels with dam south of railroad.
- 1914 Map of Orchard Farm the property of Hannah Mary Edwards, Trustee. Named buildings, walnut orchard, pastures, wells.
- 1925 Orchard Farm Pipe Lines. Alphabetically named cement and riveted steel lines crisscrossing parcel, pump heads.
- 1925 Profile proposed pipe line for Roger Edwards – Orchard Ranch.
- 1929 Map of Proposed Valencia Planting Orchard Farm The Samuel Edwards Associates.
- 1931 Plan of 12" Concrete Drain Line Showing Ties to Property Line.

# Field Survey

The following describes the methods of the historic built environment survey conducted between January 16 and 27, 2017 and provides a summary of the survey results.

## 5.1 Survey Methods

The MREC historic built environment survey was conducted by Amy McCarthy-Reid, MA, RPA, as Principal Investigator and architectural historians Sara Orton, MS and MaryNell Nolan-Wheatley, MPS as well as cultural resources specialists Natalie Lawson, MA, RPA and Gloriella Cardenas, MA, RPA, David Sheldon MS, and Ryan Rolston, BA. Ms. McCarthy-Reid meets the qualifications of the Secretary of the Interior's standards and guidelines for archaeology and architectural history (NPS, 1983) for Principal Investigator of federal projects.

The fieldwork portion of the Mission Rock Energy Center historic survey occurred from January 16<sup>th</sup> through the 20<sup>th</sup> and the following week from January 23<sup>rd</sup> through the 27<sup>th</sup> 2017. The survey consisted of at three separate teams throughout the duration. Surveyors were familiar with the research design and historic context.

CH2M reviewed 1927, 1947, and 1970 aerial photographs and early 20<sup>th</sup> century historic maps (previously studied USGS and recently acquired through local archives) in detail for contributors to the SCRVRHD and other historic age resources prior to and during the survey, such as the following property types:

- Buildings such as ranch headquarters, main residences, employee residences, barns, garages, sheds, an adobe building, a relocated former school, office buildings, industrial and commercial buildings, worker cottages
- Irrigation-related features including pumping stations, pipelines of concrete and iron, open canals, drainage ditches, headwalls, culverts, tanks, and spillways
- Transportation features in the PAA included primary roads, secondary roads, and the railroad
- Landscaping and agricultural patterns of vegetation including orchards, windrows, row crops, and ornamental landscaping
- Petroleum industry-related structures included oil pump jacks, wellheads, sumps, and pipelines

A pre-field examination of the 1970 aerial photographs of the project area obtained from the University of California Santa Barbara Map Library indicated that there were at least thirteen (13) discrete visible segments or runs of pipeline, two (2) possible tank farms with sumps, (3) individual tanks and twelve (12) individual pump jacks. There were also six (6) discrete areas that appeared to have abandoned wells located on them. No petroleum production infrastructure appears on the 1947 aerials. The pipeline alignment, in excess of 2 miles in length along East Gaythorne and Shell roads was intensely surveyed during the field effort.

The field team visited as many parcels as possible in the PAA to search for historical resources that contribute to the SCRVRHD. These included revisiting resources identified during 1996 survey and the 2015 survey and additional new potential locations from the aerial and map review. Each team recorded historical resources in the PAA. This involved taking data points with a Trimble geographical positioning system (GPS) device, photography with detailed photo logs, drawing sketch maps, and notation, primarily on the California DPR forms. The surveyors walked most portions within each parcel and along the roadways. The resources were dated as well as possible using historic maps and aerials, maker's marks,

type, and method of manufacture. Surveyors took notes to update or create new DPR forms to reflect all secondary resources, assessing resource condition and considering the seven aspects of integrity.

## 5.2 Survey Results

As stated in Section 1, access was granted for 40 parcels belonging to 11 land owners. All of these parcels were accessed for recording and, in addition, public roads systems were recorded. Maps of areas surveyed are found in the Attachment A.

Most of the properties recorded are associated with those recorded initially for the SCRVRHD. These initial recordings, however, were not always consistent in the way they treated subsidiary properties; some properties were simply mentioned on the form of another property and others were recorded separately. This re-survey attempted to address these consistency issues and correct the previous forms. Each building and structure now has appropriate associated forms. In addition, the main roads will have their own set of forms. Irrigation features including the hundreds of standpipes, hydrants, and drainpipes will be grouped together. There are also forms grouping windrows, wind machines, and orchard heaters.

Approximately 80 buildings and structures were recorded, re-recorded, or updated. The field team also recorded nine major road segments: Foothill, Telegraph, Darling, Olive, Aliso Canyon, Mission Rock, Shell, Pine, Elizabeth Canyon. There were roadside drainage ditches and associated culverts. Other recording efforts concentrated on 3 subsidiary road systems, 1 oil extraction system with several components, and 3 irrigation systems.

Parcel access included the two landmark properties in the PAA. All of the buildings and structures on the large Edwards Ranch-Orchard Farm property with the More Adobe, owned by Limoneira, and the Sharp-Thille Ranch, with its prominent Italian Villa historic residence, were re-recorded. This included the workers' houses on both Sharp and Limoneira parcels, notably off of Foothill Road on Pine (Aliso Village Camp 800). The majority of the buildings still appear to be eligible with the exception of the More Adobe. The condition of the More adobe has dramatically worsened in the past year. The Sharp and Limoneira parcels also contained dirt roads as well as many flood and furrow type irrigation features. Much of this irrigation appears to be intact and some still serves original functions. There are three separate systems present. The water systems on the north and western portion of Limoneira (with former Olivelihoods), the Orchard Farm (also Limoneira) and the Sharp Farm may be contributing elements to the overall SCRVRHD. These systems retain much of their original integrity of location. While the system at Sharp may have more remaining components, parts of the system at Orchard Farm is demonstrably still in use. The systems, which remain primarily intact, within the still active orchards, also retain much of their integrity of setting, feeling and association. Orchard Farm's system also retains much of the integrity of design, materials, and workmanship. The Sharp Farm system, which may not still be in use, retains some integrity of setting, as many of the features are still in place, as well as some integrity of materials.

Overall, none of these systems are likely eligible on their own merits. Although they are related to the development of orchards within the SCRVRHD, they are not unique in the Santa Clara Valley, do not have any clear associations with an important figure, are not unique in their engineering design, and because plans for the systems still exist, lack research potential. They do, however, contribute to the overall district, as they are good examples of water systems of the period, still largely intact, and visible within the orchards, much as they would have been during the early 20<sup>th</sup> century.

Some pieces of abandoned farm equipment, an oil wagon, for example, were also discovered within and around the properties. Historic orchard heaters were observed both currently in use in the fields and discarded in the Ellsworth Barranca. Vegetation types were noted, such as eucalyptus windrows, as well as natural and channelized waterways, and new land uses including several new orchards and movement of the Limoneira mulch processing area. The field team documented intrusions or detractors of non-



contributing characteristics, whether modern or historical in age. We also recorded the pipeline, pump jacks, tank farms and wells in the PAA. When field checked, as indicated through study of the 1970 aerials and Google Earth, many petroleum features had been removed.

The project team is finalizing California DPR 523 forms for all of the historical resources. Some resources were recorded collectively, as a type of feature. For example, all irrigation stand pipes in a given agricultural field were recorded individually, but as a property type for that particular parcel or, group of parcels, depending on historical land ownership and use, or along with other components of the system in place. Maps which show survey area boundaries, parcels for which permission to survey was granted, and locations of farmsteads are provided in Attachment A.

Results of the survey indicate that all of the previously recorded buildings and structures still retain their historically important characteristics. They are generally in the same condition as recorded in 1996 with the exception of the More Adobe, which was found in a deteriorated condition during the 2015 reconnaissance and continues to deteriorate. The current field effort has identified a number of new contributing infrastructure elements to this historic district. Although several newly recorded properties may detract from the integrity of the district; for example, modern elements (petroleum system features, State Route 126), the SCVRHD is still eligible for listing on the National Register under Criteria A and C. Based on the level of similar intrusions (other transmission lines) and scale of the district and its overall integrity, the installation of a monopole transmission line will not compromise the eligibility of this historic district, particularly when the siting of a portion of the line among and near the tall trees that line Todd Barranca and the screening effect of the trees is considered.

Potential project effects would be indirect and visual effects of the generator tie-line on the setting of historical resources that are contributing to the SCVRHD. Neither the project site nor the generator tie-line, gas, nor water line would involve the removal of or direct effects to the historic properties.

**Table 5.1. Properties Recorded**

Address #	Address Street	Property Name	Resource Name	Parcel Number	Notes
	Edwards Ranch Road	Edwards Ranch	Edwards Adobe (More Adobe)	90018008	
	Edwards Ranch Road	Edwards Ranch	Row of Connected Buildings	90018008	Updating existing form; no new Primary Records
	Edwards Ranch Road	Edwards Ranch	Office	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #7	90018008	CA bungalow
	Edwards Ranch Road	Edwards Ranch	Residence #8	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #9	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #10	90018008	
	Edwards Ranch Road	Edwards Ranch	Barn 1893	90018008	
	Edwards Ranch Road	Edwards Ranch	Barn 1900	90018008	
	Edwards Ranch Road	Edwards Ranch	Implement shed	90018008	
	Edwards Ranch Road	Edwards Ranch	Barn 1920	90018008	
	Edwards Ranch Road	Edwards Ranch	Garage Shed	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #8 Shed	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #7 Shed	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #7 Garden	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #9 Garage	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence Orchard	90018008	Orchard-RR-01 - goes with both Res #9 and #10
	Edwards Ranch Road	Edwards Ranch	Residence #10 Shed	90018008	
	Edwards Ranch Road	Edwards Ranch	Residence #10 Carport	90018008	
	Edwards Ranch Road	Edwards Ranch	Shed and Tank	90018008	
12025	Foothill Road			64030013	No assessor date, appears 1978 aerial
730	Mission Rock Road			0990060385	1960 assessor, bldg 1967 aerial; Cross gabled, board and batten siding. Visible from the street. Check for previous BSO.
842	Mission Rock Road			0990060555	1966 assessor, 3 bldgs appear 1969 aerial, 1 on 1967; Hipped roof. No access; slightly visible.
890	Mission Rock Road	Saticoy Oil Field Office		0990050075	No assessor date, appears 1969 aerial; Metal clad; project laydown area. Building not found.
899	Mission Rock Road			0900190325	No assessor date, 2 bldgs 1978 aerial. Hipped roof office and low or flat metal roof ancillary buildings
910	Mission Rock Road			0990110015	1945 assessor, not on 1947 aerial, 2 bldgs on 1967; Limited visibility from street.

**Table 5.1. Properties Recorded**

Address #	Address Street	Property Name	Resource Name	Parcel Number	Notes
936	Mission Rock Road			0990110095	1968 build date, Metal clad roof and siding, metal window screens; visible from the street.
1202	Mission Rock Road			0900190145	Access to building façade only
1205	Mission Rock Road			0900190265	1948 assessor, 1 bldg 1969 aerial; Gabled roof
802	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
804	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
806	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
808	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
810	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
812	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
814	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
816	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
818	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
820	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
822	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
824	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
826	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
828	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road

**Table 5.1. Properties Recorded**

Address #	Address Street	Property Name	Resource Name	Parcel Number	Notes
830	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
832	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
834	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
836	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
838	Pine Road	Limoneira Ranch	Aliso Village – Camp 800	64031007	Formerly 12255 Foothill Road
	Roger Road	Edwards Ranch	Employee Residence	90018008	CA bungalow
	Roger Road	Edwards Ranch	Roger Edwards Residence	90018008	
	Roger Road	Edwards Ranch	Roger Edwards Residence Shed	90018008	
	Roger Road	Edwards Ranch	Employee Residence Barn	90018008	
	Roger Road	Edwards Ranch	Employee Residence Shed	90018008	
	Roger Road	Edwards Ranch	Employee Residence Garden	90018008	
	Roger Road	Edwards Ranch	Edwards Ranch canal	90018008	E. Gaythorne crossing - canal bridge
12075	Telegraph Road, West	Limoneira Ranch	Harwood Ranch	90005108	Has a previous DPR form.
11736	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Ranch Office and Residence	90004206	
11736	Telegraph Road, West	Sharp-Thille Ranch	Quonset Hut Office	90004205	
11736	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Ranch Office and Residence	90004206	
11840	Telegraph Road, West	Sharp-Thille Ranch	Italian Villa	90004206	

**Table 5.1. Properties Recorded**

<b>Address #</b>	<b>Address Street</b>	<b>Property Name</b>	<b>Resource Name</b>	<b>Parcel Number</b>	<b>Notes</b>
11840	Telegraph Road, West	Sharp-Thille Ranch	Italian Villa Garage	90004206	
11840	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Orchard	90004206	Orchard-RR-02
11840	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing Garage 1	90004206	Used the address for the main house.
11840	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing Garage 2	90004206	Used the address for the main house.
11840	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing Garage 3	90004206	Used the address for the main house.
11840	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing Garage 4	90004206	Used the address for the main house.
11840	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing Shed	90004206	Used the address for the main house.
11874	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing	90004206	
11874	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing Shed	90004206	
11876	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing	90004206	(OHP list 1910)
11878	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing	90004206	
11880	Telegraph Road, West	Sharp-Thille Ranch	Sharp-Thille Employee Housing	90004206	
12075	Telegraph Road, West	Limoneira Ranch	Garden		Garden
12390	Telegraph Road, West	Limoneira Ranch	Orchard		orchard with 12390 residence

**Table 5.1. Properties Recorded**

Address #	Address Street	Property Name	Resource Name	Parcel Number	Notes
12390	Telegraph Road, West	Limoneira Ranch	Residence		residence (attached garage)
	Telegraph Road, West	Telegraph Road, West		NA	Primary form for Road, add Linear forms for road and ditches. Associated Resources on linear forms for culverts, retaining walls, other features. Continuation sheet L5.
	Telegraph Road, West		Pumphouse	90005102	No assessor date, 1947 aerial; Corrugated metal clad
	Darling Road		Pumphouse		Along road edge. Need full set of DPRs.
		Drainage Properties Ditches Culverts Drains		NA	Along each main road. Olive, Foothill, Aliso Canyon, Telegraph
		Edwards Ranch	Drainage	90018008	Additional segments alongside state route 126 Saticoy Oil Field. System. Primaries, Linear, BSOs
		Oil Properties		NA	East Gaythorne Road. Pipeline, pumpjacks, tanks – separator facilities, wells
		Orchards		NA	Large blocks of orchards on separate map
		Southern Pacific Railroad		90017203	Southern Pacific Railroad tracks and part of Ellsworth Barranca bridge Update
		Southern Pacific Railroad		90018002	Southern Pacific Railroad tracks, part Ellsworth Barranca bridge, and Edwards Ranch drainage bridge Update
		Southern Pacific Railroad		99005002	Southern Pacific Railroad tracks and Todd Barranca bridge Update
		Sharp Irrigation System Orchard Farm Irrigation System Limoneira north irrigation Todd Barranca channel			
		Wason Barranca	Wason Barranca		Concrete lined; access from Sharp-Thilles; btw '27-'47 aerials - straightened and channelized
		Wind rows Orchard Farm Wind rows Sharp Wind rows Limoneira		NA	On Limoneira and Sharp parcels

**Table 5.1. Properties Recorded**

Address #	Address Street	Property Name	Resource Name	Parcel Number	Notes
	Aliso Canyon Road	Aliso Canyon Road		NA	Primary form for Road, add Linear forms for road and ditches. Associated Resources on linear forms for culverts, retaining walls, other features. Continuation sheet L5.
		Edwards Ranch Orchard Farm	Edwards Ranch Roads		Orchard Roads
		State Highway 126		NA	complete remotely (GE)
		Limoneira north roads			Orchard roads
		Sharp property roads			Orchard roads
	Elizabeth Road	Elizabeth Road			Linear record up to visitors parking lot.
	Pine Road	Pine Road		NA	Primary form for Road, add Linear forms for road and ditches. Associated Resources on linear forms for culverts, retaining walls, other features. Continuation sheet L5.
	Mission Rock Road	Mission Rock Road		NA	Primary form for Road, add Linear forms for road and ditches. Associated Resources on linear forms for culverts, retaining walls, other features. Continuation sheet L5.
	Olive Road	Olive Road		NA	Primary form for Road, add Linear forms for road and ditches. Associated Resources on linear forms for culverts, retaining walls, other features. Continuation sheet L5.
	Foothill Road	Foothill Road		NA	Primary form for Road, add Linear forms for road and ditches. Associated Resources on linear forms for culverts, retaining walls, other features. Continuation sheet L5.
		Ellsworth Barranca dump / debris areas			
		Ellsworth Barranca Sewage Disposal site			

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# Attachment A

## Maps

Due to privacy concerns, a copy of Attachment B has been provided directly to the California Energy Commission Staff's Project Manager for the Mission Rock Energy Center.

# Attachment B

## Property Owner Access Record

Due to privacy concerns, a copy of Attachment B has been provided directly to the California Energy Commission Staff's Project Manager for the Mission Rock Energy Center.