

Appendix E

Cultural Resources Assessment



Somis Ranch Farmworker Housing Complex Project

Cultural Resources Assessment

prepared for
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Executive Summary

Purpose and Scope

Rincon Consultants, Inc. (Rincon) was retained by the County of Ventura Resources Management Agency, Planning Division to conduct a cultural resources study for the Somis Ranch Farmworker Housing Complex Project (project) in an unincorporated area of Ventura County, California. The purpose of this report is to identify and evaluate cultural resources that may be affected by the implementation of the proposed project, which involves the development of a farmworker affordable housing complex and construction of an on-site community wastewater treatment facility. The current buildings on the property would remain; they would not be demolished, relocated or altered for the proposed project. This cultural resources study was prepared in compliance with the requirements of the California Environmental Quality Act (CEQA). This study includes a cultural resources records search of the California Historical Resources Information System (CHRIS), historical maps and aerial imagery review, Native American outreach including a Sacred Lands File (SLF) search conducted by the Native American Heritage Commission (NAHC), a field survey of the project site, archival research, an evaluation of the subject property for historical significance, and preparation of this report.

Dates of Investigation

Rincon Archaeologist Elaine Foster, BA, contacted the NAHC on March 11, 2020 to request an SLF search and a contact list of Native Americans culturally affiliated with the project site. Ms. Foster sent informal consultation letters to known Native American contacts in the area on March 13, 2020 to request information on potential cultural resources in the project vicinity that may be impacted by project development. The South Central Coastal Information Center staff conducted the cultural resources records search on April 3, 2020. Architectural Historian Rachel Perzel, MA, and Archaeologist Mary Pfeiffer, BA, conducted the cultural resources survey of the project site on April 28, 2020. This report was completed in June 2020.

Summary of Findings

Available information suggests the agricultural property at 2789 Somis Road is eligible for listing in the California Register of Historical Resources and as a Ventura County Landmark; it therefore is presumed to be a historical resource as part of the current project's CEQA compliance. The proposed project does not involve any demolition or direct alteration of any of the buildings on the project site. Rather, the project involves the subdivision of the existing property into four parcels, three of which would include and the construction of an adjacent residential development and an on-site community wastewater treatment facility. The remaining parcel would retain the existing residential and agricultural buildings and remain in agricultural production. The new development would include a landscaping buffer to separate new development from the existing buildings. Therefore, regarding built-environment resources, Rincon recommends a finding of a ***less than significant impact to historical resources*** under CEQA.

The cultural resources records search identified three previously recorded cultural resources within a 0.5-mile radius of the project site, none of which are located within the project site. Of the recorded resources in the records search radius, two are Native American-origin archaeological resources in close proximity to the current project site. The majority of the project site has been previously disturbed from grading, building development and agricultural activities. The pedestrian field survey identified three isolated shell fragments within the southern portion of the project site and intermixed modern and historic-era refuse along the eastern boundary of the project site. The isolated shell fragments were not found in association with any other cultural materials or soil discoloration and are therefore not considered cultural in nature. Based on the size and nature of the historic and modern refuse, the deposit is likely related to episodic refuse dumping that occurred during the construction and maintenance a culvert on the property. Episodic refuse dumping is a common pattern observed in rural communities before the health and safety laws of the 1960s and 1970s (Sullivan and Griffith 2005). The refuse was not formally recorded as a cultural resource as the components could not be dated to a historic period. Native American outreach identified the project site is sensitive for archaeological resources and Patrick Tumamait of the Barbareño/Ventureño Band of Mission Indians recommended Native American monitoring during all ground disturbance associated with the project.

Based on the proximity of the project to a freshwater source, Arroyo Las Posas, the presence of nearby archaeological resources, and the results of Native American outreach, the area is considered sensitive for archaeological resources. Rincon therefore recommends archaeological and Native American monitoring during project ground disturbance. These recommended measures are presented below. With adherence to these recommendations, Rincon recommends a finding of ***less than significant impact with mitigation to archaeological resources*** under CEQA. The project is also required to adhere to regulations regarding the discovery of human remains, detailed below.

Archaeological and Native American Monitoring

Rincon recommends archaeological and Native American monitoring of initial project-related ground disturbing activities. Archaeological monitoring should be performed under the direction of the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983). The qualified archaeologist, in consultation with the County of Ventura and the Native American monitor, may recommend the reduction or termination of monitoring depending upon observed conditions (e.g., no resources encountered within the first 50 percent of ground disturbance). If archaeological resources are encountered during ground-disturbing activities, work within a minimum of 50 feet of the find must halt and the find evaluated for California Register of Historical Resources (CRHR) eligibility. Should an unanticipated resource be found as CRHR eligible and avoidance is infeasible, additional analysis (e.g., testing) may be necessary to determine if project impacts would be significant.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for National Register of Historic Places (NRHP)/CRHR eligibility. If the discovery proves to be significant under the National Historic Preservation Act (NHPA) and/or CEQA

and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts to historical resources.

Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted site access to provide recommendations for the treatment of the identified remains.

1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by the County of Ventura Resources Management Agency – Planning Division to conduct a cultural resources assessment for the Somis Ranch Farmworker Housing Complex Project (project) in an unincorporated area of Ventura County, California. As described in greater detail below, this assessment includes a cultural resources records search, a search of the Sacred Lands Files (SLF), Native American group outreach, a field survey of the project site, archival research, and preparation of this report. The project is subject to the requirements of the California Environmental Quality Act (CEQA), with the County of Ventura (County) acting as the lead agency. All work was completed in accordance with the applicable cultural resources guidelines and regulations of CEQA and the County.

1.1 Project Location

The approximately 36.3-acre project site is located at 2789 Somis Road on Assessor Parcel Number (APN) 156-018-048. Situated just north of the intersection of Somis Road/Las Posas Road, the property is in an unincorporated area of Ventura County between the city of Camarillo and the unincorporated community of Somis. The property is located immediately north of and adjacent to the City of Camarillo (City), and outside of the City's sphere of influence and City Urban Restriction Boundary (Figure 1). The property is currently predominantly used for agricultural production and contains two residences and ancillary agricultural buildings (Figure 2). An unpaved road, Bell Ranch Road, provides access to the property from Somis Road. The property is depicted on Township 02 North, Range 20 West, Section 19 of the United States Geological Survey (USGS) *Camarillo, CA* 7.5-minute quadrangle (Figure 1).

1.2 Project Description

The proposed project would entail subdivision of the existing property into four parcels, three of which would be developed for farmworker housing (approximately 18.4 acres) and one of which would remain in agricultural production (approximately 17.9 acres). The proposed housing community would contain 360 dwelling units, 655 vehicular parking spaces, 379 bicycle parking spaces, and amenities such as community centers, play fields, tot lots/playgrounds, picnic tables, barbeques, and a basketball court. The proposed farmworker housing complex would be constructed in three phases and is intended to be 100 percent affordable to farmworkers who qualify as lower income and would include 28 multi-family residential buildings containing one-, two-, and three-bedroom units (Figure 3). Designed in a Spanish Colonial architectural style, the residential buildings would be up to three stories in height, with a maximum height of 35 feet.

The project would also include construction and operation of an on-site community wastewater treatment facility (CWWTF). Treated effluent quality would meet Disinfected Tertiary Recycled Water requirements in accordance with California Code of Regulations Title 22. The recycled water is proposed for use as off-site agricultural irrigation and any water that cannot be used for agriculture (e.g., excess recycled water and treated wastewater effluent not meeting recycled water quality standards) would be dispersed through a series of underground seepage pits on the westerly side of the project site. The proposed CWWTF would be operated by a public sewer agency.

Landscaping will include a landscaped buffer surrounding the housing development in addition to landscaped areas within the housing consisting of drought-tolerant species and smart irrigation controls for water efficiency (Figure 4). The project would also include two on-site stormwater detention basins capture stormwater runoff from the development

The existing residences and ancillary agricultural buildings at on the property would not be demolished or relocated as part of the proposed project.

1.3 Personnel

Rincon Architectural Historian Susan Zamudio-Gurrola, MHP, conducted the archival research and co-authored this report. Architectural Historian Rachel Perzel, MA, conducted the built environment field survey and co-authored this report. South Central Coastal Information Center staff completed the cultural resources records search. Senior Architectural Historian Steven Treffers, MHP managed this cultural resources study and provided senior oversight. Ms. Zamudio-Gurrola, Ms. Perzel and Mr. Treffers meet the Secretary of the Interior's Professional Qualification Standards (PQS) for architectural history and history. Rincon Registered Professional Archaeologist (RPA) Hannah Haas, MA, oversaw the archaeological portion of this study. Ms. Haas meets the Secretary of the Interior's Professional Qualification Standards for archaeology. Archaeologist Elaine Foster, BA, conducted Native American outreach. Archaeologist Mary Pfeiffer, BA, conducted the archaeological survey and co-authored this report. Geographic Information Systems (GIS) Analyst Audrey Brown prepared the figures found in the report. Rincon Principal Christopher A. Duran, MA, RPA, reviewed this report for quality control/quality assurance.

Figure 1 Vicinity Map



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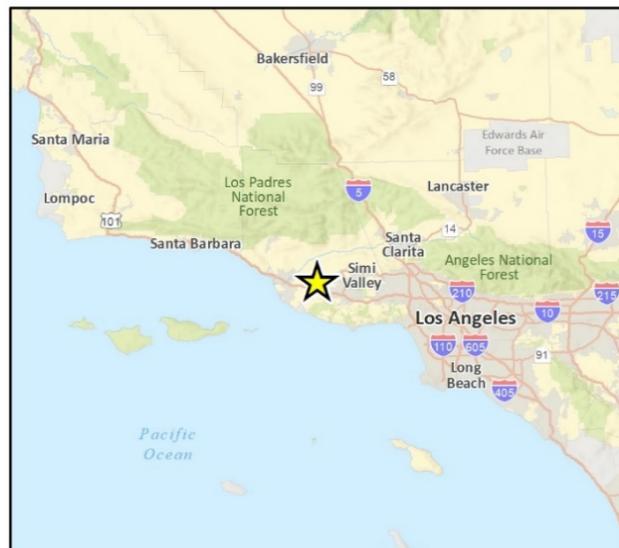


Fig 1 Regional Location

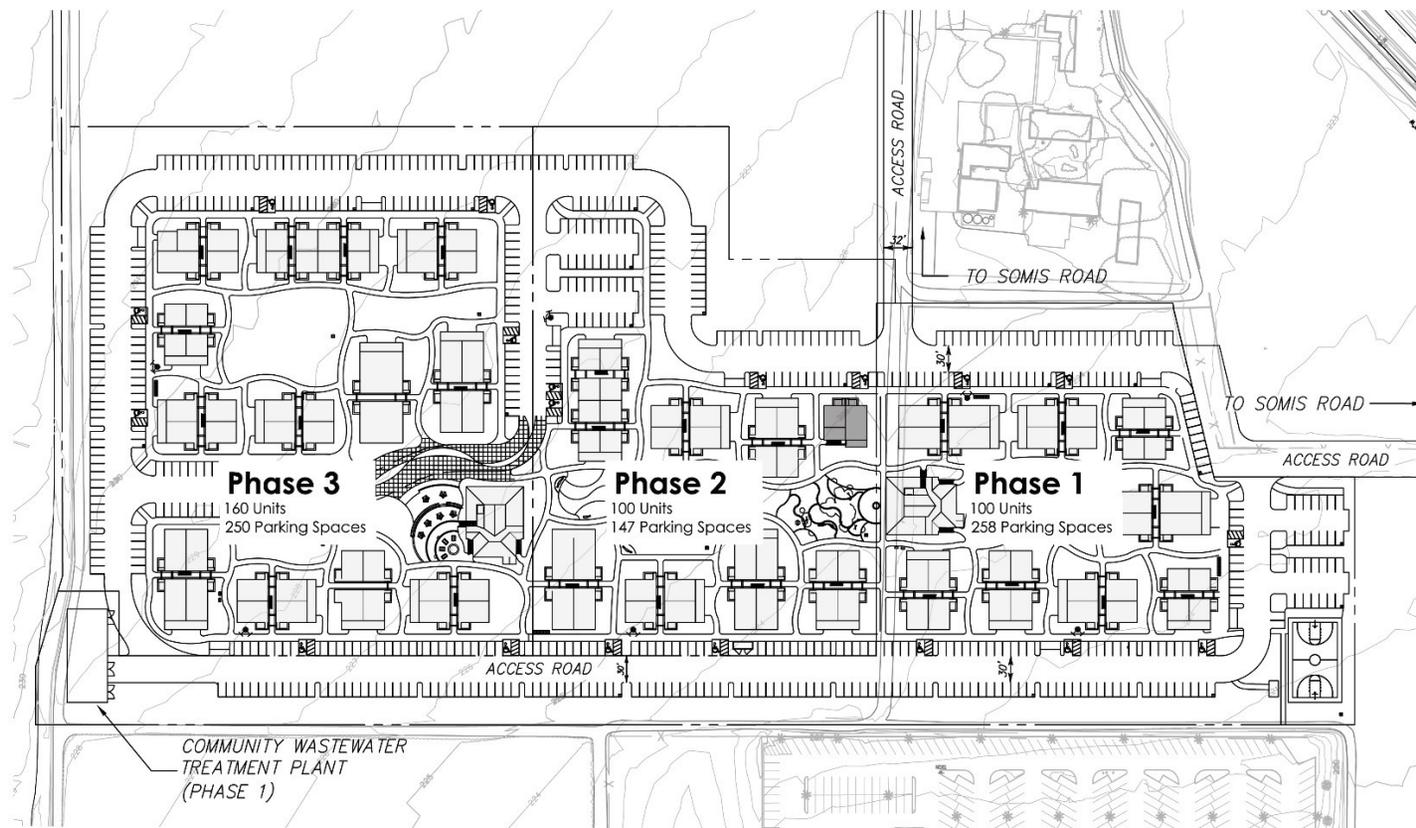
Figure 2 Project Location Map



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Fig. 2 Project Location

Figure 3 Housing Complex Phasing Plan



Source: Jensen Design & Survey Inc., 2019.

2 Regulatory Setting

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural resources that should be adhered to before and during implementation of the proposed project.

2.1 CEQA

PRC §5024.1, Section 15064.5 of the CEQA Guidelines, and PRC §§21083.2 and 21084.1 were used as the basic guidelines for this cultural resources study. CEQA (§21084.1) requires that a lead agency determine if a project could have a significant effect on historical resources. A historical resource is one listed in or determined to be eligible for listing in the California Register of Historical Resources (§21084.1), included in a local register of historical resources (§15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (§15064.5[a][3]). Resources listed in the NRHP are automatically listed in the CRHR.

According to CEQA, impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines §15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register (CEQA Guidelines §15064.5[b][2][A]).

2.2 California Register of Historical Resources

The CRHR was created by Assembly Bill 2881, which was established in 1992. The CRHR is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Public Resources Code, 5024.1[a]). The criteria for eligibility for the CRHR are consistent with the National Register criteria but have been modified for state use in order to include a range of historical resources that better reflect the history of California (Public Resources Code, 5024.1[b]). Certain properties are determined by the statute to be automatically included in the CRHR by operation of law, including California properties formally determined eligible for, or listed in, the National Register.

The CRHR consists of properties that are listed automatically and those that must be nominated through an application and public hearing process. The CRHR automatically includes the following:

- Criterion 1:** Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Criterion 2:** Is associated with the lives of persons important to our past

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history

In addition, if it can be demonstrated that a project will cause damage to a *unique archaeological resource*, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC §21083.2[a], [b]).

PRC Section 21083.2(g) defines a *unique archaeological resource* as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

Criterion 1: Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information

Criterion 2: Has a special and particular quality such as being the oldest of its type or the best available example of its type

Criterion 3: Is directly associated with a scientifically recognized important prehistoric or historic event or person

2.3 Local Regulations

County of Ventura

Ventura County Ordinance No. 4225, known as the Cultural Heritage Ordinance, delineates the criteria utilized to assess the eligibility of a potential Cultural Heritage Site, and the manner by which Cultural Heritage Sites are designated. An improvement, natural feature or site may become a designated Cultural Heritage Site if it meets the following applicable criteria:

- A. To be designated as a Landmark, a property must meet one of the following criteria
1. It exemplifies or reflects special elements of the County's social, aesthetic, engineering, architectural or natural history;
 2. It is associated with events that have made a significant contribution to the broad patterns of Ventura County or its cities, regional history or the cultural heritage of California or the United States;
 3. It is associated with the lives of persons important to Ventura County or its cities, California or national history;
 4. It has yielded, or has the potential to yield, information important to the prehistory or history of Ventura County or its cities, California or the nation.
 5. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values;
 6. Integrity. Establish the authenticity of the resource's physical identity by evidence of lack of deterioration and significant survival of the characteristics that existed during its period of importance. This shall be evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling and association.

B. Sites of Merit – Satisfy the following criteria:

1. Sites of historical, architectural, community or aesthetic merit which have not been designated as a landmark or point of interest, but which are deserving of special recognition; and
2. County approved surveyed sites with a National Register status code of 5 or above.

C. Points of Interest – Satisfy any one the following criteria:

1. That is the site of a building, structure or object that no longer exists, but was associated with historic events, important persons or embodied a distinctive character or architectural style; or
2. That it has historical significance, but has been altered to the extent that the integrity of the original workmanship, materials or style has been substantially compromised; or
3. That the site of a historic event which has no distinguishable characteristics other than that a historic event occurred at that site, and the site is not of sufficient historical significance to justify the establishment of a landmark.

D. District – Meets the criteria below:

1. Possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.
2. Has precisely mapped and defined exterior boundaries, which requires a description of what lies immediately on the edge of the district to allow rational exclusion of adjoining areas.
3. Has at least one of the criteria for significance of Section 1365-5.a. 1-8
4. Complies with the criteria for integrity contained in Section 1365-5.a.6.

In addition to meeting the criteria in Sec. 1365-5 et seq., all the following standards must be met before a site becomes a designated Cultural Heritage Site:

- A. It shall have historic, aesthetic or special character or interest for the general public, and not be limited in interest to a special group of persons;
- B. Its designation shall not require the expenditure by the County of Ventura of any amount of money not commensurate with the value of the object to be preserved; and
- C. Its designation shall not infringe upon the rights of a private owner thereof to make any and all reasonable uses thereof which are not in conflict with the purposes of this Article.

3 Setting

3.1 Prehistoric Setting

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes within all or portions of southern California (c.f., Jones and Klar 2007; Moratto 1984). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Wallace's chronology was based on early studies and lacked the chronological precision of absolute dates (Moratto 1984:159). Since then, Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained by southern California researchers over recent decades (Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955) and Warren (1968) as well as later studies, including Koerper and Drover (1983).

Early Man Horizon (ca. 10,000–6,000 BCE)

Numerous pre-8,000 BCE sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Erlandson 1991; Johnson et al. 2002; Jones and Klar 2007; Moratto 1984; Rick et al. 2001:609). One of them, the Arlington Springs site on Santa Rosa Island, produced human femurs dating to approximately 13,000 years ago (Arnold et al. 2004; Johnson et al. 2002). On San Miguel Island, human occupation at Daisy Cave (SMI-261) has also been dated to nearly 13,000 years ago. This site also included some of the earliest examples of basketry on the Pacific Coast, dating to over 12,000 years old (Arnold et al. 2004).

Although few Clovis or Folsom style fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6,000 BCE. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

Milling Stone Horizon (6,000–3,000 BCE)

Wallace (1955:219) defined the Milling Stone Horizon as "marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns." The dominance of such artifact types indicate a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed including small and large terrestrial mammals, sea mammals, birds, shellfish and other littoral and estuarine species, near-shore fishes, yucca, agave, and seeds and other plant products (Kowta 1969; Reinman 1964). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007:220). The Topanga Canyon site in the Santa Monica Mountains is considered one of the definitive Milling Stone Horizon sites in southern California.

Lithic artifacts associated with Milling Stone Horizon sites are dominated by locally available tool stone. In addition to ground stone tools such as manos and metates, chopping, scraping, and cutting tools are very common. Kowta (1969) attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Intermediate Horizon (3,000 BCE– 500 CE)

Wallace's Intermediate Horizon dates from approximately 3,000 BCE-500 CE and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish, land mammal, and sea mammal remains along the coast. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. Many archaeologists believe this change in milling stones signals a change from the processing and consuming of hard seed resources to the increasing reliance on acorn (e.g., Glassow et al. 1988; True 1993). Mortuary practices during the Intermediate typically included fully flexed burials oriented toward the north or west (Warren 1968:2-3).

Late Prehistoric Horizon (500 CE–Historic Contact)

During Wallace's (1955, 1978) Late Prehistoric Horizon, the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955:223).

According to Warren (1968), the period between 500 CE and European contact is divided into three regional patterns. The Chumash Tradition is present mainly in the region of Santa Barbara and Ventura counties; the Takic or Numic Tradition is present mainly in the Los Angeles and Orange Counties region; and the Yuman Tradition is present mainly in the San Diego region. The seemingly abrupt changes in material culture, burial practices, and subsistence focus at the beginning of the Late Prehistoric period are considered the result of a migration to the coast of peoples from inland desert regions to the east. This Takic or Numic Tradition was formerly referred to as the "Shoshonean wedge" or "Shoshonean intrusion" (Warren 1968); however, the Chumash were not assimilated or replaced and retained cultural identity.

After 500 CE, a wealth of ornaments, ceremonial, and artistic items characterize the Chumash Tradition (Warren 1968) along the central coast and offshore islands. Ground stone items include bowls, mortars and pestles, balls, grooved stones, doughnut stones, stone beads, pendants, pipes, tubes, and mammal effigies. Projectile points, both large and small, were typically non-stemmed and leaf-shaped, with convex or concave bases. Chipped stone implements also included drills and scrapers. Utilitarian objects were made from bone (e.g., awls, fishhooks, whistles, and tubes) and

shell (e.g., fishhooks and abalone shell dishes). Shell beads and ornaments were abundant, and bowls, pestles, pipes, and stone tubes were inlaid with shell beads and engraved. Bowls, pipes, and ornaments were commonly manufactured from steatite.

Characteristic mortuary practices during the Chumash Tradition included burial in crowded cemeteries. Burials are normally flexed, placed face down, and oriented toward the north or west (Warren 1968:5). The interments are typically marked by vertical pieces of whalebone, and have abundant grave goods, such as ornaments, effigies, and utensils.

3.2 Ethnographic Context

The project lies within an area historically occupied by the Ventureño Chumash, so called after their historic period association with Mission San Buenaventura (Grant 1978a). The Chumash spoke six closely related Chumashan languages, which have been divided into three branches: Northern Chumash (consisting only of Obispeño), Central Chumash (consisting of Purisimeño, Ineseño, Barbareño, and Ventureño), and Island Chumash (Jones and Klar 2007:80). Groups neighboring Chumash territory included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino-Tongva to the south.

Early Spanish accounts describe the Santa Barbara Channel as heavily populated at the time of contact. Estimates of the total Chumash population range from 8,000-10,000 (Kroeber 1925:551) to 18,000-22,000 (Cook and Heizer 1965: 21). Coastal Chumash lived in hemispherical dwellings made of tule reed mats, or animal skins in rainy weather. These houses could usually lodge as many as 60 people (Brown 2001). The village of *šukuw* (or *shuku*), at Rincon Point, was encountered by Gaspar de Portola in 1769. This village had 60 houses and seven canoes, with an estimated population of 300 (Grant 1978b).

The *tomol*, or wooden plank canoe, was an especially important tool for the procurement of marine resources and for maintaining trade networks between Coastal and Island Chumash. Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets and hooks and lines. Shellfish were gathered from beach sands using digging sticks, and mussels and abalone were pried from rocks using wood or bone wedges.

The acorn was an especially important resource for many California tribes. Acorn procurement and processing involved the manufacture of baskets for gathering, winnowing, and cooking and the production of mortars and milling stones for grinding. Bow and arrow, spears, traps and other various methods were used for hunting (Hudson and Blackburn 1983). The Chumash also manufactured various other utilitarian and non-utilitarian items. Eating utensils, ornaments, fishhooks, harpoons, and other items were made using bone and shell. *Olivella* shell beads were especially important for trade.

The Chumash were heavily affected by the arrival of Europeans. The Spanish missions and later Mexican and American settlers dramatically altered traditional Chumash lifeways. Chumash population was drastically reduced by the introduction of European diseases. However, many Chumash descendants still inhabit the region.

3.3 History

Post-European contact history for the state of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). Each of these periods is briefly described below.

Spanish Period (1769–1822)

Spanish exploration of California began when Juan Rodriguez Cabrillo led the first European expedition into the region in 1542. During this expedition, he anchored in Malibu Lagoon. He named the area Pueblo de las Canoas for the Chumash canoes. For more than 200 years after his initial expedition, Spanish, Portuguese, British, and Russian explorers sailed the California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolle 2003). In 1769, Gaspar de Portolá and Franciscan Father Junipero Serra established the first Spanish settlement at Mission San Diego de Alcalá. This was the first of 21 missions erected by the Spanish in what was then known as Alta (upper) California between 1769 and 1823. Mission San Buenaventura was founded in 1782. It was during this time that initial Spanish settlement of the project vicinity began.

Mexican Period (1822–1848)

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw the privatization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute mission lands to individuals in the form of land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting most of the state's lands into private ownership for the first time (Shumway 2007). About 20 land grants (ranchos) were located in Ventura County. The approximately 26,623-acre Rancho Las Posas was originally granted to Jose Carrillo in 1824 (or 1834, depending on the source), and later the title confirmed to Jose de la Guerra y Noriega (Mason 1883; Stork 1891; Westergaard 1920). It is on this former rancho land that the subject property is located.

In 1846, the Mexican-American War was initiated following the annexation of Texas by the United States and a dispute over the boundary of the state between the U.S. and Mexico. On January 10, leaders of the pueblo of Los Angeles surrendered peacefully after Mexican General Jose Maria Flores withdrew his forces. Shortly thereafter, newly appointed Mexican Military Commander of California Andrés Pico surrendered all of Alta California to U.S. Army Lieutenant Colonel John C. Fremont in the Treaty of Cahuenga (Nevin 1978).

American Period (1848–Present)

The Mexican Period officially ended in February 1848 with the signing of the Treaty of Guadalupe Hidalgo, formally concluding the Mexican-American War. Per the treaty, the United States agreed to pay Mexico \$15 million for conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico and Wyoming. California gained statehood in 1850, and this political shift set in motion a variety of factors that began to erode the rancho system.

In 1848, the discovery of gold in northern California led to the California Gold Rush, though the first gold was found in 1842 in San Francisquito slightly east of Ventura County (Workman 1935: 107;

Guinn 1977). The presence of commercial grade oil in Ventura County was recognized in 1852 at Rancho Ojai (Franks and Lambert 1985).

By 1853, the population of California exceeded 300,000. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the southern California economy through 1850s. However, a severe drought in the 1860s decimated cattle herds and drastically affected rancheros' source of income. Thousands of settlers and immigrants continued to pour into the state, particularly after the completion of the transcontinental railroad in 1869. Property boundaries that were loosely established during the Mexican era led to disputes with new incoming settlers, problems with squatters, and lawsuits. Given the size of their holdings, the initiation of property taxes proved onerous for many southern California ranchers. Rancheros often were encumbered by debt and the cost of legal fees to defend their property. As a result much of the rancho lands were sold or otherwise acquired by Americans. Most of these ranchos were subdivided into agricultural parcels or towns (Dumke 1944).

Ventura County was officially divided from Santa Barbara County in 1873. The Saugus to Santa Barbara Branch (or Santa Paula Branch) of the Southern Pacific Railroad was constructed in the mid-1880s, encouraging travel through, and settlement of the Santa Clara River Valley, as well as creating a large distribution network for its citrus and other products (Sperry 2006). In the 1880s, a dramatic boom arrived in southern California, fueled by various factors including increasingly accessible rail travel, agricultural development and improved shipment methods, and favorable advertisement (Dumke 1944). In 1883, the California Immigration Commission designed an advertisement declaring the state as "the Cornucopia of the World" (Poole 2002:36). New southern Californian towns were promoted as havens for good health and economic opportunity. The first version of the Southern Pacific's Coast Line, between Los Angeles and Santa Barbara, was completed in 1900 through the Santa Clara Valley. A later version through Santa Susana Pass and bypassing the Saugus Branch was completed in 1904, offering a coastal alternative to the Central Valley mainline.

Somis

The town of Somis was developed on the lands of Rancho Las Posas. Thomas Bard and David T. Perkins, in pursuing land development, formed the Las Posas Land and Water Company in 1888 and leased Rancho Las Posas land to farmers who grazed sheep, and grew barley, wheat, beans, beets and walnuts, among other crops (Triem 1985; Gidney 1917; Storke 1891). The wharf in Hueneme served these farmers in shipping their products. In 1892 Thomas Bard had a survey completed and the town site laid out; its name is said to have come from the Chumash name for scrub oak spring (Triem 1985). Running through the center of the town was Central Avenue (today called Somis Road), and intersecting streets included North Street, and Rice and Bell streets, named after the farming families who owned the nearby land: Peter Rice and Robert Bell (Ventura County Recorder 1892). Sale of town lots carried a stipulation prohibiting the use of alcohol for manufacture, sale or consumption. In 1900 the Southern Pacific Railroad extended a branch line through Somis which was completed through Santa Susanna in 1904, improving local farmers' access to outside markets (Triem 1985).

Somis has remained a small agricultural town with slow growth. Its population was reported as approximately 75 residents before World War II. Shortly after the war ended, subdivision of land created additional town lots, expanding the town size (Ventura County Recorder 1948 and 1953). Somis' population grew to 400 residents by 1992 (McClellan 1992). Although current census data is unavailable for the community, its population is approximated at 3,000 people.

4 Background Research

4.1 Cultural Resources Records Search

On April 3, 2020, South Central Coastal Information Center (SCCIC) staff conducted a records search of the California Historical Resources Information System (CHRIS) at their facility located at California State University, Fullerton. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the project site and a 0.5-mile radius surrounding it. Rincon also reviewed the NRHP, the CRHR, the California Historical Landmarks list, and Built Environment Resources Directory (BERD) as well as its predecessor the California State Historic Property Data (HPD) File. Review of those records did not identify any cultural resources within the project site or immediate vicinity. Additionally, Rincon reviewed the Archaeological Determination of Eligibility (ADOE) list. Results of the records search can be found in Appendix A of this cultural resources assessment.

The SCCIC records search identified 14 previously conducted cultural resources studies within a 0.5-mile radius of the project site (Table 1). Three studies (VN-00575, VN-00590, and VN-01838) include a portion of the project site and are summarized in greater detail below.

VN-00575

Robert Lopez prepared VN-00575 as part of the Proposed Swepi Well Locations and Pipeline Routes in 1988. The study was for a proposed subdivision of a 129-acre parcel. This study included literature review and field reconnaissance of a 17.8-acre parcel and approximately 35 miles of pipeline. Robert Lopez observed three previously recorded cultural resources along portions of the proposed pipeline. None of these resources are within the current project site or 0.5-mile buffer.

VN-00590

Robert Lopez prepared VN-00590, as part of the proposed Off-campus Center Siting Study for the California State University in 1986. This study included background research and a field survey. No cultural resources were identified. Lopez analyzed five locations throughout Ventura County, totaling 1624 total acres. The portion of VN-00590 was negative for cultural resources and no other portions were within 0.5 mile of the current project site

VN-01838

Robert Lopez prepared VN-00345, *An Archaeological Reconnaissance of the Area Involved in Parcel Map Waiver No. 970, Ventura County, California*, in 1999. The study was for a proposed subdivision of a 129-acre parcel. This study included a records search of the Ventura County Archaeological Society and UCLA Archaeological Information Center, literature review, and a field reconnaissance. Robert Lopez observed no resources during any portion of the study

Table 1 Previous Cultural Resources Studies within 0.5-Mile of the Project Site

Report Number	Author(s)	Year	Title	Relationship to Project Site
VN-00126	Clellow, William C. Jr.	1975	<i>Archaeological Resources of the Proposed Callegus Creek Project</i>	Outside
VN-00572	Dames and Moore	1988	<i>Phase 1 Cultural Resources Survey Fiber Optic Cable Project, Burbank to Santa Barbara, California for Us Sprint Communications Company</i>	Outside
VN-00575	Lopez, Robert	1988	<i>An Archaeological Reconnaissance of the Areas Involved in the Proposed Swepi Well Locations and Pipeline Routes Oxnard Plain, Ventura County, California</i>	Within
VN-00590	Lopez, Robert	1986	<i>An Archaeological Reconnaissance of the Five Area Involved in the Off-campus Center Siting Study for the California State University, Ventura County, California</i>	Within
VN-00722	Lopez, Robert	1988	<i>A Proposed Fourth Pipeline Route and Alterations to Route Three for the Proposed Swepi Oil Explorations Project on the Oxnard Plain, Ventura County, California</i>	Outside
VN-01091	Gray, John T. and Chantal Cagle	1992	<i>Phase I Prehistoric Archaeological Survey Sediment Control Project Arroyo Las Posas Ventura County California</i>	Outside
VN-01153	Peak and Associates, Inc	1991	<i>Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, California</i>	Outside
VN-01265	Reed, L.W.	1992	<i>Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project</i>	Outside
VN-01346	Maki, Mary K.	1995	<i>Phase I Cultural Resources Survey of 3.6 Acres for the Camarillo Reservoir No.6</i>	Outside
VN-01838	Lopez, Robert	1999	<i>An Archaeological Reconnaissance of the Area Involved in Parcel Map Waiver No. 970, Ventura County, California</i>	Within
VN-02504	Arrington, Cindy and Nancy Sikes	2006	<i>Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II</i>	Outside
VN-02872	Fortier, Jana	2009	<i>TEA-21 Rural Roadside Inventory: Native American Consultants and Ethnographic Study for Caltrans District 7, Ventura County</i>	Outside
VN-02992	Maki, Mary	2008	<i>Phase I Cultural Resources Investigation of Approximately 6.3 Linear Miles and 9.5 Acres for the Calleguas Municipal Water District's Regional Salinity Management Pipeline - Phase 2 Revision, Ventura County, California</i>	Outside
VN-03094	Foster, John A.	2002	<i>Historic Resource Evaluation Report- Mason Avenue At-Grade Crossing and Safety Improvements Project, Los Angeles City, California</i>	Outside

Source: South Central Coastal Information Center 2020

The SCCIC records search also identified three previously recorded cultural resources within a 0.5-mile radius of the project site (Table 2), none of which are located within or adjacent to the project site.

Table 2 Previously Recorded Cultural Resources within 0.5-Mile of the Project Site

Primary Number	Trinomial	Resource Type	Description	Recorder(s) and Year(s)	NRHP/CRHR Status	Relationship to Project Site
P-56-001512	CA-VEN-1512	Prehistoric Site	Midden	2016 (Fatima Clark)	Unknown	Outside
P-56-001513	CA-VEN-1513H	Historic-aged Site	Refuse Dump	2016 (Fatima Clark)	Unknown	Outside
P-56-153144	-	Historic-aged Structure	Asphalt Lined Drainage	2018 (Jennifer Stropes)	Unknown	Outside

Source: South Central Coastal Information Center 2020

4.2 Native American Outreach

Rincon contacted the Native American Heritage Commission (NAHC) on March 11, 2020, to request a search of the Sacred Lands File (SLF) and a contact list of Native Americans culturally affiliated with the project area. A response was received from the NAHC on March 12, 2020, stating the SLF search had been completed with “negative” results. On March 13, 2020, Rincon sent letters to nine Native American contacts in the area to request information on potential cultural resources in the project vicinity that may be impacted by project development. This outreach does not constitute formal Assembly Bill (AB) 52 consultation as required by CEQA. AB 52 consultation is performed between the lead government agency and California Native American tribes who have requested notification of projects in their traditional area. Appendix B provides the results of the outreach effort.

As of the completion of this report, the following responses have been received:

Patrick Tumamait of the Barbareño/ Ventureño Band of Mission Indians responded via telephone on March 16, 2020. Mr. Tumamait expressed knowledge of a Native American site within the project area and recommended CCIC record review. Mr. Tumamait also recommended Native American monitoring during all ground disturbing activities associated with project development.

4.3 Archival Research Methods

Archival research for this study was completed in April and May 2020. Research methodology focused on the review of a variety of primary and secondary source materials relating to the history and development of the area surrounding the project site. Sources included, but were not limited to, historic maps, aerial photographs, local newspaper articles, and written histories of the area. Due to the COVID-19 pandemic, local repositories such as the Museum of Ventura County research library and the Ventura County Assessor’s Office were not accessible. In-person research was unable to be conducted in support of this study, and research methods were limited primarily to digitized and readily available online sources. A list of sources and repositories that were consulted to identify pertinent materials is included below.

- *A History of California and an Extended History of Its Southern Coast Counties also Containing Biographies of Well-Known Citizens of the Past and Present* by J.M. Guinn
- *Ventura County: The Garden of the World* by Edwin Earl Hampton
- *History of Santa Barbara and Ventura Counties, California* by Jesse D. Mason, published by Thomson & West
- *History of Santa Barbara, San Luis Obispo and Ventura Counties, California* by C.M. Gidney, Benjamin Brooks and Edwin M. Sheridan
- *Ventura County: Land of Good Fortune* by Judith P. Triem
- *Ventura County Star*
- *Oxnard Press Courier* accessed via Newspapers.com and Newspaperarchive.com
- *Los Angeles Times*
- City/county directories accessed via Ancestry.com
- 1890 Ventura County Great Register, accessed via the Ventura County Genealogical Society
- *Historical Ecology of the lower Santa Clara River, Ventura River, and Oxnard Plain: an analysis of terrestrial, riverine and coastal habitats* by the San Francisco Estuary Institute
- Ventura County Assessor's Office online database
- Records of survey and parcel, plat and tract maps available through County View (Ventura County GIS)
- *Ventura County Historical Landmarks and Points of Interest List*
- Historic aerial photos accessed via University of California, Santa Barbara Map & Imagery Laboratory and NETRonline
- Historic topographic maps accessed via United States Geological Survey
- Other sources as noted in the references list

5 Field Survey

5.1 Methods

Rincon Archaeologist Mary Pfeiffer, BA conducted a pedestrian archaeological field survey of the project site on April 28, 2020. Transect intervals were spaced 10 meters and oriented generally from northwest to southeast. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock [FAR]), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the project site. Site characteristics and survey conditions were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at the Rincon Ventura office.

Rincon Architectural Historian Rachel Perzel, MA conducted a pedestrian survey of the built environment in the project site on April 28, 2020. The survey consisted of a visual inspection of all built environment features over 45 years of age. Buildings and associated features were documented to assess their construction, alterations, overall condition and integrity, and to identify any potential character-defining features. Copies of the field notes and digital photographs from the field surveys are on file with Rincon's Ventura office.

5.2 Results

Built Environment Resources

2789 Somis Road

The archival research and field survey conducted for this study identified a grouping of eight buildings sited in the southeast portion of the project site with an associated address of 2789 Somis Road. Because this grouping contains buildings which are over 45 years of age and are historically associated with one another, it was recorded and evaluated for historical significance as a single resource on California Department of Parks and Recreation 523 Series Forms (DPR forms), which are included in Appendix C. Included below is a summary of the property's existing conditions, developmental history, and eligibility for listing in the NRHP, CRHR and as a Ventura County Landmark.

PROPERTY DESCRIPTION

2789 Somis Road is an agricultural property located adjacent to and west of Somis Road, slightly north of Las Posas Road, in unincorporated Ventura County. Originally part of a much larger ranch, the property is currently 36.36 acres and includes a grouping of eight residential and support buildings at the southeast corner, otherwise surrounded by agricultural fields (Figure 5). Access is provided by an unpaved road (Bell Ranch Road) that branches off Somis Road and enters the property at east. The eight buildings are generously spaced and surrounded with mature plantings,

grassy lawn areas, and accompanying gardens. A single mobile-home is located at the southern portion of the building grouping. There are three agricultural fields located to the south, west, and north of the building grouping respectively.

Residence No. 1

The eastern-most building on the property is a single-story, rectangular-planned residence (Figure 6). The vernacular bungalow-style building sits on a concrete foundation, is clad in wooden lap siding, and exhibits original one-over-one wood sash windows of various sizes throughout. The primary entry to the building, a single, multi-panel wooden door that appears original, is offset on the north elevation. The building is topped with a low-pitched front-gabled roof with moderate overhanging eaves, which are enclosed and supported with three cantilevered exposed beams. Slatted wooden gable vents are present. A satellite dish has been mounted to the roof. Surrounding the residence inside a white picket fence is a lush lawn and mature plantings including palm and orange trees in addition to ornamentals. Although research limitations prevented definitively dating the building, based on visual observation, it appears to date to circa 1920. The building appears minimally altered and is in good condition.

Figure 5 Site Map Identifying Buildings located on Developed Portion of the Subject Property



Imagery provided by Microsoft Bing and its licensors © 2020.

Fig 4 Buildings

Figure 6 Residence No. 1, Primary (North) and West Elevations**Residence No. 2**

Sited roughly thirty feet west of Residence No. 1 and separated by a hedge row of mature plantings, Residence No. 2 is a single-story T-planned vernacular building also built in a bungalow style (Figure 7). The building is clad in wooden lap siding and features one-over-one wood sash windows of various size throughout in addition to a single-light picture window on the primary (north) elevation, also wood-framed. Two entrances to the building, single wooden multi-light doors, are accessible via a semicircular concrete patio at the front of the building. The building is topped with a low-pitched intersecting gabled roof with moderate overhanging eaves clad in asphalt shingles. Eaves are enclosed and supported with cantilevered exposed beams. Slatted wooden gable vents are present and the building features two brick and mortar chimneys. Surrounding the building inside a wooden horizontal fence is a lush lawn and mature plantings including palm, avocado and cypress trees in addition to ornamentals. Although research limitations prevented definitively dating the building, based on visual observation, it appears to date to circa 1920. The building appears minimally altered and is in good condition.

Figure 7 Residence No. 2, Primary (North) and East Elevations



Residence No. 3

Sited roughly sixty feet west of Residence No. 2 and set back roughly fifty feet further south on the property, Residence No. 3 is a single-story, L-planned vernacular building built in a bungalow style (Figure 8). The building sits on a raised poured concrete perimeter foundation and is clad in wooden lap siding. Visual observation suggests its footprint was expanded westward following its initial construction, potentially more than one time. The original portion of the building features one-over-one wood sash windows, some which appear in pairs, while the apparent addition features aluminum and vinyl sliders. The building includes several entryways, two of which on the primary, north elevation are contained under gabled overhangs supported by wooden columns; these are accessible via two concrete steps.

In the western portion of the building is a passthrough that leads from the front to the rear of the building. Although contained under a single roof structure, the passthrough functionally divides the building into two individual interior spaces. The building is topped with a low-pitched, intersecting gabled roof clad in asphalt shingles. Exposed rafters and cantilevered decorative exposed beams support the roof. Slatted wooden gable vents are present, and no chimneys appear extant. The building is set back behind and surrounded by a lawn and decorative plantings including rose bushes. Surrounding the building inside a wooden horizontal fence is a lush lawn and mature plantings including palm, avocado and cypress in addition to ornamentals. Although research limitations prevented definitively dating the building, it appears to have been built before 1945. Aside from the aforementioned addition, the building appears minimally altered and is in good condition; it is currently being used as an office.

Figure 8 Residence No. 3 as Viewed from the Northwest**Residence No. 4**

Residence No. 4 is sited roughly 40 feet west of Residence No. 3 (Figure 9). The vernacular bungalow-style residence is a single-story and features a rectangular footprint. The building sits on a raised concrete perimeter foundation and is clad in wooden lap siding. It features one-over-one wood sash windows that appear in pairs or groupings of three. Two entrances are included, one offset (to the north) on the east elevation and another offset (to the south) on the west. Both entrances feature a single wooden door accessible via a concrete step and small porch sheltered under a gabled overhang supported with square wooden columns. The door at rear is topped with a single-light wooden transom sash; that on the primary, east elevation is bracketed with windows. The building is topped with a low-pitched, gabled roof clad in asphalt shingles. Exposed rafters and cantilevered exposed beams (decorative) support the roof. Slatted wooden gable vents are present. A brick and mortar chimney featuring a stepped design is exposed on the north elevation. The building is set back behind and surrounded by a lawn and ornamental plantings including beds of lilies. Mature cypress and orange trees surround the building at rear. Although research limitations prevented definitively dating the building, based on visual observation, it appears to have been built before 1945. The building appears minimally altered and is in good condition; it is currently being used as an office.

Figure 9 Residence No. 4, Primary (East) Elevation



Residence No. 5

Sited just northwest of Residence No. 4, Residence No. 5 is a single story residence exhibiting an L-shaped footprint (Figure 10). The vernacular building is clad in wooden board and batten siding and features one-over-one wood sash windows of varying size. The building is topped with an intersecting, medium-pitched gabled roof clad in asphalt shingles with exposed rafters. A partial length concrete porch sheltered under the main roof structure lines the primary, east elevation. The building's primary entry, a single wooden door covered with a wooden screen door, is accessible via the porch. The building includes two secondary entrances on the north and west elevations, both accessible via steps and a concrete stoop. The door on the north elevation appears non-original while all other doors and windows appear original. The building is surrounded with mature vegetation, including cypress trees and rose bushes, to its south and west. Although research limitations prevented definitively dating the building, based on visual observation, it appears to predate the Residence Nos. 1 and 2 and is estimated to have been built earlier in the twentieth century. It appears minimally altered and is in good condition.

Figure 10 Residence No. 5, Primary (East) Elevation***Barn No. 1***

Barn No. 1 is a single-story, rectangular-planned utilitarian building sited adjacent to the west of Residence No. 4 (Figure 11). The building is topped with a gabled roof with moderate overhangs and exposed rafters clad in rolled asphalt. It is clad in wooden lap siding and exhibits no window openings. Original barn doors on the north and south elevations have been removed and their large openings infilled with a combination of board and batten siding and solid, contemporary doors (two on each elevation). A small shed-like addition has been added to the building's northwest corner to provide covered storage. Compared with property residences, the building is surrounded with minimal vegetation. Although research limitations prevented definitively dating the building it appears to date to have been built before 1945. It appears relatively intact and in fair condition; it is currently used for storage.

Figure 11 Barn No. 1, South Elevation



Barn No. 2

Located roughly 25 feet south of Barn No. 1, Barn No. 2 is a monitor barn with an apparent addition on the north end, creating roughly a L-shaped plan (Figure 12). It is clad in corrugated vertical metal paneling. The building is topped with a gabled clerestory roof clad in corrugated metal paneling consistent with siding material. It exhibits limited window openings; those extant throughout are relatively small and include various types of metal window sash. Large door openings are featured on the south and west elevations of the building. An original sliding metal-clad barn door remains extant on the south elevation door opening; the door on the west elevation appears to be non-original. Compared with the property's residences, the building is surrounded with minimal vegetation. Although research limitations prevented definitively dating the building it appears to date to have been built before 1945. The building appears relatively intact and in fair condition; it is currently used as a workshop.

Figure 12 Barn No. 2, East and South Elevations**Barn No. 3**

Barn No. 3 is located roughly 20 feet south of and sited trending west-east to face Barn No. 2 (Figure 13). The utilitarian building is a single-story and features a rectangular footprint. It is clad in vertical wooden siding (some areas are board-and-batten), painted red. The building is topped with an exaggerated shed roof clad in corrugated metal paneling with minimal overhang and exposed rafters. Minimal window openings are included but the primary (north) elevation is lined with large openings covered with wooden sliding barn doors that appear original. It is surrounded with minimal vegetation although two large eucalyptus trees are extant to its immediate rear (south). Although research limitations prevented definitively dating the building it appears to date to have been built before 1945. The building appears minimally altered and is in fair condition; it is currently used for storage.

Figure 13 Barn No. 3, Primary (North) and West Elevations



Property History

The property at 2789 Somis Road was once part of a much larger ranch established in the 19th century. Known as Bell Ranch, it was initially developed in the 1870s by early and notable Ventura County settlers Peter Rice and Robert Bell, and subsequently operated by Thomas Bard's Berylwood Investment Company beginning in the early 20th century. As discussed further below, both these individuals and entities made significant contributions to the early agricultural development in Ventura County.

Peter Rice was born in Pennsylvania in 1818 and moved to Ohio with his parents at the age of five (Figure 14). As an adult he worked in the purchase and sale of cattle, and in the fur business, at which he was very successful. Rice bought a farm in Richland County, Ohio and married Isabella Turbutt. In 1849 they set out for California and initially settled in the northern part of the state. Rice was involved in mining, lumber, stagecoach lines, and the building of bridges and turnpikes. Drawn by the discovery of silver, he went to Virginia City, Nevada and successfully engaged in the development of sawmills and ditches. In 1871 Rice made a trip to Ventura County where he invested in a 1,150-acre ranch on the Rancho Las Posas and eventually relocated his family to the ranch (Mason 1883).

Robert Bell also arrived in Ventura County in 1871 by way of Ohio and northern California (Figure 14). Born in Richland County Ohio in 1842, he initially settled in Yuba County where he worked as a ranchman for several seasons. He relocated to Ventura County in 1871, purchasing 300 acres of land in the Somis area and improving the land to a tillable condition and grew beans, beets and hay. In 1877 he married Peter Rice's daughter, Rebecca Lucretia Rice, and would subsequently have three children, Polly, Bertha and Walter (Guinn 1907).

Figure 14 Peter Rice and Robert Bell (Sources: Mason 1883 and Guinn 1907)



PETER RICE,



Robert Bell

Soon after their arrival in Ventura County, Peter Rice and Robert Bell established an agricultural partnership known as Rice & Bell in the mid-1870s. By the end of the decade, Rice & Bell were invested in a farm, which appears to have included the current project site, covering 1,130 acres, with up to 3,000 acres also cultivated in adjoining lands (Hampton 2002; Mason 1883). Records from the late 1870s describe Rice & Bell's ranch as having "more the appearance of a village than the homes of quiet farmers; these enterprising and well-known gentlemen farm on so large a scale, that to give anything like a description of their ranch would require more space than we can give at the present" (Hampton 2002). Although it is unclear if any of these buildings remain within the current project site, Rice & Bell's ranch was described as containing an adobe ranch house, a barn, machinery storehouse, horse stables, a blacksmith shop, four granaries, cribs, and a yard and orange trees. The ranch produced barley, wheat and corn, and was used for hog-raising. In the 1890s, the Rice & Bell ranch was also reported to be growing beans and walnuts. Peter Rice died in 1890, but Bell and his wife Rebecca continued to maintain the farming business into the following decades (Hampton 2002; *Los Angeles Times* 1997). The Bell's 42-year tenure on the ranch established the property's identity in the community through the following decades as the Bell Ranch.

Around 1920, Robert and Rebecca Lucretia Bell appear to have sold the ranch to the Berylwood Investment Company (*Oxnard Daily Courier* 1923; *Los Angeles Times* 1997). The Berylwood Investment Company was founded in 1911 by Thomas R. Bard, a prominent politician, businessman, and key figure in the development of Ventura County. Soon after its formation and under the direction of the Bard family, Berylwood Investment Company began improvements to properties in the Las Posas and Simi valleys. Thomas' son Richard Bard was appointed general manager in 1917 and various members of the Bard family would continue to oversee leadership roles in the company into the following decades. By the 1950s the company's holdings included nearly 2,000 acres of orchards, over 1,800 acres of beans and other irrigated row crops, and over 3,500 acres of open land and pasture, part of which was planted to barley and hay. This acreage was located at three ranches including the Bell Ranch, Hondo Ranch and Simi Ranch. The company's headquarters were once located in downtown Hueneme but in 1950 moved to a hilltop overlooking Somis, and their original office building became Port Hueneme City Hall (*Oxnard Press Courier* 1957).

Following the transfer of management to the Berylwood Investment Company circa 1920, the ranch became known as the B.I. Bell Ranch, the “B.I.” a reference to the ranch’s new management (Robertson, n.d.). Although the extant buildings on the property could not be definitively dated due to research limitations, Residence Nos. 1, 2 and 5 were constructed prior to 1927 as demonstrated by an aerial photograph from that year. Residence No. 5 may predate the other buildings (Figure 15). However, it is unclear whether Residences Nos. 1 and 2 were constructed during the property’s association with Rice & Bell or the Berylwood Investment Company. The additional extant buildings described above appear to date to the post 1940s per historic aerial photographs (UCSB Map & Imagery Lab, various). Rebecca Lucretia Bell died in 1928 and Robert Bell died in 1930; however, it is unclear where they were living at this time (R.L. Polk & Co. 1956; Hampton 2002; Find a Grave 2020).

In the 1940s the majority of the Bell Ranch (which included the subject property and surrounding lands) was planted with orchard rows (UCSB Map & Imagery Lab, various). By the 1950s additional orchards had been planted closer to the hill to the north, and the land south of the ranch complex was planted with lower-scale row crops (UCSB Map & Imagery Lab 1959). It appears subdivision of the ranch land adjacent to Las Posas Road began by the 1960s and continued through the 1970s (Figure 16). By the 1960s some of the former orchard land fronting Las Posas Road (slightly west of the subject property) had been developed with various uses that appear to include office, commercial and industrial (NETRonline 1967).

Figure 15 1927 Aerial Photograph Depicting Building Complex within Project Site

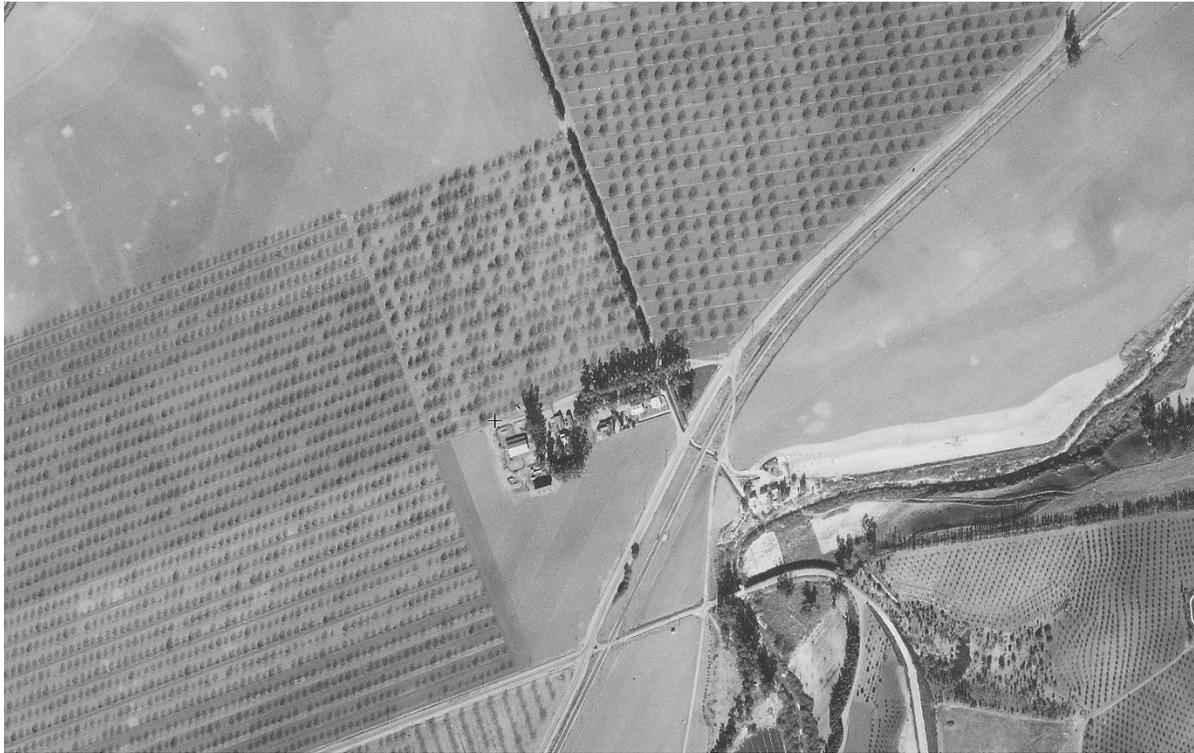


Figure 16 1964 Aerial Photograph Depicting Building Complex within Project Site



The company Kaiser Aetna purchased the Bell Ranch property from Berylwood Investment Company in 1969 (*Oxnard Press Courier* 1971a). Kaiser Aetna had an Agricultural Services division which provided management services for agricultural properties and conducted real estate development. During its ownership of the Bell Ranch, the company replanted orchards to replace poor performing and diseased trees, installed new irrigation, and planted new citrus and avocado acreage. The Bell Ranch served as headquarters for Kaiser Aetna's Agricultural Services and its Agricultural Operations Division (*Oxnard Press Courier* 1971a and 1977).

Online Ventura County Recorder and Assessor records indicate that by 1970, Kaiser Aetna began surveying the property for subdivision. The subject property was included in a tract called the Peter Rice Tract, and the T.R. Bard Tract was mapped adjacent to the north (Ventura County 1970. Record of Survey, 37RS64). Another tract map made in 1974 created several parcels, of which the 112.9-acre Parcel 1 included the subject property (Parcel Map 16PM 98).

In the early 1970s Kaiser Aetna formulated a 10,000-acre master planned, multi-use development for a portion of the property. At the time, Bell Ranch was described as encompassing 1,200 acres (*Oxnard Press Courier* 1971b). However, the master plan was never fully realized and newspaper accounts state the development area was reduced in size (*Oxnard Press Courier* 1975). The company sold 2+ acre homesites planted with avocado trees near Los Angeles Avenue, and developed properties fronting Las Posas Avenue (which today include a medical building and a school) (*Oxnard Press Courier* 1971a; NETRonline 1967, 1969 and 1978).

In 1977, a new corporation formed by five former employees of Kaiser Aetna and called Ag Land Services Inc. purchased Kaiser Aetna's Agricultural Services Division (*Oxnard Press Courier* 1977). Located on the subject property at 2789 Somis Road, it appears Ag Land Services Inc. has remained on the property through present day. The company is involved in agricultural consulting and management of numerous ranches in the Somis, Camarillo, Moorpark and Ventura areas (Citrus Pest & Disease Prevention Program 2020).

Since this time, the larger ranch property continued to be further subdivided and developed with new uses. By 1978 St. John's Pleasant Valley Hospital was developed slightly north of Las Posas Road (*Oxnard Press Courier* 1971a; NETRonline 1967, 1969 and 1978). In 1979 the Peter Rice Tract was subdivided leading to the development of a police station, medical offices, and commercial businesses (NETRonline 1989; Google Earth).

The Oxnard Union High School District developed a new high school on a portion of the Bell Ranch property which opened in 2015. Located slightly west of the subject property, the new school was named "Rancho Campana", which translates to "Bell Ranch" in Spanish, in honor of the family who once owned the land (Leung 2013; Oxnard Union High School District 2017 and 2020). Records on file with the Ventura County Assessor and Recorder show in 2019 a 40.22-acre parcel was split into two parcels which included the subject property of 36.36 acres and a smaller 4.64-acre parcel that is now owned by the City of Camarillo.

Historic Evaluation

Based on information available at the time of this study, the subject property appears to possess significant associations with the early agricultural history of Ventura County and may be presumed eligible for listing in the CRHR and as a Ventura County Landmark. The exact construction dates of the buildings on the ranch property were unable to be definitively determined due to in-person research constraints resulting from COVID-19 considerations. However, available information indicates the ranch was historically associated with two notable nineteenth century pioneering

entities which were influential in Ventura County's agricultural history, Rice & Bell ranch and the Bard family's Berylwood Investment Company. Residence Nos. 1 and 2 appear to have been built circa 1920, around the time the Berylwood Investment Company assumed ownership of the ranch. Residence No. 5 appears to have been built earlier, but further research would be necessary to substantiate. It is unclear what if any extant buildings on the site are associated with the Rice & Bell period of the property. However, the Berylwood Investment Company maintained a noteworthy presence in Ventura County's growth during and after this period, supported in part by the subject property. Further, the buildings on the property are largely intact and representative of early twentieth century agricultural practices within Ventura County and embody the distinctive characteristics of this period of architectural history. For these reasons the subject property appears to be eligible under CRHR Criteria 1 and 3, and Ventura County Landmark Criteria 1, 2, and 5. The original Bell Ranch has been continually subdivided and a number of buildings and structures have been removed and replaced; however, the ranch still retains multiple buildings from the early twentieth century and maintains its historic character such that it retains sufficient integrity to convey its significant associations.

Although the ranch property is associated with Peter Rice and Robert Bell, their association with the extant buildings cannot be definitively documented at this time. Further, while Thomas R. Bard and other members of the Bard family who founded and led the Berylwood Investment Company have been associated with the property, this association is tangential, and the subject property is not directly illustrative of any significance these individuals may have. For this reason, the subject property does not appear to be eligible for state or local designation under CRHR Criterion 2 or Ventura County Landmark Criterion 3. Lastly, the CHRIS records search results and archaeological field survey do not indicate the subject property is eligible for state or local designation under CRHR Criterion 4 or Ventura County Landmark Criterion 4.

Archaeological Resources

Overall ground visibility was less than five percent with 100 percent exposure. Exposed soil was a light to medium brown very fine-grained well drained silty sand with igneous pebbles intermixed (Figure 15). Vegetation consisted primarily of agricultural crops including strawberries, celery and cabbage and seasonal non-native grasses. The cabbage and celery fields were not able to be surveyed due to zero ground visibility within those areas of the project site (Figure 16, Figure 17). Three heavily calcified shell fragments were observed along an unnamed dirt access road within the southern portion of the project site (Figure 18, Figure 19); no cultural materials or soil discoloration were observed in association with the shell fragments. Along the eastern project site boundary, a north to south trending access road is situated adjacent to a historic-period culvert (Figure 20). Clam shell, modern refuse, historic-period manganese dioxide decolorized glass fragments (amethyst glass, ca. 1870-1920), ceramic sherds and undiagnostic glass fragments were observed on either side of the culvert (Figure 21, Figure 22 and Figure 23). Because the refuse was intermixed with modern refuse, it was not recorded as an archaeological site.

Figure 17 Exposed Soil Within Project Site



Figure 18 Cabbage Field Within Project Site, Facing North/Northwest



Figure 19 Celery Field Within Project Site, Facing Northeast



Figure 20 Shell Fragment Within Southern Portion of Project Site



Figure 21 Overview of Shell Fragments Along Access Road, Facing East/Northeast



Figure 22 Historic-Period Culvert, Facing North



Figure 23 Shell Located Along Historic-Period Culvert



Figure 24 Amethyst Glass Fragment Located Along Historic-Period Culvert



Figure 25 Ceramic Fragment Located Along Historic-Period Culvert



6 Findings and Conclusions

As detailed above, available information suggests the agricultural property at 2789 Somis Road is eligible for listing in the CRHR and as a Ventura County Landmark; it therefore is presumed to be a historical resource as part of the current project's CEQA compliance. The proposed project does not involve any the demolition or direct alteration of any of the buildings on the project site. Rather, the project involves the subdivision of the existing property into four parcels, three of which would include and the construction of an adjacent residential development and an on-site CWWTF. The remaining parcel would retain the existing residential and agricultural buildings and remain in agricultural production. The new development would include a landscaping buffer to separate it from the existing buildings.

Under Section 15064.5(b) of the CEQA Guidelines, a significant impact would occur to historical resources if the physical characteristics of the resource which convey its historical significance and justify its eligibility for inclusion in the CRHR. Although the project would result in the subdivision of the subject property, the historical boundaries of the ranch at 2789 Somis Road were once much larger and the ranch was continually subdivided in the post-World War II era. Further, the property would continue to operate as an agricultural property and retain its buildings and a portion of agricultural land within its boundaries. The proposed residential development will change aspects of the property's surroundings; however, its setting has already largely changed since the historical period due to ongoing subdivision and new construction. The proposed development is consistent with these non-historical elements and would not further diminish the setting. Further, the new development would be further buffered and distinguished from the historic buildings and property through landscaping. Therefore, regarding built-environment resources, Rincon recommends a finding of a ***less than significant impact to historical resources*** under CEQA.

The cultural resources records search identified three previously recorded cultural resources within a 0.5-mile radius of the project site, none of which are located within the project site. Of the recorded resources in the records search radius, one is a prehistoric archaeological resource in close proximity to the current project site. The majority of the project site has been previously disturbed from grading, building development and agricultural activities. The pedestrian field survey identified three isolated shell fragments within the southern portion of the project site and intermixed modern and historic-era refuse along the eastern boundary of the project site. The isolated shell fragments were not found in association with any other cultural materials or soil discoloration and are therefore not considered cultural resources here. Based on the size and nature of the historic and modern refuse, the deposit is likely related to episodic refuse dumping that occurred during the construction and maintenance of the culvert. Episodic refuse dumping is a common pattern observed in rural communities before the health and safety laws of the 1960s and 1970s (Sullivan and Griffith 2005). The refuse was not formally recorded as a resource due to heavy modern disturbances and the undiagnostic fragmented nature of the find. Native American outreach identified the project site is sensitive for archaeological resources and Patrick Tumamait of the Barbareño/Ventureño Band of Mission Indians recommended Native American monitoring during all ground disturbance associated with the project.

Based on the proximity of the project to a freshwater source, Arroyo Las Posas, the presence of nearby archaeological resources, and the results of Native American outreach, the area is considered sensitive for archaeological resources. Rincon therefore recommends archaeological and Native American monitoring during project ground disturbance. These recommended measures are presented below. With adherence to these recommendations, Rincon recommends a finding of ***less than significant impact with mitigation to archaeological resources*** under CEQA. The project is also required to adhere to regulations regarding the discovery of human remains, detailed below.

6.1 Archaeological and Native American Monitoring

Rincon recommends archaeological and Native American monitoring of initial project-related ground disturbing activities. Archaeological monitoring should be performed under the direction of the qualified archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983). The qualified archaeologist, in consultation with the County of Ventura and the Native American monitor, may recommend the reduction or termination of monitoring depending upon observed conditions (e.g., no resources encountered within the first 50 percent of ground disturbance). If archaeological resources are encountered during ground-disturbing activities, work within a minimum of 50 feet of the find must halt and the find evaluated for CRHR eligibility. Should an unanticipated resource be found as CRHR eligible and avoidance is infeasible, additional analysis (e.g., testing) may be necessary to determine if project impacts would be significant.

6.2 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the NRHP/CRHR eligibility. If the discovery proves to be significant under the NHPA and/or CEQA and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts to historical resources.

6.3 Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD), who has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours of being granted site access, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance.

7 References

Arnold, Jeanne E., Michael R. Walsh, and Sandra E. Hollimon

_____. 2004 The Archaeology of California. *Journal of Archaeological Research* 12(1).

Bean, Walton

_____. 1968 *California: An Interpretive History*. McGraw-Hill Book Company, New York.

Byrd, Brian F. and L. Mark Raab

_____. 2007 Prehistory of the Southern Bight: Models for a New Millennium in California Prehistory. T.L. Jones and K.A. Klar, eds. Pp. 215-228. New York, New York: Altamira Press.

Citrus Pest & Disease Prevention Program

_____. 2020 “Kevin Ball Joins Citrus Pest & Disease Prevention Committee as Coastal District Representative”, in *Citrus Insider*, May 28, 2019. Accessed March 19, 2020 at <https://citrusinsider.org/2019/05/28/kevin-ball-joins-citrus-pest-disease-prevention-committee-as-coastal-district-representative/>

Cook, Sherburne F. and Robert F. Heizer

_____. 1965 The Quantitative Approach to the Relation Between Population and Settlement Size. University of California Archaeological Survey Reports, No. 64. Berkeley.

Dillon, Brian D.

_____. 2002 California Paleo-Indians: Lack of Evidence, or Evidence of a Lack? in *Essays in California Archaeology: A Memorial to Franklin Fenenga*. W. J. Wallace and F. A. Riddell, eds. Pp. 110–128. Paper number 60. Berkeley, California: Contributions of the University of California Archaeological Research Facility.

Dumke, Glenn S.

_____. 1944 *The Boom of the Eighties in Southern California*. Sixth printing, 1991. San Marino, California: Huntington Library Publications.

Erlandson, Jon M.

_____. 1991 Early Maritime Adaptations on the Northern Channel Islands in Hunter-Gatherers of Early Holocene Coastal California. Volume 1: Perspectives in California Archaeology. J. M. Erlandson and R. Colten, eds. Pp. 101-111. Los Angeles, California: Costen Institute of Archaeology Press.

Erlandson, Jon M., Theodore Cooley, and Richard Carrico

_____. 1987 A Fluted Projectile Point Fragment from the Southern California Coast: Chronology and Context at CA-SBA-1951. *Journal of California and Great Basin Anthropology* 9:120–128.

Find a Grave

_____. 2020 “Rebecca Lucretia Rice Bell”, <https://www.findagrave.com/memorial/59606459/rebecca-lucretia-bell>

Franks, Kenny Arthur and Paul F. Lambert

_____. 1985 Early California Oil: A Photographic History, 1865-1940. Texas A&M University Press, College Station, Texas.

Gidney, Charles Montville

_____. 1917 History of Santa Barbara, San Luis Obispo and Ventura Counties, California. Lewis Publishing Company, San Luis Obispo County, California.

Grant, Campbell

_____. 1978a Chumash: Introduction in *California*. Volume 8: Handbook of North American Indians. Robert F. Heizer, ed. and William C. Sturtevant, general ed. Washington, D.C.: Smithsonian Institution Scholarly Press.

_____. 1978b Eastern Coastal Chumash in California. Volume 8: Handbook of North American Indians. Robert F. Heizer, ed. and William C. Sturtevant, general ed. Washington, D.C.: Smithsonian Institution Scholarly Press.

Guinn, J.M.

_____. 1907 A History of California and an Extended History of Its Southern Coast Counties, vol. I. Historic Record Company, Los Angeles.

_____. 1977 "Gold! Gold! Gold! from San Francisquito!" in Los Angeles Biography of a City. John Caughey and LaRee Caughey, eds. Berkeley, California: University of California, Berkeley Press.

Hampton, Edwin Earl (Jr.)

_____. 2002 Ventura County: Garden of the World, The Ventura County Historical Society Quarterly, vol. 46, nos. 1-4. Ventura County Historical Society and Ventura County Museum of History & Art.

Hudson, Travis and Thomas C. Blackburn

_____. 1983 The Material Culture of the Chumash Interaction Sphere, Vol. II: Food Preparation and Shelter. Los Altos: Ballena Press. Anthropological Papers No. 25 (Ballena Press/Santa Barbara Museum of Natural History Cooperative Publication).

Johnson, J.R., T.W. Stafford, Jr., H.O. Ajie, and D.P. Morris

_____. 2002 Arlington Springs Revisited in Proceedings of the Fifth California Islands Symposium. D. Browne, K. Mitchell, and H. Chaney, eds. Pp. 541–545. Santa Barbara, California: USDI Minerals Management Service and the Santa Barbara Museum of Natural History.

Jones, Terry L. and Kathryn A. Klar

_____. 2007 California Prehistory: Colonization, Culture, and Complexity. Berkeley, California: AltaMira Press.

Jones, Terry L., Richard T. Fitzgerald, Douglas J. Kennett, Charles Miksicek, John L. Fagan, John Sharp, and Jon M. Erlandson

_____. 2002 The Cross Creek Site and Its Implications for New World Colonization. *American Antiquity* 67:213–230.

Koerper, Henry C. and Christopher E. Drover

_____. 1983 Chronology Building for Coastal Orange County: The Case from CA-ORA-119-A. *Pacific Coast Archaeological Society Quarterly* 19(2):1–34.

Koerper, Henry C., Roger D. Mason, and Mark L. Peterson

_____. 2002 Complexity, Demography, and Change in Late Holocene Orange County in Catalysts to Complexity: Late Holocene Societies of the California Coast. Volume 6: Perspectives in California Archaeology. Jon M. Erlandson and Terry L. Jones, eds. Pages 63–81. Los Angeles, California: Costen Institute of Archaeology Press.

Kowta, Makoto

_____. 1969 The Sayles Complex, A Late Milling Stone Assemblage from the Cajon Pass and the Ecological Implications of its Scraper Planes. *University of California, Berkeley Publications in Anthropology* 6:35–69.

Kroeber, Alfred J.

_____. 1925 *Handbook of the Indians of California*. Unabridged reprint 1976. New York, New York: Dover Publications, Inc.

Leung, Wendy

_____. 2013 “Future Camarillo high school gets name”, *Ventura County Star*, 26 September.

Los Angeles Times

_____. 1997 “Robert B. Hooker; WWII Veteran, Somis Rancher”, 22 May.

Mason, Roger D. and Mark L. Peterson

_____. 1994 Newport Coast Archaeological Project: Newport Coast Settlement Systems—Analysis and Discussion, Volume 1, Part 1 of 2. The Keith Companies. Report on file, South Central Coastal Information Center, California State University, Fullerton.

Mason, Jesse D.

_____. 1883 *History of Santa Barbara County, California*. Thompson & West, Oakland, California

McClellan, Doug

_____. 1992 “Centennial of Somis is a Small Affair: Communities: A walking tour and back-yard party mark today’s celebration. The 400 residents call their town an oasis.” *Los Angeles Times*. 11 October. <https://www.latimes.com/archives/la-xpm-1992-10-11-me-377-story.html>

Moratto, Michael

_____. 1984 *California Archaeology*. Orlando, Florida: Academic Press, Inc.

National Park Service (NPS)

_____. 1983 *Archaeology and Historic Preservation: Secretary of the Interior’s Standards and Guidelines*. Electronic document. Accessed February 12, 2020 at: https://www.nps.gov/history/local-law/arch_stnds_0.htm

Nationwide Environmental Title Research LLC (NETRonline)

_____. Various Aerial photographs and topographical maps depicting the project site. Accessed March through May 2020 at historicaerials.com

Nevin, David

_____. 1978 *The Mexican War*. Time-Life Books, Inc., Alexandria.

Oxnard Daily Courier

_____. 1923 "Announcements", 9 November.

Oxnard Press Courier

_____. 1957 "The Berylwood Investment Co.", 29 November.

_____. 1971a "New Agricultural Management Service Available in County", 3 July.

_____. 1971b "Editorials: Development vs. Environment", 19 September. Page 4.

_____. 1975 "Company To Seek Annexation Move", 22 July.

_____. 1977 "Camarillo Men Buy Ag Services", 5 August.

Oxnard Union High School District

_____. 2020 Rancho Campana High School – History. Accessed March 19, 2020 at <https://www.ranchocampanahigh.us/students-parents/about-rancho/history/>

_____. 2017 Board Meeting Agenda, 15 March.

Poole, Jean Bruce

_____. 2002 *El Pueblo: The Historic Heart of Los Angeles*. The J. Paul Getty Trust, Los Angeles, California.

Reinman, Fred M.

_____. 1964 Maritime Adaptations on San Nicolas Island, California. University of California Archaeological Survey Annual Report 1963–1964:47–80.

Rick, Torben C., Jon M. Erlandson, and René Vellanoweth

_____. 2001 Paleocoastal Marine Fishing on the Pacific Coast of the Americas: Perspectives from Daisy Cave, California. *American Antiquity* 66:595–613.

R.L. Polk & Company

_____. 1956 Listing for Lee, Virgil B. at Bell Ranch, Somis. In Polk's Ventura County Directory, Los Angeles.

Rick, Torben C., Jon M. Erlandson, and René Vellanoweth

_____. 2001 Paleocoastal Marine Fishing on the Pacific Coast of the Americas: Perspectives from Daisy Cave, California. *American Antiquity* 66:595–613.

Robertson, Leigh

_____. N.d. "Maulhardt Equipment Co. 1953-1967". Accessed March 13, 2020 at The Adventures of Leigh Robertson, <http://leighrobertson.net/maulhardt.html>

Rolle, Andrew

_____. 2003 *California: A History*. Wheeling, Illinois: Harlan Davidson, Inc.

Shumway, Burgess Mck.

_____. 2007 *California Ranchos: Patented Private Land Grants Listed by County*. Rockville, Maryland: Borgo Press.

Sperry, Russell B.

_____. 2006 "History of the Santa Paula Branch." Santa Clara River Valley Railroad Historical Society. Accessed May 28, 2020 at <http://scrvrhs.com/branch.htm>.

Stork, Yda Addis

_____. 1891 *A Memorial and Biographical History of Santa Barbara, San Luis Obispo and Ventura County, California*. The Lewis Publishing Company, Chicago.

Sullivan, Michael and Carol Griffith

_____. 2005 *Down in the Dumps: Context Statement and Guidance on Historical-Period Waste Management and Refuse Deposits*. Arizona State Historic Preservation Office, Phoenix.

Triem, Judith

_____. 1985 *Ventura County: Land of Good Fortune*. Windsor Publications, Northridge, California.

True, Delbert L.

_____. 1993 *Bedrock Milling Elements as Indicators of Subsistence and Settlement Patterns in Northern San Diego County, California*. Pacific Coast Archaeological Society Quarterly 29(2):1–26.

University of California, Santa Barbara (UCSB) Map & Imagery Lab

_____. 1927 Flight C-104, Frame I-14. Accessed using FrameFinder, http://mil.library.ucsb.edu/ap_indexes/FrameFinder/

_____. 1935 Flight C-3797, Frame 28. Accessed using FrameFinder, http://mil.library.ucsb.edu/ap_indexes/FrameFinder/

_____. 1959 Flight AXI-1959, Frame 18W-14. Accessed using FrameFinder, http://mil.library.ucsb.edu/ap_indexes/FrameFinder/

_____. 1962 Flight HA-OH, Frame 61. Accessed using FrameFinder, http://mil.library.ucsb.edu/ap_indexes/FrameFinder/

_____. 1964 Flight HA-WE, Frame 44. Accessed using FrameFinder, http://mil.library.ucsb.edu/ap_indexes/FrameFinder/

Ventura County Recorder

_____. 1892 "Map of the Town of Somis in Rancho Las Posas", 003MR033

_____. 1948 Bard-Holbert Subdivision No. 1, 15MR68

_____. 1953 Bard-Holbert Subdivision No. 2, 21MR75

Wallace, William J.

_____. 1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11(3):214-230.

_____. 1978 Post-Pleistocene Archaeology, 9000 to 2000 B.C. in *California*. Volume 8: Handbook of North American Indians. Robert F. Heizer, ed. and William C. Sturtevant, general ed. Pp. 25-36. Washington, D.C.: Smithsonian Institution Scholarly Press.

Warren, Claude N.

_____. 1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast *in* Archaic Prehistory in the Western United States. C. Irwin-Williams, ed. Eastern New Mexico University Contributions in Anthropology 1(3):1-14.

Westergaard, Waldemar

_____. 1920 "Thomas R. Bard and Ventura County's Sheep Industry, 1870-1884", *Southern California Quarterly*, vol. 11, part 3, 1920. Historical Society of Southern California, Los Angeles. Accessed March 16, 2020 on Google Books.

Workman, Boyle

_____. 1935 *The City that Grew*. Los Angeles, California: Southland Publication Company.

Appendix A

Records Search Results

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00126		1975	Clewlow, William C. Jr.	Archaeological Resources of the Proposed Callegus Creek Project		56-000071, 56-000200, 56-000213, 56-000214, 56-000215, 56-000216, 56-000217, 56-000218, 56-000219, 56-000242
VN-00572		1988	Dames and Moore	Phase 1 Cultural Resources Survey Fiber Optic Cable Project, Burbank to Santa Barbara, California for Us Sprint Communications Company	Dames & Moore	56-000027, 56-000196, 56-000202, 56-000240, 56-000241, 56-000341, 56-000342, 56-000550, 56-000643, 56-000644, 56-000655, 56-000729, 56-000789, 56-000895, 56-000896, 56-000916, 56-000917, 56-000918
VN-00575		1988	Lopez, Robert	An Archaeological Reconnaissance of the Areas Involved in the Proposed Swepi Well Locations and Pipeline Routes Oxnard Plain, Ventura County, California	Robert Lopez, Archaeological Consultant	56-000631, 56-000665, 56-000666
VN-00590		1986	Lopez, Robert	An Archaeological Reconnaissance of the Five Area Involved in the Off-campus Center Siting Study for the California State University, Ventura County, California		56-000665
VN-00722		1988	Lopez, Robert	A Proposed Fourth Pipeline Route and Alterations to Route Three for the Proposed Swepi Oil Explorations Project on the Oxnard Plain, Ventura County, California	Robert Lopez, Archaeological Consultant	
VN-01091		1992	Gray, John T. and Chantal Cagle	Phase I Prehistoric Archaeological Survey Sediment Control Project Arroyo Las Posas Ventura County California	Dames & Moore	56-000631, 56-000661
VN-01153		1991	Peak and Associates, Inc.	Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, California	Peak & Associates	56-001089
VN-01265		1992	Reed, L.W.	Consolidated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project	Peak and Associates	19-000007, 19-000021, 19-000034, 19-000089, 19-000251, 19-000357, 19-000385, 19-000389, 19-000390, 19-000407, 19-000409, 19-000668, 19-000781, 19-000830, 19-000887, 19-000901, 19-000963, 19-001097, 19-001112, 19-001124, 19-001575, 19-001620
VN-01346		1995	Maki, Mary K.	Phase I Cultural Resources Survey of 3.6 Acres for the Camarillo Reservoir No.6	Fugro West, Inc.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-01838		1999	Lopez, Robert	An Archaeological Reconnaissance of the Area Involved in Parcel Map Waiver No. 970, Ventura County, California	Robert Lopez, Archaeological Consultant	
VN-02504		2006	Arrington, Cindy and Nancy Sikes	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	SWCA Environmental Consultants, Inc.	
VN-02872		2009	Fortier, Jana	TEA-21 Rural Roadside Inventory: Native American Consultants and Ethnographic Study for Caltrans District 7, Ventura County	ICF Jones & Stokes	
VN-02992		2008	Maki, Mary	Phase I Cultural Resources Investigation of Approximately 6.3 Linear Miles and 9.5 Acres for the Calleguas Municipal Water District's Regional Salinity Management Pipeline - Phase 2 Revision, Ventura County, California		
VN-03094		2002	Foster, John A.	Historic Resource Evaluation Report- Mason Avenue At-Grade Crossing and Safety Improvements Project, Los Angeles City, California	Greenwood and Associates	

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-001512	CA-VEN-001512	Resource Name - RCHS-Site-1	Site	Prehistoric	AP02; AP15	2016 (Fatima Clark, ESA PCR)	
P-56-001513	CA-VEN-001513H	Resource Name - RCHS-Site-2	Site	Historic	AH04	2016 (Fatima Clark, ESA PCR)	
P-56-153144		Resource Name - St. John's Drain	Object	Protohistoric	AH07	2018 (Jennifer Stropes, BFSA)	

Appendix B

Native American Outreach

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd, Suite 100
Sacramento, CA 95814
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Somis Ranch Farmworker Housing Complex Project

County: Ventura

USGS Quadrangle Name: Camarillo, Moorpark, Newbury Park, and Santa Paula
Quadrangle

Township: 02N Range: 20W Section(s): 17-20

Company/Firm/Agency: Rincon Consultants, Inc.

Contact Person: Elaine Foster

Street Address: 449 15th St. #303

City: Oakland, CA Zip: 94612

Phone: 213-788-4842 x 3016

Email: efoster@rinconconsultants.com

Project Description:

The proposed housing complex would be constructed on approximately 18.5 acres of the project site. The project site would be accessible from two driveways off Somis Road. The proposed housing community would contain 360 dwelling units, along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The proposed project would consist of 100 percent affordable housing units, and would be a mix of one-, two-, and three-bedroom units. Designed with a "Spanish Colonial" architectural style, the housing development would be up to three stories in height, with a maximum height of 35 feet. The project would also include 566 parking spaces and 379 bicycle parking spaces.

In addition, the project would construct an on-site community wastewater treatment facility (CWWTF), which would service the proposed housing community and produce recycled water for beneficial use as

agricultural irrigation water. Excess recycled water and treated wastewater effluent not meeting recycled water quality standards would be dispersed through a series of underground seepage pits on the westerly side of the project site. Approximately 281,000 square feet of the project site would be landscaped, including a landscaped buffer surrounding the development. Landscape design would include drought-tolerant species and smart irrigation controls for water efficiency. Two stormwater detention basins would be constructed on the project site to capture stormwater runoff from the development.

The project would be implemented in three phases. Phase 1 would consist of 100 units and the CWWTF, Phase 2 would consist of 100 units and an easement to the CWWTF, and Phase 3 would consist of 160 units and an easement to the CWWTF. Construction activities would require approximately 1,500 cubic yards (cy) of cut soil and 35,100 cy of fill soil. Approximately 33,600 cy of soil would be imported. There would be no soil export. Construction equipment would be staged on the project site. The existing residences and ancillary agricultural buildings on the project site would not be demolished or relocated.

NATIVE AMERICAN HERITAGE COMMISSION

March 12, 2020

Elaine Foster, Archaeologist
Rincon Consultants, Inc.

Via Email to: efoster@rinconconsultants.com

Re: Somis Ranch Farmworker Housing Complex Project, Ventura County

Dear Ms. Foster:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Sarah.Fonseca@nahc.ca.gov.

Sincerely,



Sarah Fonseca
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Joseph Myers
Pomo

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contact List
Ventura County
3/12/2020**

**Barbareno/Ventureno Band of
Mission Indians**

Julie Tumamait-Stenslie,
Chairperson
365 North Poli Ave
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com
Chumash

**Northern Chumash Tribal
Council**

Fred Collins, Spokesperson
P.O. Box 6533
Los Osos, CA, 93412
Phone: (805) 801 - 0347
fcollins@northernchumash.org
Chumash

**Barbareno/ Ventureno Band of
Mission Indians**

Patrick Tumamait,
992 El Camino Corto
Ojai, CA, 93023
Phone: (805) 216 - 1253
Chumash

**San Luis Obispo County
Chumash Council**

Mark Vigil, Chief
1030 Ritchie Road
Grover Beach, CA, 93433
Phone: (805) 481 - 2461
Fax: (805) 474-4729
Chumash

**Barbareno/ Ventureno Band of
Mission Indians**

Raudel Banuelos,
331 Mira Flores
Camarillo, CA, 93012
Phone: (805) 427 - 0015
Chumash

**Santa Ynez Band of Chumash
Indians**

Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezechumash.org
Chumash

**Barbareno/ Ventureno Band of
Mission Indians**

Eleanor Arrellanes,
P. O. Box 5687
Ventura, CA, 93005
Phone: (805) 701 - 3246
Chumash

**Chumash Council of
Bakersfield**

Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net
Chumash

**Coastal Band of the Chumash
Nation**

Gino Altamirano, Chairperson
P. O. Box 4464
Santa Barbara, CA, 93140
cbcn.consultation@gmail.com
Chumash

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Somis Ranch Farmworker Housing Complex Project, Ventura County.

Native Americans Consulted

Local Group/Government Contact	Rincon Coordination Efforts	Response to Coordination Efforts
<p><i>Barbareno/Ventureno Band of Mission Indians</i> Julie Tumamait-Stenslie, Chairperson 365 North Poli Ave Ojai, CA, 93023 Phone: (805) 646 - 6214 jtumamait@hotmail.com</p>	<p>Letter: 3/13/2020</p>	
<p><i>Barbareno/ Ventureno Band of Mission Indians</i> Patrick Tumamait, 992 El Camino Corto Ojai, CA, 93023 Phone: (805) 216 - 1253</p>	<p>Letter: 3/13/2020</p> <p>Message Received: 3/16/2020</p> <p>Follow up call: 4/21/2020</p>	<p>Message was left with knowledge of a site within the farm field, off the highway. Mentioned the CCIC would have information even if the NAHC does not. Previously monitored construction of a fiberoptic line in Somis township. Recommends Native American Monitoring and would like to be involved in the project. Follow up call confirmed that the likely site is CA-VEN-1512 in Rancho Campana High School, consisting of shell and some tools. No other comments were provided.</p>
<p><i>Barbareno/ Ventureno Band of Mission Indians</i> Raudel Banuelos, 331 Mira Flores Camarillo, CA, 93012 Phone: (805) 427 - 0015</p>	<p>Letter: 3/13/2020</p>	

Local Group/Government Contact	Rincon Coordination Efforts	Response to Coordination Efforts
<p><i>Barbareno/ Ventureneno Band of Mission Indians</i> Eleanor Arrellanes, P. O. Box 5687 Ventura, CA, 93005 Phone: (805) 701 - 3246</p>	Letter: 3/13/2020	
<p><i>Chumash Council of Bakersfield</i> Julio Quair, Chairperson 729 Texas Street Bakersfield, CA, 93307 Phone: (661) 322 - 0121 chumashtribe@sbcglobal.net</p>	Letter: 3/13/2020	
<p><i>Coastal Band of the Chumash Nation</i> Gino Altamirano, Chairperson P. O. Box 4464 Santa Barbara, CA, 93140 cbcn.consultation@gmail.com</p>	Letter: 3/13/2020	Letter was returned to the Ventura office as undeliverable. A copy of the letter was sent via email 4/29/2020
<p><i>Northern Chumash Tribal Council</i> Fred Collins, Spokesperson P.O. Box 6533 Los Osos, CA, 93412 Phone: (805) 801 - 0347 fcollins@northernchumash.org</p>	Letter: 3/13/2020	
<p><i>San Luis Obispo County Chumash Council</i> Mark Vigil, Chief 1030 Ritchie Road Grover Beach, CA, 93433 Phone: (805) 481 - 2461 Fax: (805) 474-4729</p>	Letter: 3/13/2020	
<p><i>Santa Ynez Band of Chumash Indians</i> Kenneth Kahn, Chairperson P.O. Box 517 Santa Ynez, CA, 93460 Phone: (805) 688 - 7997 Fax: (805) 686-9578 kkahn@santaynezchumash.org</p>	Letter: 3/13/2020	



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

March 13, 2020

Barbareno/Ventureno Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson
365 North Poli Avenue
Ojai, CA 93023

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Chairperson Tumamait-Stenslie,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

This letter serves to inquire about your knowledge of potential cultural resources within the vicinity that may be impacted by the project. Rincon contacted the Native American Heritage Commission to request a Sacred Lands File search of the project site that was returned with "negative results". However, we are aware that the results of this search do not negate the possibility of cultural resources existing within the project site.

If you have knowledge of cultural resources that may exist within or near the project site that you wish to be documented in our report, please contact me at (213) 788-4842, extension 3016, or at efoster@rinconconsultants.com. Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Elaine Foster", written in a cursive style.

Elaine Foster
Archaeologist

Enclosed: Project Location Map



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

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March 13, 2020

Barbareno-Ventureno Band of Mission Indians
Patrick Tumamait, Chairperson
992 El Camino Corto
Ojai, CA 93023

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Mr. Tumamait,

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March 13, 2020

Barbareno/Ventureno Band of Mission Indians
Raudel Banuelos
331 Mira Flores
Camarillo, CA 93012

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Mr. Banuelos,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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March 13, 2020

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
PO Box 5687
Ventura, CA 93005

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Ms. Arrellanes,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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www.rinconconsultants.com

March 13, 2020

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA 93307

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Chairperson Quair,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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March 13, 2020

Coastal Band of the Chumash Nation
Gino Altamirano, Chairperson
PO Box 4464
Santa Barbara, CA 93140

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Chairperson Altamirano,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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Elaine Foster
Archaeologist

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March 13, 2020

Northern Chumash Tribal Council
Fred Collins, Spokesperson
PO Box 6533
Los Osos, CA 93412

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Spokesperson Collins,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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Archaeologist

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March 13, 2020

San Luis Obispo County Chumash Council
Mark Vigil, Chief
1030 Ritchie Road
Grover Beach, CA 93433

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Chief Vigil,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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www.rinconconsultants.com

March 13, 2020

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
PO Box 517
Santa Ynez, CA 93460

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Chairperson Kahn,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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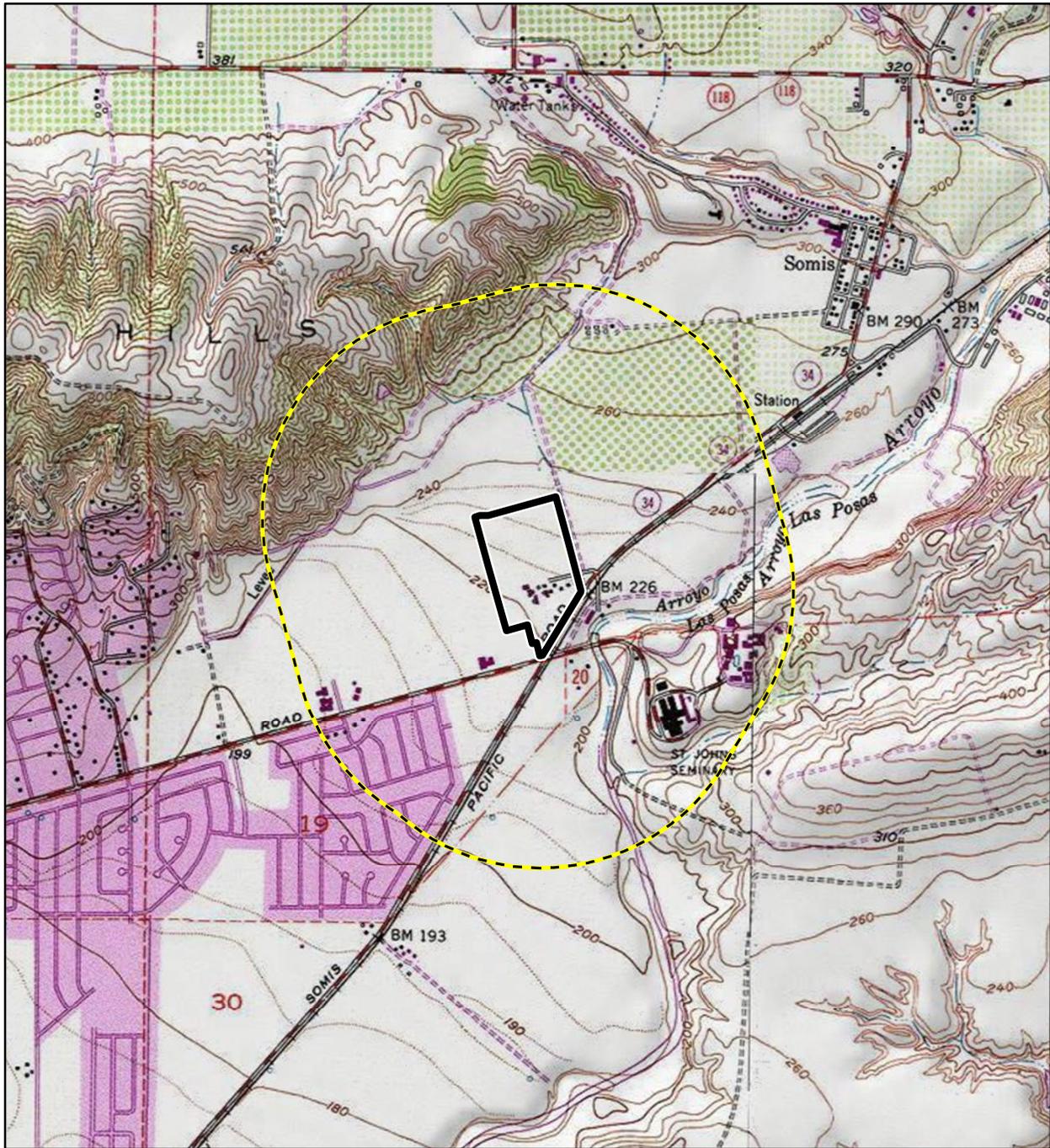
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Elaine Foster
Archaeologist

Enclosed: Project Location Map



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Camarillo, Moorpark, Newbury Park, and Santa Paula Quadrangle. T02N R20W S17-20. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Half-Mile Buffer
-  Area of Potential Effects



0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Records Search Map





Rincon Consultants, Inc.

449 15th Street, Suite 303
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www.rinconconsultants.com

March 13, 2020

Coastal Band of the Chumash Nation
Gino Altamirano, Chairperson
PO Box 4464
Santa Barbara, CA 93140

Subject: Cultural Resources Report for the Somis Ranch Farmworker Housing Project, Ventura County, California

Dear Chairperson Altamirano,

Rincon Consultants, Inc. (Rincon) has been retained by the Ventura County Resource Management Agency to conduct an Environmental Impact Report at 2789 Somis Road, located north of the City of Camarillo. The proposed project involves the construction of 360 dwelling units with a maximum height of 35 feet along with amenities such as community center rooms, play fields, tot lots/playgrounds, and basketball courts. The project also proposes to construct a community wastewater treatment facility and landscaping of 281,000 square feet of the project site. This project is subject to the California Environmental Quality Act (CEQA) and the Ventura County Resource Management Agency, Planning Division is the lead agency. This letter is intended as informal outreach only; consultation under California Assembly Bill 52 of 2014 will be carried out separately by the City of Concord.

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Rincon Consultants, Inc.

Elaine Foster
Archaeologist

Enclosed: Project Location Map

Environmental Scientists

Planners

Engineers

Ventura, California 93003

**Coastal Band of the Chumash Nation
Gino Altamirano, Chairperson
PO Box 4464
Santa Barbara, CA 93140**

NIXIE 91109 04/21/2020

RETURN TO SENDER
NOT DELIVERABLE AS ADDRESSED
UNABLE TO FORWARD
SORT IN MANUAL ONLY NO AUTOMATION
BC: 56998999955

510 834 4455

Appendix C

DPR 523 Series Forms

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 3CS; 5S3

Other Listings
Review Code Reviewer Date

Page 1 of 9

*Resource Name or #: 2789 Somis Road

P1. Other Identifier: Rice & Bell Ranch; Bell Ranch; Somis Ranch

*P2. Location: Not for Publication Unrestricted *a. County: Ventura

*b. USGS 7.5' Quad: Camarillo Date: 1951 Township 2N, Range 20W, Section S.B. B.M.

c. Address: 2789 Somis Road City: Somis Zip: 93066

d. UTM: Zone: mE/ mN (G.P.S.)

e. Other Locational Data: APN: 156-0-180-485

***P3a. Description:**

2789 Somis Road is an agricultural property located adjacent to and west of Somis Road, slightly north of Las Posas Road, in unincorporated Ventura County. Originally part of a much larger ranch, the property is currently 36.36 acres and includes a grouping of eight residential and ancillary buildings near the southeast corner, surrounded by agricultural fields. Access is provided by Bell Ranch Road that branches off Somis Road and enters the property from the east. The eight buildings are generously spaced and surrounded with grassy lawn areas and landscaping. A single mobile-home is located at the southern portion of the building grouping. There are three agricultural fields located to the south, west, and north of the building grouping, respectively.

Residence No. 1

The eastern-most building on the property is a single-story, rectangular-planned residence. The vernacular bungalow-style building sits on a concrete foundation, is clad in wooden lap siding, and exhibits original one-over-one wood sash windows of various sizes throughout. The primary entry to the building, a single, multi-panel wooden door that appears original, is offset on the north elevation. The building is topped with a low-pitched front-gabled roof with moderate overhanging eaves, which are enclosed and supported with three cantilevered exposed beams. Slatted wooden gable vents are present. A satellite dish has been mounted to the roof. Surrounding the residence inside a white picket fence is a lush lawn and mature plantings including palm and orange trees in addition to ornamentals. Although research limitations prevented definitively dating the building, based on visual observation, it appears to date to circa 1920. The building appears minimally altered and is in good condition.

See continuation sheet, p. 4.

*P3b. Resource Attributes: HP33. Farm/ranch

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)

P5a. Photo or Drawing



P5b. Description of Photo:

Residence No. 5, view facing west, April 30, 2020.

*P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

Ranch originally established mid-1870s; extant buildings on current ranch property appear to date from early to mid-20th C (aerial photos, visual observation).

*P7. Owner and Address:

Somis Ranch Partners, LLC

*P8. Recorded by:

S. Zamudio-Gurrola, S. Treffers, R. Perzel
Rincon Consultants, Inc.
180 N. Ashwood Ave
Ventura, CA 93003

*P9. Date Recorded:

June 5, 2020

*P10. Survey Type:

Intensive

***P11. Report Citation:**

Treffers, S., S. Zamudio-Gurrola, R. Perzel, M. Pfeiffer, and H. Haas. 2020. Cultural Resources Assessment Report for the Somis Ranch Farmworker Housing Project. Rincon Consultants. Report on file, South Central Coastal Information Center, California State University, Fullerton.

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure, and Object Record

Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record

Artifact Record Photograph Record Other (List):

State of California X Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

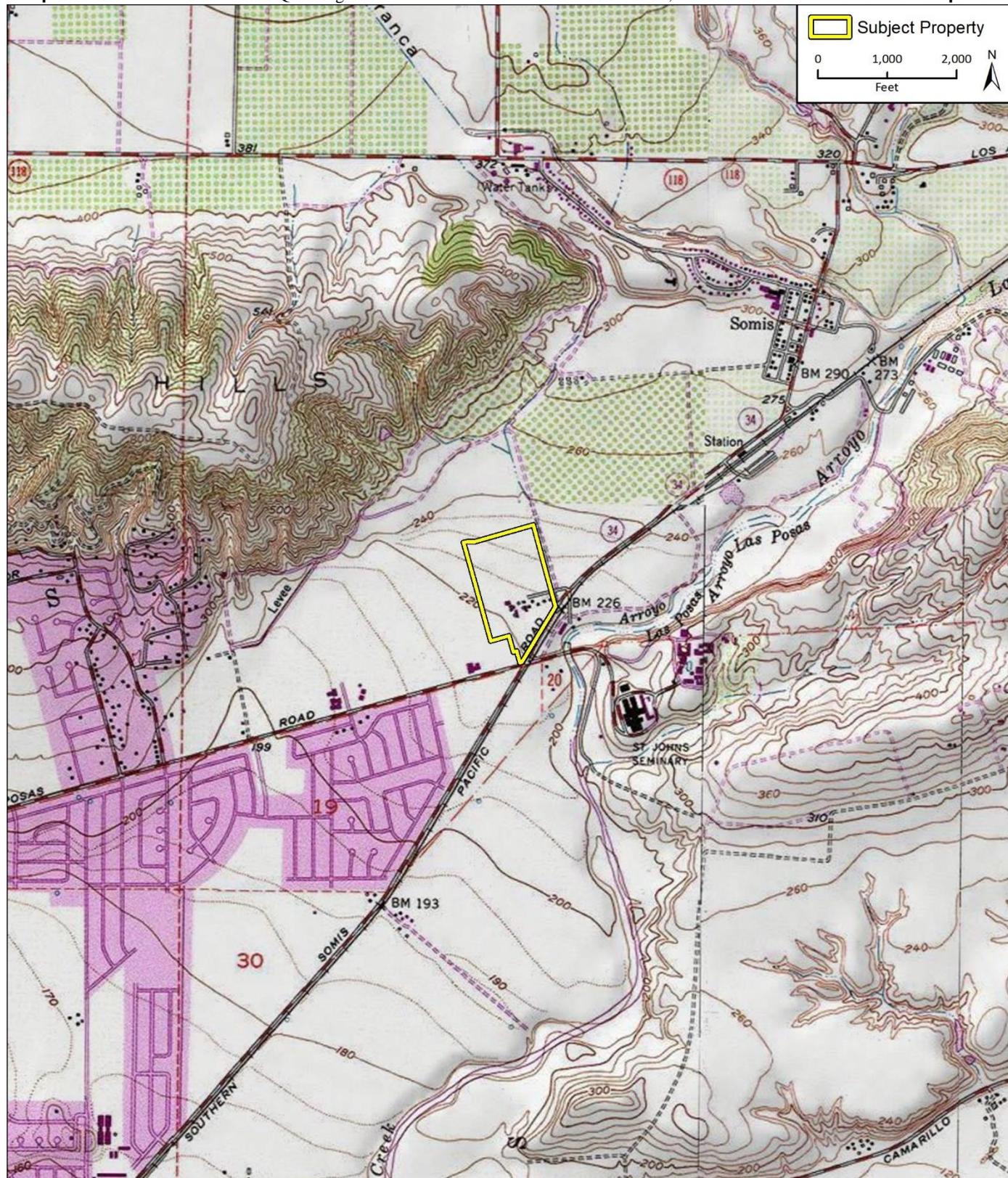
Page 2 of 9

*Resource Name or # 2789 Somis Road

*Map Name: USGS Camarillo Quadrangle

*Scale: 1:24,000

*Date of map: 1951



BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or # 2789 Somis Road

*NRHP Status Code 3CS; 5S3

Page 3 of 9

B1. Historic Name: N/A
B2. Common Name: N/A
B3. Original Use: Ranch
B4. Present Use: Ranch
*B5. Architectural Style: Vernacular; bungalow

***B6. Construction History:**

Rice & Bell Ranch was originally established in mid-1870s. Ranch was subdivided various times over the decades to its present 36.36-acre size. Various residences and ranch buildings have been constructed and moved or removed over the decades. The extant buildings on the ranch appear to date from the early to mid-twentieth century (based on aerial photos and visual observation). See P3a. Description for details.

*B7. Moved? No Yes Unknown Date: Unknown Original Location: Unknown

*B8. Related Features: None

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme: Early Agricultural development; architectural typology Area: Ventura County

Period of Significance: Late 1800s-early 1900s Property Type: Ranch

Applicable Criteria: 1/3

The property at 2789 Somis Road was once part of a much larger ranch established in the 19th century. Known as Bell Ranch, it was initially developed in the 1870s by early and notable Ventura County settlers Peter Rice and Robert Bell, and subsequently operated by Thomas Bard's Berylwood Investment Company beginning in the early 20th century. As discussed further below, both these individuals and entities made significant contributions to the early agricultural development in Ventura County.

Peter Rice was born in Pennsylvania in 1818 and moved to Ohio with his parents at the age of five. As an adult he worked in the purchase and sale of cattle, and in the fur business, at which he was very successful. Rice bought a farm in Richland County, Ohio and married Isabella Turbutt. In 1849 they set out for California and initially settled in the northern part of the state. Rice was involved in mining, lumber, stagecoach lines, and the building of bridges and turnpikes. Drawn by the discovery of silver, he went to Virginia City, Nevada and successfully engaged in the development of sawmills and ditches. In 1871 Rice made a trip to Ventura County where he invested in a 1,150-acre ranch on the Rancho Las Posas and eventually relocated his family to the ranch (Mason 1883).

Robert Bell also arrived in Ventura County in 1871 by way of Ohio and northern California. Born in Richland County Ohio in 1842, he initially settled in Yuba County where he worked as a ranchman for several seasons. He relocated to Ventura County in 1871, purchasing 300 acres of land in the Somis area and improving the land to a tillable condition and grew beans, beets and hay. In 1877 he married Peter Rice's daughter, Rebecca Lucretia Rice, and would subsequently have three children, Polly, Bertha and Walter (Guinn 1907).

Soon after their arrival in Ventura County, Peter Rice and Robert Bell established an agricultural partnership known as Rice & Bell in the mid 1870s. By the end of the decade, Rice & Bell were invested in a farm, which appears to have included the current project site, covering 1,130 acres, with up to 3,000 acres also cultivated in adjoining lands (Hampton 2002; Mason 1883). Records from the late 1870s describe Rice & Bell's ranch as having "more the appearance of a village than the homes of quiet farmers; these enterprising and well-known gentlemen farm on so large a scale, that to give anything like a description of their ranch would require more space than we can give at the present" (Hampton 2002). See continuation sheet, p. 5.

B11. Additional Resource Attributes: N/A

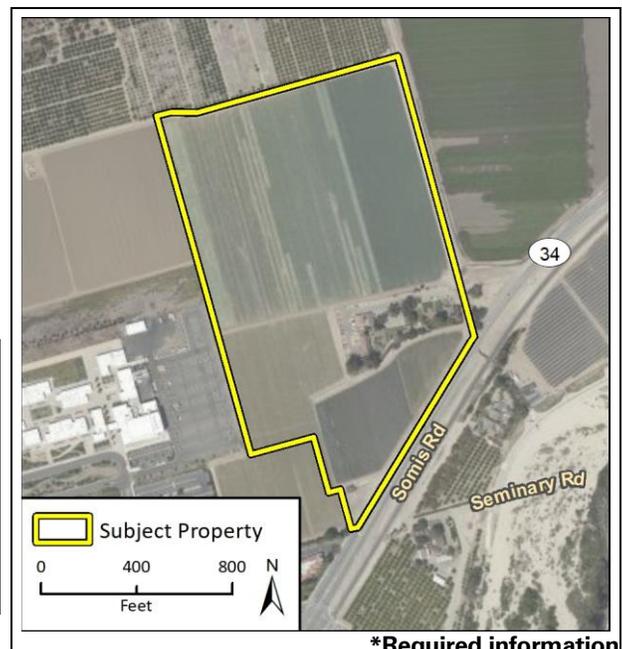
*B12. References: See continuation sheet.

B13. Remarks:

*B14. Evaluator: S. Zamudio-Gurrola, S. Treffers, Rincon Consultants.

*Date of Evaluation: June 5, 2020

(This space reserved for official comments.)



P3a. Description (continued):

Residence No. 2

Sited roughly 30 feet west of Residence No. 1 and separated by a hedge row, Residence No. 2 is a single-story T-planned vernacular building also built in a bungalow style. The building is clad in wooden lap siding and features one-over-one wood sash windows of various size throughout, in addition to a single-light, wood-framed picture window on the primary (north) elevation. Two entrances to the building, single wooden multi-light doors, are accessible via a semicircular concrete patio at the front of the building. The building is topped with a low-pitched intersecting gabled roof with moderate overhanging eaves clad in asphalt shingles. Eaves are enclosed and supported with cantilevered exposed beams. Slatted wooden gable vents are present, and the building features two brick and mortar chimneys. Surrounding the building inside a wooden horizontal fence is a lush lawn and mature plantings including palm, avocado and cypress trees in addition to ornamentals. Although research limitations prevented definitively dating the building, based on visual observation, it appears to date to circa 1920. The building appears minimally altered and is in good condition.

Residence No. 3

Sited roughly 60 feet west of Residence No. 2 and set back roughly 50 feet further south on the property, Residence No. 3 is a single-story, L-planned vernacular building built in a bungalow style. The building sits on a raised poured concrete perimeter foundation and is clad in wooden lap siding. Visual observation suggests its footprint was expanded westward following its initial construction, potentially more than one time. The original portion of the building features one-over-one wood sash windows, some which appear in pairs, while the apparent addition features aluminum and vinyl sliders. The building includes several entryways, two of which on the primary, north elevation are contained under gabled overhangs supported by wooden columns; these are accessible via two concrete steps.

In the western portion of the building is a passthrough that leads from the front to the rear of the building. Although contained under a single roof structure, the passthrough functionally divides the building into two interior spaces. The building is topped with a low-pitched, intersecting gabled roof clad in asphalt shingles. Exposed rafters and cantilevered decorative exposed beams support the roof. Slatted wooden gable vents are present, and no chimneys appear extant. The building is set back behind and surrounded by a lawn and decorative plantings including rose bushes. Surrounding the building inside a wooden horizontal fence is a lush lawn and mature plantings including palm, avocado and cypress in addition to ornamentals. Although research limitations prevented definitively dating the building, it appears to have been built before 1945. Aside from the aforementioned addition, the building appears minimally altered and is in good condition; it is currently being used as an office.

Residence No. 4

Residence No. 4 is sited roughly 40 feet west of Residence No. 3. The vernacular bungalow-style residence is a single story and features a rectangular footprint. The building sits on a raised concrete perimeter foundation and is clad in wooden lap siding. It features one-over-one wood sash windows that appear in pairs or groupings of three. Two entrances are included, one offset (to the north) on the east elevation and another offset (to the south) on the west. Both entrances feature a single wooden door accessible via a concrete step and small porch sheltered under a gabled overhang supported with square wooden columns. The door at rear is topped with a single-light wooden transom sash; that on the primary, east elevation is bracketed with windows. The building is topped with a low-pitched, gabled roof clad in asphalt shingles. Exposed rafters and cantilevered exposed beams (decorative) support the roof. Slatted wooden gable vents are present. A brick and mortar chimney featuring a stepped design is exposed on the north elevation. The building is set back behind and surrounded by a lawn and ornamental plantings including beds of lilies. Mature cypress and orange trees surround the building at rear. Although research limitations prevented definitively dating the building, based on visual observation, it appears to have been built before 1945. The building appears minimally altered and is in good condition; it is currently being used as an office.

Residence No. 5

Sited just northwest of Residence No. 4, Residence No. 5 is a single story residence exhibiting an L-shaped footprint. The vernacular building is clad in wooden board and batten siding and features one-over-one wood sash windows of varying size. The building is topped with an intersecting, medium-pitched gabled roof clad in asphalt shingles with exposed rafters. A partial length concrete porch sheltered under the main roof structure lines the primary, east elevation. The building's primary entry, a single wooden door covered with a wooden screen door, is accessible via the porch. The building includes two secondary entrances on the north and west elevations, both accessible via steps and a concrete stoop. The door on the north elevation appears non-original while all other doors and windows appear original. The building is surrounded with mature vegetation, including cypress trees and rose bushes, to its south and west. Although research limitations prevented definitively dating the building, based on visual observation, it appears to predate the Residence Nos. 1 and 2 and is estimated to have been built earlier in the twentieth century. It appears minimally altered and is in good condition.

Barn No. 1

Barn No. 1 is a single-story, rectangular-planned utilitarian building sited adjacent to the west of Residence No. 4. The building is topped with a gabled roof with moderate overhang and exposed rafters clad in rolled asphalt. It is clad in wooden lap siding and exhibits no window openings. Original barn doors on the north and south elevations have been removed and their large openings infilled with a combination of board and batten siding and solid, contemporary doors (two on each elevation). A small shed-like addition has been added to the building's northwest corner to provide covered storage. Compared with property residences, the building is surrounded with minimal vegetation. Although research limitations prevented definitively dating the building it appears to date to have been built before 1945. It appears relatively intact and in fair condition; it is currently used for storage.

*Recorded by: S. Zamudio-Gurrola & R. Perzel, Rincon Consultants

*Date: June 5, 2020

■ Continuation

□ Update

P3a. Description (continued):

Barn No. 2

Located roughly 25 feet south of Barn No. 1, Barn No. 2 is a monitor barn with an apparent addition on the north end, creating roughly a L-shaped plan. It is clad in corrugated vertical metal paneling. The building is topped with a gabled clerestory roof clad in corrugated metal paneling consistent with siding material. It exhibits limited window openings; those extant throughout are relatively small and include various types of metal window sash. Large door openings are featured on the south and west elevations of the building. An original sliding metal-clad barn door remains extant on the south elevation door opening; the door on the west elevation appears to be non-original. Compared with the property's residences, the building is surrounded with minimal vegetation. Although research limitations prevented definitively dating the building it appears to date to have been built before 1945. The building appears relatively intact and in fair condition; it is currently used as a workshop.

Barn No. 3

Barn No. 3 is located roughly 20 feet south of and sited trending west-east to face Barn No. 2. The utilitarian building is a single story and features a rectangular footprint. It is clad in vertical wooden siding (some areas are board-and-batten), painted red. The building is topped with an exaggerated shed roof clad in corrugated metal paneling with minimal overhang and exposed rafters. Minimal window openings are included but the primary (north) elevation is lined with large openings covered with wooden sliding barn doors that appear original. It is surrounded with minimal vegetation although two large eucalyptus trees are extant to its immediate rear (south). Although research limitations prevented definitively dating the building it appears to date to have been built before 1945. The building appears minimally altered and is in fair condition; it is currently used for storage.

B10. Significance, (continued):

Although it is unclear if any of these buildings remain within the current project site, Rice & Bell's ranch was described as containing an adobe ranch house, a barn, machinery storehouse, horse stables, a blacksmith shop, four granaries, cribs, and a yard and orange trees. The ranch produced barley, wheat and corn, and was used for hog-raising. In the 1890s, the Rice & Bell ranch was also reported to be growing beans and walnuts. Peter Rice died in 1890, but Bell and his wife Rebecca continued to maintain the farming business into the following decades (Hampton 2002; *Los Angeles Times* 1997). The Bell's 42-year tenure on the ranch established the property's identity in the community through the following decades as the Bell Ranch.

Around 1920, Robert and Rebecca Lucretia Bell appear to have sold the ranch to the Berylwood Investment Company (*Oxnard Daily Courier* 1923; *Los Angeles Times* 1997). The Berylwood Investment Company was founded in 1911 by Thomas R. Bard, a prominent politician, businessman, and key figure in the development of Ventura County. Soon after its formation and under the direction of the Bard family, Berylwood Investment Company began improvements to properties in the Las Posas and Simi valleys. Thomas' son Richard Bard was appointed general manager in 1917 and various members of the Bard family would continue to oversee leadership roles in the company into the following decades. By the 1950s the company's holdings included nearly 2,000 acres of orchards, over 1,800 acres of beans and other irrigated row crops, and over 3,500 acres of open land and pasture, part of which was planted to barley and hay. This acreage was located at three ranches including the Bell Ranch, Hondo Ranch and Simi Ranch. The company's headquarters were once located in downtown Hueneme but in 1950 moved to a hilltop overlooking Somis, and their original office building became Port Hueneme City Hall (*Oxnard Press Courier* 1957).

Following the transfer of management to the Berylwood Investment Company circa 1920, the ranch became known as the B.I. Bell Ranch, the "B.I." a reference to the ranch's new management (Robertson, n.d.). Although the extant buildings on the property could not be definitively dated due to research limitations, Residence Nos. 1, 2 and 5 were constructed prior to 1927 as demonstrated by an aerial photograph from that year. Residence No. 5 may predate the other buildings. However, it is unclear whether Residences Nos. 1 and 2 were constructed during the property's association with Rice & Bell or the Berylwood Investment Company. The additional extant buildings described above appear to date to the post 1940s per historic aerial photographs (UCSB Map & Imagery Lab, various). Rebecca Lucretia Bell died in 1928 and Robert Bell died in 1930; however, it is unclear where they were living at this time (R.L. Polk & Co. 1956; Hampton 2002; Find a Grave 2020).

In the 1940s the majority of the Bell Ranch (which included the subject property and surrounding lands) was planted with orchard rows (UCSB Map & Imagery Lab, various). By the 1950s additional orchards had been planted closer to the hill to the north, and the land south of the ranch complex was planted with lower-scale row crops (UCSB Map & Imagery Lab 1959). It appears subdivision of the ranch land adjacent to Las Posas Road began by the 1960s and continued through the 1970s. By the 1960s some of the former orchard land fronting Las Posas Road (slightly west of the subject property) had been developed with various uses that appear to include office, commercial and industrial (NETRonline 1967).

The company Kaiser Aetna purchased the Bell Ranch property from Berylwood Investment Company in 1969 (*Oxnard Press Courier* 1971a). Kaiser Aetna had an Agricultural Services division which provided management services for agricultural properties and conducted real estate development. During its ownership of the Bell Ranch, the company replanted orchards to replace poor performing and diseased trees, installed new irrigation, and planted new citrus and avocado acreage. The Bell Ranch served as headquarters for Kaiser Aetna's Agricultural Services and its Agricultural Operations Division (*Oxnard Press Courier* 1971a and 1977).

Online Ventura County Recorder and Assessor records indicate that by 1970, Kaiser Aetna began surveying the property for subdivision. The subject property was included in a tract called the Peter Rice Tract, and the T.R. Bard Tract was mapped adjacent to the north (Ventura County 1970. Record of Survey, 37RS64). Another tract map made in 1974 created several parcels, of which the 112.9-acre Parcel 1 included the subject property (Parcel Map 16PM 98). See continuation sheet, p. 6.

*Recorded by: S. Zamudio-Gurrola & R. Perzel, Rincon Consultants

*Date: June 5, 2020

■ Continuation

□ Update

B10. Significance (continued):

In the early 1970s Kaiser Aetna formulated a 10,000-acre master planned, multi-use development for a portion of the property. At the time, Bell Ranch was described as encompassing 1,200 acres (*Oxnard Press Courier* 1971b). However, the master plan was never fully realized and newspaper accounts state the development area was reduced in size (*Oxnard Press Courier* 1975). The company sold 2+ acre homesites planted with avocado trees near Los Angeles Avenue, and developed properties fronting Las Posas Avenue (which today include a medical building and a school) (*Oxnard Press Courier* 1971a; NETRonline 1967, 1969 and 1978).

In 1977, a new corporation formed by five former employees of Kaiser Aetna and called Ag Land Services Inc. purchased Kaiser Aetna's Agricultural Services Division (*Oxnard Press Courier* 1977). Located on the subject property at 2789 Somis Road, it appears Ag Land Services Inc. has remained on the property through present day. The company is involved in agricultural consulting and management of numerous ranches in the Somis, Camarillo, Moorpark and Ventura areas (Citrus Pest & Disease Prevention Program 2020).

Since this time, the larger ranch property continued to be further subdivided and developed with new uses. By 1978 St. John's Pleasant Valley Hospital was developed slightly north of Las Posas Road (*Oxnard Press Courier* 1971a; NETRonline 1967, 1969 and 1978). In 1979 the Peter Rice Tract was subdivided leading to the development of a police station, medical offices, and commercial businesses (NETRonline 1989; Google Earth).

The Oxnard Union High School District developed a new high school on a portion of the Bell Ranch property which opened in 2015. Located slightly west of the subject property, the new school was named "Rancho Campana", which translates to "Bell Ranch" in Spanish, in honor of the family who once owned the land (Leung 2013; Oxnard Union High School District 2017 and 2020). Records on file with the Ventura County Assessor and Recorder show in 2019 a 40.22-acre parcel was split into two parcels which included the subject property of 36.36 acres and a smaller 4.64-acre parcel that is now owned by the City of Camarillo.

Evaluation:

Based on information available at the time of this study, the subject property appears to possess significant associations with the early agricultural history of Ventura County and may be presumed eligible for listing in the CRHR and as a Ventura County Landmark. The exact construction dates of the buildings on the ranch property were unable to be definitively determined due to in-person research constraints resulting from COVID-19 considerations. However, available information indicates the ranch was historically associated with two notable nineteenth century pioneering entities which were influential in Ventura County's agricultural history, Rice & Bell ranch and the Bard family's Berylwood Investment Company. Residence Nos. 1 and 2 appear to have been built circa 1920, around the time the Berylwood Investment Company assumed ownership of the ranch. Residence No. 5 appears to have been built earlier, but further research would be necessary to substantiate. It is unclear what if any extant buildings on the site are associated with the Rice & Bell period of the property. However, the Berylwood Investment Company maintained a noteworthy presence in Ventura County's growth during and after this period, supported in part by the subject property. Further, the buildings on the property are largely intact and representative of early twentieth century agricultural practices within Ventura County and embody the distinctive characteristics of this period of architectural history. For these reasons the subject property appears to be eligible under CRHR Criteria 1 and 3, and Ventura County Landmark Criteria 1, 2, and 5. The original Bell Ranch has been continually subdivided and a number of buildings and structures have been removed and replaced; however, the ranch still retains multiple buildings from the early twentieth century and maintains its historic character such that it retains sufficient integrity to convey its significant associations.

Although the ranch property is associated with Peter Rice and Robert Bell, their association with the extant buildings cannot be definitively documented at this time. Further, while Thomas R. Bard and other members of the Bard family who founded and led the Berylwood Investment Company have are associated with the property, this association is tangential, and the subject property is not directly illustrative of any significance these individuals may have. For this reason, the subject property does not appear to be eligible for state or local designation under CRHR Criterion 2 or Ventura County Landmark Criterion 3. Lastly, the CHRIS records search results and archaeological field survey do not indicate the subject property is eligible for state or local designation under CRHR Criterion 4 or Ventura County Landmark Criterion 4.

B12. References (continued):

Find a Grave. 2020. "Rebecca Lucretia Rice Bell", <https://www.findagrave.com/memorial/59606459/rebecca-lucretia-bell>

Franks, Kenny Arthur and Paul F. Lambert. 1985. *Early California Oil: A Photographic History, 1865-1940*. Texas A&M University Press, College Station, Texas.

Hampton, Edwin Earl (Jr.). 2002. *Ventura County: Garden of the World*, The Ventura County Historical Society Quarterly, vol. 46, nos. 1-4. Ventura County Historical Society and Ventura County Museum of History & Art.

Leung, Wendy. 2013. "Future Camarillo high school gets name", *Ventura County Star*, 26 September.

Los Angeles Times. 1997. "Robert B. Hooker; WWII Veteran, Somis Rancher", 22 May.

Mason, Jesse D. 1883. *History of Santa Barbara County, California*. Thompson & West, Oakland, California.

McClellan, Doug. 1992. "Centennial of Somis is a Small Affair: Communities: A walking tour and back-yard party mark today's celebration. The 400 residents call their town an oasis." *Los Angeles Times*. 11 October. <https://www.latimes.com/archives/la-xpm-1992-10-11-me-377-story.html>

*Recorded by: S. Zamudio-Gurrola & R. Perzel, Rincon Consultants

*Date: June 5, 2020

■ Continuation

□ Update

B12. References (continued):

Nationwide Environmental Title Research LLC (NETRonline). Various. Aerial photographs and topographical maps depicting the project site. Accessed March through May 2020 at historicaerials.com

Oxnard Daily Courier. 1923. "Announcements", 9 November.

Oxnard Press Courier

- 1957 "The Berylwood Investment Co.", 29 November.
- 1971a "New Agricultural Management Service Available in County", 3 July.
- 1971b "Editorials: Development vs. Environment", 19 September. Page 4.
- 1975 "Company To Seek Annexation Move", 22 July.
- 1977 "Camarillo Men Buy Ag Services", 5 August.

Oxnard Union High School District

- 2020 Rancho Campana High School – History. Accessed March 19, 2020 at <https://www.ranchocampanahigh.us/students-parents/about-rancho/history/>
- 2017 Board Meeting Agenda, 15 March.

R.L. Polk & Company. 1956. Listing for Lee, Virgil B. at Bell Ranch, Somis. In Polk's Ventura County Directory, Los Angeles.

Robertson, Leigh. N.d. "Maulhardt Equipment Co. 1953-1967". Accessed March 13, 2020 at The Adventures of Leigh Robertson, <http://leighrobertson.net/maulhardt.html>

UCSB Map & Imagery Lab

- 1927 Flight C-104, Frame I-14
- 1935 Flight C-3797, Frame 28
- 1959 Flight AXI-1959, Frame 18W-14
- 1962 Flight HA-OH, Frame 61
- 1964 Flight HA-WE, Frame 44

Ventura County Recorder

- 1892 "Map of the Town of Somis in Rancho Las Posas", 003MR033
- 1948 Bard-Holbert Subdivision No. 1, 15MR68
- 1953 Bard-Holbert Subdivision No. 2, 21MR75

P5a. Photo or Drawing (continued):

1927 Aerial Photograph Depicting Ranch Property and Building Complex (at center)



*Recorded by: S. Zamudio-Gurrola & R. Perzel, Rincon Consultants

*Date: June 5, 2020

Continuation

Update

P5a. Photo or Drawing (continued):

Residence No. 1, Primary (North) and West Elevations



Residence No. 2, Primary (North) and East Elevations



Residence No. 3 as Viewed from the Northwest



Residence No. 4, Primary (East) Elevation



Residence No. 5, Primary (East) Elevation



Barn No. 1, South Elevation



*Recorded by: S. Zamudio-Gurrola & R. Perzel, Rincon Consultants

*Date: June 5, 2020

■ Continuation

□ Update

P5a. Photo or Drawing (continued):

Barn No. 2, East and South Elevations



Barn No. 3, Primary (North) and West Elevations



Site Map of Building Complex on Developed Portion of Ranch Property



Appendix F

Noise Modeling Results

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 6/2/2020

Case Description: Somis Ranch

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Residential	Residential	55	50	45

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	50	0
Backhoe	No	40		77.6	50	0

Results

Equipment	Calculated (dBA)	
	*Lmax	Leq
Dozer	81.7	77.7
Backhoe	77.6	73.6
Total	81.7	79.1

*Calculated Lmax is the Loudest value.

ELECTRICAL DATA

38HDR UNIT SIZE	V-PH-Hz	VOLTAGE RANGE*		COMPRESSOR		OUTDOOR FAN MOTOR			MIN CKT AMPS	FUSE/ HACR BKR AMPS
		Min	Max	RLA	LRA	FLA	NEC Hp	kW Out		
018	208/230-1-60	187	253	9.0	48.0	0.80	0.125	0.09	12.1	20
024	208/230-1-60	187	253	12.8	58.3	0.80	0.125	0.09	16.8	25
030	208/230-1-60	187	253	14.1	73.0	1.45	0.25	0.19	19.1	30
036	208/230-1-60	187	253	14.1	77.0	1.45	0.25	0.19	19.1	30
	208/230-3-60	187	253	9.0	71.0	1.45	0.25	0.19	12.7	20
	460-3-60	414	506	5.6	38.0	0.80	0.25	0.19	7.8	15
048	208/230-1-60	187	253	21.8	117.0	1.45	0.25	0.19	28.7	50
	208/230-3-60	187	253	13.7	83.1	1.45	0.25	0.19	18.6	30
	460-3-60	414	506	6.2	41.0	0.80	0.25	0.19	8.6	15
060	208/230-1-60	187	253	26.4	134.0	1.45	0.25	0.19	34.5	60
	208/230-3-60	187	253	16.0	110.0	1.45	0.25	0.19	21.5	35
	460-3-60	414	506	7.8	52.0	0.80	0.25	0.19	10.6	15

* Permissible limits of the voltage range at which the unit will operate satisfactorily

FLA - Full Load Amps

HACR - Heating, Air Conditioning, Refrigeration

LRA - Locked Rotor Amps

NEC - National Electrical Code

RLA - Rated Load Amps (compressor)

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

38HDR

SOUND LEVEL

Unit Size	Standard Rating (dB)	Typical Octave Band Spectrum (dBA) (without tone adjustment)						
		125	250	500	1000	2000	4000	8000
018	68	52.0	57.5	60.5	63.5	60.5	57.5	46.5
024	69	57.5	61.5	63.0	61.0	60.0	56.0	45.0
030	72	56.5	63.0	65.0	66.0	64.0	62.5	57.0
036	72	65.0	61.5	63.5	65.0	64.5	61.0	54.5
048	72	58.5	61.0	64.0	67.5	66.0	64.0	57.0
060	72	63.0	61.5	64.0	66.5	66.0	64.5	55.5

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE-VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
018	12 (6.7)
024	12 (6.7)
030	12 (6.7)
036	12 (6.7)
048	12 (6.7)
060	12 (6.7)

X Q 200 RENTAL



STANDBY 200 kW PRIME 182 kW POWER MODULE



Frequency	Voltage	Standby kW (kVA)	Prime kW (kVA)
60 Hz	600V	200 (250)	182 (227.5)
60 Hz	480/277V	200 (250)	182 (227.5)
60 Hz	240/139V	200 (250)	182 (227.5)
60 Hz	208/120V	200 (250)	182 (227.5)

FEATURES

FUEL/EMISSIONS STRATEGY

- EPA Tier 4 Interim and CARB Certified for Non-Road Mobile applications at all 60 Hz ratings

SINGLE-SOURCE SUPPLIER

- Factory designed and fully prototype tested with certified torsional vibration analysis available
- ISO 9001:2000 compliant facility

CAT® C7.1 Interim 4 ACERT™ DIESEL ENGINE

- Utilizes ACERT Technology and Cat NOx Reduction System (NRS)
- Cat CEM exhaust after treatment
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine control

CAT LC SERIES GENERATOR

- Matched to the performance and output characteristics of Cat engines
- UL 1446 Recognized Class H insulation

CAT EMCP 4.2 CONTROL PANEL

- Fully featured power metering, protective relaying and engine/generator control and monitoring
- Simple user friendly interface and navigation
- Automatic set-point adjustment

CAT DIGITAL VOLTAGE REGULATOR (CDVR)

- Three-phase sensing
- Adjustable volts-per-hertz regulation
- Provides precise control, excellent block loading, and constant voltage in the normal operating range

ENCLOSURE

- Highly corrosion resistant 12 gauge galvanealed sheet steel construction
- Two coat polyester powder-coated finish
- Six access doors for ease of maintenance
- Secure and safe design with safety glass control panel viewing window with lockable access door
- Fuel fill and battery can only be reached through lockable access doors
- Certified single point lifting eye and lifting points on the base frame

DISTRIBUTION PANEL

- Switchable voltage from 480/277V 3 phase to 240/139V 3 phase (can be adjusted down to 208/120V 3 Phase), 240/120V 1 phase

REAR CUSTOMER ACCESS

- Separate control panel and distribution panel access doors
- Hinged door over main bus connectors
- Emergency stop on panel
- Remote start/stop contacts

ENVIRONMENTALLY FRIENDLY DESIGN

- EPA Tier 4 Interim certified
- 110% spill containment of onboard engine fluids
- Meets 71 dB(A) at 7 m per SAE J1074

RENTAL READY FEATURES

- Anti-condensation heater 110-120 VAC
- Coolant heater 110-120 VAC
- UL Listed battery charger
- Solar powered battery maintainer
- Cam lock distribution system

X Q 200 R E N T A L



FACTORY INSTALLED STANDARD EQUIPMENT

SYSTEM	STANDARD EQUIPMENT
Air Inlet	Air cleaner, two stage cyclonic/paper with dust cup and service indicator Series turbocharger and air-to-air aftercooler
Charging System	12V - 100 Amp charging alternator UL/CSA listed 120V-10A battery charger Solar powered battery maintainer
Control Panel	EMCP 4.2 genset mounted controller Automatic start/stop with cool down timer Idle/rated switch Generator Protection features: 32, 32RV, 46, 50/51, 27/59, 81 O/U Metering display: voltage, current, frequency, power factor, kW, WHM, and kVAR
Cooling System	Package mounted radiator with vertical air discharge provides 43° C ambient capability at standby rating 120VAC coolant heater, fuse protected, thermostatically controlled, automatically disconnected on start-up Coolant drain line with internal control valve piped to base-frame Coolant sight gauge, level switch and shutdown 50% Coolant antifreeze with corrosion inhibitor
Distribution System	NEMA 1 steel enclosure with separate hinged, lockable door Main bus connections with hinged load cover with clear Plexiglas window closed for operation 4-pole 800A 100% UL circuit breaker with 12V DC shunt trip wired to load door safety switch Multiple duplex and twist lock receptacles with individual circuit breakers Two wire remote start/stop terminals and 120 VAC shore power connection for rapid starting CamLock distribution system
Enclosure	Sound attenuating, 12gauge galvanealed sheet metal enclosure limits overall noise to 71 dB(A) @ 7m (23') Interior walls and ceilings insulated with sound attenuating foam Black stainless steel pad-lockable latches, doorkeepers on all doors and zinc die-cast hinges/grab handles All components are pretreated for anti-corrosive protection prior to painting with polyester powder coat Painted Cat power module white with Cat rental decals
Engine	EPA approved Tier 4 Interim Cat C7.1 ATAAC heavy duty diesel engine Electronic ADEM™ A4 controls 12VDC energized to shutdown solenoid
Exhaust System	Cat Clean Emissions Module and integrated silencer with flexible connectors
Fuel System	350 gal fuel tank, UL listed, double wall, 24 hr runtime @ 100% prime rating Fuel cooler, primary fuel filters with integral water separator, and engine mounted secondary Switch operated electric priming pump Interconnected three way fuel for switching between remote and integral tank
Generator	Three-phase, random wound, 12-lead design, 0.667 pitch Screen protected and drip proof, self regulating, brushless generator with fully interconnected damper windings, IC06 cooling system and sealed for life bearings Class H insulation with coastal insulation protection. Windings are impregnated in a triple dip, thermo-setting moisture, oil and acid resisting polyester varnish. Heavy coat of anti-tracking varnish for additional protection against moisture and condensation Permanent magnet provides 350% short circuit, enhanced motor starting and non-linear performance 120VAC anti-condensation heater Cat digital voltage regulator (Cat DVR) with VAR/PF control
Lube System	Lubricating oil system including pump, integral oil cooler, lube oil, filter, open crankcase breather with filter Oil drain line with internal valve routed to connection point accessible from exterior 500 hour oil change intervals
Mounting System	Generator set soft mounted to the heavy duty, fabricated steel base frame using captive anti-vibration pads between the generator set and base-frame to ensure complete isolation of rotating assemblies Base frame includes integral fuel tank and provides 110% spill containment of all engine fluids
Starting System	Single 12V electric starting motor on engine One 12V-1000 CCA Cat brand maintenance free battery with disconnect switch, battery rack, and cables Glow plugs fitted on the engine
General	Factory testing of standard generator set and complete power module Full manufacturer's warranty O&M manuals
	OPTIONAL EQUIPMENT
Available Options	Canadian Standards Authority certification (CSA) Transport Canada compliant fuel tank (IBC CGSB43) Tandem axle trailers with either hydraulic or electric brakes

X Q 200 RENTAL



TECHNICAL DATA

CAT GENERATOR	ENGINE
Frame Size LC5034H Pitch 0.667 No. of poles 4 Excitation Static regulated brushless PM excited Number of bearings..... Single bearing, close coupled Insulation..... Class H Enclosure Drip proof IP23 Alignment..... Pilot shaft Overspeed capability – % of rated125% of rated Voltage regulator 3 phase sensing with Volts-per-Hertz Voltage regulation..... Less than ± 1/2% voltage gain Adjustable to compensate for engine speed droop and line loss Wave form deviation 2% Telephone Influence Factor (TIF)..... Less than 50 Harmonic Distortion (THD)..... Less than 5%	ManufacturerCaterpillar Model.....C7.1 Type4-cycle Cylinder configurationIn-line 6 Displacement – L (cu in)7.01 L (427.7 in ³) Bore – mm (in)..... 105mm (4.13 in) Stroke – mm (in) 135 mm (5.3 in) Compression ratio..... 16.5:1 Engine RPM..... 2200 Aspiration..... ATAAC Fuel system MEUIC Governor type ADEM™ A4 Fuel..... Requires ULSD

Materials and specifications are subject to change without notice.

Generator Set Technical Data	Units	60Hz Standby	60Hz Prime
Power Rating	kW (KVA)	200 (250)	182 (227.5)
Performance Specification		DM	DM
Lubricating System			
Oil pan capacity	L (gal)	16(4.3)	16(4.3)
Fuel System			
Fuel consumption			
100% Load	L/hr (gal/hr)	59.5 (15.7)	53.1 (14.0)
75% Load	L/hr (gal/hr)	44.6 (11.8)	39.8 (10.5)
50% Load	L/hr (gal/hr)	29.8 (7.9)	27.8 (7.3)
Fuel Tank Capacity	L (gal)	1295 (350)	1295 (350)
Running time @ 75% rating	Hr	29	33
Cooling System			
Ambient Capability	°C (°F)	43	43
Engine & Radiator coolant capacity	L (gal)	28 (7.6)	28 (7.6)
Engine coolant capacity	L (gal)	11.5 (3.1)	11.5 (3.1)
Air Requirements			
Combustion air flow	m ³ /min (cfm)		
Maximum dirty air cleaner restriction	kPa (in H ₂ O)	14.3 (505)	13.6 (480.3)
Exhaust System			
Exhaust flow at rated	m ³ /min (cfm)	N/A	13.1 (462.6)
Exhaust temperature at rated kW – dry exhaust	°C (°F)	506 (942.8)	N/A
Noise Rating (with enclosure)*			
@ 7 meters (23 feet)	dB(A)	71	71
Emissions (Tier 4 interim regulation)			
NOx	g/hp-hr	1.9	1.9
CO	g/hp-hr	.2	.2
HC	g/hp-hr	.02	.02
PM	g/hp-hr	.005	.005

Model	Length mm (in)	Width mm (in)	Height mm (in)	Weight with Lube oil and Coolant kg (lb)	Weight with fuel, lube oil and coolant Kg (lb)
XQ200 w/o trailer	4083 (161)	1401(52)	2162(85)	4053 (8916)	5300 (11660)
XQ200 w/ trailer	6019 (237)	2235(88)	2577(101)	4969 (10932)	6300 (13860)

CONTROL PANEL

FEATURES

- EMCP 4.2 engine operator interface
- Battery charger indicator
- Fuel level display
- Idle /rated switch
- Panel light momentary pushbutton
- Voltage adjust potentiometer
- Regeneration alarm indications for DPF 80% soot level and high exhaust temperature
- Coolant alarm
- Emergency stop pushbutton
- Alarm horn
- Convenient service access for Cat (service tools not included).

EMCP 4.2 ENGINE OPERATOR INTERFACE

- Controls
 - Run/Auto/Stop
 - Speed Adjust
 - Cool-down timer
 - Emergency Stop
 - Cycle crank
- Engine Monitoring:
 - RPM
 - Operating hours
 - Coolant Temperature
 - DC Volts
 - Oil pressure
 - Oil Temperature
- True RMS AC metering, 3 phase
 - L-L volts, L-N volts, phase amps
 - Average volts, Amps, Frequency
 - kW, kVA, kVAR, kW-hr, %kW
 - Power Factor (Average, Phase)
 - kW-hr, kVA-hr (total)
- Shutdowns with common indicating light for:
 - Low oil pressure
 - High Coolant Temp
 - Failure to Start (Overcrank)
 - Emergency stop
 - Overspeed
 - High Oil Temperature
 - Low Coolant level
- Fuel level monitoring and control.

EMCP 4.2 GENERATOR PROTECTIVE RELAYING

- Generator protective features provided by EMCP 4.2
 - Phase over/under voltage (Device 27/59)
 - Over/Under frequency (Device 81 O/U)
 - Reverse Power (Device 32/32RV)
 - Current Balance (46)
 - Overcurrent (Device 50/51) (GCB trip unit)
 - Loss of Excitation (Device 40) (CDVR)
 - Generator Phase Sequence



DISTRIBUTION PANEL

- One 4 pole 800 A MCCB, with 12 VDC shunt trip coil activated on any monitored engine or electrical
- Under-voltage release NEMA 1 steel enclosure with hinged lockable door with clear Plexiglas window
- Bus bars are sized for full load capacity of the generator set at 0.8 power factor.
- Includes ground bus, tin-plated copper, for connection to the generator frame ground and field ground cable.
- Customer convenience panel with multiple output receptacles:
 - 1 – 125V, 30 A single phase auxiliary supply
 - 2 – 240V, 50A California style Twist Lock.
 - 2 – 120/208V, 20A Twist Lock.
 - 2 – 120V, 20A Duplex Receptacles with GFI..
- CamLock distribution system
- Consistent 120VAC output from GFCI receptacles independent of bus bar voltage

AC DISTRIBUTION

- Provides 120 VAC for all module accessories.
- Includes controls to de-energize jacket water heaters, battery charger, and generator space heater when the engine is running.

RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications:

CSA 22.0 No. 100, IEC60034-22, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-16, UL1004B, NEC, CEC, 2006/42/EEC, 2006/95/EC, 2004/108/EC, 2000/EC/14, UL142, ULc601, IBC CGSB43, API 546, EGSA 101P, IEEE 43, DEFRA, UL1741, NFPA 99/110, OSHA, 97/68/EC, BS4999, BS5000, IEC60034-5

Fuel Rates are based on fuel oil of 35o API {16oC (60oF)} gravity having an LHV of 42780 kJ/kg (18390 Btu/lb) when used at 29oC (85oF) and weighing 838.9 g/liter (7.001 /b/U.S. gal). Additional ratings may be available for Specific customer requirements, contact your Caterpillar Representative for details. For information regarding Low Sulfur fuel and biodiesel capability, consult your Cat Dealer.

Standby – Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator on the generator set is peak prime rated (as defined in ISO852 at 30° C (86° F).

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO0346 standard conditions.

Prime – Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchase power. There is no limitation on the annual hours of operation and the generator can supply 10% overload power.

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Appendix G

Seepage Pit Performance Test Report

SEEPAGE PIT PERFORMANCE TEST REPORT
FOR PROPOSED SOMIS RANCH RESIDENTIAL DEVELOPMENT
VENTURA COUNTY, CALIFORNIA

PROJECT NO.: 302947-001
SEPTEMBER 24, 2019

PREPARED FOR
PLAZA DEVELOPMENT PARTNERS LLC
ATTENTION: DAVE WHITE

BY
EARTH SYSTEMS PACIFIC
1731-A WALTER STREET
VENTURA, CALIFORNIA 93003



Earth Systems

1731 Walter Street, Suite A | Ventura, CA 93003 | Ph: 805.642.6727 | www.earthsystems.com

September 24, 2019

Project No.: 302947-001

Report No.: 19-9-27

Plaza Development Partners LLC
Attention: Dave White
PO Box 6045
Oxnard, CA 93031-6045

Project: Somis Ranch - Proposed Residential Development
Camarillo Area of Ventura County, California
Subject: Seepage Pit Performance Test Report
Reference: Onsite Wastewater Treatment System Technical Manual, County of Ventura,
February 28, 2006.

Introduction

As requested, Earth Systems Pacific (Earth Systems) has performed seepage pit performance testing for a proposed residential development at Somis Ranch in the Camarillo area of Ventura County, California. The scope of the work reported herein was based on the current Ventura County Ordinance. It is our understanding that numerous seepage pits will be constructed along the north and west sides of the project site and that the pits will accommodate treated effluent and collected stormwater.

Field Exploration and Soil Sampling

Six borings (B-20 through B-25) were drilled to depths ranging from approximately 51.5 to 61.5 feet below the existing ground surface to observe the soil profile and to obtain samples for laboratory analyses. The borings were drilled July 1 and 2 of 2019, using 8-inch diameter hollow-stem continuous flight auger powered by a CME-85 truck mounted drilling rig. The approximate locations of the borings were determined in the field by pacing and sighting, and are shown on the attached Performance Test Location Map.

Samples were obtained within the borings with a Standard Penetration Test (SPT) sampler (ASTM D 1586). The SPT sampler has a 2.00-inch outside diameter and a 1.37-inch inside diameter, but when used without liners, as was done for this project, the inside diameter is 1.63 inches. The samples were obtained by driving the samplers with a 140-pound hammer dropping 30 inches in accordance with ASTM D 1586. The hammer was operated with an automatic trip mechanism.

The final logs of the borings represent interpretations of the contents of the field logs and the results of laboratory testing performed on the samples obtained during the subsurface study. The final logs are attached to this report.

Soil and Groundwater Conditions

Evaluation of the subsurface indicates that much of the project site is underlain directly by alluvium consisting of interbedded clay, silt, and sand layers.

Groundwater was not encountered in the onsite borings to a maximum depth of about 61.5 feet below the existing ground surface. According to the Seismic Hazard Zones Report for the Camarillo 7.5-Minute Quadrangle, Ventura County, California (CGS, 2002), the depth of historical high groundwater is estimated to be deeper than 70 feet. It appears that groundwater will not encroach within 10 vertical feet of the bottoms of the seepage pits. See the attached Historical High Groundwater Map. It should be noted that fluctuations in groundwater levels may occur because of variations in rainfall, regional climate, and other factors.

Seepage Pit Performance Testing

After drilling, continuous stems of 3-inch diameter perforated PVC pipes were placed in the borings, and gravel packs were established between the walls of the annulus and the pipes to prevent caving. The borings were then pre-saturated by filling the borings with water. The borings were kept full of water for a period of one hour.

On the following days, falling head performance tests were performed by partially filling the test hole to near the top of the effective pit depth with water, and recording the drop in the water surface every few minutes for a few hours. The borings were essentially dry when the final readings were taken.

Hydrometer Testing

The gradation characteristics of certain samples were evaluated by hydrometer (in accordance with ASTM D 7928) and sieve analysis procedures. The samples were soaked in water until individual soil particles were separated, then washed on the No. 200 mesh sieve, oven dried, weighed to calculate the percent passing the No. 200 sieve, and mechanically sieved. Additionally, hydrometer analyses were performed to assess the distribution of the particles that passed the No. 200 screen. The hydrometer portions of the tests were run using sodium hexametaphosphate as a dispersing agent.

Performance Test (Absorption) Rate Determination

According to the referenced Ventura County OWTS Technical Manual, there are two methods for calculating the percolation rate: 1) minimum absorption rate from field data, assuming that it varies by less than 15 percent from the previous reading, or 2) weighted absorption rate based on the UPC Soil Types (see attached diagrams) from the hydrometer testing of the soils encountered in the test borings.

The minimum absorption rate based on field data is 3.4 gallons per square foot per day. The minimum absorption rate based on UPC soil type is 0.83 gallons per square foot per day. Based on these data, the tested absorption rate should be 0.83 gallons per square foot per day.

Limitations and Uniformity of Conditions

The analyses and recommendations submitted herein are based upon the data provided in the referenced site-specific reports. If variations from the assumed conditions appear evident, it will be necessary to reevaluate the recommendations of this report.

The scope of services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater or air, on, below, or around this site. Any statements in this report or on the soil boring logs regarding odors noted, unusual or suspicious items or conditions observed, are strictly for the information of the client.

Findings of this report are valid as of this date; however, changes in conditions of a property can occur with passage of time whether they be due to natural processes or works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur whether they result from legislation or broadening of knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of 1 year.

In the event that any changes in the nature, design, or location of the structure and other improvements are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

This update report is issued with the understanding that it is the responsibility of the Owner, or of his representative to ensure that the information and recommendations contained herein are called to the attention of the Architect and Engineers for the project and incorporated into the plan and that the necessary steps are taken to see that the Contractor and Subcontractors carry out such recommendations in the field.

As the Geotechnical Engineers for this project, Earth Systems Pacific has striven to provide services in accordance with generally accepted geotechnical engineering practices in this community at this time. No warranty or guarantee is expressed or implied. This report was prepared for the exclusive use of the Client for the purposes stated in this document for the referenced project only. No third party may use or rely on this report without express written authorization from Earth Systems Pacific for such use or reliance.

It is recommended that Earth Systems Pacific be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations

may be properly interpreted and implemented in the design and specifications. If Earth Systems Pacific is not accorded the privilege of making this recommended review, it can assume no responsibility for misinterpretation of the recommendations contained herein.

Please call if you have any questions, or if we can be of further service.

Respectfully submitted,

EARTH SYSTEMS PACIFIC

mlu
September 24, 2019
Meng Wei Lu
Civil Engineer



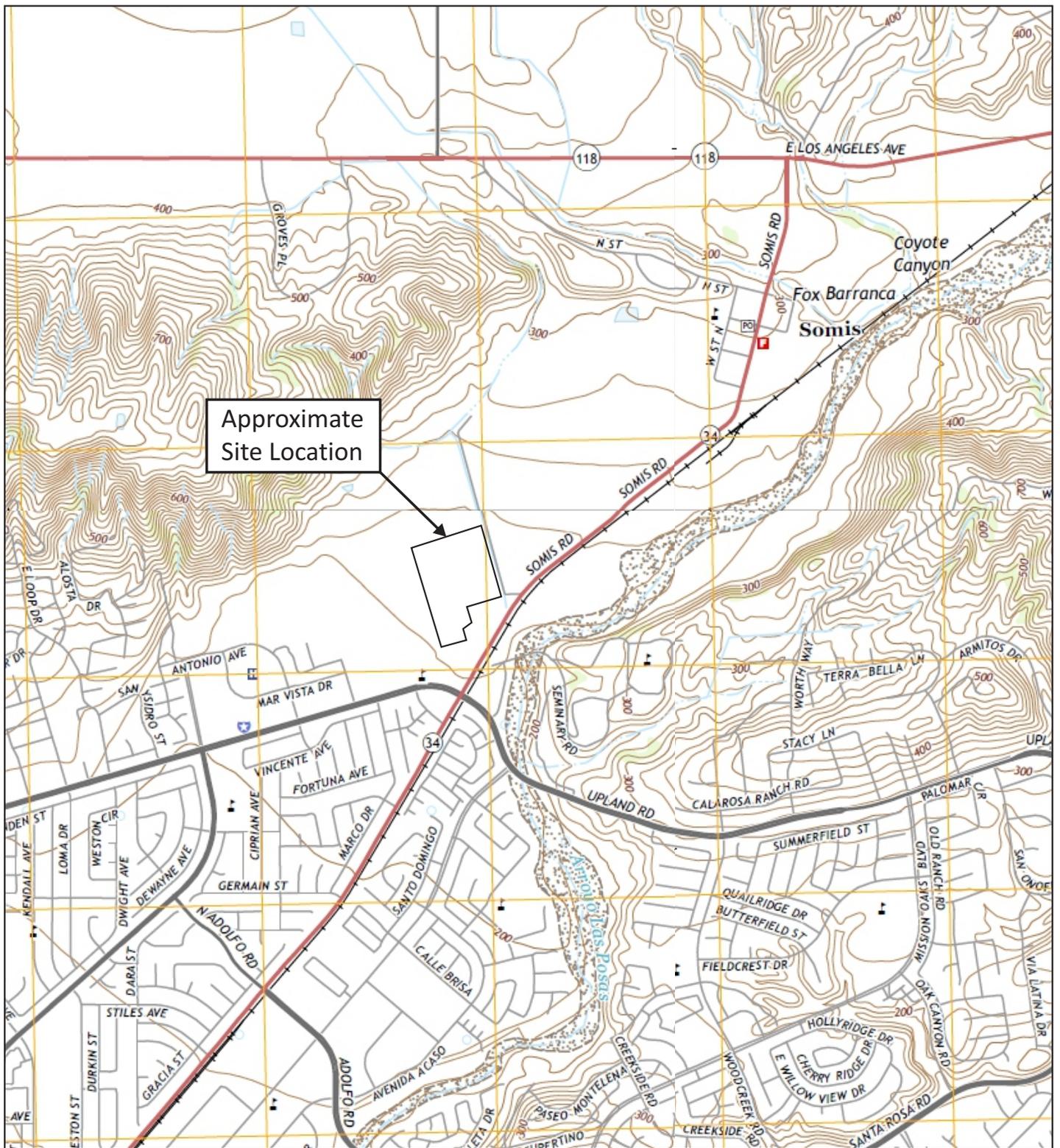
Reviewed and Approved

TJ
Todd J. Tranby
Engineering Geologist



- Attachments:
- Vicinity Map
 - Regional Geologic Map 1 (Dibblee)
 - Regional Geologic Map 2 (USGS/CGS [SCAMP])
 - Seismic Hazard Zones Map
 - Historical High Groundwater Map
 - Logs of Borings
 - Performance Test Location Map
 - Performance Test Data Worksheet
 - Hydrometer Test Results
 - Hydrometer Test Plots on Soil Classification Chart

- Copies:
- 4 - Client (3 mail, 1 email)
 - 1 - Project File



*Taken from USGS Topo Maps, Newbury Park, Moorpark, Santa Paula, and Camarillo Quadrangles, California, 2015.

Approximate Scale: 1" = 2,000'



VICINITY MAP

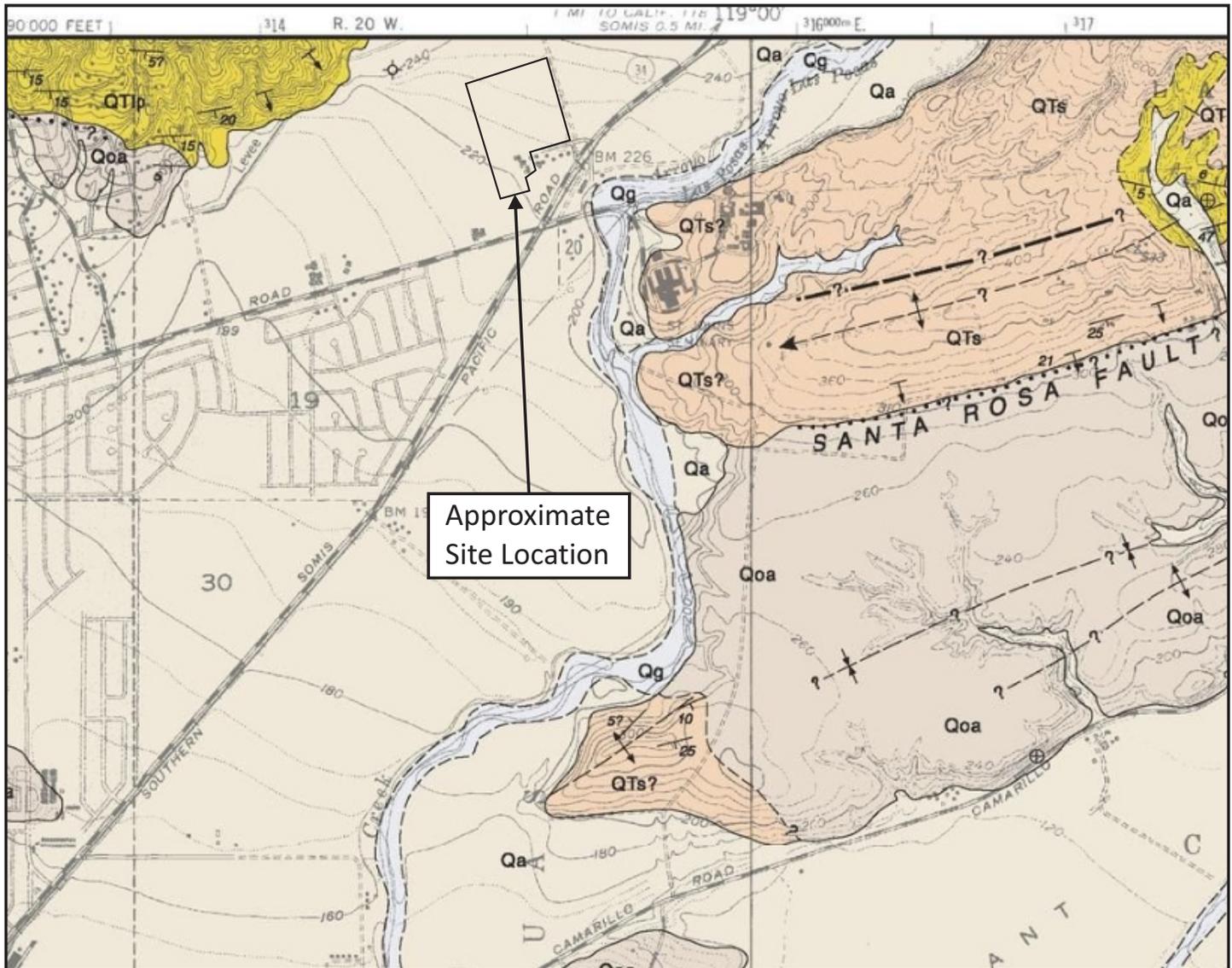
Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California



Earth Systems

September 2019

302947-001



*Taken from Dibblee, Jr., Geologic Map of The Camarillo and Newbury Park Quadrangles, Ventura County, California, 1990, DF-28.

GEOLOGIC SYMBOLS

not all symbols shown on each map

<p>FORMATION CONTACT dashed where inferred or indefinite dotted where concealed</p>	<p>MEMBER CONTACT between units of a formation Prominent bed</p>	<p>CONTACT BETWEEN SURFICIAL SEDIMENTS located only approximately in places</p>
--	---	--

FAULT: Dashed where indefinite or inferred, dotted where concealed, queried where existence is doubtful. Parallel arrows indicate inferred relative lateral movement. Relative vertical movement is shown by U/D (U=upthrown side, D=downthrown side). Short arrow indicates dip of fault plane. Sawteeth are on upper plate of low angle thrust fault.

FOLDS:

<p>ANTICLINE</p>	<p>SYNCLINE</p>
-------------------------	------------------------

arrow on axial trace of fold indicates direction of plunge; dotted where concealed by surficial sediments

Strike and dip of sedimentary rocks

<p>18</p>	<p>20</p>	<p>80</p>		
-----------	-----------	-----------	--	--

Strike and dip of metamorphic or igneous rock foliation or flow banding or compositional layers

<p>75</p>	<p>80</p>		<p>80</p>
-----------	-----------	--	-----------

OTHER SYMBOLS:

<p>Direction of landslide movement</p>	<p>outline of water bodies shown on map</p>	<p>water well</p>	<p>oil well</p>	<p>springs</p>
--	---	-------------------	-----------------	----------------

LEGEND

SURFICIAL SEDIMENTS

- af** Artificial fill
- Qg** Stream channel sand and gravel
- Qf** Alluvial fan gravel and sand, locally slightly indurated
- Qa** Alluvium: gravel, sand and clay of flatlands

Approximate Scale: 1" = 2,000'

0 2,000' 4,000'

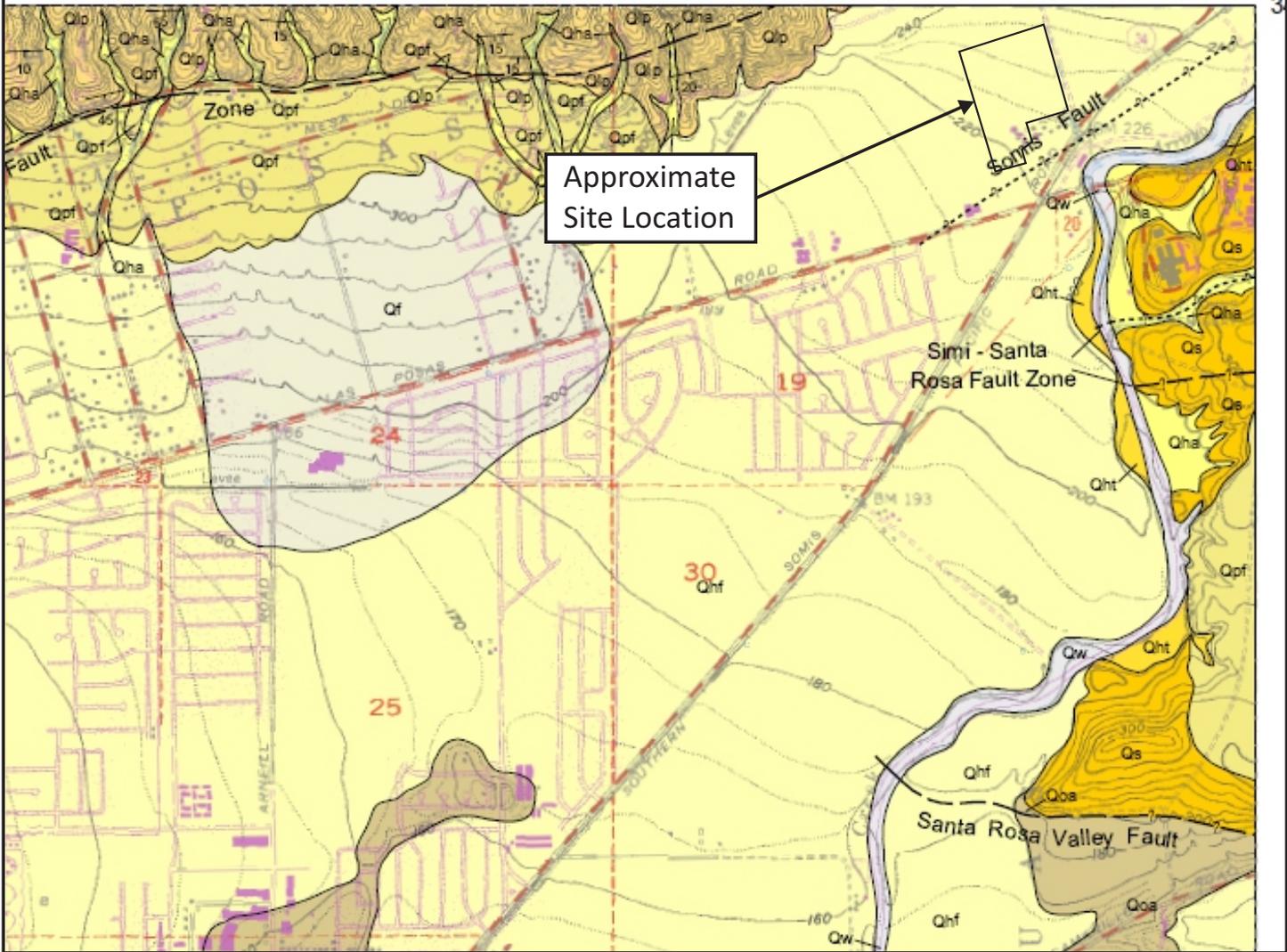
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REGIONAL GEOLOGIC MAP 1

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California

Earth Systems

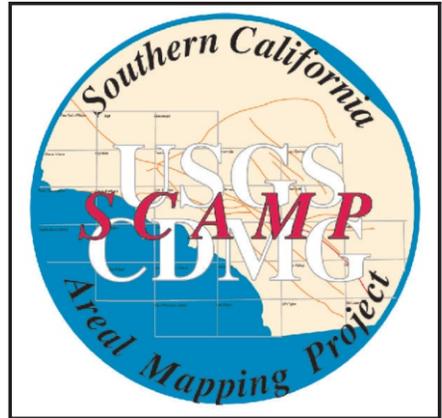
September 2019	302947-001
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*Taken from USGS, SCAMP Geologic Map of the Camarillo 7.5' Quadrangle, Ventura County, California, 2004.

MAP SYMBOLS

- Contact between map units - Generally approximately located or inferred, dotted where concealed.
- Contact between similar map units of different relative age - Recognized by scour and incised channelling features. Generally approximately located.
- Fault - Generally approximately located or inferred, dotted where concealed, queried where location is uncertain.
- Axis of anticline
- Axis of syncline
- Strike and dip of bedding.
- Landslide - Arrows indicate principal direction of movement, queried where existence is questionable (some geologic features are drawn within questionable landslides); hachured where headscarp is mappable.



Qhf: Alluvial fan deposits (Holocene)

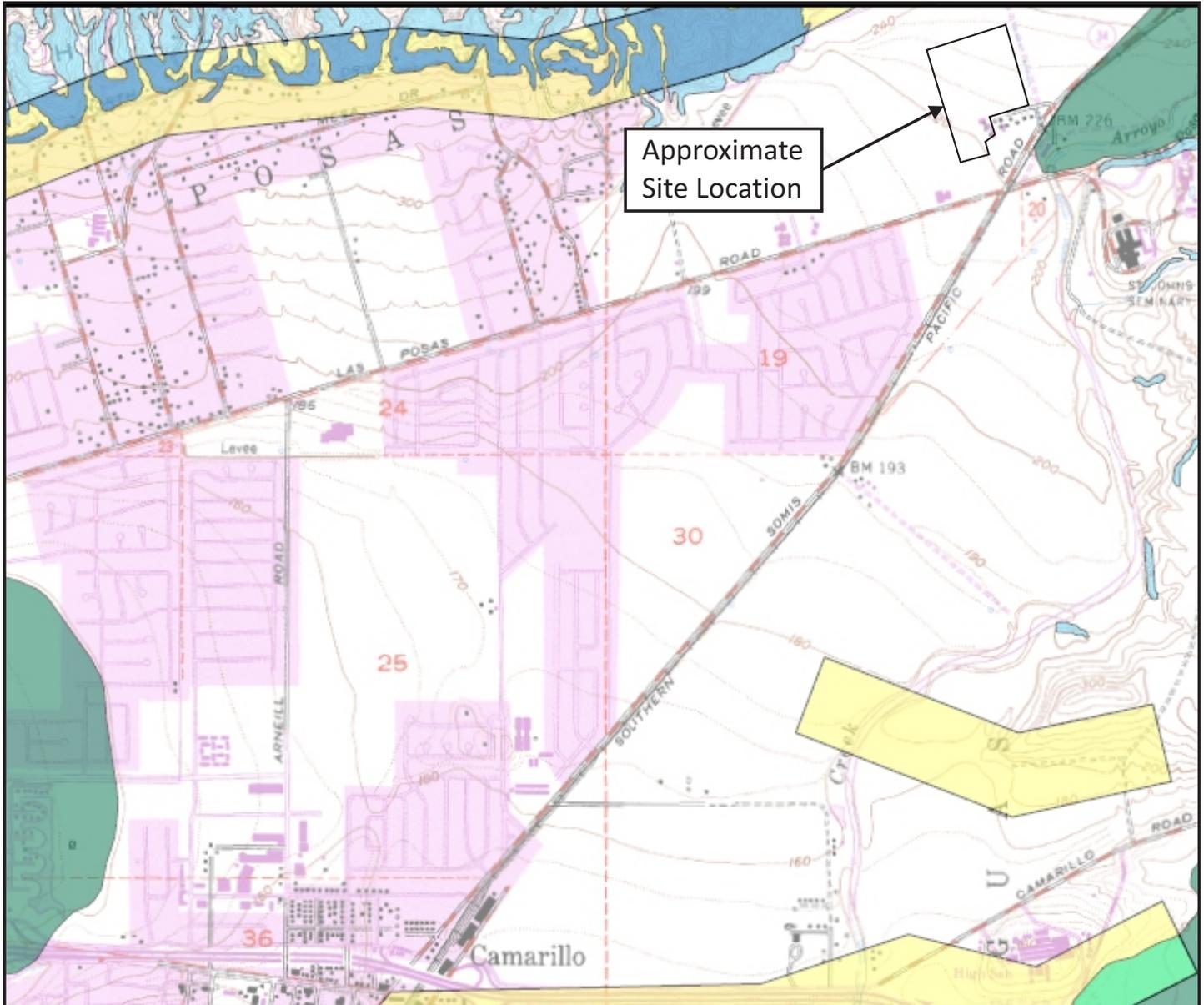
Approximate Scale: 1" = 2,000'



REGIONAL GEOLOGIC MAP 2

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California





Approximate Site Location

EARTHQUAKE FAULT ZONES

Delineated in compliance with Chapter 7.5 Division 2 of the California Public Resources Code (*Alquist-Priolo Earthquake Fault Zoning Act*)

OFFICIAL MAP

Released: May 1, 1998

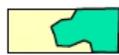
SEISMIC HAZARD ZONES

Delineated in compliance with Chapter 7.8 Division 2 of the California Public Resources Code (*Seismic Hazards Mapping Act*)

OFFICIAL MAP

Released: February 7, 2002

OVERLAPPING EARTHQUAKE FAULT AND SEISMIC HAZARD ZONES



Overlap of Earthquake Fault Zone and Liquefaction Zone
Areas that are covered by both Earthquake Fault Zone and Liquefaction Zone.



Overlap of Earthquake Fault Zone and Earthquake-Induced Landslide Zone
Areas that are covered by both Earthquake Fault Zone and Earthquake-Induced Landslide Zone.

Note: Mitigation methods differ for each zone – AP Act only allows avoidance; Seismic Hazard Mapping Act allows mitigation by engineering/geotechnical design as well as avoidance.

Approximate Scale: 1" = 2,000'

0 2,000' 4,000'

N



SEISMIC HAZARD ZONES MAP

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California



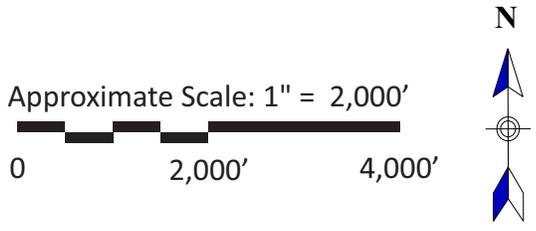
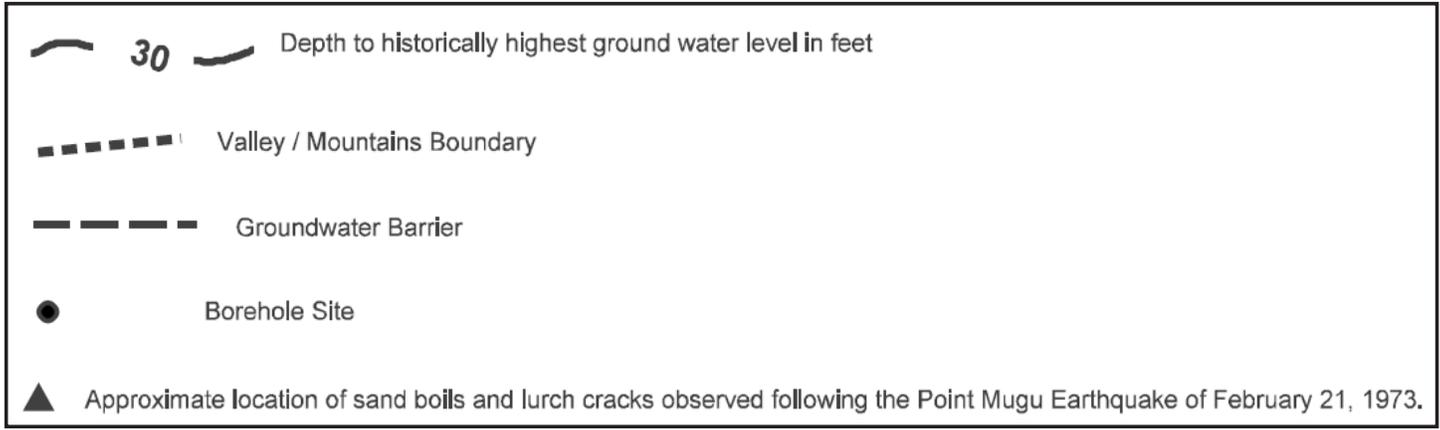
Earth Systems

September 2019

302947-001



*Taken from CGS, Seismic Hazard Zone Report For The Camarillo 7.5-Minute Quadrangle, Ventura County, California, 2002.



HISTORICAL HIGH GROUNDWATER MAP	
Somis Ranch Farmworker Housing Camarillo Area of Ventura County, California	
 Earth Systems	
September 2019	302947-001

BORING NO: B-20 PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 1, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0									
5		█		1/2/3		CL			ALLUVIUM: Olive brown sandy clay with silt; medium stiff; moist
10		█		1/2/2		CL			ALLUVIUM: Dark yellow brown silty clay; soft; moist.
15		█		2/4/3		CL			ALLUVIUM: Dark yellow brown silty clay with sand and minor caliche; medium stiff; moist.
20		█		2/2/4		CL			ALLUVIUM: Dark yellow brown sandy clay with silt and minor caliche; medium stiff; moist.
25		█		4/6/6		SM			ALLUVIUM: Pale yellow brown silty fine sand; medium dense; damp.
30		█		2/3/4		ML			ALLUVIUM: Yellow brown sandy silt ; medium stiff; damp to moist.
35		█		2/4/6		CL			ALLUVIUM: Dark yellow brown sandy clay with silt; stiff; moist.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-20 (Continued) PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 1, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40				3/4/7		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; stiff; moist.
45				3/6/5		ML			ALLUVIUM: Pale yellow brown sandy silt with clay; stiff; damp to moist.
50				4/5/5		SM			ALLUVIUM: Dark yellow brown silty sand; medium dense; damp to moist.
55						SM			Thin lense of gravel at 55.0'
60				9/7/16		SP-SM			ALLUVIUM: Yellow brown poorly-graded fine sand to silty sand; medium dense; damp.
65									Total Depth: 61.5 feet. No Groundwater Encountered.
70									
75									

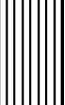
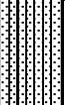
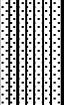
Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-21 PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 1, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0									
5				1/2/3		CL			ALLUVIUM: Olive brown silty clay with sand; medium stiff; moist.
10				1/2/1		CL			ALLUVIUM: Olive brown silty clay; soft; very moist.
15				2/2/2		CL			ALLUVIUM: Dark yellow brown silty clay with sand and minor caliche; soft; moist.
20				2/3/3		CL			ALLUVIUM: Dark yellow brown silty clay with minor caliche; medium stiff; moist.
25				3/3/5		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; medium stiff; moist.
30				4/2/3		ML			ALLUVIUM: Dark yellow brown sandy silt; medium stiff; moist
35				4/5/5		SM			ALLUVIUM: Dark yellow brown silty sand; medium dense; moist.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-21 (Continued) PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 1, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40		█		2/5/5		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; stiff; moist.
45		█		2/4/5		SM			ALLUVIUM: Dark yellow brown silty sand; loose; moist.
50		█		5/7/5		SM			ALLUVIUM: Dark yellow brown silty sand; medium dense; moist.
55									Total Depth: 51.5 feet. No Groundwater Encountered.
60									
65									
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-22 PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0									
5				1/2/3		CL			ALLUVIUM: Olive brown silty clay.
10				1/2/3		CL			ALLUVIUM: Dark yellow brown silty clay; medium stiff; moist.
15				1/2/2		CL			ALLUVIUM: Dark yellow brown silty clay with sand and minor caliche; soft; moist.
20				1/2/2		CL			ALLUVIUM: Dark yellow brown silty clay with sand and minor caliche; soft; moist.
25				3/3/5		ML			ALLUVIUM: Yellow brown sandy silt with clay; medium stiff; moist. Silty fine sand at 26 feet.
30				3/3/3		ML			ALLUVIUM: Yellow brown sandy silt with clay; medium stiff; moist.
35				5/4/4		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; medium stiff; moist.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-22 (Continued) PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40				3/4/5		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; stiff; moist.
45				3/4/6		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; stiff; moist.
50				3/4/7		ML			ALLUVIUM: Dark yellow brown sandy silt with clay; stiff; moist.
55									Total Depth: 51.5 feet. No Groundwater Encountered. Installed 50 feet of 3" perforated pipe and gravel backfill.
60									
65									
70									
75									

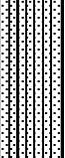
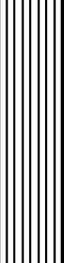
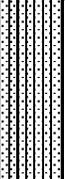
Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-23 PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						CL			ALLUVIUM: Olive brown silty clay.
5		█		1/2/4		CL			ALLUVIUM: Dark yellow brown silty clay with sand; medium stiff; moist.
10		█		2/2/3		CL			ALLUVIUM: Dark yellow brown silty clay; medium stiff; moist.
15		█		1/2/3		CL			ALLUVIUM: Dark yellow brown silty clay with sand and minor caliche; medium stiff; moist.
20		█		2/2/4		ML			ALLUVIUM: Dark yellow brown clayey silt with sand; medium stiff; moist.
25		█		2/2/2		ML			ALLUVIUM: Brown sandy silt with clay; soft; moist.
30		█		3/5/4		ML			ALLUVIUM: Brown sandy silt; stiff; moist.
35		█		3/3/6		ML			ALLUVIUM: Brown clayey silt with sand; stiff; moist.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-23 (Continued) PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40		█		3/4/5		ML			ALLUVIUM: Brown sandy silt with clay; stiff; moist.
45		█		4/4/5		SM			ALLUVIUM: Yellow brown silty fine sand; loose; moist.
50		█		3/5/6		ML			ALLUVIUM: Dark yellow brown clayey silt with sand; stiff; moist.
55									
60		█		4/10/25		SM			ALLUVIUM: Yellow brown silty sand; dense; moist.
65									Total Depth: 61.5 feet. No Groundwater Encountered. Backfilled to 49 feet. Installed 50 feet of 3" perforated pipe and gravel backfill.
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-24 PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0									
5		█		3/2/2		CL			ALLUVIUM: Dark yellow brown silty clay; soft; moist.
10		█		1/2/3		CL			ALLUVIUM: Yellow brown silty clay with minor caliche; medium stiff; moist.
15		█		2/2/3		CL			ALLUVIUM: Olive brown silty clay; minor caliche; medium stiff; moist.
20		█		2/2/3		ML			ALLUVIUM: Interbeds of clayey silt; medium stiff; moist.
25		█		2/2/3		ML			ALLUVIUM: Yellow brown sandy silt with clay; medium stiff; moist.
30		█		5/4/4		SM			ALLUVIUM: Yellow brown silty fine sand; loose; damp to moist.
35		█		2/4/4		ML			ALLUVIUM: Yellow brown clayey silt with sand; medium stiff; moist.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-24 (Continued) PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40				4/3/4		ML			ALLUVIUM: Yellow brown clayey silt with sand; medium stiff; moist.
45				5/5/6		ML			ALLUVIUM: Yellow brown sandy silt with clay; stiff; moist.
50				3/4/7		ML			ALLUVIUM: Yellow brown sandy silt with clay; stiff; moist.
55									Total Depth: 51.5 feet. No Groundwater Encountered. Installed 50 feet of 3" perforated pipe and gravel backfill.
60									
65									
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-25 PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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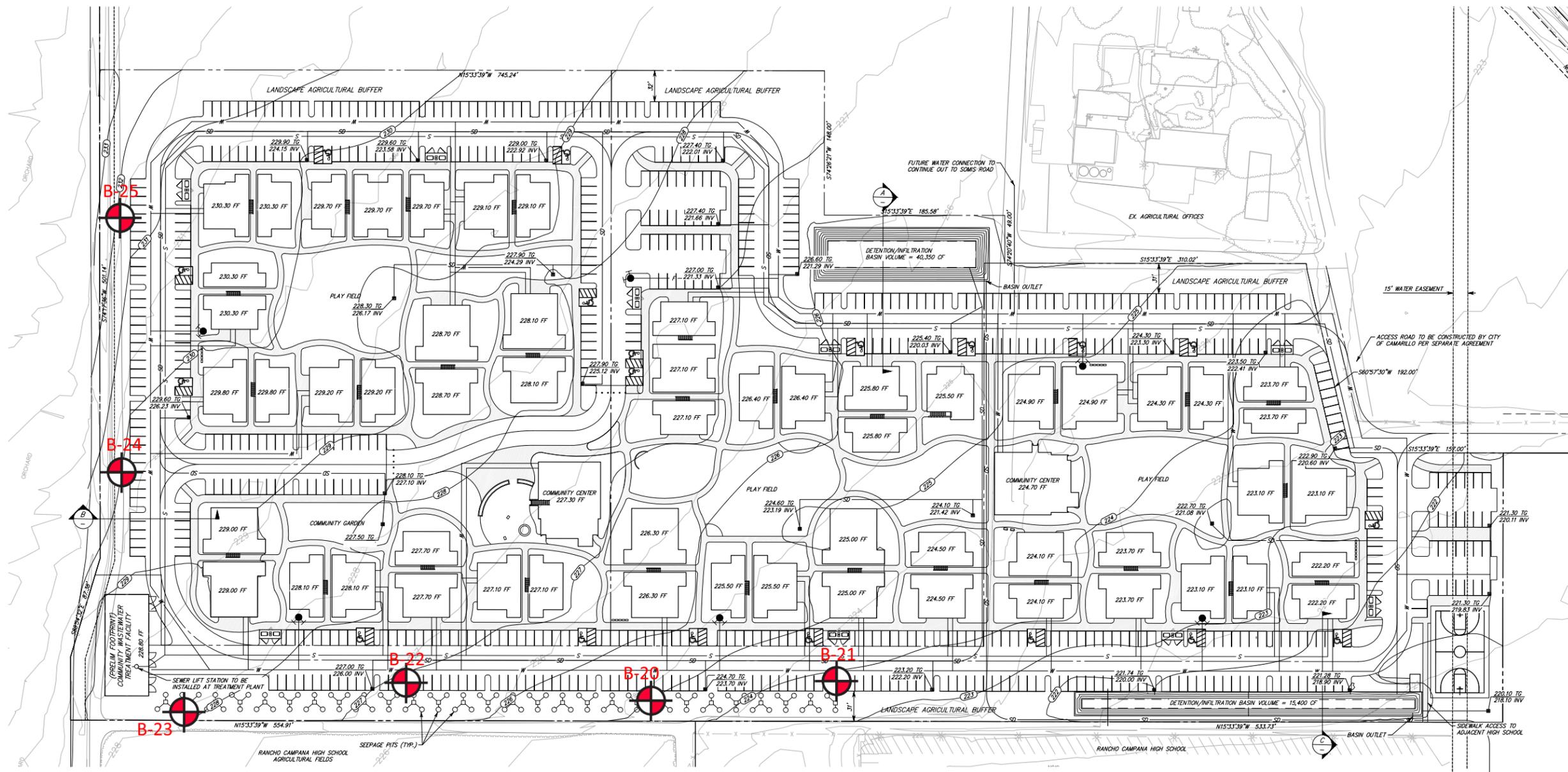
Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown clayey silt; dry.
5		█		1/2/3		ML			ALLUVIUM: Yellow brown clayey silt; medium stiff; moist.
10		█		2/1/2		ML			ALLUVIUM: Yellow brown clayey silt; soft; very moist.
15		█		1/2/2		ML			ALLUVIUM: Yellow clayey silt with minor caliche; soft; moist.
20		█		1/2/3		ML			ALLUVIUM: Yellow clayey silt with minor caliche; firm; moist.
25		█		1/2/2		ML			ALLUVIUM: Yellow brown clayey silt with sand; soft; moist.
30		█		2/3/3		ML			ALLUVIUM: Yellow brown sandy silt; medium stiff; moist.
35		█		2/3/3		ML			ALLUVIUM: Dark yellow brown clayey silt; medium stiff; moist.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

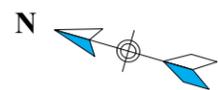
BORING NO: B-25 (Continued) PROJECT NAME: Somis Ranch Farmworker Housing PROJECT NUMBER: 302947-001 BORING LOCATION: Per Plan	DRILLING DATE: July 2, 2019 DRILL RIG: CME-85 DRILLING METHOD: Eight-Inch Hollow Stem Auger LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40				2/4/4		ML			ALLUVIUM: Yellow brown sandy silt with clay; medium stiff; moist.
45				4/4/5		ML			ALLUVIUM: Yellow brown sandy silt; stiff; moist.
50				2/8/10		ML			ALLUVIUM: Yellow brown sandy silt; very stiff; moist.
55									
60				7/11/14		SM			ALLUVIUM: Pale yellow brown silty fine sand; medium dense; damp to moist.
65									Total Depth: 61.5 feet. No Groundwater Encountered. Installed 50 feet of 3" perforated pipe and gravel backfill.
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



B-25
 : Approximate locations of performance tests.



Approximate Scale: 1" = 120'


PERFORMANCE TEST LOCATION MAP

Somis Ranch Farmworker Housing
 Camarillo Area of Ventura County, California



September 2019

302947-001

SEEPAGE PIT PERFORMANCE TEST DATA WORKSHEET

Location - Somis Ranch

Date Tested - July 17, 2019

Test Performed By - Scott Calvert

Hole Depth (ft) - 50

Date Presaturated - July 16, 2019

Hole Diameter (in) - 8

B-20

Pipe Diameter (in) 3

This spreadsheet calculates absorption rate by dividing the volume of water absorbed in the time period by the surface area of the test hole and by the time interval. The volume of water is adjusted for the gravel pack between the pipe and the borehole sidewalls.

<u>Time</u>	<u>Change In Time</u>	<u>Minutes</u>	<u>Depth To Water (Feet)</u>	<u>Water Drop (Feet)</u>	<u>Depth of Water Left in Hole (Feet)</u>	<u>Average Head (Feet)</u>	<u>Absorption Rate (Gal/ft²/day)</u>
11:13			19.74		30.26		
11:15	0:02	2	22.39	2.65	27.61	28.935	36.08
11:17	0:02	2	25.1	2.71	24.9	26.255	40.64
11:19	0:02	2	29.04	3.94	20.96	22.93	67.59
11:21	0:02	2	32.80	3.76	17.2	19.08	77.40
11:23	0:02	2	36.05	3.25	13.95	15.575	81.80
11:25	0:02	2	37.93	1.88	12.07	13.01	56.53
11:29	0:04	4	41.35	3.42	8.65	10.36	64.36
11:33	0:04	4	43.81	2.46	6.19	7.42	64.24
11:37	0:04	4	45.74	1.93	4.26	5.225	70.91
11:41	0:04	4	47.01	1.27	2.99	3.625	66.35
11:45	0:04	4	50.00	2.99	0	1.495	356.47

SEEPAGE PIT PERFORMANCE TEST DATA WORKSHEET

Location - Somis Ranch

Date Tested - July 17, 2019

Test Performed By - Scott Calvert

Hole Depth (ft) - 50

Date Presaturated - July 16, 2019
B-21

Hole Diameter (in) - 8
Pipe Diameter (in) 3

This spreadsheet calculates absorption rate by dividing the volume of water absorbed in the time period by the surface area of the test hole and by the time interval. The volume of water is adjusted for the gravel pack between the pipe and the borehole sidewalls.

<u>Time</u>	<u>Change In Time</u>	<u>Minutes</u>	<u>Depth To Water (Feet)</u>	<u>Water Drop (Feet)</u>	<u>Depth of Water Left in Hole (Feet)</u>	<u>Average Head (Feet)</u>	<u>Absorption Rate (Gal/ft²/day)</u>
9:31			18.25		31.75		
9:33	0:02	2	23.20	4.95	26.8	29.275	66.61
9:35	0:02	2	28.35	5.15	21.65	24.225	83.65
9:37	0:02	2	32.03	3.68	17.97	19.81	72.99
9:39	0:02	2	35.04	3.01	14.96	16.465	71.71
9:41	0:02	2	36.15	1.11	13.85	14.405	30.18
9:43	0:02	2	38.09	1.94	11.91	12.88	58.91
9:45	0:02	2	40.25	2.16	9.75	10.83	77.82
9:47	0:02	2	41.50	1.25	8.5	9.125	53.30
9:49	0:02	2	42.35	0.85	7.65	8.075	40.86
9:51	0:02	2	43.19	0.84	6.81	7.23	45.00
9:53	0:02	2	43.65	0.46	6.35	6.58	27.01
9:55	0:02	2	44.10	0.45	5.9	6.125	28.34
9:59	0:04	4	45.03	0.93	4.97	5.435	32.89
10:03	0:04	4	45.70	0.67	4.3	4.635	27.64
10:08	0:05	5	46.60	0.9	3.4	3.85	35.51
10:13	0:05	5	47.25	0.65	2.75	3.075	31.78
10:18	0:05	5	47.70	0.45	2.3	2.525	26.50
10:23	0:05	5	48.08	0.38	1.92	2.11	26.45
10:28	0:05	5	48.30	0.22	1.7	1.81	17.64
10:33	0:05	5	48.55	0.25	1.45	1.575	22.75
10:53	0:20	20	49.10	0.55	0.9	1.175	16.24
11:27	0:34	34	50.00	0.9	0	0.45	34.01
13:50	2:23	143	49.58	-0.42	0.42	0.21	-6.18
14:20	0:30	30	50.00	0.42	0	0.21	29.45

SEEPAGE PIT PERFORMANCE TEST DATA WORKSHEET

Location - Somis Ranch

Date Tested - July 16, 2019

Test Performed By - Scott Calvert

Hole Depth (ft) - 50

Date Presaturated - July 15, 2019

Hole Diameter (in) - 8

B-22

Pipe Diameter (in) 3

This spreadsheet calculates absorption rate by dividing the volume of water absorbed in the time period by the surface area of the test hole and by the time interval. The volume of water is adjusted for the gravel pack between the pipe and the borehole sidewalls.

<u>Time</u>	<u>Change In Time</u>	<u>Minutes</u>	<u>Depth To Water (Feet)</u>	<u>Water Drop (Feet)</u>	<u>Depth of Water Left in Hole (Feet)</u>	<u>Average Head (Feet)</u>	<u>Absorption Rate (Gal/ft²/day)</u>
10:25			5.00		45		
10:27	0:02	2	9.84	4.84	40.16	42.58	44.86
10:29	0:02	2	14.75	4.91	35.25	37.705	51.37
10:31	0:02	2	19.20	4.45	30.8	33.025	53.12
10:33	0:02	2	23.90	4.7	26.1	28.45	65.07
10:35	0:02	2	26.40	2.5	23.6	24.85	39.59
10:37	0:02	2	28.51	2.11	21.49	22.545	36.81
10:39	0:02	2	30.43	1.92	19.57	20.53	36.76
10:41	0:02	2	32.05	1.62	17.95	18.76	33.91
10:43	0:02	2	33.15	1.1	16.85	17.4	24.81
10:45	0:02	2	34.79	1.64	15.21	16.03	40.12
10:50	0:05	5	37.91	3.12	12.09	13.65	35.79
10:55	0:05	5	39.56	1.65	10.44	11.265	22.87
11:00	0:05	5	41.18	1.62	8.82	9.63	26.21
11:05	0:05	5	42.28	1.1	7.72	8.27	20.66
11:15	0:10	10	43.79	1.51	6.21	6.965	16.78
11:25	0:10	10	44.64	0.85	5.36	5.785	11.32
11:35	0:10	10	45.06	0.42	4.94	5.15	6.26
11:50	0:15	15	46.74	1.68	3.26	4.1	20.80
12:10	0:20	20	48.10	1.36	1.9	2.58	19.62
12:30	0:20	20	48.44	0.34	1.56	1.73	7.10
12:50	0:20	20	48.80	0.36	1.2	1.38	9.22
13:20	0:30	30	49.26	0.46	0.74	0.97	10.69
13:50	0:30	30	49.58	0.32	0.42	0.58	11.32
14:20	0:30	30	50.00	0.42	0	0.21	29.45

SEEPAGE PIT PERFORMANCE TEST DATA WORKSHEET

Location - Somis Ranch

Date Tested - July 16, 2019

Test Performed By - Scott Calvert

Hole Depth (ft) - 49

Date Presaturated - July 15, 2019

Hole Diameter (in) - 8

B-23

Pipe Diameter (in) 3

This spreadsheet calculates absorption rate by dividing the volume of water absorbed in the time period by the surface area of the test hole and by the time interval. The volume of water is adjusted for the gravel pack between the pipe and the borehole sidewalls.

<u>Time</u>	<u>Change In Time</u>	<u>Minutes</u>	<u>Depth To Water (Feet)</u>	<u>Water Drop (Feet)</u>	<u>Depth of Water Left in Hole (Feet)</u>	<u>Average Head (Feet)</u>	<u>Absorption Rate (Gal/ft²/day)</u>
12:28			6.00		43		
12:30	0:02	2	11.60	5.6	37.4	40.2	54.97
12:32	0:02	2	16.18	4.58	32.82	35.11	51.44
12:34	0:02	2	20.21	4.03	28.79	30.805	51.55
12:36	0:02	2	22.70	2.49	26.3	27.545	35.60
12:38	0:02	2	24.97	2.27	24.03	25.165	35.50
12:40	0:02	2	26.82	1.85	22.18	23.105	31.50
12:42	0:02	2	28.08	1.26	20.92	21.55	22.99
12:44	0:02	2	29.24	1.16	19.76	20.34	22.41
12:46	0:02	2	30.20	0.96	18.8	19.28	19.56
12:48	0:02	2	30.80	0.6	18.2	18.5	12.74
12:52	0:04	4	32.60	1.8	16.4	17.3	20.42
12:56	0:04	4	33.60	1	15.4	15.9	12.33
13:00	0:04	4	34.93	1.33	14.07	14.735	17.68
13:04	0:04	4	35.88	0.95	13.12	13.595	13.68
13:08	0:04	4	36.75	0.87	12.25	12.685	13.41
13:20	0:12	12	38.23	1.48	10.77	11.51	8.37
13:35	0:15	15	41.15	2.92	7.85	9.31	16.28
13:50	0:15	15	42.85	1.7	6.15	7	12.53
14:05	0:15	15	44.04	1.19	4.96	5.555	10.99
14:20	0:15	15	45.15	1.11	3.85	4.405	12.83
14:35	0:15	15	46.3	1.15	2.7	3.275	17.65
8:35	6:00	360	49	2.7	0	1.35	3.92

SEEPAGE PIT PERFORMANCE TEST DATA WORKSHEET

Location - Somis Ranch

Date Tested - July 15, 2019

Test Performed By - Scott Calvert

Hole Depth (ft) - 48.6

Date Presaturated -
B-24

Hole Diameter (in) - 8
Pipe Diameter (in) 3

This spreadsheet calculates absorption rate by dividing the volume of water absorbed in the time period by the surface area of the test hole and by the time interval. The volume of water is adjusted for the gravel pack between the pipe and the borehole sidewalls.

<u>Time</u>	<u>Change In Time</u>	<u>Minutes</u>	<u>Depth To Water (Feet)</u>	<u>Water Drop (Feet)</u>	<u>Depth of Water Left in Hole (Feet)</u>	<u>Average Head (Feet)</u>	<u>Absorption Rate (Gal/ft^2/day)</u>
11:05			5.00		43.6		
11:08	0:03	3	9.55	4.55	39.05	41.325	28.97
11:10	0:02	2	12.76	3.21	35.84	37.445	33.81
11:12	0:02	2	15.18	2.42	33.42	34.63	27.55
11:15	0:03	3	18.55	3.37	30.05	31.735	27.90
11:18	0:03	3	21.08	2.53	27.52	28.785	23.08
11:21	0:03	3	23.52	2.44	25.08	26.3	24.35
11:24	0:03	3	25.15	1.63	23.45	24.265	17.62
11:27	0:03	3	26.60	1.45	22	22.725	16.73
11:32	0:05	5	28.88	2.28	19.72	20.86	17.18
11:42	0:10	10	32.59	3.71	16.01	17.865	16.30
11:52	0:10	10	35.46	2.87	13.14	14.575	15.43
12:02	0:10	10	37.69	2.23	10.91	12.025	14.49
12:12	0:10	10	39.39	1.7	9.21	10.06	13.17
12:27	0:15	15	41.31	1.92	7.29	8.25	12.05
12:42	0:15	15	42.74	1.43	5.86	6.575	11.21
12:57	0:15	15	43.99	1.25	4.61	5.235	12.22
13:12	0:15	15	44.69	0.7	3.91	4.26	8.35
13:27	0:15	15	45.35	0.66	3.25	3.58	9.31
13:57	0:30	30	46.18	0.83	2.42	2.835	7.30
14:27	0:30	30	46.85	0.67	1.75	2.085	7.86
14:57	0:30	30	47.11	0.26	1.49	1.62	3.84
8:36	6:21	381	48.60	1.49	0	0.745	3.40

SEEPAGE PIT PERFORMANCE TEST DATA WORKSHEET

Location - Somis Ranch

Date Tested - July 15, 2019

Test Performed By - Scott Calvert

Hole Depth (ft) - 49

Date Presaturated -
B-25

Hole Diameter (in) - 8
Pipe Diameter (in) 3

This spreadsheet calculates absorption rate by dividing the volume of water absorbed in the time period by the surface area of the test hole and by the time interval. The volume of water is adjusted for the gravel pack between the pipe and the borehole sidewalls.

<u>Time</u>	<u>Change In Time</u>	<u>Minutes</u>	<u>Depth To Water (Feet)</u>	<u>Water Drop (Feet)</u>	<u>Depth of Water Left in Hole (Feet)</u>	<u>Average Head (Feet)</u>	<u>Absorption Rate (Gal/ft²/day)</u>
9:34			5		44		
9:44	0:10	10	8.48	3.48	40.52	42.26	6.50
9:54	0:10	10	12.07	3.59	36.93	38.725	7.31
10:04	0:10	10	15.06	2.99	33.94	35.435	6.66
10:14	0:10	10	17.82	2.76	31.18	32.56	6.68
10:29	0:15	15	22.11	4.29	26.89	29.035	7.76
10:44	0:15	15	25.05	2.94	23.95	25.42	6.07
10:59	0:15	15	27.86	2.81	21.14	22.545	6.54
11:14	0:15	15	30.26	2.4	18.74	19.94	6.31
11:29	0:15	15	32.66	2.4	16.34	17.54	7.16
11:44	0:15	15	34.64	1.98	14.36	15.35	6.74
11:59	0:15	15	35.95	1.31	13.05	13.705	4.99
12:29	0:30	30	38.52	2.57	10.48	11.765	5.69
12:59	0:30	30	41.12	2.6	7.88	9.18	7.35
13:29	0:30	30	43.13	2.01	5.87	6.875	7.54
13:59	0:30	30	44.78	1.65	4.22	5.045	8.36
14:29	0:30	30	45.92	1.14	3.08	3.65	7.89
14:59	0:30	30	47.14	1.22	1.86	2.47	12.22
8:31	6:28	388	49	1.86	0	0.93	3.46

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 5'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 205.9

Corrected Wt., g: 205.9

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 109.9

Corrected Wt., g: 109.9

Calculation Factor: 1.0990

Hydrometer Analysis for < #10 Material

Start time: 2:09:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:09:20 AM	84	23	4.6	79.4
1 hour	3:09:00 AM	63	23	4.6	58.4
6 hour	8:09:00 AM	35	23	4.6	30.4

% Gravel:	0.0
% Sand(2mm - 74µm):	27.8
% Silt(74µm- 5µm):	19.1
% Clay(5µm - 2µm):	25.4
% Clay(≤2µm):	27.7

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 10'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 246.1

Corrected Wt., g: 246.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.2	0.08	99.92
#8	0.5	0.20	99.80
#10	1.0	0.41	99.59

Air Dry Hydro Sample Wt., g: 66.2

Corrected Wt., g: 66.2

Calculation Factor: 0.6647

Hydrometer Analysis for < #10 Material

Start time: 2:00:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:00:20 AM	65	23	4.6	60.4
1 hour	3:00:00 AM	35	23	4.6	30.4
6 hour	8:00:00 AM	27	23	4.6	22.4

% Gravel:	0.1
% Sand(2mm - 74µm):	9.0
% Silt(74µm- 5µm):	45.2
% Clay(5µm - 2µm):	12.0
% Clay(≤2µm):	33.7

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 15'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 325

Corrected Wt., g: 325.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.4	0.12	99.88
#10	0.4	0.12	99.88

Air Dry Hydro Sample Wt., g: 104.8

Corrected Wt., g: 104.8

Calculation Factor: 1.0493

Hydrometer Analysis for < #10 Material

Start time: 2:02:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:02:20 AM	82	23	4.6	77.4
1 hour	3:02:00 AM	50	23	4.6	45.4
6 hour	8:02:00 AM	40	23	4.6	35.4

% Gravel:	0.0
% Sand(2mm - 74µm):	26.2
% Silt(74µm- 5µm):	30.5
% Clay(5µm - 2µm):	9.6
% Clay(≤2µm):	33.7

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 20'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 427.2

Corrected Wt., g: 427.2

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.4	0.09	99.91
#8	1.5	0.35	99.65
#10	3.2	0.75	99.25

Air Dry Hydro Sample Wt., g: 119.7

Corrected Wt., g: 119.7

Calculation Factor: 1.2060

Hydrometer Analysis for <#10 Material

Start time: 2:11:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:11:20 AM	78	23	4.6	73.4
1 hour	3:11:00 AM	58	23	4.6	53.4
6 hour	8:11:00 AM	43	23	4.6	38.4

% Gravel:	0.1
% Sand(2mm - 74µm):	39.0
% Silt(74µm- 5µm):	16.6
% Clay(5µm - 2µm):	12.5
% Clay(≤2µm):	31.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 25'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 477.5

Corrected Wt., g: 477.5

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.2	0.04	99.96
#8	0.7	0.15	99.85
#10	1.0	0.21	99.79

Air Dry Hydro Sample Wt., g: 112.5

Corrected Wt., g: 112.5

Calculation Factor: 1.1274

Hydrometer Analysis for < #10 Material

Start time: 1:39:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:39:20 AM	26	23	4.6	21.4
1 hour	2:39:00 AM	10	23	4.6	5.4
6 hour	7:39:00 AM	8	23	4.6	3.4

% Gravel:	0.0
% Sand(2mm - 74µm):	81.0
% Silt(74µm- 5µm):	14.2
% Clay(5µm - 2µm):	1.8
% Clay(≤2µm):	3.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 30'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 410.5

Corrected Wt., g: 410.5

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.2	0.05	99.95

Air Dry Hydro Sample Wt., g: 125.6

Corrected Wt., g: 125.6

Calculation Factor: 1.2566

Hydrometer Analysis for < #10 Material

Start time: 1:26:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:26:20 AM	70	23	4.6	65.4
1 hour	2:26:00 AM	18	23	4.6	13.4
6 hour	7:26:00 AM	14	23	4.6	9.4

% Gravel:	0.0
% Sand(2mm - 74µm):	48.0
% Silt(74µm- 5µm):	41.3
% Clay(5µm - 2µm):	3.2
% Clay(≤2µm):	7.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 35'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 510.1

Corrected Wt., g: 510.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 97.9

Corrected Wt., g: 97.9

Calculation Factor: 0.9790

Hydrometer Analysis for < #10 Material

Start time: 1:36:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:36:20 AM	69	23	4.6	64.4
1 hour	2:36:00 AM	40	23	4.6	35.4
6 hour	7:36:00 AM	9	23	4.6	4.4

% Gravel:	0.0
% Sand(2mm - 74µm):	34.2
% Silt(74µm- 5µm):	29.6
% Clay(5µm - 2µm):	31.7
% Clay(≤2µm):	4.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 40'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 342.9

Corrected Wt., g: 342.9

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 109.3

Corrected Wt., g: 109.3

Calculation Factor: 1.0930

Hydrometer Analysis for < #10 Material

Start time: 1:34:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:34:20 AM	75	24	4.4	70.6
1 hour	2:34:00 AM	33	24	4.4	28.6
6 hour	7:34:00 AM	9	24	4.4	4.6

% Gravel:	0.0
% Sand(2mm - 74µm):	35.4
% Silt(74µm- 5µm):	38.4
% Clay(5µm - 2µm):	22.0
% Clay(≤2µm):	4.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 45'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 333.5

Corrected Wt., g: 333.5

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.3	0.09	99.91
#8	0.3	0.09	99.91
#10	0.3	0.09	99.91

Air Dry Hydro Sample Wt., g: 110.3

Corrected Wt., g: 110.3

Calculation Factor: 1.1040

Hydrometer Analysis for < #10 Material

Start time: 1:28:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:28:20 AM	71	24	4.4	66.6
1 hour	2:28:00 AM	30	24	4.4	25.6
6 hour	7:28:00 AM	23	24	4.4	18.6

% Gravel:	0.1
% Sand(2mm - 74µm):	39.6
% Silt(74µm- 5µm):	37.1
% Clay(5µm - 2µm):	6.4
% Clay(≤2µm):	16.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 50'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 523.6

Corrected Wt., g: 523.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.7	0.13	99.87
#4	1.3	0.25	99.75
#8	3.1	0.59	99.41
#10	4.3	0.82	99.18

Air Dry Hydro Sample Wt., g: 76.3

Corrected Wt., g: 76.3

Calculation Factor: 0.7693

Hydrometer Analysis for < #10 Material

Start time: 1:54:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:54:20 AM	38	24	4.4	33.6
1 hour	2:54:00 AM	15	24	4.4	10.6
6 hour	7:54:00 AM	11	24	4.4	6.6

% Gravel:	0.3
% Sand(2mm - 74µm):	56.0
% Silt(74µm- 5µm):	29.9
% Clay(5µm - 2µm):	5.2
% Clay(≤2µm):	8.6

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 20 @ 60'**

Soil Description: **SP-SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 576.9

Corrected Wt., g: 576.9

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	4.3	0.75	99.25
3/8 inch	21.1	3.66	96.34
#4	48.8	8.46	91.54
#8	96.6	16.74	83.26
#10	117.6	20.38	79.62

Air Dry Hydro Sample Wt., g: 105.6

Corrected Wt., g: 105.6

Calculation Factor: 1.3263

Hydrometer Analysis for <#10 Material

Start time: 1:52:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:52:20 AM	15	24	4.4	10.6
1 hour	2:52:00 AM	7	24	4.4	2.6
6 hour	7:52:00 AM	6	24	4.4	1.6

% Gravel:	8.5
% Sand(2mm - 74µm):	83.5
% Silt(74µm- 5µm):	6.0
% Clay(5µm - 2µm):	0.8
% Clay(≤2µm):	1.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 5'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 297.7

Corrected Wt., g: 297.7

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 62.8

Corrected Wt., g: 62.8

Calculation Factor: 0.6280

Hydrometer Analysis for < #10 Material

Start time: 9:15:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:15:20 AM	56	23	4.5	51.5
1 hour	10:15:00 AM	32	23	4.5	27.5
6 hour	3:15:00 PM	21	23	4.5	16.5

% Gravel:	0.0
% Sand(2mm - 74µm):	18.0
% Silt(74µm- 5µm):	38.2
% Clay(5µm - 2µm):	17.5
% Clay(≤2µm):	26.3

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 10'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 331.8

Corrected Wt., g: 331.8

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 64.5

Corrected Wt., g: 64.5

Calculation Factor: 0.6450

Hydrometer Analysis for <#10 Material

Start time: 7:40:48 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	7:41:08 AM	60	23	4.5	55.5
1 hour	8:40:48 AM	32	23	4.5	27.5
6 hour	1:40:48 PM	24	23	4.5	19.5

% Gravel:	0.0
% Sand(2mm - 74µm):	14.0
% Silt(74µm- 5µm):	43.4
% Clay(5µm - 2µm):	12.4
% Clay(≤2µm):	30.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 15'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 312

Corrected Wt., g: 312.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.6	0.19	99.81
#10	0.7	0.22	99.78

Air Dry Hydro Sample Wt., g: 59.5

Corrected Wt., g: 59.5

Calculation Factor: 0.5963

Hydrometer Analysis for < #10 Material

Start time: 8:40:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:40:20 AM	54	23	4.5	49.5
1 hour	9:40:00 AM	32	23	4.5	27.5
6 hour	2:40:00 PM	23	23	4.5	18.5

% Gravel:	0.0
% Sand(2mm - 74µm):	17.0
% Silt(74µm- 5µm):	36.9
% Clay(5µm - 2µm):	15.1
% Clay(≤2µm):	31.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 20'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 332.6

Corrected Wt., g: 332.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.6	0.18	99.82
#10	1.6	0.48	99.52

Air Dry Hydro Sample Wt., g: 67.8

Corrected Wt., g: 67.8

Calculation Factor: 0.6813

Hydrometer Analysis for < #10 Material

Start time: 9:10:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:10:20 AM	65	23	4.5	60.5
1 hour	10:10:00 AM	37	23	4.5	32.5
6 hour	3:10:00 PM	28	23	4.5	23.5

% Gravel:	0.0
% Sand(2mm - 74µm):	11.2
% Silt(74µm- 5µm):	41.1
% Clay(5µm - 2µm):	13.2
% Clay(≤2µm):	34.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 25'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 390.2

Corrected Wt., g: 390.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.7	0.18	99.82
#8	1.6	0.41	99.59
#10	3.3	0.85	99.15

Air Dry Hydro Sample Wt., g: 63.3

Corrected Wt., g: 63.3

Calculation Factor: 0.6384

Hydrometer Analysis for < #10 Material

Start time: 9:37:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:37:20 AM	44	23	4.5	39.5
1 hour	10:37:00 AM	19	23	4.5	14.5
6 hour	3:37:00 PM	6	23	4.5	1.5

% Gravel:	0.2
% Sand(2mm - 74µm):	37.9
% Silt(74µm- 5µm):	39.2
% Clay(5µm - 2µm):	20.4
% Clay(≤2µm):	2.3

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 30'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 336.4

Corrected Wt., g: 336.4

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.5	0.15	99.85
#10	0.7	0.21	99.79

Air Dry Hydro Sample Wt., g: 63.3

Corrected Wt., g: 63.3

Calculation Factor: 0.6343

Hydrometer Analysis for < #10 Material

Start time: 9:49:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:49:20 AM	49	23	4.5	44.5
1 hour	10:49:00 AM	12	23	4.5	7.5
6 hour	3:49:00 PM	11	23	4.5	6.5

% Gravel:	0.0
% Sand(2mm - 74µm):	29.8
% Silt(74µm- 5µm):	58.4
% Clay(5µm - 2µm):	1.6
% Clay(≤2µm):	10.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 35'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 475.7

Corrected Wt., g: 475.7

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.2	0.04	99.96
#10	0.9	0.19	99.81

Air Dry Hydro Sample Wt., g: 80.4

Corrected Wt., g: 80.4

Calculation Factor: 0.8055

Hydrometer Analysis for < #10 Material

Start time: 1:30:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:30:20 AM	39	23	4.5	34.5
1 hour	2:30:00 AM	9	23	4.5	4.5
6 hour	7:30:00 AM	7	23	4.5	2.5

% Gravel:	0.0
% Sand(2mm - 74µm):	57.2
% Silt(74µm- 5µm):	37.2
% Clay(5µm - 2µm):	2.5
% Clay(≤2µm):	3.1

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 40'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 489.6

Corrected Wt., g: 489.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 63.8

Corrected Wt., g: 63.8

Calculation Factor: 0.6380

Hydrometer Analysis for < #10 Material

Start time: 9:32:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:32:20 AM	40	23	4.5	35.5
1 hour	10:32:00 AM	14	23	4.5	9.5
6 hour	3:32:00 PM	12	23	4.5	7.5

% Gravel:	0.0
% Sand(2mm - 74µm):	44.4
% Silt(74µm- 5µm):	40.7
% Clay(5µm - 2µm):	3.1
% Clay(≤2µm):	11.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 45'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 533.2

Corrected Wt., g: 533.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 66.7

Corrected Wt., g: 66.7

Calculation Factor: 0.6670

Hydrometer Analysis for < #10 Material

Start time: 9:09:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:09:20 AM	20	23	4.5	15.5
1 hour	10:09:00 AM	9	23	4.5	4.5
6 hour	3:09:00 PM	8	23	4.5	3.5

% Gravel:	0.0
% Sand(2mm - 74µm):	76.8
% Silt(74µm- 5µm):	16.5
% Clay(5µm - 2µm):	1.5
% Clay(≤2µm):	5.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 21 @ 50'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 465.6

Corrected Wt., g: 465.6

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.2	0.04	99.96

Air Dry Hydro Sample Wt., g: 60.1

Corrected Wt., g: 60.1

Calculation Factor: 0.6012

Hydrometer Analysis for <#10 Material

Start time: 1:31:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:31:20 AM	33	23	4.6	28.4
1 hour	2:31:00 AM	8	23	4.6	3.4
6 hour	7:31:00 AM	6.5	23	4.6	1.9

% Gravel:	0.0
% Sand(2mm - 74µm):	52.8
% Silt(74µm- 5µm):	41.5
% Clay(5µm - 2µm):	2.5
% Clay(≤2µm):	3.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 5'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 225.5

Corrected Wt., g: 225.5

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.6	0.27	99.73

Air Dry Hydro Sample Wt., g: 73.4

Corrected Wt., g: 73.4

Calculation Factor: 0.7360

Hydrometer Analysis for <#10 Material

Start time: 1:56:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:56:20 AM	68	23	4.6	63.4
1 hour	2:56:00 AM	40	23	4.6	35.4
6 hour	7:56:00 AM	34	23	4.6	29.4

% Gravel:	0.0
% Sand(2mm - 74µm):	13.9
% Silt(74µm- 5µm):	38.0
% Clay(5µm - 2µm):	8.2
% Clay(≤2µm):	39.9

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 10'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 265.3

Corrected Wt., g: 265.3

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.6	0.23	99.77
#8	0.8	0.30	99.70
#10	2.3	0.87	99.13

Air Dry Hydro Sample Wt., g: 70.8

Corrected Wt., g: 70.8

Calculation Factor: 0.7142

Hydrometer Analysis for < #10 Material

Start time: 2:10:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:10:20 AM	67	23	4.6	62.4
1 hour	3:10:00 AM	40	23	4.6	35.4
6 hour	8:10:00 AM	29	23	4.6	24.4

% Gravel:	0.2
% Sand(2mm - 74µm):	12.4
% Silt(74µm- 5µm):	37.8
% Clay(5µm - 2µm):	15.4
% Clay(≤2µm):	34.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 15'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 280.4

Corrected Wt., g: 280.4

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.4	0.14	99.86
#8	0.5	0.18	99.82
#10	0.8	0.29	99.71

Air Dry Hydro Sample Wt., g: 73.4

Corrected Wt., g: 73.4

Calculation Factor: 0.7361

Hydrometer Analysis for < #10 Material

Start time: 2:07:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:07:20 AM	66	23	4.6	61.4
1 hour	3:07:00 AM	43	23	4.6	38.4
6 hour	8:07:00 AM	32	23	4.6	27.4

% Gravel:	0.1
% Sand(2mm - 74µm):	16.5
% Silt(74µm- 5µm):	31.2
% Clay(5µm - 2µm):	15.0
% Clay(≤2µm):	37.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 20'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 344

Corrected Wt., g: 344.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 61.7

Corrected Wt., g: 61.7

Calculation Factor: 0.6170

Hydrometer Analysis for < #10 Material

Start time: 8:47:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:47:20 AM	51	23	4.6	46.4
1 hour	9:47:00 AM	29	23	4.6	24.4
6 hour	2:47:00 PM	20	23	4.6	15.4

% Gravel:	0.0
% Sand(2mm - 74µm):	24.8
% Silt(74µm- 5µm):	35.7
% Clay(5µm - 2µm):	14.5
% Clay(≤2µm):	25.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 25'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 360.7

Corrected Wt., g: 360.7

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.5	0.14	99.86

Air Dry Hydro Sample Wt., g: 81.6

Corrected Wt., g: 81.6

Calculation Factor: 0.8171

Hydrometer Analysis for < #10 Material

Start time: 2:04:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:04:20 AM	57	23	4.6	52.4
1 hour	3:04:00 AM	26	23	4.6	21.4
6 hour	8:04:00 AM	20	23	4.6	15.4

% Gravel:	0.0
% Sand(2mm - 74µm):	35.9
% Silt(74µm- 5µm):	37.9
% Clay(5µm - 2µm):	7.4
% Clay(≤2µm):	18.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 30'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 417.8

Corrected Wt., g: 417.8

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.2	0.05	99.95
#10	0.7	0.17	99.83

Air Dry Hydro Sample Wt., g: 84.5

Corrected Wt., g: 84.5

Calculation Factor: 0.8464

Hydrometer Analysis for < #10 Material

Start time: 8:48:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:48:20 AM	62	23	4.6	57.4
1 hour	9:48:00 AM	23	23	4.6	18.4
6 hour	2:48:00 PM	18	23	4.6	13.4

% Gravel:	0.0
% Sand(2mm - 74µm):	32.2
% Silt(74µm- 5µm):	46.1
% Clay(5µm - 2µm):	5.9
% Clay(≤2µm):	15.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 35'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 471.6

Corrected Wt., g: 471.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	1.3	0.28	99.72
#8	2.1	0.45	99.55
#10	2.7	0.57	99.43

Air Dry Hydro Sample Wt., g: 76.7

Corrected Wt., g: 76.7

Calculation Factor: 0.7714

Hydrometer Analysis for < #10 Material

Start time: 1:54:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:54:20 AM	50	23	4.6	45.4
1 hour	2:54:00 AM	19	23	4.6	14.4
6 hour	7:54:00 AM	15	23	4.6	10.4

% Gravel:	0.3
% Sand(2mm - 74µm):	40.8
% Silt(74µm- 5µm):	40.2
% Clay(5µm - 2µm):	5.2
% Clay(≤2µm):	13.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 40'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 401.5

Corrected Wt., g: 401.5

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.4	0.10	99.90
#10	1.1	0.27	99.73

Air Dry Hydro Sample Wt., g: 66.6

Corrected Wt., g: 66.6

Calculation Factor: 0.6678

Hydrometer Analysis for < #10 Material

Start time: 9:13:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:13:20 AM	49	23	4.6	44.4
1 hour	10:13:00 AM	24	23	4.6	19.4
6 hour	3:13:00 PM	20	23	4.6	15.4

% Gravel:	0.0
% Sand(2mm - 74µm):	33.5
% Silt(74µm- 5µm):	37.4
% Clay(5µm - 2µm):	6.0
% Clay(≤2µm):	23.1

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 45'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 346.7

Corrected Wt., g: 346.7

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.4	0.12	99.88

Air Dry Hydro Sample Wt., g: 64.6

Corrected Wt., g: 64.6

Calculation Factor: 0.6468

Hydrometer Analysis for < #10 Material

Start time: 1:48:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:48:20 AM	55	23	4.6	50.4
1 hour	2:48:00 AM	17	23	4.6	12.4
6 hour	7:48:00 AM	14	23	4.6	9.4

% Gravel:	0.0
% Sand(2mm - 74µm):	22.1
% Silt(74µm- 5µm):	58.7
% Clay(5µm - 2µm):	4.7
% Clay(≤2µm):	14.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 22 @ 50'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 447.4

Corrected Wt., g: 447.4

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.3	0.07	99.93
#10	0.6	0.13	99.87

Air Dry Hydro Sample Wt., g: 63.7

Corrected Wt., g: 63.7

Calculation Factor: 0.6378

Hydrometer Analysis for < #10 Material

Start time: 1:49:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:49:20 AM	47	23	4.6	42.4
1 hour	2:49:00 AM	15	23	4.6	10.4
6 hour	7:49:00 AM	12	23	4.6	7.4

% Gravel:	0.0
% Sand(2mm - 74µm):	33.5
% Silt(74µm- 5µm):	50.2
% Clay(5µm - 2µm):	4.7
% Clay(≤2µm):	11.6

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 5'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 186

Corrected Wt., g: 186.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.2	0.11	99.89
#10	0.4	0.22	99.78

Air Dry Hydro Sample Wt., g: 60.6

Corrected Wt., g: 60.6

Calculation Factor: 0.6073

Hydrometer Analysis for < #10 Material

Start time: 8:57:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:57:20 AM	55	23	4.6	50.4
1 hour	9:57:00 AM	32	23	4.6	27.4
6 hour	2:57:00 PM	25	23	4.6	20.4

% Gravel:	0.0
% Sand(2mm - 74µm):	17.0
% Silt(74µm- 5µm):	37.9
% Clay(5µm - 2µm):	11.5
% Clay(≤2µm):	33.6

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 10'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 259.1

Corrected Wt., g: 259.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 66.2

Corrected Wt., g: 66.2

Calculation Factor: 0.6620

Hydrometer Analysis for < #10 Material

Start time: 8:49:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:49:20 AM	64	23	4.6	59.4
1 hour	9:49:00 AM	36	23	4.6	31.4
6 hour	2:49:00 PM	27	23	4.6	22.4

% Gravel:	0.0
% Sand(2mm - 74µm):	10.3
% Silt(74µm- 5µm):	42.3
% Clay(5µm - 2µm):	13.6
% Clay(≤2µm):	33.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 15'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 292.8

Corrected Wt., g: 292.8

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 62.2

Corrected Wt., g: 62.2

Calculation Factor: 0.6220

Hydrometer Analysis for < #10 Material

Start time: 9:23:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:23:20 AM	50	23	4.6	45.4
1 hour	10:23:00 AM	31	23	4.6	26.4
6 hour	3:23:00 PM	22	23	4.6	17.4

% Gravel:	0.0
% Sand(2mm - 74µm):	27.0
% Silt(74µm- 5µm):	30.6
% Clay(5µm - 2µm):	14.4
% Clay(≤2µm):	28.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 20'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 501.2

Corrected Wt., g: 501.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.6	0.12	99.88

Air Dry Hydro Sample Wt., g: 84.5

Corrected Wt., g: 84.5

Calculation Factor: 0.8460

Hydrometer Analysis for < #10 Material

Start time: 8:59:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:59:20 AM	65	23	4.6	60.4
1 hour	9:59:00 AM	30	23	4.6	25.4
6 hour	2:59:00 PM	20	23	4.6	15.4

% Gravel:	0.0
% Sand(2mm - 74µm):	28.6
% Silt(74µm- 5µm):	41.4
% Clay(5µm - 2µm):	11.8
% Clay(≤2µm):	18.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 25'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 329.7

Corrected Wt., g: 329.7

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.6	0.18	99.82

Air Dry Hydro Sample Wt., g: 62

Corrected Wt., g: 62.0

Calculation Factor: 0.6211

Hydrometer Analysis for < #10 Material

Start time: 9:07:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:07:20 AM	43	23	4.6	38.4
1 hour	10:07:00 AM	15	23	4.6	10.4
6 hour	3:07:00 PM	11	23	4.6	6.4

% Gravel:	0.0
% Sand(2mm - 74µm):	38.2
% Silt(74µm- 5µm):	45.1
% Clay(5µm - 2µm):	6.4
% Clay(≤2µm):	10.3

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 30'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 368.5

Corrected Wt., g: 368.5

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 60.5

Corrected Wt., g: 60.5

Calculation Factor: 0.6050

Hydrometer Analysis for < #10 Material

Start time: 8:55:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:55:20 AM	35	23	4.6	30.4
1 hour	9:55:00 AM	12	23	4.6	7.4
6 hour	2:55:00 PM	9	23	4.6	4.4

% Gravel:	0.0
% Sand(2mm - 74µm):	49.8
% Silt(74µm- 5µm):	38.0
% Clay(5µm - 2µm):	4.9
% Clay(≤2µm):	7.3

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 35'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 381.4

Corrected Wt., g: 381.4

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.3	0.08	99.92
#10	0.7	0.18	99.82

Air Dry Hydro Sample Wt., g: 74.6

Corrected Wt., g: 74.6

Calculation Factor: 0.7473

Hydrometer Analysis for < #10 Material

Start time: 9:03:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:03:20 AM	65	23	4.6	60.4
1 hour	10:03:00 AM	20	23	4.6	15.4
6 hour	3:03:00 PM	15	23	4.6	10.4

% Gravel:	0.0
% Sand(2mm - 74µm):	19.2
% Silt(74µm- 5µm):	60.2
% Clay(5µm - 2µm):	6.7
% Clay(≤2µm):	13.9

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 40'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 426.6

Corrected Wt., g: 426.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.4	0.09	99.91
#10	0.9	0.21	99.79

Air Dry Hydro Sample Wt., g: 73.8

Corrected Wt., g: 73.8

Calculation Factor: 0.7396

Hydrometer Analysis for < #10 Material

Start time: 8:52:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:52:20 AM	47	23	4.6	42.4
1 hour	9:52:00 AM	16	23	4.6	11.4
6 hour	2:52:00 PM	12	23	4.6	7.4

% Gravel:	0.0
% Sand(2mm - 74µm):	42.7
% Silt(74µm- 5µm):	41.9
% Clay(5µm - 2µm):	5.4
% Clay(≤2µm):	10.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 45'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 479.6

Corrected Wt., g: 479.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	2.9	0.60	99.40
#10	3.8	0.79	99.21

Air Dry Hydro Sample Wt., g: 65.3

Corrected Wt., g: 65.3

Calculation Factor: 0.6582

Hydrometer Analysis for < #10 Material

Start time: 9:01:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:01:20 AM	30	23	4.6	25.4
1 hour	10:01:00 AM	13	23	4.6	8.4
6 hour	3:01:00 PM	10	23	4.6	5.4

% Gravel:	0.0
% Sand(2mm - 74µm):	61.4
% Silt(74µm- 5µm):	25.8
% Clay(5µm - 2µm):	4.6
% Clay(≤2µm):	8.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 50'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 558.6

Corrected Wt., g: 558.6

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 60.3

Corrected Wt., g: 60.3

Calculation Factor: 0.6030

Hydrometer Analysis for <#10 Material

Start time: 9:42:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	9:42:20 AM	50	23	4.6	45.4
1 hour	10:42:00 AM	21	23	4.6	16.4
6 hour	3:42:00 PM	16	23	4.6	11.4

% Gravel:	0.0
% Sand(2mm - 74µm):	24.7
% Silt(74µm- 5µm):	48.1
% Clay(5µm - 2µm):	8.3
% Clay(≤2µm):	18.9

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 23 @ 60'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 502.2

Corrected Wt., g: 502.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.2	0.04	99.96
#8	2.4	0.48	99.52
#10	6.8	1.35	98.65

Air Dry Hydro Sample Wt., g: 101.6

Corrected Wt., g: 101.6

Calculation Factor: 1.0299

Hydrometer Analysis for < #10 Material

Start time: 8:55:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:55:20 AM	32	23	4.6	27.4
1 hour	9:55:00 AM	12	23	4.6	7.4
6 hour	2:55:00 PM	11	23	4.6	6.4

% Gravel:	0.0
% Sand(2mm - 74µm):	73.4
% Silt(74µm- 5µm):	19.4
% Clay(5µm - 2µm):	1.0
% Clay(≤2µm):	6.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 5'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 237

Corrected Wt., g: 237.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 59.7

Corrected Wt., g: 59.7

Calculation Factor: 0.5970

Hydrometer Analysis for < #10 Material

Start time: 1:41:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:41:20 AM	57	25	4.3	52.7
1 hour	2:41:00 AM	35	25	4.3	30.7
6 hour	7:41:00 AM	26	25	4.3	21.7

% Gravel:	0.0
% Sand(2mm - 74µm):	11.7
% Silt(74µm- 5µm):	36.9
% Clay(5µm - 2µm):	15.1
% Clay(≤2µm):	36.3

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 10'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 291

Corrected Wt., g: 291.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 64.4

Corrected Wt., g: 64.4

Calculation Factor: 0.6440

Hydrometer Analysis for < #10 Material

Start time: 1:39:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:39:20 AM	62	25	4.3	57.7
1 hour	2:39:00 AM	36	25	4.3	31.7
6 hour	7:39:00 AM	27	25	4.3	22.7

% Gravel:	0.0
% Sand(2mm - 74µm):	10.4
% Silt(74µm- 5µm):	40.4
% Clay(5µm - 2µm):	14.0
% Clay(≤2µm):	35.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 15'**

Soil Description: **CL**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 324.6

Corrected Wt., g: 324.6

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 60.8

Corrected Wt., g: 60.8

Calculation Factor: 0.6080

Hydrometer Analysis for < #10 Material

Start time: 1:34:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:34:20 AM	58	25	4.3	53.7
1 hour	2:34:00 AM	33	25	4.3	28.7
6 hour	7:34:00 AM	22	25	4.3	17.7

% Gravel:	0.0
% Sand(2mm - 74µm):	11.7
% Silt(74µm- 5µm):	41.1
% Clay(5µm - 2µm):	18.1
% Clay(≤2µm):	29.1

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 20'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 331

Corrected Wt., g: 331.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 66

Corrected Wt., g: 66.0

Calculation Factor: 0.6600

Hydrometer Analysis for < #10 Material

Start time: 1:32:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:32:20 AM	61	25	4.3	56.7
1 hour	2:32:00 AM	28	25	4.3	23.7
6 hour	7:32:00 AM	20	25	4.3	15.7

% Gravel:	0.0
% Sand(2mm - 74µm):	14.1
% Silt(74µm- 5µm):	50.0
% Clay(5µm - 2µm):	12.1
% Clay(≤2µm):	23.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 25'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 460

Corrected Wt., g: 460.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 60.6

Corrected Wt., g: 60.6

Calculation Factor: 0.6060

Hydrometer Analysis for < #10 Material

Start time: 1:28:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:28:20 AM	51	25	4.3	46.7
1 hour	2:28:00 AM	17	25	4.3	12.7
6 hour	7:28:00 AM	14	25	4.3	9.7

% Gravel:	0.0
% Sand(2mm - 74µm):	22.9
% Silt(74µm- 5µm):	56.1
% Clay(5µm - 2µm):	5.0
% Clay(≤2µm):	16.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 30'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 368.9

Corrected Wt., g: 368.9

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 66.9

Corrected Wt., g: 66.9

Calculation Factor: 0.6690

Hydrometer Analysis for < #10 Material

Start time: 1:26:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:26:20 AM	28	25	4.3	23.7
1 hour	2:26:00 AM	8	25	4.3	3.7
6 hour	7:26:00 AM	7	25	4.3	2.7

% Gravel:	0.0
% Sand(2mm - 74µm):	64.6
% Silt(74µm- 5µm):	29.9
% Clay(5µm - 2µm):	1.5
% Clay(≤2µm):	4.0

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 35'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 419.4

Corrected Wt., g: 419.4

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 66.8

Corrected Wt., g: 66.8

Calculation Factor: 0.6680

Hydrometer Analysis for < #10 Material

Start time: 1:11:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:11:20 AM	61	25	4.3	56.7
1 hour	2:11:00 AM	17	25	4.3	12.7
6 hour	7:11:00 AM	6	25	4.3	1.7

% Gravel:	0.0
% Sand(2mm - 74µm):	15.1
% Silt(74µm- 5µm):	65.9
% Clay(5µm - 2µm):	16.5
% Clay(≤2µm):	2.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 40'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 482

Corrected Wt., g: 482.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 59.8

Corrected Wt., g: 59.8

Calculation Factor: 0.5980

Hydrometer Analysis for < #10 Material

Start time: 1:10:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:10:20 AM	54	25	4.3	49.7
1 hour	2:10:00 AM	16	25	4.3	11.7
6 hour	7:10:00 AM	13	25	4.3	8.7

% Gravel:	0.0
% Sand(2mm - 74µm):	16.9
% Silt(74µm- 5µm):	63.5
% Clay(5µm - 2µm):	5.1
% Clay(≤2µm):	14.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 45'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 405.1

Corrected Wt., g: 405.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 64.7

Corrected Wt., g: 64.7

Calculation Factor: 0.6470

Hydrometer Analysis for < #10 Material

Start time: 2:07:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:07:20 AM	53	25	4.3	48.7
1 hour	3:07:00 AM	15	25	4.3	10.7
6 hour	8:07:00 AM	11	25	4.3	6.7

% Gravel:	0.0
% Sand(2mm - 74µm):	24.7
% Silt(74µm- 5µm):	58.8
% Clay(5µm - 2µm):	6.1
% Clay(≤2µm):	10.4

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 24 @ 50'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 425

Corrected Wt., g: 425.0

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.3	0.07	99.93
#8	0.5	0.12	99.88
#10	0.6	0.14	99.86

Air Dry Hydro Sample Wt., g: 61

Corrected Wt., g: 61.0

Calculation Factor: 0.6109

Hydrometer Analysis for <#10 Material

Start time: 2:05:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:05:20 AM	50	25	4.3	45.7
1 hour	3:05:00 AM	17	25	4.3	12.7
6 hour	8:05:00 AM	13	25	4.3	8.7

% Gravel:	0.1
% Sand(2mm - 74µm):	25.1
% Silt(74µm- 5µm):	54.0
% Clay(5µm - 2µm):	6.6
% Clay(≤2µm):	14.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 5'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 287.9

Corrected Wt., g: 287.9

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.2	0.07	99.93
#10	0.3	0.10	99.90

Air Dry Hydro Sample Wt., g: 59.2

Corrected Wt., g: 59.2

Calculation Factor: 0.5926

Hydrometer Analysis for < #10 Material

Start time: 2:01:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	2:01:20 AM	57	24	4.5	52.5
1 hour	3:01:00 AM	29	24	4.5	24.5
6 hour	8:01:00 AM	22	24	4.5	17.5

% Gravel:	0.0
% Sand(2mm - 74µm):	11.4
% Silt(74µm- 5µm):	47.3
% Clay(5µm - 2µm):	11.8
% Clay(≤2µm):	29.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 10'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 350.1

Corrected Wt., g: 350.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 58.2

Corrected Wt., g: 58.2

Calculation Factor: 0.5820

Hydrometer Analysis for < #10 Material

Start time: 1:59:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:59:20 AM	55	24	4.5	50.5
1 hour	2:59:00 AM	25	24	4.5	20.5
6 hour	7:59:00 AM	18	24	4.5	13.5

% Gravel:	0.0
% Sand(2mm - 74µm):	13.2
% Silt(74µm- 5µm):	51.6
% Clay(5µm - 2µm):	12.0
% Clay(≤2µm):	23.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 15'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 383.1

Corrected Wt., g: 383.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 56.6

Corrected Wt., g: 56.6

Calculation Factor: 0.5660

Hydrometer Analysis for < #10 Material

Start time: 1:54:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:54:20 AM	56	24	4.5	51.5
1 hour	2:54:00 AM	28	24	4.5	23.5
6 hour	7:54:00 AM	20	24	4.5	15.5

% Gravel:	0.0
% Sand(2mm - 74µm):	9.0
% Silt(74µm- 5µm):	49.5
% Clay(5µm - 2µm):	14.1
% Clay(≤2µm):	27.4

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 20'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 333.1

Corrected Wt., g: 333.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 56.6

Corrected Wt., g: 56.6

Calculation Factor: 0.5660

Hydrometer Analysis for < #10 Material

Start time: 1:52:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:52:20 AM	54	24	4.5	49.5
1 hour	2:52:00 AM	28	24	4.5	23.5
6 hour	7:52:00 AM	20	24	4.5	15.5

% Gravel:	0.0
% Sand(2mm - 74µm):	12.5
% Silt(74µm- 5µm):	46.0
% Clay(5µm - 2µm):	14.1
% Clay(≤2µm):	27.4

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 25'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 405.5

Corrected Wt., g: 405.5

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 61.3

Corrected Wt., g: 61.3

Calculation Factor: 0.6130

Hydrometer Analysis for < #10 Material

Start time: 1:46:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:46:20 AM	55	24	4.5	50.5
1 hour	2:46:00 AM	22	24	4.5	17.5
6 hour	7:46:00 AM	16	24	4.5	11.5

% Gravel:	0.0
% Sand(2mm - 74µm):	17.6
% Silt(74µm- 5µm):	53.9
% Clay(5µm - 2µm):	9.7
% Clay(≤2µm):	18.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 30'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 368

Corrected Wt., g: 368.0

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.4	0.11	99.89
#8	1.0	0.27	99.73
#10	1.4	0.38	99.62

Air Dry Hydro Sample Wt., g: 70.4

Corrected Wt., g: 70.4

Calculation Factor: 0.7067

Hydrometer Analysis for <#10 Material

Start time: 1:45:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:45:20 AM	42	24	4.5	37.5
1 hour	2:45:00 AM	12	24	4.5	7.5
6 hour	7:45:00 AM	9	24	4.5	4.5

% Gravel:	0.1
% Sand(2mm - 74µm):	46.8
% Silt(74µm- 5µm):	42.5
% Clay(5µm - 2µm):	4.2
% Clay(≤2µm):	6.4

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 35'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 496.7

Corrected Wt., g: 496.7

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.3	0.06	99.94
#10	1.3	0.26	99.74

Air Dry Hydro Sample Wt., g: 64

Corrected Wt., g: 64.0

Calculation Factor: 0.6417

Hydrometer Analysis for < #10 Material

Start time: 3:06:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	3:06:20 AM	63	24	4.5	58.5
1 hour	4:06:00 AM	27	24	4.5	22.5
6 hour	9:06:00 AM	19	24	4.5	14.5

% Gravel:	0.0
% Sand(2mm - 74µm):	8.8
% Silt(74µm- 5µm):	56.1
% Clay(5µm - 2µm):	12.5
% Clay(≤2µm):	22.6

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 40'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 466.8

Corrected Wt., g: 466.8

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.2	0.04	99.96
#10	0.2	0.04	99.96

Air Dry Hydro Sample Wt., g: 67.1

Corrected Wt., g: 67.1

Calculation Factor: 0.6713

Hydrometer Analysis for < #10 Material

Start time: 1:40:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:40:20 AM	44	24	4.5	39.5
1 hour	2:40:00 AM	15	24	4.5	10.5
6 hour	7:40:00 AM	12	24	4.5	7.5

% Gravel:	0.0
% Sand(2mm - 74µm):	41.2
% Silt(74µm- 5µm):	43.2
% Clay(5µm - 2µm):	4.4
% Clay(≤2µm):	11.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 45'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 268.2

Corrected Wt., g: 268.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 60.9

Corrected Wt., g: 60.9

Calculation Factor: 0.6090

Hydrometer Analysis for < #10 Material

Start time: 1:38:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:38:20 AM	52	24	4.5	47.5
1 hour	2:38:00 AM	13	24	4.5	8.5
6 hour	7:38:00 AM	11	24	4.5	6.5

% Gravel:	0.0
% Sand(2mm - 74µm):	22.0
% Silt(74µm- 5µm):	64.0
% Clay(5µm - 2µm):	3.3
% Clay(≤2µm):	10.7

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 50'**

Soil Description: **ML**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 437.8

Corrected Wt., g: 437.8

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	3.2	0.73	99.27
#8	4.0	0.91	99.09
#10	4.2	0.96	99.04

Air Dry Hydro Sample Wt., g: 57.2

Corrected Wt., g: 57.2

Calculation Factor: 0.5775

Hydrometer Analysis for < #10 Material

Start time: 1:34:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:34:20 AM	44	24	4.5	39.5
1 hour	2:34:00 AM	10	24	4.5	5.5
6 hour	7:34:00 AM	8	24	4.5	3.5

% Gravel:	0.7
% Sand(2mm - 74µm):	30.9
% Silt(74µm- 5µm):	58.9
% Clay(5µm - 2µm):	3.4
% Clay(≤2µm):	6.1

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Somis Ranch Farmworker Housing

Job No.: 302947-001

Sample ID: **B 25 @ 60'**

Soil Description: **SM**

Hydrometer ID: 504229

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 607.7

Corrected Wt., g: 607.7

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	5.1	0.84	99.16
#8	36.7	6.04	93.96
#10	50.2	8.26	91.74

Air Dry Hydro Sample Wt., g: 88.5

Corrected Wt., g: 88.5

Calculation Factor: 0.9647

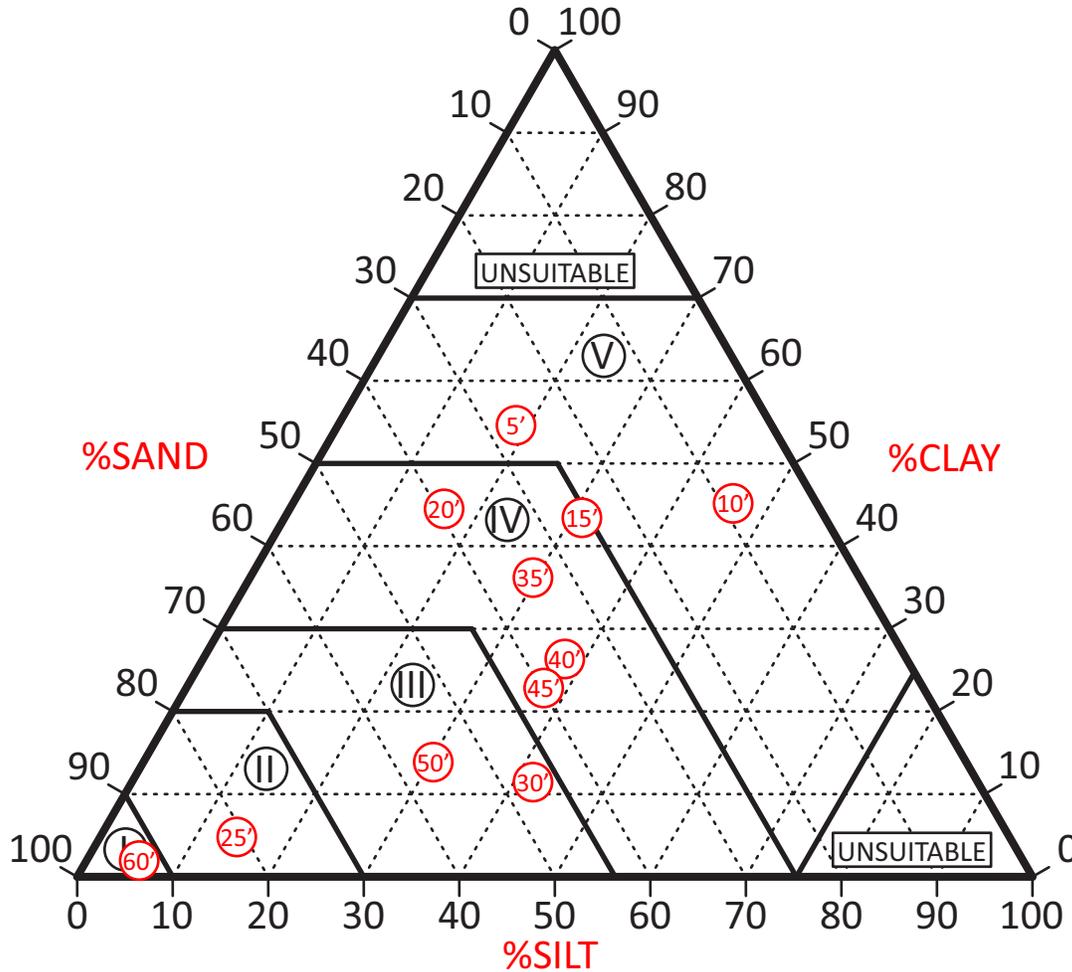
Hydrometer Analysis for <#10 Material

Start time: 1:33:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	1:33:20 AM	32	24	4.5	27.5
1 hour	2:33:00 AM	13	24	4.5	8.5
6 hour	7:33:00 AM	7	24	4.5	2.5

% Gravel:	0.8
% Sand(2mm - 74µm):	70.7
% Silt(74µm- 5µm):	19.7
% Clay(5µm - 2µm):	6.2
% Clay(≤2µm):	2.6

SOIL CLASSIFICATION CHART FOR BORING B-20



Soil Types	Soil Absorption Capacity (Gals/ft ² /day)	Required Leaching Area/100Gals (ft ²)	Percolation Rating
Ⅰ	5	20	Excellent
Ⅱ	4	25	Good
Ⅲ	2.5	40	Fair*
Ⅳ	1.1	90	Poor*
Ⅴ	0.83	120	Questionable*

*A pit performance test is required when Soil Types III, IV, and V make up 50% or more of the soil profile.

SOIL CLASSIFICATION CHART, B-20

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California

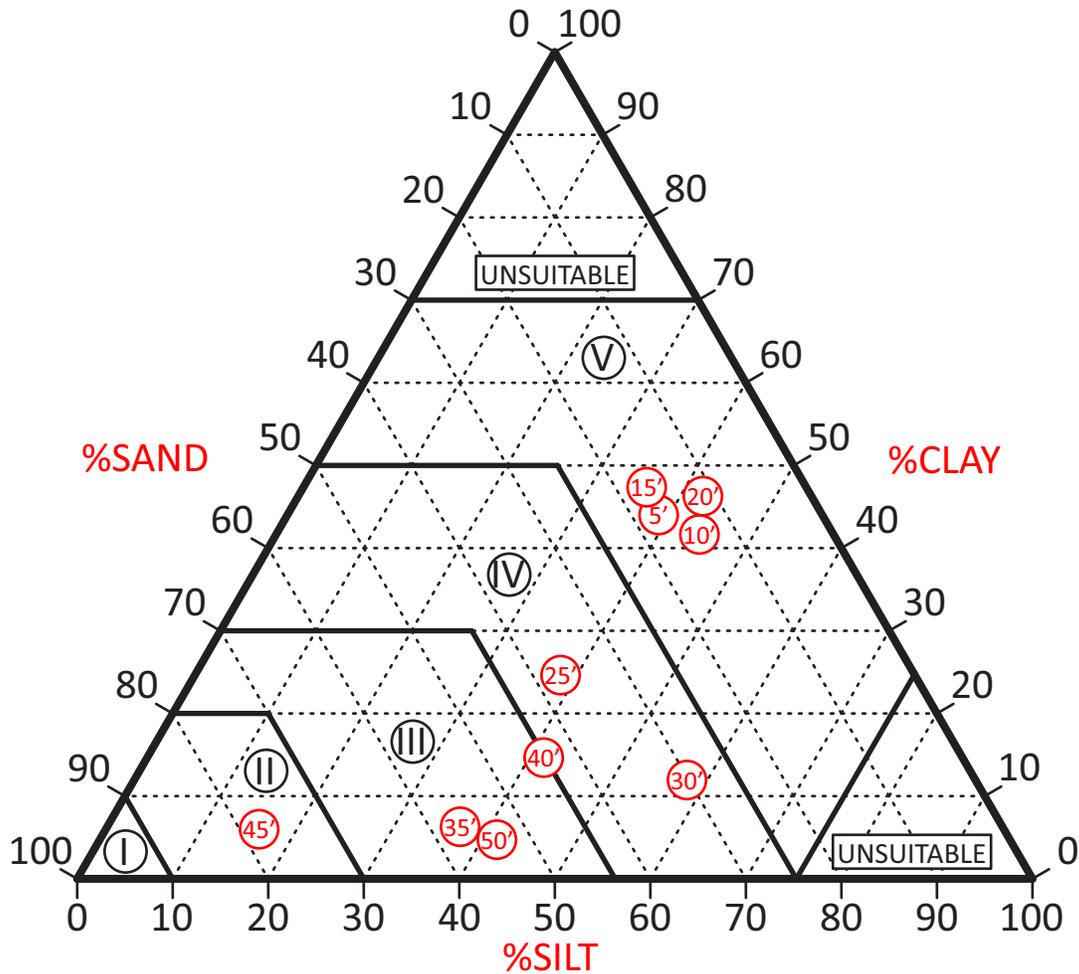


Earth Systems

September 2019

302947-001

SOIL CLASSIFICATION CHART FOR BORING B-21



Soil Types	Soil Absorption Capacity (Gals/ft ² /day)	Required Leaching Area/100Gals (ft ²)	Percolation Rating
Ⓘ	5	20	Excellent
Ⓜ	4	25	Good
Ⓜ	2.5	40	Fair*
Ⓜ	1.1	90	Poor*
Ⓜ	0.83	120	Questionable*

*A pit performance test is required when Soil Types III, IV, and V make up 50% or more of the soil profile.

SOIL CLASSIFICATION CHART, B-21

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California

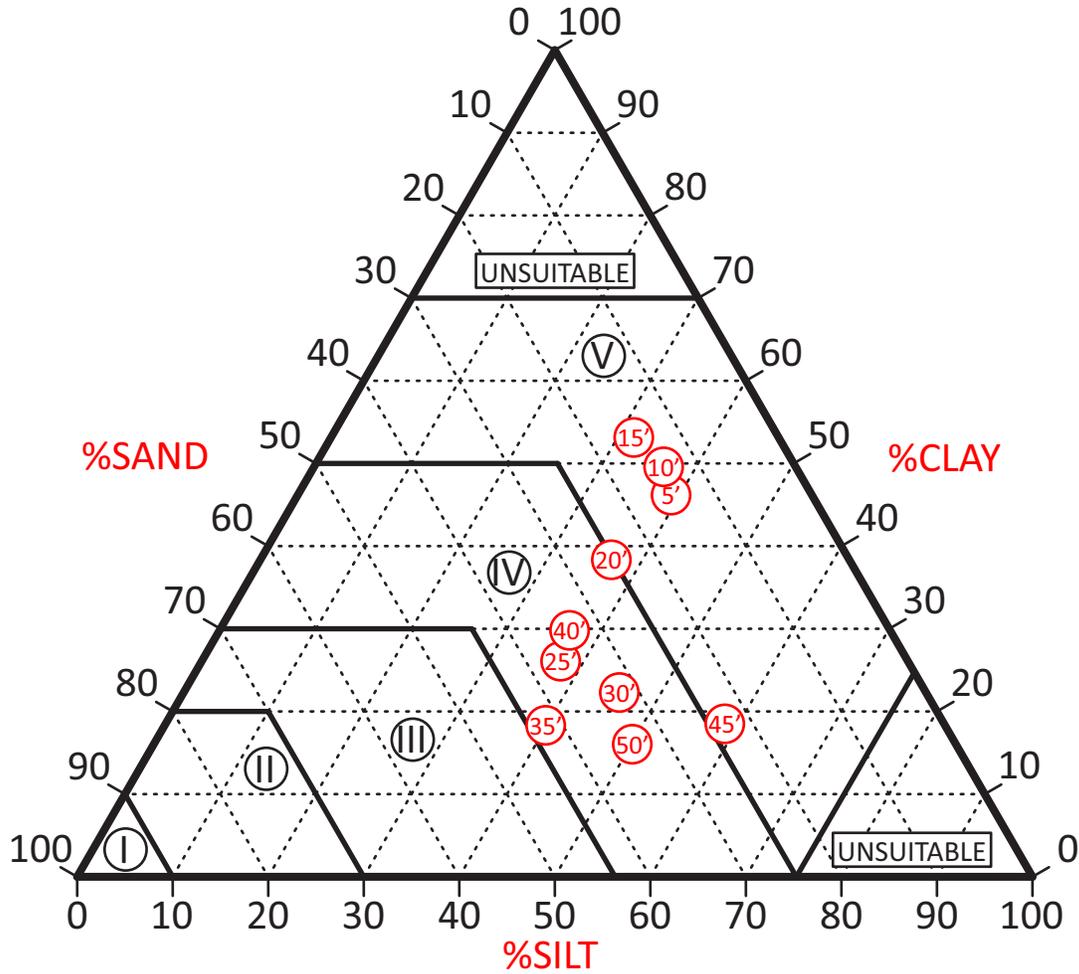


Earth Systems

September 2019

302947-001

SOIL CLASSIFICATION CHART FOR BORING B-22



Soil Types	Soil Absorption Capacity (Gals/ft ² /day)	Required Leaching Area/100Gals (ft ²)	Percolation Rating
Ⓘ	5	20	Excellent
Ⓜ	4	25	Good
Ⓝ	2.5	40	Fair*
Ⓓ	1.1	90	Poor*
Ⓔ	0.83	120	Questionable*

*A pit performance test is required when Soil Types III, IV, and V make up 50% or more of the soil profile.

SOIL CLASSIFICATION CHART, B-22

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California

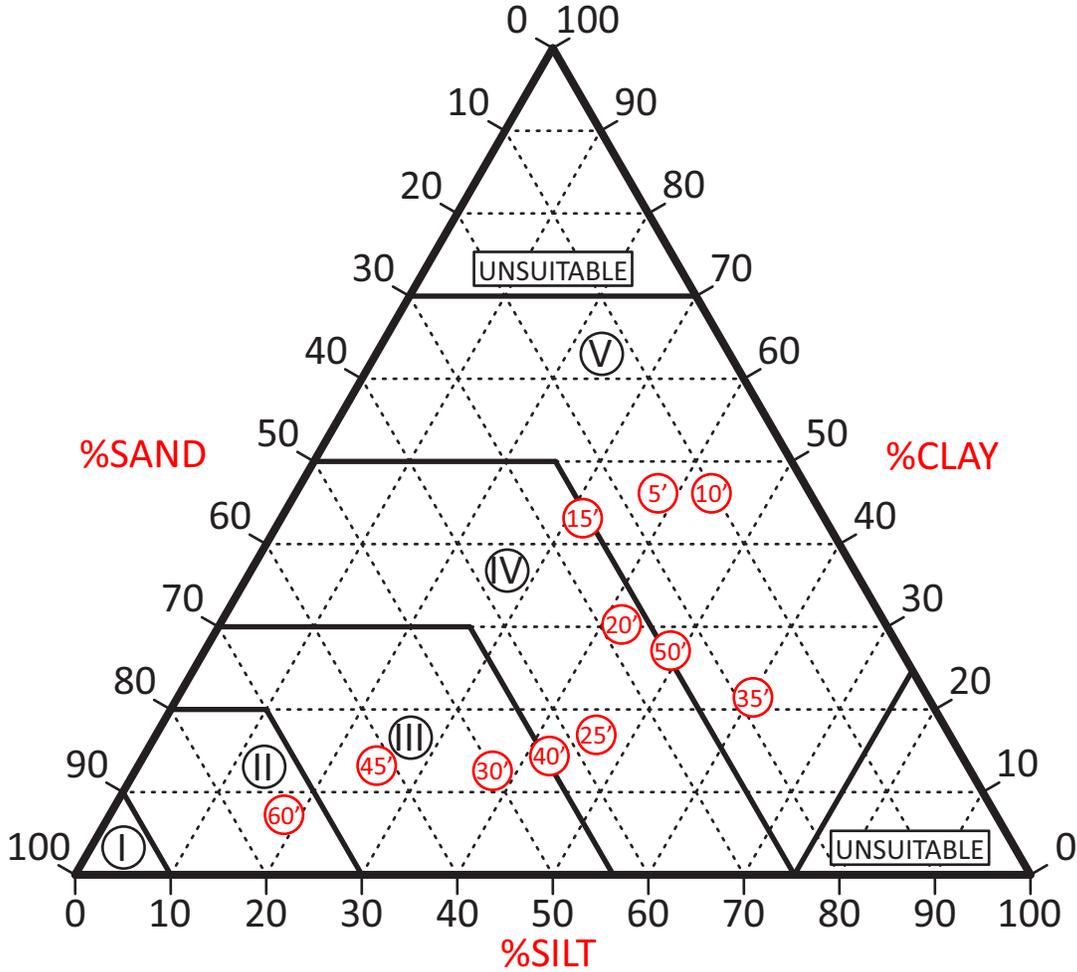


Earth Systems

September 2019

302947-001

SOIL CLASSIFICATION CHART FOR BORING B-23



Soil Types	Soil Absorption Capacity (Gals/ft ² /day)	Required Leaching Area/100Gals (ft ²)	Percolation Rating
Ⓘ	5	20	Excellent
Ⓜ	4	25	Good
Ⓜ	2.5	40	Fair*
Ⓧ	1.1	90	Poor*
Ⓧ	0.83	120	Questionable*

*A pit performance test is required when Soil Types III, IV, and V make up 50% or more of the soil profile.

SOIL CLASSIFICATION CHART, B-23

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California

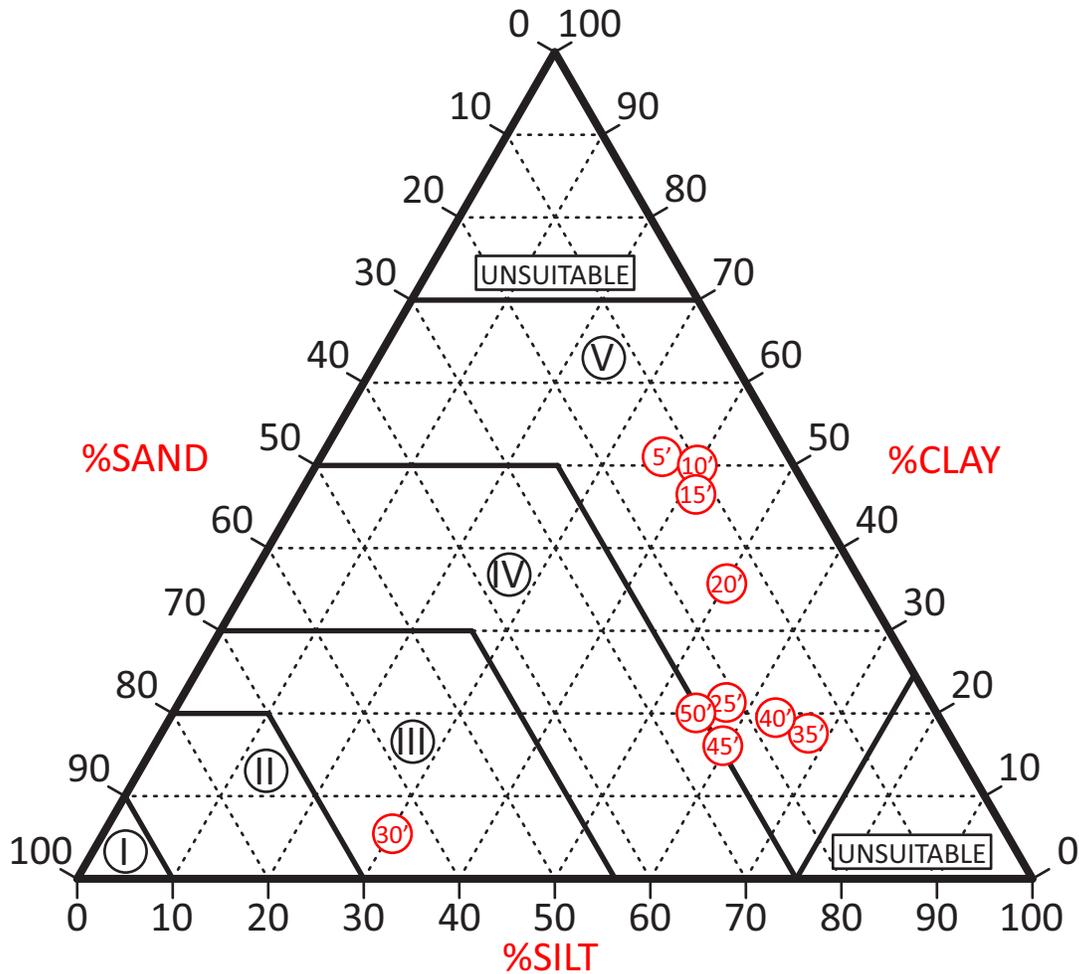


Earth Systems

September 2019

302947-001

SOIL CLASSIFICATION CHART FOR BORING B-24



Soil Types	Soil Absorption Capacity (Gals/ft ² /day)	Required Leaching Area/100Gals (ft ²)	Percolation Rating
Ⓘ	5	20	Excellent
Ⓜ	4	25	Good
Ⓜ	2.5	40	Fair*
Ⓜ	1.1	90	Poor*
Ⓜ	0.83	120	Questionable*

*A pit performance test is required when Soil Types III, IV, and V make up 50% or more of the soil profile.

SOIL CLASSIFICATION CHART, B-24

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California

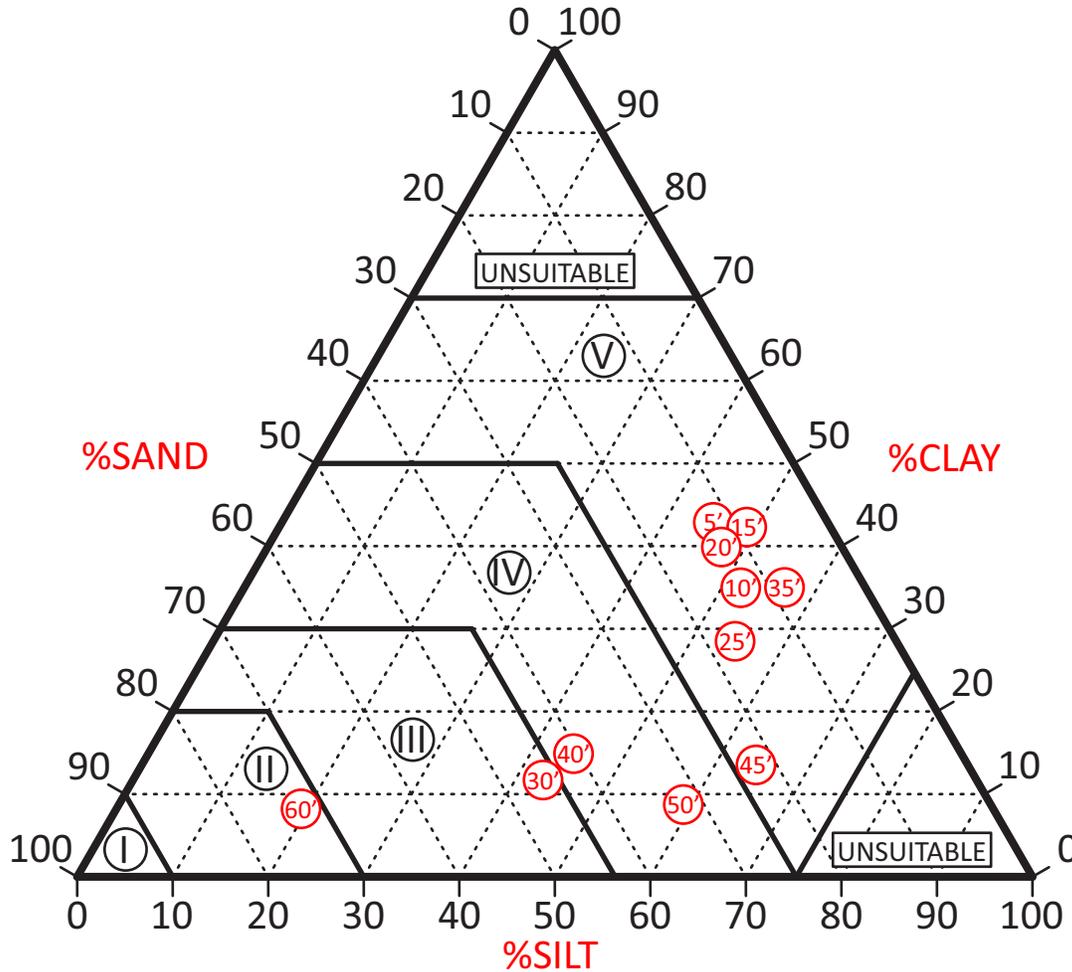


Earth Systems

September 2019

302947-001

SOIL CLASSIFICATION CHART FOR BORING B-25



Soil Types	Soil Absorption Capacity (Gals/ft ² /day)	Required Leaching Area/100Gals (ft ²)	Percolation Rating
Ⓘ	5	20	Excellent
Ⓜ	4	25	Good
Ⓜ	2.5	40	Fair*
Ⓧ	1.1	90	Poor*
Ⓧ	0.83	120	Questionable*

*A pit performance test is required when Soil Types III, IV, and V make up 50% or more of the soil profile.

SOIL CLASSIFICATION CHART, B-25

Somis Ranch Farmworker Housing
Camarillo Area of Ventura County, California



Earth Systems

September 2019

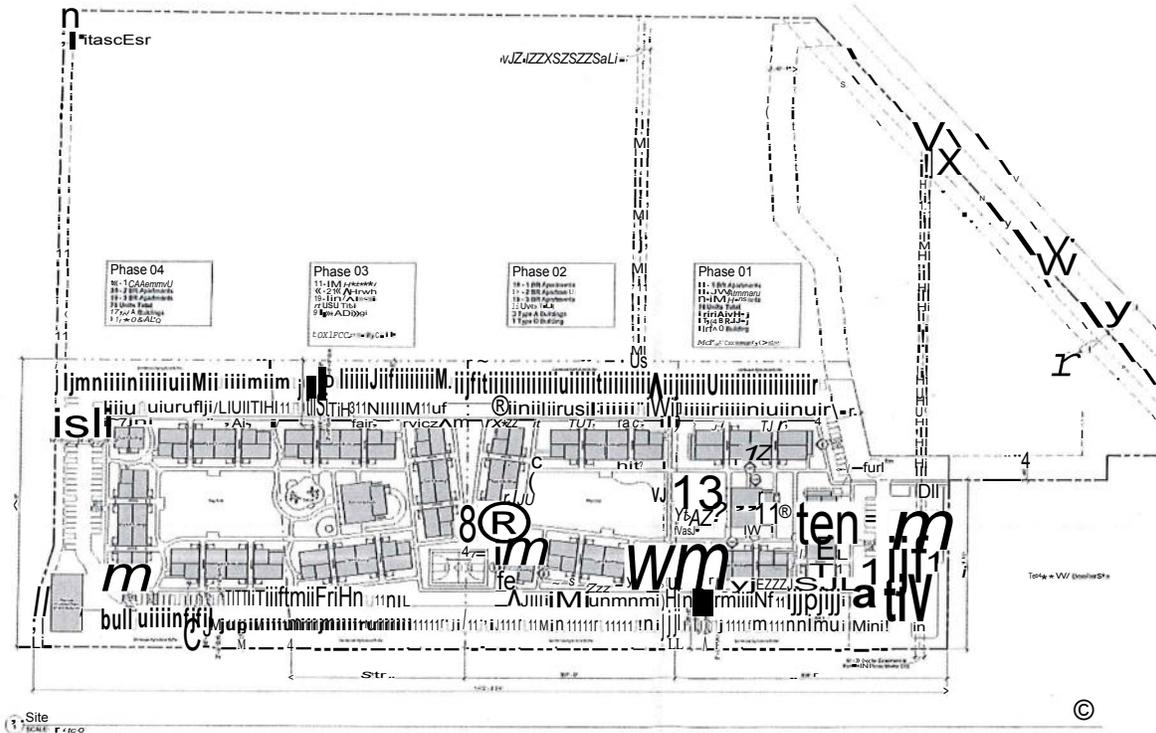
302947-001

Appendix H

Traffic Study

SOMIS RANCH FARMWORKER HOUSING PROJECT VENTURA COUNTY, CALIFORNIA

REVISED TRAFFIC STUDY



February 21, 2020

ATE Project #19015

Prepared for:

Jensen Design and Survey, Inc.
1672 Donlon Street
Ventura, CA 93003



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Since 1978

Richard L. Pool, P.E.
Scott A. Schell, AICP, PTP

February 21, 2020

Ms. Lisa Woodburn
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Ventura, CA 93001

REVISED TRAFFIC STUDY FOR THE SOMIS RANCH FARMWORKER HOUSING PROJECT - VENTURA COUNTY, CALIFORNIA

Associated Transportation Engineers (ATE) is pleased to submit the following revised traffic study for the Somis Ranch Farmworker Housing Project. The revised traffic study addresses Ventura County staff comments on the December 16th traffic study and examines existing and future traffic conditions in the vicinity of the Project site. It is our understanding that this traffic study will be incorporated into the development application for the Project to be submitted to Ventura County.

We appreciate the opportunity to assist Jensen Design and Survey, with this Project.

Associated Transportation Engineers

By Richard L. Pool, P.E.
President



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INTRODUCTION

The following study contains an analysis of the potential traffic impacts associated with the proposed Somis Ranch Farmworker Housing Project (the "Project"), located on the west side of Somis Road in unincorporated Ventura County and directly adjacent to the City of Camarillo. The study provides information relative to Existing, Existing + Project, Cumulative and Cumulative + Project traffic conditions within the Project study-area. A review of the access to the site also presented.

PROJECT DESCRIPTION

The Somis Ranch Farmworker Housing Project consists of 360 multi-family housing units with related residential community amenities. The Project will be constructed in 3 phases (Phase I-100 units, Phase II-100 units, Phase III-160 units). The Project site is located at 2789 Somis Road immediately north of the City of Camarillo in the unincorporated Somis area of Ventura County. The Project is requesting the approval for a Planned Development Permit, a Parcel Map and a CUP for a community waste water treatment facility (WWTF). The City of Camarillo will improve the existing access connection and construct the new access connection to Somis Road as part of the North Pleasant Valley Groundwater Treatment Facility and De-Salter Project. The Project has a shared access agreement with the City of Camarillo to utilize the new access connections to Somis Road that will serve the groundwater treatment facility. Figure 2 illustrates the Project site plan.

EXISTING CONDITIONS

Street Network

The study-area circulation system is comprised of U.S. Highway 101, State Route 118, State Route 34, Las Posas Road-Upland Road, Flynn Road, Adolfo Road, Daily Drive, Ventura Boulevard, Balcom Canyon Road and Grimes Canyon Road which serve as the major arterials, and collector streets, as illustrated in Figure 1. The following text provides a brief discussion of the primary components of the study-area street network.

U.S. Highway 101, located south of the site, is a multi-lane freeway which serves as a major arterial for the City of Camarillo and is the principal inter-city route along this portion of the Pacific Coast. The segment of U.S. Highway 101 in the study-area is 6-lanes with auxiliary on-off ramp lanes. Primary access between the freeway and the Project site is provided via the signalized hook ramps at Daily Drive and Ventura Boulevard.

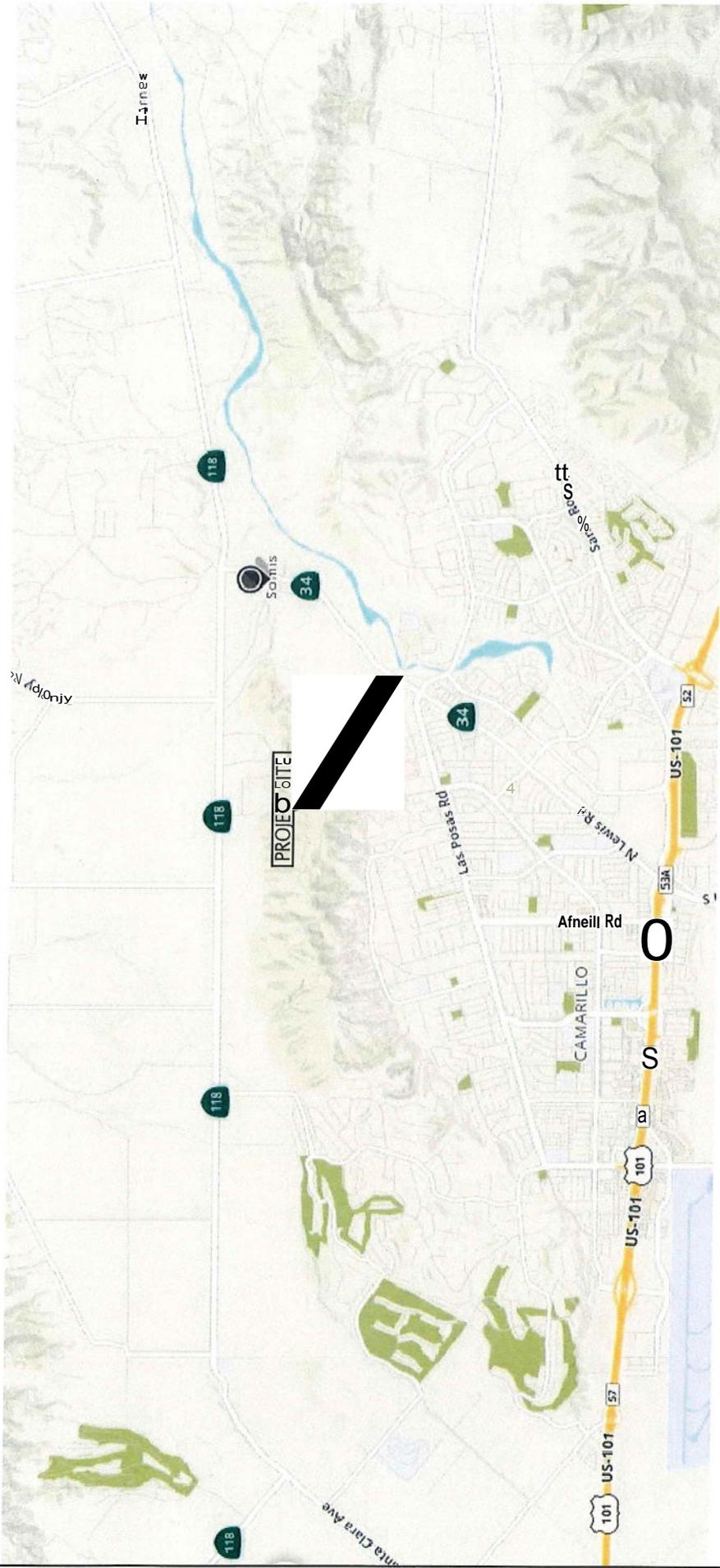


FIGURE 1

PROJECT SITE LOCATION - EXISTING STREET NETWORK

A > CONSULTING
 F > RAIL > OPERATION
 E > ENGINEERING

State Route 118 (Los Angeles Avenue), located north of the project site, is a 2- to 6-lane highway that extends from the State Route 126 (Santa Paula Freeway) in the City of Ventura to State Route 210 (Foothill Freeway) east of the City of San Fernando. State Route 118 is signalized at Somis Road.

State Route 34, (Somis Road/Lewis Road) in the study-area is a 2-lane north-south primary arterial. State Route 34 connects Somis to the City of Camarillo and City of Oxnard. The State Route 118 (Los Angeles Avenue)/State Route 34 (Somis Road) intersection provides regional access to the Project site.

Las Posas Road-Upland Road, is a 4-lane secondary arterial roadway that extends south to Pleasant Valley Road. The roadway extends east from Ponderosa Drive to Lewis Road as Las Posas Road. The roadway continues east from Lewis Road to Santa Rosa Road as Upland Road. South of Ponderosa Road, Las Posas is primary arterial. Las Posas Road-Upland Road serves residential, and commercial land uses in the study-area. The intersections of Las Posas Road/Camino Alvarez, Las Posas Road-Upland Road/Lewis Road and Upland Road/Flynn Road are signalized.

Daily Drive, located south of the site, is a 2-lane east-west collector roadway that provides access to the commercial and residential area located along the northern frontage of U.S. Highway 101 between Las Posas Road and Lewis Road. The U.S. Highway 101 northbound/Daily Drive ramp intersection and Daily Drive/Lewis Road intersections are controlled by traffic signals.

Ventura Boulevard, located south of the site is a 2- to 4-lane east-west secondary roadway that extends from Lewis Road to Wood Road west of the Camarillo Town Center. Ventura Boulevard provides access to the commercial and residential area located along the southern frontage of U.S. Highway 101. The U.S. Highway 101 southbound/Ventura Boulevard ramp intersection and Ventura Boulevard/Lewis Road intersections are controlled by traffic signals.

Adolfo Road, is a 4-lane secondary arterial roadway that extends east from Ponderosa Drive to its terminus at the Conejo Creek. Adolfo Road serves residential, commercial and industrial land uses in the study-area. The Lewis Road/Adolfo Road intersection is signalized.

Santa Clara Avenue, is a 2-lane secondary arterial roadway that extends south from State Route 118 to U.S. Highway 101. Santa Clara Avenue serves agricultural residential and industrial land uses in the study-area. The State Route 118/Santa Clara Avenue intersection is signalized.

Flynn Road, is a 4-lane secondary arterial/industrial collector roadway that extends south from Upland Road to Mission Oaks Boulevard. Flynn Road serves residential, commercial and industrial land uses in the study-area. The Upland Road/Flynn Road intersection is signalized.

Balcom Canyon Road, is a 2-lane rural roadway that extends north from State Route to Bradley Road. Balcom Canyon Road serves agricultural and residential land uses in the study-area. The State Route 118/Balcom Canyon Road intersection is signalized.

Grimes Canyon Road, is a 2-lane rural roadway that extends north from State Route 118 to Broadway. Grimes Canyon Road serves agricultural and residential land uses in the study-area. The State Route 118/Grimes Canyon Road intersection is signalized.

Roadway Operations

The following section reviews average daily traffic (ADT) volumes and roadway operations in the study-area. The operational characteristics of the study-area roadways are analyzed based on a set of standard Ventura County roadway design capacities which are summarized in the Technical Appendix. In rating a roadway's operating condition, "Levels of Service" (LOS) "A" through "F" are used. LOS "A" and LOS "B" represent primarily free-flow operations, LOS "C" represents stable conditions, LOS "D" nears unstable operations with restrictions on maneuverability within traffic streams, LOS "E" represents unstable operations with maneuverability very limited, and LOS "F" represents breakdown or forced flow conditions. LOS "D" is considered acceptable for County thoroughfares in the unincorporated areas of the County and LOS "E" for State Route 118 between Santa Clara Avenue and the City of Moorpark and State Route 34 in Somis north of the City of Camarillo.

Existing ADT volumes for the roadway segments in the vicinity of the Project site were obtained from data collected by Caltrans¹ and Ventura County contained in the Technical Appendix (T-4 - T-16). Table 1 lists the existing ADT and levels of service for study-area roadways. Roadway classifications are based on the Ventura County General Plan.

¹ 2017 Traffic Volumes on California State Highways, California Department of Transportation.

**Table 1
Existing Roadway Operations**

Roadway	Class	Roadway Type	ADT	LOS
State Route 118 - east of Balcom Canyon Road	Class I	2-Lane Roadway	19,500	LOS E
- east of Somis Road	Class I	2-Lane Roadway	19,500	LOS E
- west of Somis Road	Class I	2-Lane Roadway	14,000	LOS D
- west of Santa Clara	Class I	4-Lane Roadway	24,700	LOS B
- west of State Route 232	Class I	4-Lane Roadway	35,500	LOS C
State Route 34 - south of Los Angeles Avenue	Class I	2-Lane Roadway	14,500	LOS D
Balcom Canyon Road - north of Los Angeles Avenue	Class II	2-Lane Roadway	3,000	LOS B
Broadway - west of Grimes Canyon Road	Class II	2-Lane Roadway	2,300	LOS B
Central Avenue - west of U.S. Highway 101	Class I	2-Lane Roadway	17,000	LOS D
Grimes Canyon Road - north of Los Angeles Avenue	Class II	2-Lane Roadway	3,500	LOS B
Las Posas Road - south of Pleasant Valley Road	Class I	2-Lane Roadway	10,100	LOS D
Lewis Road -south of Pleasant Valley Road	Class I	4-Lane Roadway	19,700	LOS B
Pleasant Valley Road - west of Las Posas Road	Class I	2-Lane Roadway	16,200	LOS E
Rose Avenue - south of Los Angeles Avenue	Class II	2-Lane Roadway	9,100	LOS D

The data presented in Table 1 indicate that the study-area roadway segments currently operate in the LOS "B" - "E" range based on Ventura County Public Works roadway design capacities presented in Figure 4.2.2 in the Technical Appendix (T-3). Based on Ventura County standards LOS "E" is acceptable for State Route 118 and State Route 34. While LOS "D" is acceptable for all other County roadways. Pleasant Valley Road is currently operating at an unacceptable LOS "E".

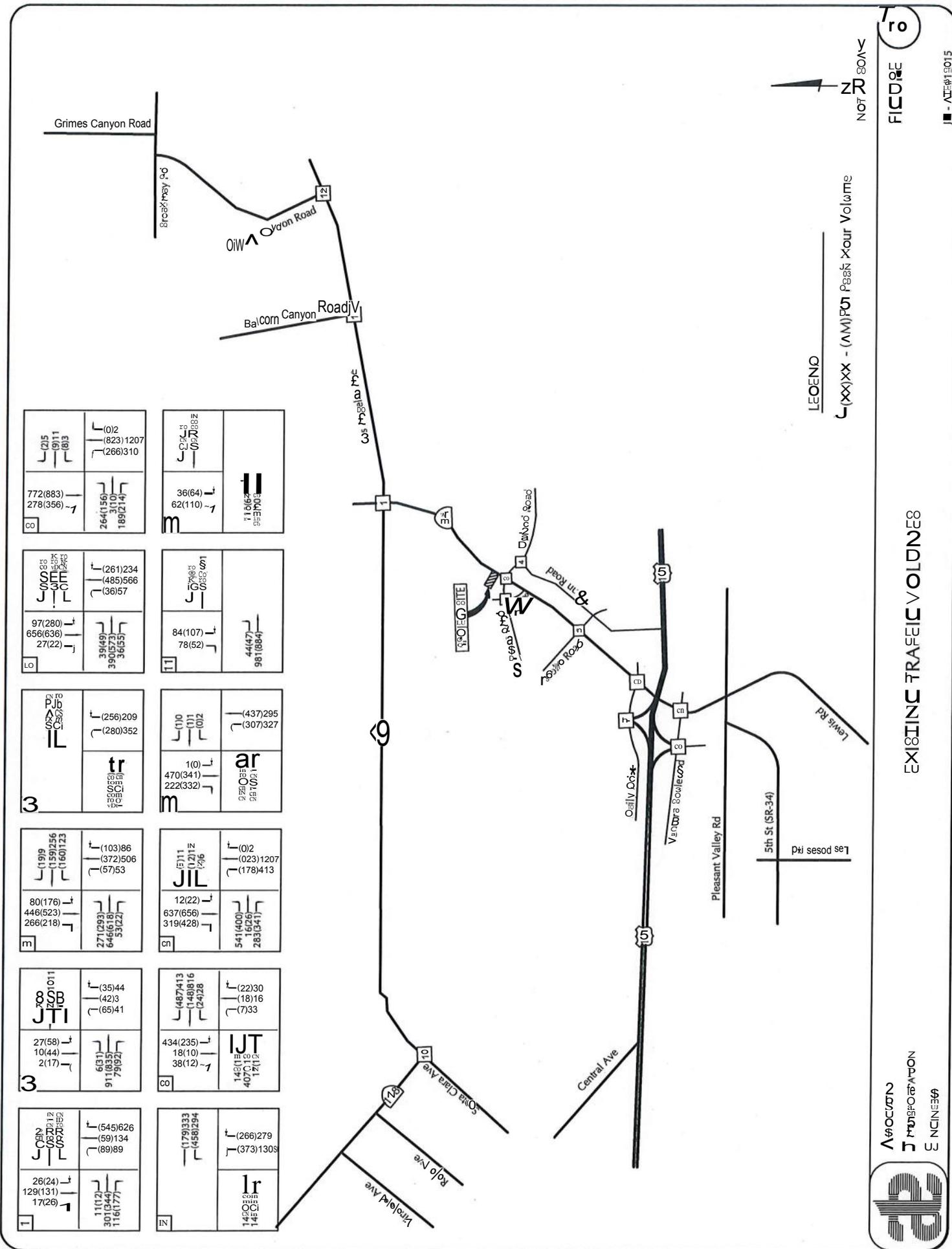
Intersections Operations

Existing AM and PM peak hour traffic volumes were collected for this study in March and November 2019. Figure 3 illustrates the existing AM and PM peak hour traffic volumes. Existing levels of service for the study-area intersection were calculated using the adopted Intersection Capacity Utilization methodology for signalized intersections as required by Ventura County and the City of Camarillo. The ATE used the service flow rates adopted by the Ventura County Transportation Commission for the Congestion Management Plan per the Ventura County Initial Study Assessment Guidelines. Worksheets illustrating the level of service calculations are contained in the Technical Appendix (T-41 - T-64). Table 2 lists the existing intersection level of service for the study-area intersections. The existing lane geometries and traffic controls for the study-area intersections are illustrated on Figure 4.

Table 2
Existing Intersection Operations

intersection	Control	Existing Conditions	
		AM Peak Hour	PM Peak Hour
		ICU-LOS	ICU-LOS
State Route 118/Santa Clara Avenue	Signal	0.88-LOS D	0.86-LOS D
State Route 118/Somis Road	Signal	0.80-LOS C	0.74-LOS C
State Route 118/Balcom Canyon Road	Signal	0.65-LOS B	0.67-LOS B
State Route 118/Grimes Canyon Road	Signal	0.68-LOS A	0.66-LOS B
Los Posas Road/Camino Alvarez	Signal	0.38-LOS A	0.36-LOS A
Somis Road/Las Posas Road	Signal	0.53-LOS A	0.52-LOS A
Upland Road/Flynn Road	Signal	0.44-LOS A	0.38-LOS A
Lewis Road/Adolfo Road	Signal	0.57-LOS A	0.53-LOS A
Lewis Road/Daily Drive	Signal	0.49-LOS A	0.51-LOS A
U.S. Highway 101NB Ramps/Daily Drive	Signal	0.38-LOS A	0.62-LOS B
U.S. Highway 101 SB Ramps/Ventura Boulevard	Signal	0.30-LOS A	0.61-LOS B
Lewis Road/Ventura Boulevard	Signal	0.37-LOS A	0.52-LOS A

The study-area intersections generally operate in the LOS "A"- "C" range during the AM and PM peak hour period as indicated in Table 2.



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EXISTING TRAFFIC VOLUMES

IMPACT THRESHOLDS

The study-area roadways and intersections are located in both unincorporated Ventura County and the City of Camarillo. The impact thresholds for both the County and City are discussed in the following text.

Ventura County General Plan Policies

Roadways: The thresholds established by Ventura County² that are outlined in Table 3 were used to assess the significance of roadway and intersection impacts associated with project generated traffic.

Table 3
Minimum Acceptable Level of Service For Roadway Segments and Intersections

Minimum LOS	County of Ventura - Description
C	All County maintained local roads.
D	All County thoroughfares and state highways within the unincorporated area of the County, except as provided below
E	<ol style="list-style-type: none"> 1. State Route 33 between the end of the Ojai freeway and the City of Ojai. 2. State Route 118 between Santa Clara Avenue and the City of Moorpark. 3. State Route 34 (Somis Road) north of the City of Camarillo. 4. Santa Rosa Road between Camarillo city limit line and Thousand Oaks city limit line. 5. Moorpark Road north of Santa Rosa Road to Moorpark city limit line.
Varies	The LOS prescribed by the applicable city for all state highways, city thoroughfares, and city maintained local roads located within that city, if the city has formerly adopted General Plan policies, ordinances or a reciprocal agreement with the County, pertaining to development in the city that would individually or cumulatively affect the LOS of state highways, county thoroughfares and county-maintained local roads in the unincorporated area of the County.
	County LOS standards are applicable for any city that has not adopted its own standards or has not executed a reciprocal agreement with the County pertaining to impacts to County roads.
At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the less stringent LOS of the two shall be the minimum acceptable LOS of that intersection.	

Project-Specific Impacts - A significant adverse project specific traffic impact is assumed to occur on any road segment if any one of the following results from the project:

- a. If the project would cause the existing LOS on a roadway segment to fall to an unacceptable level as defined in Table 3.
- b. If the project will add one or more PHT to a roadway segment that is currently operating at an unacceptable LOS as defined in Table 3.

² Ventura County Initial Study Assessment Guidelines, County of Ventura, April 26, 2011.

Cumulative Impacts – A potentially significant adverse cumulative traffic impact is assumed to occur on any road segment if any one of the following results from the project:

- a. If the project will add one or more PHT to a roadway segment that is part of the regional road network and the roadway segment is currently operating at an unacceptable LOS as defined in Table 3.
- b. If the project will add 10 or more PHT to a roadway segment which is part of the regional road network and is projected to reach an unacceptable LOS as defined in Table 3 by the Year 2020.

All projects that generate traffic contribute to cumulative traffic impacts. The analysis of cumulative traffic impacts, as contained in the Final Subsequent EIR prepared for the County General Plan Update (2005) and subsequent addendum (2007), would normally be considered sufficient analysis of traffic impacts. In such cases, payment of County's Traffic Impact Mitigation Fees (TIMF) is intended to mitigate the project's contribution to the cumulative traffic impacts for road segments outside of the Ojai Valley.

Intersections: A potentially significant adverse project-specific traffic impact is assumed to occur at any intersection on the Regional Road Network if the project will exceed the thresholds established in Table 4.

**Table 4
Threshold of Significance For Changes in Level of Service at Intersections**

Significant Changes in LOS	
Intersection Level of Service (Existing)	Increase in V/C or Trips Greater Than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	10 Trips*
LOS E	5 Trips*
LOS F	1 Trip*
*To critical movements. These are the highest combination of left and opposing through/right-turn PHTM.	

If the project involves County General Plan land use designation changes, zone changes or intensification of use, such that the projects impacts could not have been anticipated and were not included in either analysis for the current General Plan or TIMF Program, or the project is located within the boundaries of the Ojai Area Plan, additional cumulative impact analysis and mitigation measures may be required at the discretion of the Director, County PWA - Transportation Department.

City of Camarillo

The City of Camarillo's acceptable level of service for intersections is LOS C or better, with LOS D (V/C 0.83) allowed for short periods of time during the peak hours periods. Project impacts are significant and must be mitigated if they exceed the thresholds listed in Table 5. Mitigation measures must provide a level of service equal to or better than the base conditions.

**Table 5
Intersection Threshold Criteria**

Existing + Project; Cumulative + Project	Per Lane Critical Project-Added Peak Hour Trips
LOS D	30 Trips
LOS E	20 Trips
LOS F	10 Trips

PROJECT-GENERATED TRAFFIC

Project Trip Generation

Trip generation estimates were calculated for the Somis Ranch Farmworker Housing Project based on the rates presented in the Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition for Multi-Family (Land-Use Code #220).³ Trip generation for the WWTF was based on operational data assuming 1 employee working on-site part of the day. Table 6 summarizes the average daily, AM and PM peak hour trip generation estimates for the Project.

**Table 6
Project Trip Generation**

Land Use	Size/Employee	ADT		AM Peak Hour		PM Peak Hour	
		Rate	Trips	Rate	Trips (In/Out)	Rate	Trips (In/Out)
Apartment	360 units	7.32	2,635	0.46	166 (38/128)	0.56	202 (127/75)
Waste Water Treatment Facility	1 Employee	2.00	2	1.00	1 (1/0)	0.00	0 (0/0)
Total Trip Generation:			2,637		167 (39/128)		202 (12/75)

The data presented in Table 6 show that the Somis Ranch Farmworker Housing Project would generate 2,637 average daily trips, 167 AM peak hour trips, and 202 PM peak hour trips.

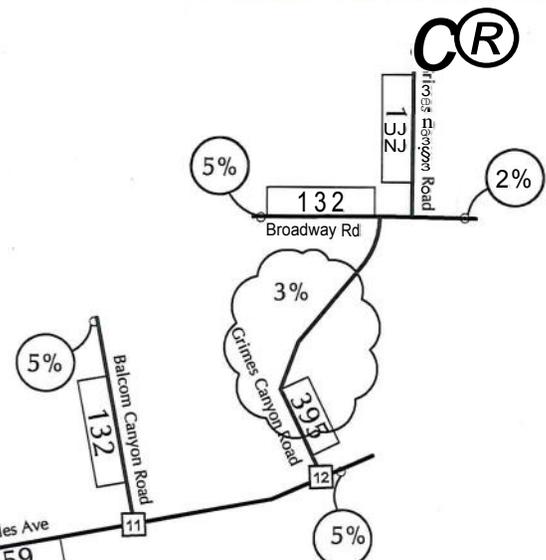
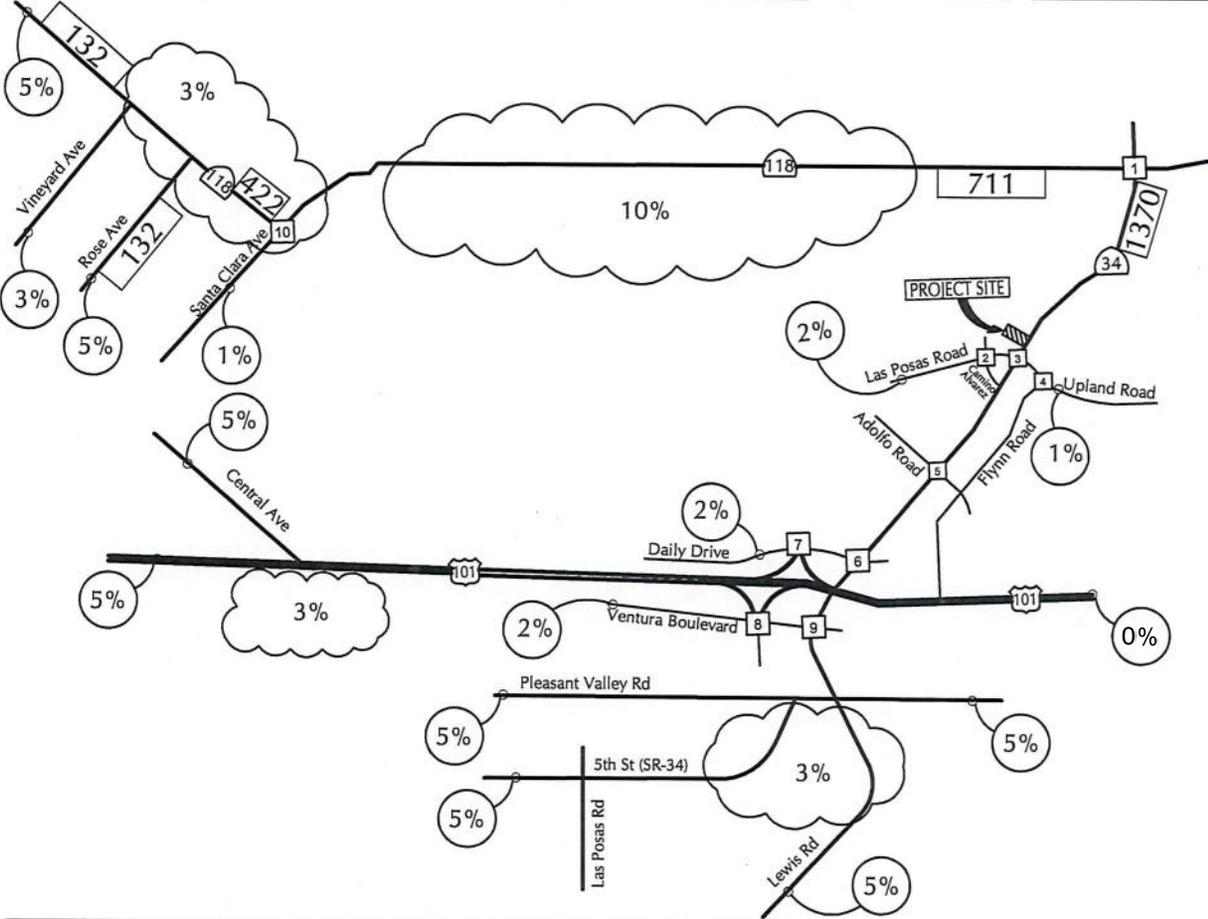
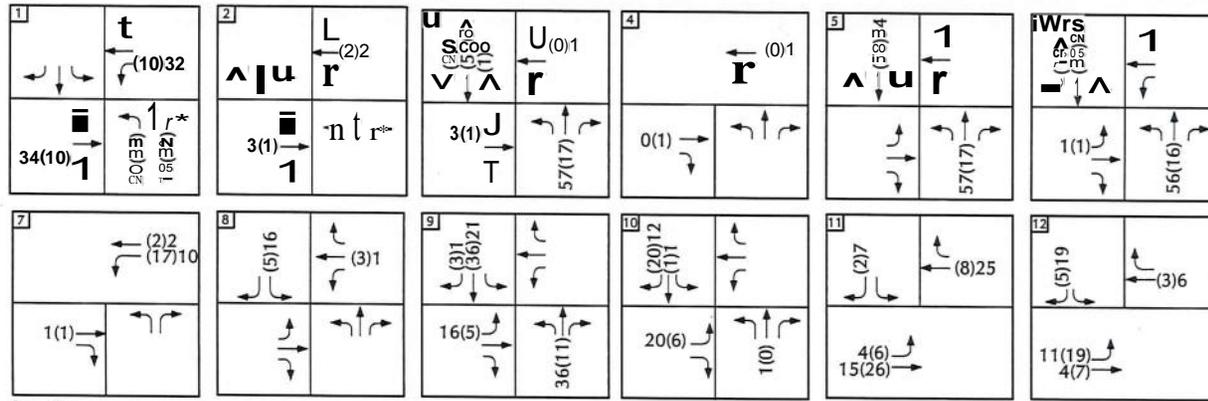
³ Trip Generation, Institute of Transportation Engineers, 10th Edition, 2017.

Project Trip Distribution and Assignment

Trip distribution percentages for the project was developed based on peak hour operational data provided by the applicant to ATE for use in this traffic study. The proposed Somis Ranch Farmworker Housing Project is located immediately north of the City of Camarillo. Primary access to the site is provided via State Route 34. From the proposed Project site, State Route 34 provides a direct connection north to the community of Somis, State Route 118, the Fas Posas Valley, and south to the City of Camarillo, U.S. Highway 101, and the Oxnard Plain. Both the Fas Posas Valley and the Oxnard Plain have substantial amounts of farms and agricultural operations. In order to accurately distribute and assign trips for the proposed project, an analysis of agricultural operations in both areas was conducted, using geographic information systems (GIS) and data from the Ventura County Agricultural Commissioner's Office. The results of this analysis are discussed in Exhibit "A" located in the Technical Appendix (T-65 -T-71).

Due to the aforementioned acreage amounts in the Oxnard Plain and Fas Posas Valley, 41% of the trips from this Project will be directed towards the Oxnard Plain via State Route 34 and U.S. Highway 101. A substantial amount of trips (52%) are assumed to travel towards the Fas Posas Valley via Somis Road and State Route 118. Since not all peak hour trips from this Project will be farm work related trips the remaining 7% (local trips) are routed on various surface streets in the City of Camarillo.

Project-generated traffic was distributed and assigned to the study-area street system as presented in Table 7. Figure 5 illustrates the distribution and assignment of project-generated traffic volumes.



LEGEND

- Lane Geometry
- Distribution Percentage
- C(XX)XX** - (A.M.)P.M. Peak Hour Volume
- Average Daily Traffic Volume



NOT TO SCALE

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

JH - ATE#19015



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**Table 7
Project Trip Distribution**

Route	Origin/Destination	Percent
U.S. Highway 101	East	0%
	West	13%
State Route 118 (Between Santa Clara Avenue and Somis Road)	East	5%
	West	16%
	Ag. Fields	10%
State Route 34	South	28%
Santa Clara Avenue	West	1%
Balcom Canyon Road	North	5%
Grimes Canyon Road	North	15%
Las Posas Road-Upland Road	East	1%
	West	2%
Daily Drive	West	2%
Ventura Boulevard	West	2%
Total:		100%

POTENTIAL TRAFFIC IMPACTS

Project-Specific Impacts

Roadways. Roadway volumes and level of service for the Existing and Existing + Project conditions are listed in Table 8.

**Table 8
Existing + Project Daily Roadway Operations**

Roadway Segment	Class	Roadway Type	ADT			
			Existing	Existing+ Project	LOS	Impact?
State Route 118						
- east of Balcom Canyon Road	Class I	2-Lane Roadway	19,500	20,159	LOS E	No
- east of Somis Road	Class I	2-Lane Roadway	19,500	20,159	LOS E	No
- west of Somis Road	Class I	2-Lane Roadway	12,200	12,911	LOS D	No
- west of Santa Clara Avenue	Class I	4-Lane Roadway	24,700	25,122	LOS B	No
- west of State Route 232	Class I	4-Lane Roadway	35,500	35,632	LOS C	No
State Route 34						
- south of Los Angeles Avenue	Class I	2-Lane Roadway	14,500	15,870	LOS D	No
Balcom Canyon Road						
- north of Los Angeles Avenue	Class II	2-Lane Roadway	3,000	3,132	LOS B	No
Broadway						
- west of Grimes Canyon Road	Class II	2-Lane Roadway	2,300	2,432	LOS B	No
Central Avenue						
- west of U.S. Highway 101	Class I	2-Lane Roadway	17,000	17,132	LOS D	No
Grimes Canyon Road						
- north of Los Angeles Avenue	Class II	2-Lane Roadway	3,500	3,895	LOS B	No
Las Posas Road						
- south of Pleasant Valley Road	Class I	2-Lane Roadway	10,100	10,232	LOS D	No
Lewis Road						
-south of Pleasant Valley Road	Class I	4-Lane Roadway	19,700	19,832	LOS B	No
Pleasant Valley Road						
- west of Las Posas Road	Class I	2-Lane Roadway	16,200	16,332	LOS E	Yes
Rose Avenue						
- south of Los Angeles Avenue	Class II	2-Lane Roadway	9,100	9,232	LOS D	No

The data in Table 8 show that the Project traffic would generate significant impacts to Pleasant Valley Road based on Ventura County impact criteria. The study-area roadway segments would continue to operate in the LOS "B" - "E" range based on Ventura County roadway design capacities. Based on Ventura County standards LOS "E" and "D" are acceptable for State Route 118 and State Route 34. The Ventura County 2040 General Plan Update identifies planned widening improvements for Pleasant Valley Road west of Las Posas Road, State Route 34 and State Route 118. These roads are planned to be widened from 2-lanes to 4-lanes throughout the study-area.

Intersections. Tables 9 and 10 present the Existing and Existing + Project AM and PM peak hour intersection levels of service and identifies impacts based on Ventura County and City of Camarillo thresholds. Figure 6 illustrates the AM and PM peak hour Existing + Project traffic volumes.

Table 9
Existing + Project AM Peak Hour Intersection Operations

Intersection	Control	AM Peak Hour		Impact?
		Existing	Existing + Project	
		ICU-LOS	ICU-LOS	
State Route 118/Santa Clara Avenue	Signal	0.88-LOS D	0.88-LOS D	No
State Route 118/Somis Road	Signal	0.80-LOS C	0.83-LOS D	No
State Route 118/Balcom Canyon Road	Signal	0.65-LOS B	0.66-LOS B	No
State Route 118/Grimes Canyon Road	Signal	0.68-LOS A	0.68-LOS A	No
Las Posas Road/Camino Alvarez	Signal	0.38-LOS A	0.38-LOS A	No
Somis Road/Las Posas Road	Signal	0.53-LOS A	0.53-LOS A	No
Upland Road/Flynn Road	Signal	0.44-LOS A	0.44-LOS A	No
Lewis Road/Adolfo Road	Signal	0.57-LOS A	0.57-LOS A	No
Lewis Road/Daily Drive	Signal	0.49- LOS A	0.50-LOS A	No
U.S. Highway 101/Daily Drive	Signal	0.38-LOS A	0.39-LOS A	No
U.S. Highway 101 SB Ramps/Ventura Boulevard	Signal	0.30-LOS A	0.30-LOS A	No
Lewis Road/Ventura Boulevard	Signal	0.37-LOS A	0.38-LOS A	No

Table 10
Existing + Project PM Peak Hour Intersection Operations

Intersection	Control	PM Peak Hour		Impact?
		Existing	Existing + Project	
		ICU-LOS	ICU-LOS	
State Route 118/Santa Clara Avenue	Signal	0.86-LOS D	0.87-LOS D	No
State Route 118/Somis Road	Signal	0.74-LOS C	0.79-LOS C	No
State Route 118/Balcom Canyon Road	Signal	0.67-LOS B	0.68-LOS B	No
State Route 118/Grimes Canyon Road	Signal	0.66-LOS B	0.67-LOS B	No
Las Posas Road/Camino Alvarez	Signal	0.36-LOS A	0.36-LOS A	No
Somis Road/Las Posas Road	Signal	0.52-LOS A	0.54-LOS A	No
Upland Road/Flynn Road	Signal	0.38-LOS A	0.38-LOS A	No
Lewis Road/Adolfo Road	Signal	0.53-LOS A	0.54 LOS A	No
Lewis Road/Daily Drive	Signal	0.51-LOS A	0.52 LOS A	No
U.S. Highway 101/Daily Drive	Signal	0.62-LOS B	0.62-LOS B	No
U.S. Highway 101 SB Ramps/Ventura Boulevard	Signal	0.61-LOS B	0.62-LOS B	No
Lewis Road/Ventura Boulevard	Signal	0.52-LOS A	0.53-LOS A	No

The data in Tables 9 and 10 show that the Project would not significantly impact any of the study-area intersections based on Ventura County and City of Camarillo impact thresholds.

CUMULATIVE (EXISTING + APPROVED/PENDING PROJECTS) ANALYSIS

Ventura County and City of Camarillo require that the roadways and intersections be analyzed with the addition of traffic generated by projects which have been approved or are pending within the study-area that could impact the facilities. Cumulative traffic can be developed either by using the Ventura County traffic model or a list of cumulative projects. The Cumulative (Existing + Approved/Pending Projects) traffic volumes were forecast for the study-area roadways and intersections assuming development of 17 approved and pending projects located within unincorporated Ventura County and the City of Camarillo. The development activity list for the City of Camarillo and County of Ventura are contained in the Technical Appendix (T-81 - T-96). Figure 7 illustrates the location of the approved and pending projects. Trip generation estimates were developed for the approved/pending projects using trip generation average rates published in the ITE, *Trip Generation*, 10th Edition. Trip generation for the 3 developments located in Ventura County were provided by County staff. Table 11 summarizes the trip generation for the approved/pending development projects.

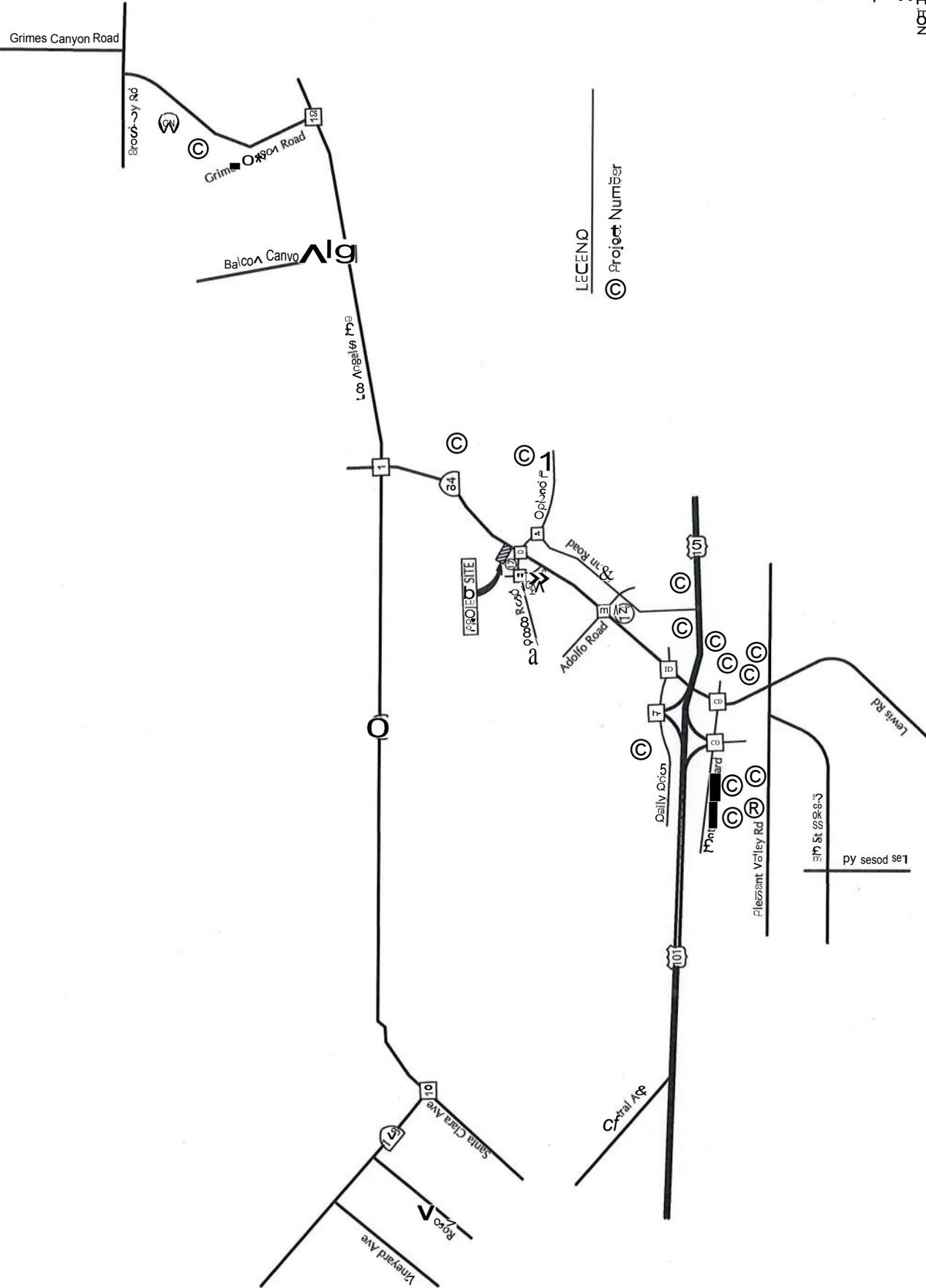
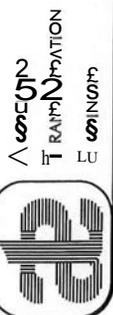


FIGURE K

CUMULATIVE PROJECT LOCATION MAP



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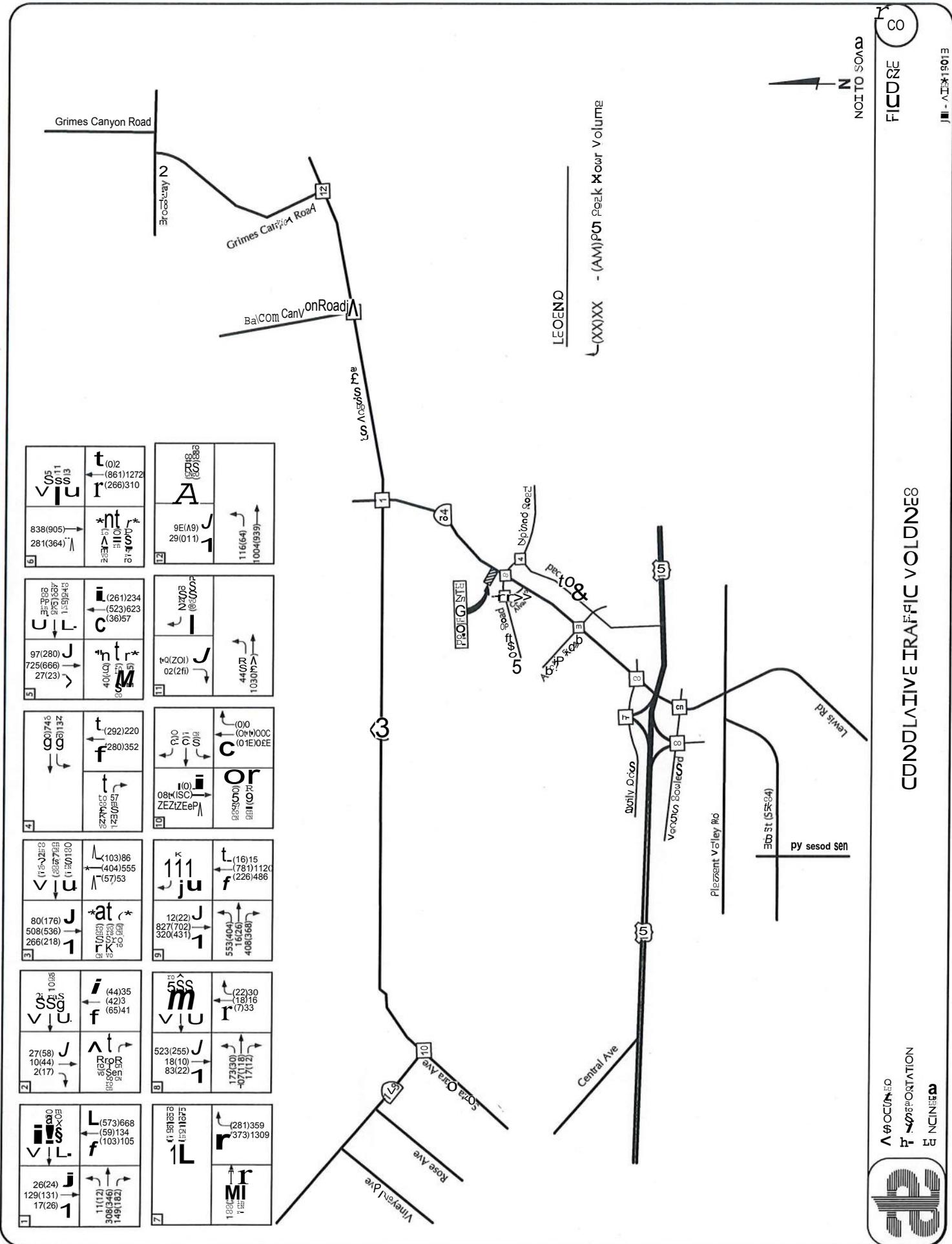
Table 11
Approved/Pending Development Projects Trip Generation

No.	jurisdiction	Project	Land Use/ITE LU Code	Size	ADT	Trips	
						AM Peak Hour	PM Peak Hour
1.	Ventura County	PL15-0014	Wholesale Lumberyard	18.9 acres	164	16	16
2.	Ventura County	PL18-0081	Organics Processing	17.2 acres	40	4	4
3.	Ventura County	PL18-0109	Dog Kennel	20 acres	50	5	5
4.	City of Camarillo	CUP-307(2)	Apartments/(#220)	10 units	73	5	6
		CPD-236M(1)	Retail Commercial/(#820)	8,000 sq.ft.	302	8	30
5.	City of Camarillo	RPD-188	Condominiums/(#220)	87 units	637	40	49
6.	City of Camarillo	CUP-330	Apartments/(#220)	23 units	168	10	13
			Retail Commercial/(#820)	6,100 sq.ft.	230	6	23
7.	City of Camarillo	RPD-199	Single Family Res./(#210)	4 units	38	3	4
8.	City of Camarillo	RPD-189M(2)	Apartments/(#220)	96 units	703	44	54
		RPD-196	Townhomes/(#220)	285 units	2,086	131	160
		CUP-369	Apartments/(#220)	24 units	176	11	13
9.	City of Camarillo	CUP-369	Retail Commercial/(#820)	12,000 sq.ft.	453	11	46
10.	City of Camarillo	RPD-198	Senior Housing ^(a)	281 units	2,118	168	166
11.	City of Camarillo	RPD-202	Townhomes/(#220)	6 units	44	3	3
			Apartments/(#220)	12 units	88	6	7
12.	City of Camarillo	CUP-391	Retail Commercial/(#820)	1,400 sq.ft.	53	1	5
13.	City of Camarillo	RPD-203	Single Family Res./(#210)	2 units	19	1	2
14.	City of Camarillo	CUP-383	Micro Brewery/(#970)	11,836 sq.ft.	544	12	86
15.	City of Camarillo	IPD-53M(9)	Light Industrial/(#110)	4,800 sq.ft.	24	3	3
16.	City of Camarillo	CUP-364M(1)	Brewery/(#932)	24,102 sq.ft.	2,704	0	235
17.	City of Camarillo	CUP-394	Groundwater Treatment ^(b)	9 employees	32	4	4
Total Trips:					10,746	492	934

(a) Trip generation from the traffic study prepared for the St. John's Seminary Residential Project prepared by Stantec.

(b) Trip generation from the operational data in the SEIR for North Pleasant Valley Groundwater Treatment Facility.

The data presented in Table 11 indicate that the 17 approved and pending projects would generate a total of 10,746 average daily trips, 492 AM peak hour trips and 934 PM peak hour trips. The approved and pending projects' peak hour traffic volumes were distributed and assigned to the study-area roadways and intersections. The trip assignment for the approved and pending projects was developed based on the location of each project, approved traffic studies, existing traffic patterns observed in the study-area as well as a general knowledge of the population, employment and commercial centers in and surrounding the study-area. Figure 8 illustrates the Cumulative AM and PM peak traffic volumes.



ASSOCIATED
 TRANSPORTATION
 ENGINEERS

CONJUNCTIVE TRAFFIC VOLUMES

FIGURE 8

NOI TO SOLWA

FILED: 1/14/2013

Cumulative Impacts

Roadways. Roadway volumes and LOS for the Cumulative and Cumulative + Project conditions are listed in Table 12.

**Table 12
Cumulative + Project Daily Roadway Operations**

Roadway Segment	Class	Roadway Type	ADT			
			Cumulative	Cumulative + Project	LOS	Impact?
State Route 118						
- east of Balcom Canyon Road	Class I	2-Lane Roadway	21,450	22,109	LOS E	No
- east of Somis Road	Class I	2-Lane Roadway	21,450	22,109	LOS E	No
- west of Somis Road	Class I	2-Lane Roadway	13,400	14,111	LOS D	No
- west of Santa Clara Avenue	Class I	4-Lane Roadway	27,200	27,622	LOS B	No
- west of State Route 232	Class I	4-Lane Roadway	39,000	39,132	LOS D	No
State Route 34						
- south of Los Angeles Avenue	Class I	2-Lane Roadway	15,200	16,570	LOS D	No
Balcom Canyon Road						
- north of Los Angeles Avenue	Class II	2-Lane Roadway	3,300	3,432	LOS B	No
Broadway						
- west of Grimes Canyon Road	Class II	2-Lane Roadway	2,500	2,632	LOS B	No
Central Avenue						
- west of U.S. Highway 101	Class I	2-Lane Roadway	18,700	18,832	LOS D	No
Grimes Canyon Road						
- north of Los Angeles Avenue	Class II	2-Lane Roadway	3,900	4,295	LOSC	No
Las Posas Road						
- south of Pleasant Valley Road	Class I	2-Lane Roadway	11,100	11,232	LOS D	No
Lewis Road						
- south of Pleasant Valley Road	Class I	4-Lane Roadway	21,700	21,832	LOS B	No
Pleasant Valley Road						
- west of Las Posas Road	Class I	2-Lane Roadway	17,800	17,932	LOS E	Yes
Rose Avenue						
- south of Los Angeles Avenue	Class II	2-Lane Roadway	10,000	10,132	LOS D	No

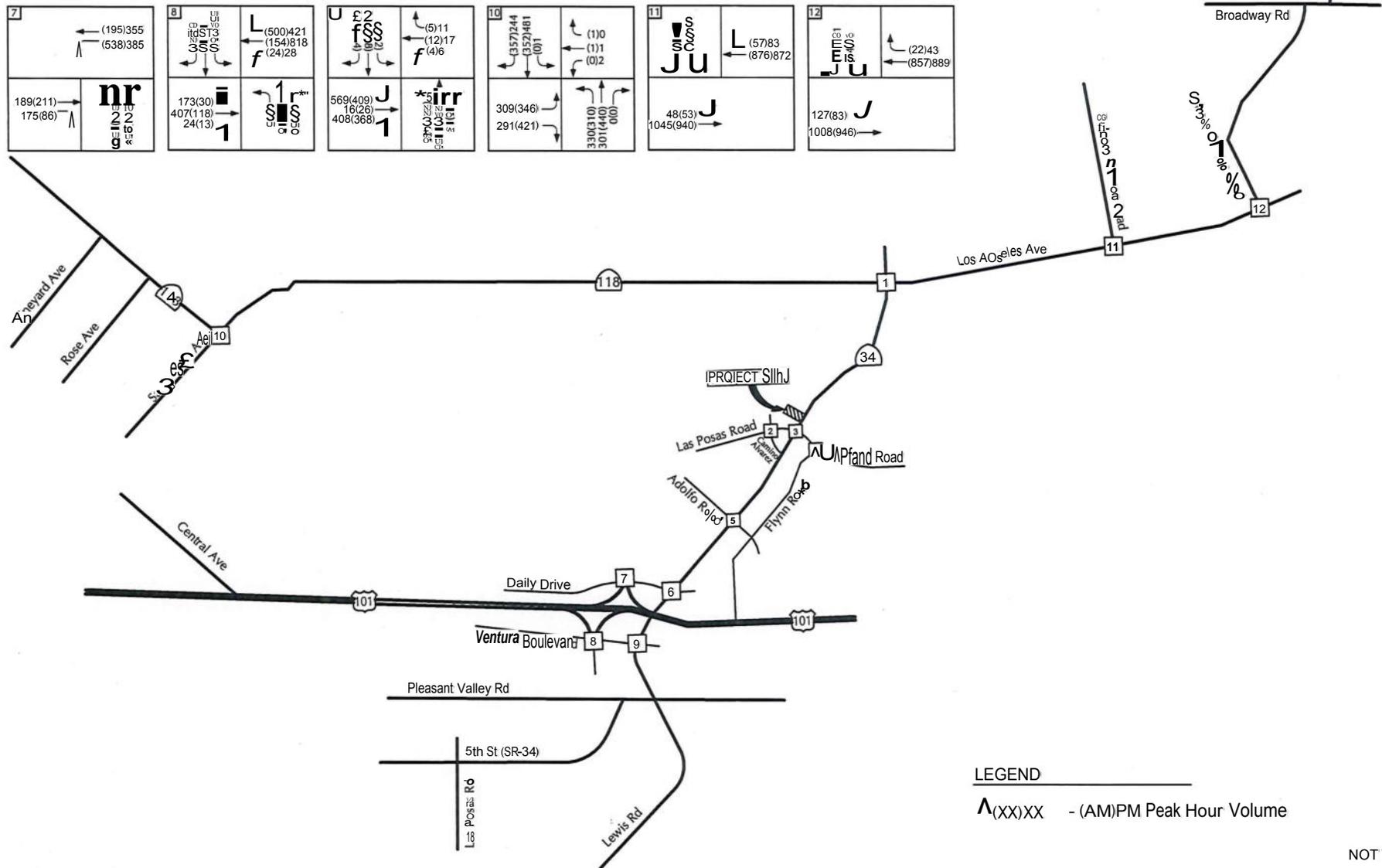
The data in Table 12 show that the Project would significantly impact Pleasant Valley Road west of Las Posas Road based on Ventura County impact criteria. The study-area roadway segments would operate in the LOS "B" - "E" range based on Ventura County roadway design capacities. Based on Ventura County standards LOS "E" is acceptable for State Route 118 and State Route 34. The Ventura County 2040 General Plan Update identifies planned widening improvements for Pleasant Valley Road west of Las Posas Road, State Route 34 and State Route 118. These roads are planned to be widened from 2-lanes to 4-lanes throughout the study-area. The Project's cumulative impacts would be mitigated by the payment of the County traffic impact mitigation fees.

Intersections. Tables 13 and 14 present the Cumulative and Cumulative + Project AM and PM peak hour intersection levels of service and identifiers impacts based on Ventura County and City of Camarillo thresholds. Figure 9 illustrates the AM and PM peak hour Cumulative + Project traffic volumes.

Table 13
Cumulative + Project AM Peak Hour Intersection Operations

Intersection	Control	AM Peak Hour		Impact?
		Cumulative	Cum. + Project	
		ICU-LOS	ICU-LOS	
State Route 118/Santa Clara Avenue	Signal	0.89-LOS D	0.89-LOS D	No
State Route 118/Somis Road	Signal	0.82-LOS D	0.86-LOS D	No
State Route 118/Balcom Canyon Road	Signal	0.67-LOS B	0.68-LOS B	No
State Route 118/Grimes Canyon Road	Signal	0.70-LOS B	0.70-LOS B	No
Las Posas Road/Camino Alvarez	Signal	0.38-LOS A	0.38-LOS A	No
Somis Road/Las Posas Road	Signal	0.55-LOS A	0.56-LOS A	No
Upland Road/Flynn Road	Signal	0.48-LOS A	0.48-LOS A	No
Lewis Road/Adolfo Road	Signal	0.58-LOS A	0.59-LOS A	No
Lewis Road/Daily Drive	Signal	0.49-LOS A	0.51-LOS A	No
U.S. Highway 101 NB Ramps/Daily Drive	Signal	0.41-LOS A	0.42-LOS A	No
U.S. Highway 101 SB Ramps/Ventura Boulevard	Signal	0.31-LOS A	0.31-LOS A	No
Lewis Road/Ventura Boulevard	Signal	0.40-LOS A	0.41-LOS A	No

<p>1</p> <p>1561(24) 1561(20) 17(6)</p> <p>(19)9 (438)220 (482)437</p> <p>11(12) 308(346) 183(192)</p> <p>605(687) 591(134) 1130(125)</p>	<p>2</p> <p>27(38) 19(49) 21(9)</p> <p>1028 (17)5</p> <p>6(3)1 941(844) 79(92)</p> <p>3(1) 941(844) 79(92)</p>	<p>3</p> <p>501(1) 501(1) 501(1) 501(1) 501(1) 501(1)</p> <p>(164)259 (687)729 (178)130</p> <p>274(294) 673(626) 53(22)</p>	<p>4</p> <p>(730)747 (283)134</p> <p>647(686) 145(259)</p>	<p>5</p> <p>97(280) 759(724) 27(23)</p> <p>(85)183 (275)637 (159)243</p> <p>40(49) 390(573) 36(55)</p> <p>266(157) 3(10) 314(241)</p>	<p>6</p> <p>(2)5 (9)11 (8)3</p> <p>266(157) 3(10) 314(241)</p>
<p>7</p> <p>(195)355 (538)385</p> <p>189(211) 175(86)</p>	<p>8</p> <p>(500)421 (154)818 (24)28</p> <p>173(30) 407(118) 24(13)</p>	<p>9</p> <p>(5)11 (12)17 (4)6</p> <p>569(409) 16(26) 408(368)</p>	<p>10</p> <p>(357)244 (352)481 (10)</p> <p>(1)0 (1)1 (0)2</p> <p>309(346) 291(421)</p>	<p>11</p> <p>(57)83 (876)872</p> <p>48(53) 1045(940)</p>	<p>12</p> <p>(22)43 (857)889</p> <p>127(83) 1008(946)</p>



LEGEND
 ^((XX))XX - (AM)PM Peak Hour Volume

N
 NOT TO SCALE

CUMULATIVE + PROJECT TRAFFIC VOLUMES



FIGURE **C**

JH - ATE#19015

Table 14
Cumulative + Project PM Peak Hour Intersection Operations

Intersection	Control	PM Peak Hour		Impact?
		Cumulative	Cum. + Project	
		ICU-LOS	ICU-LOS	
State Route 118/Santa Clara Avenue	Signal	0.87-LOS D	0.88-LOS D	No
State Route 118/Somis Road	Signal	0.81-LOS D	0.85-LOS D	No
State Route 118/Balcom Canyon Road	Signal	0.70-LOS B	0.71-LOS C	No
State Route 118/Grimes Canyon Road	Signal	0.69-LOS B	0.70-LOS B	No
Las Posas Road/Camino Alvarez	Signal	0.36-LOS A	0.36-LOS A	No
Somis Road/Las Posas Road	Signal	0.54-LOS A	0.56-LOS A	No
Upland Road/Flynn Road	Signal	0.40-LOS A	0.40-LOS A	No
Lewis Road/Adolfo Road	Signal	0.54-LOS A	0.56-LOS A	No
Lewis Road/Daily Drive	Signal	0.52-LOS A	0.53-LOS A	No
U.S. Highway 101 NB Ramps/Daily Drive	Signal	0.63-LOS B	0.63-LOS B	No
U.S. Highway 101 SB Ramps/Ventura Boulevard	Signal	0.65-LOS B	0.65-LOS B	No
Lewis Road/Ventura Boulevard	Signal	0.60-LOS A	0.61-LOS B	No

The data in Tables 13 and 14 show that the Project traffic would not significantly impact the remaining study-area intersection during the AM and PM peak hour periods based on Ventura County and City of Camarillo impact thresholds.

SITE ACCESS

Regional access to the Somis Ranch Farmworker Housing Project is provided by U.S. Highway 101 and State Route 118. Direct access to the Project will be provided via two shared access connections to Somis Road (State Route 34) with the North Pleasant Valley Groundwater Treatment Facility and De-Salter. The City of Camarillo will construct a new access connection to Somis Road and improve an existing connection to Somis Road approximately 660 feet apart as part of the North Pleasant Valley Groundwater Treatment Facility and De-Salter. A shared access agreement has been established which allows the Project to utilize the two driveway connections. The segment of Somis Road adjacent to the site access is relatively straight and level, providing good sight distance. The City of Camarillo will be required to construct the access connections to Somis Road to County of Ventura and Caltrans design standards. The two access connections to Somis Road will be designed to County Fire Department design standards to provide emergency vehicles access.

Signal Warrants

A signal warrant analysis was conducted for the Somis Road/Northern Project Access intersection and the Somis Road/Southern Project Access intersection. The traffic signal warrant analysis was completed based on the Manual on Uniform Traffic Control Devices (MUTCD), California Supplement, 8-Hour, 4-Hour and Average Daily Traffic vehicular volume warrant criteria. The posted speed limit on Somis Road is 50/40 mph in a community of less than 10,000 population, therefore the Rural warrants apply. The Project trip assignment at the Northern Project access driveway assumes no back tracking to travel south to the City of Camarillo and U.S. Highway 101. The Project trip assignment at the Southern Project access driveway assumes no back tracking to travel north to State Route 118. The Project hourly volumes were developed based on data published in the Caltrans, Progress Report on Trip Ends Generation Research Counts, 10th Edition. This report provides an hourly distribution of ADT trips over a 24 hour period. For various land uses including apartments. Tables 15 and 16 summarize the results of the signal warrant analysis.

**Table 15
Signal Warrant Results - Project Northern Access**

Warrant	Type	Warrant Satisfied ?		
		Existing	Existing + Project	Cumulative + Project
1	8-Hour	No	No	No
	Condition "A" Condition "B"	No	No	No
2	4-Hour	No	No	No
ADT	ADT	No	No	No
	Condition "A" Condition "B"	No	No	No

The approach volumes on the minor street at the Somis Road/Project Northern Access intersection do not satisfy the 8-Hour and the 4-Hour vehicular volume warrants under the Existing + Project and Cumulative + Project scenarios. In order to satisfy the 8-Hour warrant, a minimum of 53 vehicles per hour are necessary on the minor street approach with one lane. In order to satisfy the 4-Hour warrant, a minimum of 60 vehicles per hour are necessary on the minor street approach with one lane. The traffic volumes generated by the Somis Ranch Farmworker Housing development are below 53 vehicles per hour during both the 8 hour and the 4 hour period. Neither Condition "A" or "B" of the 8-Hour volumes warrant is 80 percent satisfied. Signal warrant worksheets are contained in the Technical Appendix (T-72 - T-75).

The approach volumes on the minor street at the Somis Road/Project Northern Access intersection do not satisfy the ADT vehicular volume warrants under the Existing + Project and Cumulative + Project scenarios. In order to satisfy the ADT warrant, a minimum of 850 vehicles per day in one direction are necessary on the minor street approach with one lane. The estimated exiting traffic volumes generated by the Somis Ranch Farmworker Housing development is 685 (2,635 ADT/2*52%) vehicles per day.

**Table 16
Signal Warrant Results - Project Southern Access**

Warrant	Type	Warrant Satisfied ?		
		Existing	Existing + Project	Cumulative + Project
1	8-Hour	No	No	No
	Condition "A" Condition "B"	No	No	No
2	4-Hour	No	Yes	Yes
	ADT	No	No	No
	Condition "A" Condition "B"	No	No	No

The approach volumes on the minor street at the Somis Road/Project Southern Access intersection do not satisfy the 8-Hour volume warrant under the Existing + Project and Cumulative + Project scenarios. In order to satisfy the 8-Hour warrant, a minimum of 53 vehicles per hour are necessary on the minor street approach with one lane. Neither Condition "A" or "B" of the 8-Hour volumes warrant is 80 percent satisfied. The approach volumes on the minor street at the Somis Road/Project Southern Access intersection do satisfy the 4-Hour volume warrant under the Existing + Project and Cumulative + Project scenarios. In order to satisfy the 4-Hour warrant, a minimum of 60 vehicles per hour are necessary on the minor street approach with one lane. Signal warrant worksheets are contained in the Technical Appendix (T-76 - T-79).

The approach volumes on the minor street at the Somis Road/Project Southern Access intersection do not satisfy the ADT vehicular volume warrants under the Existing + Project and Cumulative + Project scenarios. In order to satisfy the ADT warrant, a minimum of 850 vehicles per day in one direction are necessary on the minor street approach with one lane. The estimated exiting traffic volumes generated by the Somis Ranch Farmworker Housing development is 632 (2,635 ADT/2*48%) vehicles per day.

Left-Turn Lane Analysis

County staff requested that the Project driveways on Somis Road be evaluated to determine the need for left-turn lanes. The following section provides a discussion the left-turn lane evaluation at the Project access driveways.

Somis Road/Project Northern Access: The need for a northbound left-turn lane on Somis Road to accommodate left-turns into the Project site was assessed based on criteria outlined in the NCHRP Report 279. That report established guidelines for determining the need for left-turn lanes based on the mix of left-turns and through volumes on 2-lane roadways. The results of the analysis for the Project Northern access on Somis Road shows that a separate left-turn lane is warranted (NCHRP Report 279 warrant graph is contained in the Technical Appendix T-80).

Somis Road/Project Southern Access: The need for a northbound left-turn lane on Somis Road to accommodate left-turns into the Project site was assessed based on criteria outlined in the NCHRP Report 279. That report established guidelines for determining the need for left-turn lanes based on the mix of left-turns and through volumes on 2-lane roadways. The results of the analysis for the Project Southern access on Somis Road shows that a separate left-turn lane is warranted (NCHRP Report 279 warrant graph is contained in the Technical Appendix T-80). There is an existing left-turn lane on Somis Road just south of the proposed new access connection. The existing left-turn lane would be extended to the proposed access connection.

Based on Caltrans Highway Design Manual standards 325 feet of left-turn storage would be sufficient to accommodate the left-turn movements into the Project. As shown on Figure 10, the two proposed driveway connections to State Route 34 are separated by approximately 660 feet. There is adequate distance to accommodate the left-turn lanes without any turning conflict.

Right-Turn Lane Analysis

County staff requested that the Project driveways on Somis Road be evaluated to determine the need for right-turn lanes. There are no specific Caltrans warrant criteria for "Right-Turn" lanes, however given the estimated right-turn volume in the PM peak hour (66) it is recommended that a right-turn lane be provided at the Project's northern access. As discussed previously, the City of Camarillo will construct the Project's southern access connection to Somis Road. The City of Camarillo will be required to construct the southern access connection to County of Ventura and Caltrans design standards. The two access connections to Somis Road will also be designed to County Fire Department design standards to provide emergency vehicles access.

Based on Caltrans Highway Design Manual standards 150 feet of right-turn storage would be sufficient to accommodate the right-turn movements into the Project.

SAFE ROUTES TO SCHOOL

There is a high school located within walking distance of the Project site. The Rancho Campana High School is located at 4235 Mar Vista Drive directly adjacent to the Project's western boundary. The Somis Ranch Farmworker Housing Project (Phase I) will provide cross-access to the high school via a gated access connection to the school parking lot. This will allow students within the Project to walk directly to the high school without having to access major streets.

VENTURA COUNTY GENERAL PLAN CONSISTENCY

Pleasant Valley Road has an adopted LOS "D" standard per Ventura County General Plan policy 4.2.2.3(a). The findings of the traffic study conclude that Pleasant Valley Road west of Las Posas Road currently operates at LOS "E" and will continue to operate at LOS "E" with the addition of Project and cumulative traffic.

Ventura County General Plan policy 4.2.2.5 requires discretionary development that would individually cause a County thoroughfare such as Pleasant Valley Road to operate worse than LOS "D" to be prohibited unless feasible mitigation measures are adopted.

However, Ventura County General Plan policy 4.2.2.5(a) allows for an exception for farmworker housing development. Therefore, the Project is consistent with the Ventura County General Plan.

The County has adopted a Traffic Improvement Fee Program to offset the capital improvement cost required to implement traffic mitigation measures to accommodate cumulative developments within the County. The Project would also be consistent with the Ventura County General Plan by paying the "Traffic Impact Mitigation Fee".

■ ■ ■

STUDY PARTICIPANTS AND REFERENCES

Associated Transportation Engineers

Richard L. Pool, P.E. Principal Engineer
Scott A. Schell, AICP, PTP, Principal Planner
Darryl F. Nelson, Senior Transportation Planner
Jiho Ha, Transportation Engineer I

References

2017 Traffic Volumes on California State Highways, California Department of Transportation.

Ventura County Initial Study Assessment Guidelines - Public Roads and Highways Level of Service, County of Ventura Public Works Agency Transportation Department, 2000.

Highway Capacity Manual, Transportation Research Board, National Research Council, 2000.

Ventura County Congestion Management Program Update, Ventura County Transportation Commission, July 2009.

2040 General Plan Update, Background Report, Ventura County, 2018.

Circulation Element, General Plan, City of Camarillo, 2014.

Persons Contacted

Anitha Balan, Ventura County Public Works Department
Darren Arrieta, Ventura County Public Works Department

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

LEVEL OF SERVICE CRITERIA FOR ROADWAYS

INTERSECTION COUNT DATA

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

Reference 1 - State Route 118/Somis Road

Reference 2 - Las Posas Road/Camino Alvarez

Reference 3 - Somis Road/Las Posas Road

Reference 4 - Upland Road/Flynn Road

Reference 5 - Lewis Road/Adolfo Road

Reference 6 - Lewis Road/Daily Drive

Reference 7 - U.S. Highway 101 Northbound Ramps/Daily Drive

Reference 8 - U.S. Highway 101 Southbound Ramps/Ventura Boulevard

Reference 9 - Lewis Road/Ventura Boulevard

Reference 10 - State Route 118/Santa Clara Avenue

Reference 11 - State Route 118/Grimes Canyon Road

Reference 12 - State Route 118/Balcom Canyon Road

PROJECT TRIP DISTRIBUTION SUMMARY

SIGNAL WARRANTS

LEFT-TURN WARRANT GRAPH

VENTURA COUNTY AND CITY OF CAMARILLO DEVELOPMENT ACTIVITY LISTS

LEVEL OF SERVICE DEFINITIONS

Signalized Intersection Level of Service Definitions

LOS	Delay ^a	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

^a Average control delay per vehicle in seconds.

Unsignalized Intersection Level of Service Definitions

The HCM¹ uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

¹ Highway Capacity Manual, National Research Board, 2000

DISCUSSION OF INTERSECTION CAPACITY UTILIZATION (ICU)

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. The technique used to compare the volumes and capacity of an intersection is known as Intersection Capacity Utilization (ICU). ICU or volume-to-capacity ratio, usually expressed as a percentage, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity, then 20 percent of the signal cycle is not used.

The ICU calculation assumes that an intersection is signalized and that the signal is ideally timed. Although calculating ICU for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient time to satisfy its demand, and excess time exists on other movements. This is an operational problem which should be addressed.

Capacity is often defined in terms of roadway width. However, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Data collected by Kunzman Associates indicates a typical lane, whether a through-lane or a left-turn lane, has a capacity of approximately 1,700 vehicles per hour, with nearly all locations showing a capacity greater than 1,600 vehicles per hour per lane. This finding is published in the August, 1978 issue of ITE Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. For this study, a capacity of 1,600 vehicles per hour per lane will be assumed for left-turn, through, and right-turn lanes as per City policy.

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for less than 10 percent of a cycle, and a penalty of up to five percent is reasonable. On the other hand, during peak hour traffic operation, the yellow times are nearly completely used. In this study, no penalty will be applied for the yellow because the capacities have been assumed to be only 1,600 vehicles per hour per lane when in general they are 1,700-1,800 vehicles per hour per lane.

The ICU technique is an ideal tool to quantify existing as well as future intersection operations. The impact of adding a lane can be quickly determined by examining the effect the lane has on the intersection capacity utilization.

Source: Oxnard Airport Business Park Traffic Study, Kunzman Assoc., City of Oxnard, 1985.

ENGINEERING ROADWAY DESIGN CAPACITIES

FIGURE 4.2.2

AVERAGE DAILY TRAFFIC (ADT) LEVEL OF SERVICE (LOS) THRESHOLDS COUNTY ROADS AND CONVENTIONAL STATE HIGHWAYS					
LOS	CLASS I			CLASS II	CLASS III
	2 LANES	4 LANES	6 LANES	2 LANES	2 LANES
A	2,400	19,000	29,000	1,500	350
B	5,600	28,000	42,000	3,900	2,000
C	10,000	38,000	57,000	7,000	3,300
D	16,000	47,000	70,000	11,000	5,900
E	27,000	58,000	87,000	21,000	16,000

ADT/LOS THRESHOLDS FREEWAYS				
LOS	4 LANES	6 LANES	8 LANES	10 LANES
A	31,000	46,000	62,000	77,000
B	48,000	71,000	95,000	119,000
C	68,000	102,000	136,000	169,000
D	82,000	123,000	164,000	205,000
E	88,000	132,000	176,000	220,000

SOURCE: VENTURA COUNTY PUBLIC WORKS AGENCY 9/94

R. 12/20/94

INTERSECTION COUNT DATA

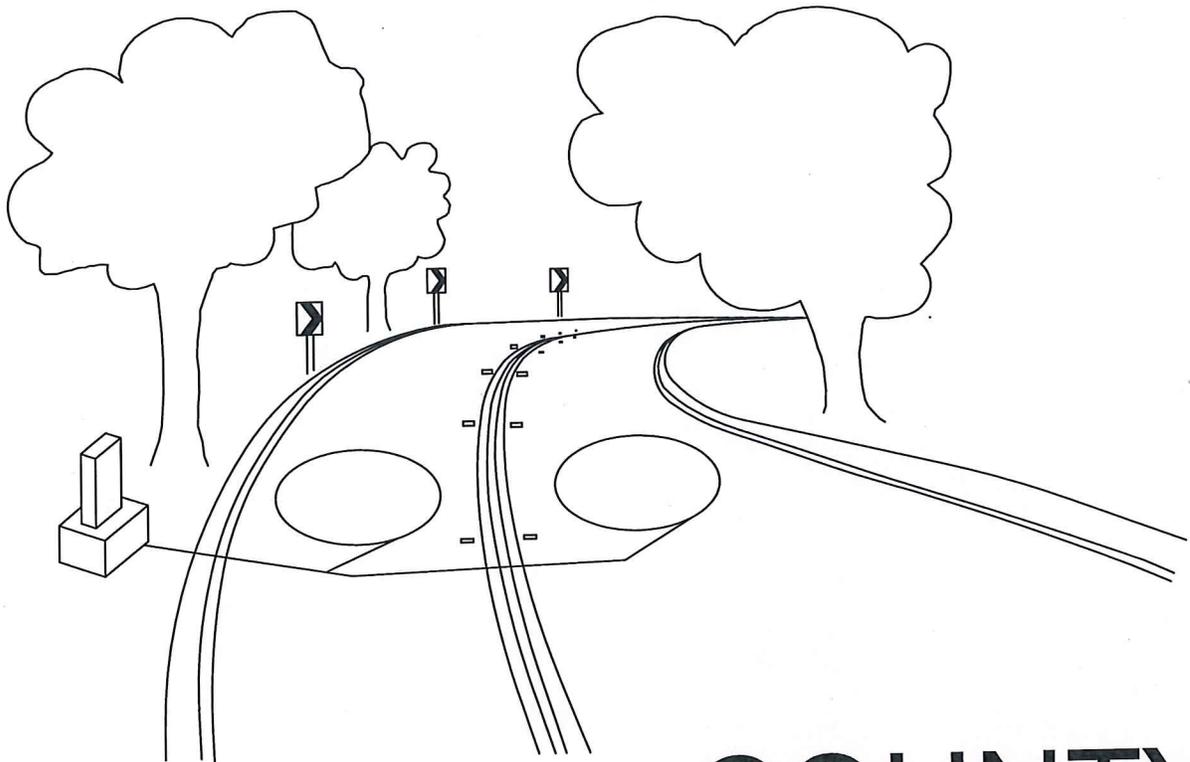


2017 Traffic Volumes : Route 118-133

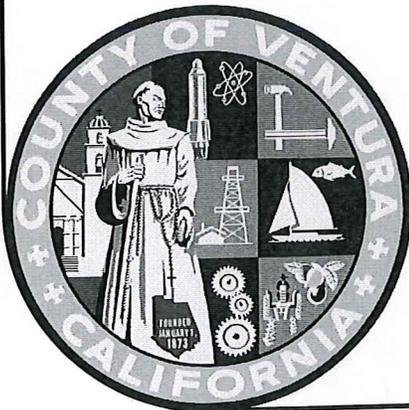
Jump to Route: 1 | 2-4 | 5-6 | 7-10 | 11-15 | 16-20 | 22-33 | 34-43 | 44-50 | 51-59 | 60-70 | 71-80 | 82-86 | 87-91 | 92-98 | 99 | 101 | 103-116 | 118-133 | 134-161 | 162-163 | 164-178 | 180-197 | 198-220 | 221-275 | 280-405 | 505-930

Dist	Rte	Rte Suffix	CO	Post Mile Prefix	Post Mile	Post Mile Suffix	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
07	118		VEN		0.516		VENTURA, JCT. RTE. 126				3950	39000	36000
07	118		VEN	R	1.019		TELEPHONE ROAD	3950	39000	36000	4250	44500	40000
07	118		VEN		2.200		JCT. RTE. 232	3650	39500	35500	3450	26500	24700
07	118		VEN		4.160		SANTA CLARA AVENUE	2450	26500	24700	1400	15100	14000
07	118		VEN		10.920		JCT. RTE. 34	1150	13100	12200	1800	21500	19500
07	118		VEN		14.686		GRIMES CANYON ROAD	1800	21500	19500	1850	22000	20200
07	118		VEN	R	17.494		MOORPARK, WEST JCT. RTE. 23	2450	31500	29000	3200	38500	36000
07	118		VEN	R	17.905		MOORPARK, EAST JCT. RTE. 23	3200	33500	38000	6900	83000	82000
07	118		VEN	T	18.127		MOORPARK, PRINCETON AVENUE	6900	83000	82000	6600	83000	82000
07	118		VEN	T	19.981		MOORPARK, COLLINS DRIVE	6600	83000	82000	7300	82000	77000
07	118		VEN	R	23.022		SIMI VALLEY, MADERA ROAD	7300	82000	77000	8900	98000	94000
07	118		VEN	R	23.821		SIMI VALLEY, FIRST STREET	6900	98000	94000	10300	114000	108000
07	118		VEN	R	24.808		SIMI VALLEY, ERRINGER ROAD	10300	114000	108000	12100	130000	122000
07	118		VEN	R	25.813		SIMI VALLEY, SYCAMORE DRIVE	12100	130000	122000	11100	140000	129000
07	118		VEN	R	27.304		SIMI VALLEY, TAPO CANYON ROAD	11100	140000	129000	12500	152000	139000
07	118		VEN	R	28.815		SIMI VALLEY, STEARNS STREET	12500	152000	139000	11900	144000	132000
07	118		VEN	R	29.563		SIMI VALLEY, YOSEMITE STREET	11900	144000	132000	11300	138000	126000
07	118		VEN	R	30.521		SIMI VALLEY, KUJHNER DRIVE	11300	136000	126000	11700	121000	119000
07	118		VEN	R	32.427		SIMI VALLEY, ROCKY PEAK ROAD	11700	121000	119000	11600	120000	118000
07	118		VEN	R	32.600		VENTURA/LOS ANGELES COUNTY LINE	11600	120000	118000			
07	118		LA	R	0.000		VENTURA/LOS ANGELES COUNTY LINE				11600	120000	118000
07	118		LA	R	1.799		LOS ANGELES, JCT. RTE. 27	11600	120000	118000	13400	139000	137000
07	118		LA	R	2.680		LOS ANGELES, DE SOTO AVENUE	13400	139000	137000	15100	166000	163000
07	118		LA	R	3.864		LOS ANGELES, PORTER RANCH DR/WINNETKA AVE	15100	166000	163000	15300	168000	165000
07	118		LA	R	4.839		LOS ANGELES, TAMPA AVENUE	15300	168000	165000	18200	203000	200000
07	118		LA	R	5.804		LOS ANGELES, RESEDA BOULEVARD	18200	203000	200000	20100	228000	224000
07	118		LA	R	6.800		LOS ANGELES, WHITE OAK AVENUE	20100	228000	224000	20100	228000	224000
07	118		LA	R	7.800		LOS ANGELES, BALBOA BOULEVARD	20100	228000	224000	20200	241000	236000
07	118		LA	R	8.343		LOS ANGELES, HAYVENHURST AVENUE	20200	241000	236000	20300	258000	252000
07	118		LA	R	9.037		LOS ANGELES, WOODLEY AVENUE	20300	258000	252000	19500	252000	245000
07	118		LA	R	9.805		LOS ANGELES, JCT. RTE. 405	19500	252000	245000	20000	251000	244000
07	118		LA	R	10.997	R	BEGIN RIGHT ALIGN				10000	126000	122000
07	118		LA	R	11.447	R	LOS ANGELES, JCT. RTE. 5	10000	126000	122000	7600	85000	82000
07	118		LA	R	11.822	R	LOS ANGELES, END RIGHT ALIGN	7600	85000	82000			
07	118		LA	R	10.997	L	LOS ANGELES, BEGIN LEFT ALIGN				7600	85000	82000
07	118		LA	R	11.818	L	LOS ANGELES, END LEFT ALIGN	7600	85000	82000			
07	118		LA	R	12.385		LOS ANGELES, SAN FERNANDO ROAD	15100	170000	164000	13900	154000	149000
07	118		LA	R	13.182		LOS ANGELES, GLENOAKS BOULEVARD	13900	154000	149000	10400	119000	115000
07	118		LA	R	14.080		LOS ANGELES, JCT. RTE. 210	10400	119000	115000			
06	119		KER		0.000		TAFT, JCT. RTE. 33				550	5600	5200
06	119		KER		0.340		TAFT, EAST KERN STREET	550	5600	5200	740	7800	7400
06	119		KER		0.830		TAFT, SECOND STREET	670	6500	6100	800	8500	8000
06	119		KER		2.140		HARRISON STREET	540	5900	5400	790	8400	7900
06	119		KER	R	13.290		TUPMAN ROAD	1450	13900	12700	1600	15200	13700
06	119		KER		18.173		JCT. RTE. 43 NORTH	1450	14400	13000	730	7500	6600
06	119		KER		19.773		JCT. RTE. 5	830	7500	6600	920	8200	7200
06	119		KER		25.260		BUENA VISTA ROAD	1400	13200	10900	1100	10600	8700
06	119		KER		26.520		EAST LIMITS OLD RIVER	1100	10600	8700	1100	13100	11300
06	119		KER		30.410		WIBLE ROAD	1250	14600	12600	1450	17500	15600
06	119		KER		31.283		JCT. RTE. 99	1450	17500	15600			
10	120		SJ	R	0.493		MOSSDALE, JCT. RTE. 5				6200	81000	79000
10	120		SJ	R	1.328		YOSEMITE AVENUE UIC	6100	81000	79000	4500	68000	66000
10	120		SJ	R	3.323		AIRPORT WAY	5700	66000	84000	5300	73000	71000
10	120		SJ	R	5.310		MANTECA ROAD/MAIN STREET	6100	84000	82000	5100	79000	77000
10	120		SJ	T	6.870		SOUTH JCT. RTE. 99	5000	78000	67000	1650	18500	14100
10	120		SJ		6.197		MANTECA, NORTH JCT. RTE. 99	1650	18500	14100	1650	18500	14100
10	120		SJ		6.830		AUSTIN ROAD	1650	18500	14100	1600	17800	13200

2018
TRAFFIC VOLUMES
OF VENTURA COUNTY ROADWAYS



COUNTY
OF
VENTURA



PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
VENTURA, CALIFORNIA

2018
TRAFFIC VOLUMES
ON
VENTURA COUNTY ROADWAYS

Prepared By
Transportation Department
Public Works Agency
County of Ventura
800 S. Victoria Avenue
Ventura, California 93009-1620

PREFACE

Traffic Volumes

This report lists vehicle traffic volumes obtained by the Ventura County Transportation Department for various roadway locations within the unincorporated area of Ventura County. The Vehicles Per Day (VPD), the morning peak hour volume, and the evening peak hour volume are listed for each location counted. Traffic counts from the four previous years are also shown. All traffic volume figures listed reflect combined totals for both directions of travel.

Vehicles Per Day (VPD)

Vehicles Per Day in this report is defined as the total traffic counted on an average weekday. The VPD volume is rounded to the nearest one hundred vehicles. A countywide program of regular and systematic traffic count sampling is conducted through the use of permanent count stations using loop detection and mechanical counting devices moved from location to location. The traffic counts are useful for presenting a countywide picture of traffic flow, evaluating traffic trends, computing accident rates, roadway planning, designing highways and other traffic oriented purposes.

Hourly AM/PM Peak Hour Traffic

Hourly AM/PM Peak is defined as the total traffic count during the highest volume hour in the morning/afternoon on an average weekday. The volume is then rounded to the nearest ten vehicles. This data is useful for evaluating highway capacity and other traffic operational studies.

Average Annual Growth (AAG)

Average annual growth shows short-term growth pattern from the previous five years.

Special Counts (Appendix A)

Vehicle traffic volumes showing the VPD, AM and PM Peak, obtained during studies on non-master count roadways, are compiled in Appendix A at the end of this document. The duration of these counts vary as indicated. These locations are typically off the arterial road system. Special counts can be useful for general information, road maintenance planning and neighborhood traffic studies.

Legend

e/o	:	East of
n/o	:	North of
s/o	:	South of
w/o	:	West of

LOCATION	2014	2015	2016	2017	2018	2018 HOURLY PEAK		AAG
	ADT	ADT	ADT	ADT	ADT	AM PEAK	PM PEAK	
AGGEN RD								
n/o L.A. Ave (SR118)	700	600	400	600	550	50	60	-4.82%
BALCOM CANYON RD								
s/o South Mountain Rd	1700	2000	2200	2300	3000	320	430	11.36%
n/o L.A. Ave (SR118)	2400	2800	2600	2900	3000	220	240	4.46%
BARSDALE AVE								
e/o Sespe St	1400	1500	1500	1700	1600	200	210	2.67%
BEARDSLEY RD								
n/o Central Ave	2600	2500	2400	2300	2500	190	170	-0.78%
BENNETT RD								
n/o Tapo Canyon Rd	1200	1100	1100	900	900	90	10	-5.75%
BOX CANYON RD								
s/o Santa Susana Pass Rd	4000	4000	4300	4600	4700	640	500	3.23%
BRADLEY RD								
n/o L.A. Ave (SR118)	2300	2500	2500	2700	3100	220	290	5.97%
BRIGGS RD								
s/o Telegraph Rd	3300	3600	3400	3700	3700	330	360	2.29%
n/o Telegraph Rd	1100	1300	1400	1500	1400	200	160	4.82%
BRISTOL RD								
w/o Montgomery Ave	9900	10300	10300	1100	10800	940	1000	1.74%
BROADWAY								
w/o Grimes Cyn Rd (SR23)	2400	2600	2600	2700	2300	270	300	-0.85%
BURNHAM RD								
s/o Baldwin Rd (SR150)	2300	2200	2400	2300	2600	240	300	2.45%
e/o Santa Ana Rd	2100	1900	2000	1900	2100	200	290	0.00%
CALLE YUCCA								
n/o Camino Manzanas	1700	1800	1600	1600	1800	150	160	1.14%
CAMINO DOS RIOS								
w/o Lynn Rd	3400	3100	3100	3300	3300	350	270	-0.60%
CANADA LARGA RD								
e/o Ventura Ave	2400	2700	2600	2400	2000	200	180	-3.65%
CARNE RD								
n/o Ojai Ave (SR150)	800	800	800	900	700	120	90	-2.67%

LOCATION	2014 ADT	2015 ADT	2016 ADT	2017 ADT	2018 ADT	2018 HOURLY PEAK		AAG
						AM PEAK	PM PEAK	
CASITAS VISTA RD								
w/o Ojai Fwy (SR33)	2400	2500	2500	2400	2600	210	240	1.60%
CAWELTI RD								
w/o Lewis Rd	1700	1900	1800	2100	2000	200	280	3.25%
CENTER SCHOOL RD								
s/o L.A. Ave (SR118)	1700	1800	1700	1900	1900	190	180	2.22%
CENTER ST (Piru)								
w/o Telegraph Rd (SR126)	900	900	800	900	900	80	100	0.00%
CENTRAL AVE								
w/o Ventura Fwy (US101)	13800	14400	14200	13400	17200	1710	1350	4.40%
w/o Santa Clara Ave	8700	9300	9000	9100	8800	1060	1050	0.23%
e/o Vineyard Ave (SR232)	8700	9400	9800	10600	10700	1450	1100	4.14%
CHANNEL ISLANDS BLVD								
w/o Rice Ave	10700	1100	10800	10800	10900	920	1160	0.37%
CREEK RD								
e/o Country Club Dr	2500	2600	2700	2900	3000	260	290	3.65%
e/o Ventura Ave (SR33)	2800	3000	3100	3300	3300	270	330	3.29%
DEER CREEK RD								
n/o Pacific Coast Hwy (SR1)	300	300	300	300	300	40	30	0.00%
DEERHILL RD								
n/o Kanan Rd	5500	5700	5500	5500	5700	660	600	0.71%
DEL NORTE RD								
s/o Rancho Dr	400	400	300	300	300	30	40	-5.75%
DONLON RD								
n/o L.A. Ave (SR118)	2100	1700	1800	2000	1900	170	160	-2.00%
DORIS AVE								
e/o Victoria Ave	4000	4300	4200	4200	4400	430	410	1.91%
EL ROBLAR DR								
w/o Maricopa Hwy (SR33)	7800	7900	8000	7700	7800	790	790	0.00%
ETTING RD								
e/o Dodge Rd	2600	2700	2600	2600	2100	280	240	-4.27%
FAIRVIEW RD								
e/o Maricopa Hwy (SR33)	800	800	900	900	900	100	80	2.36%

LOCATION	2014	2015	2016	2017	2018	2018 HOURLY PEAK		AAG
	ADT	ADT	ADT	ADT	ADT	AM PEAK	PM PEAK	
FAIRWAY DR								
n/o Valley Vista Dr	3000	3200	3100	3100	3100	250	280	0.66%
W FIFTH ST								
e/o Harbor Blvd	5100	5100	4900	5400	5400	440	470	1.14%
FOOTHILL RD								
w/o Peck Rd	1600	1600	1600	1900	2400	240	220	8.11%
w/o Briggs Rd	1800	1900	2000	2200	2000	300	330	2.11%
e/o Wells Rd	2300	2400	2500	2800	2800	360	400	3.93%
e/o Saticoy Ave	3800	4100	4000	4100	3900	430	410	0.52%
GONZALES RD								
e/o Harbor Blvd	3900	4100	4000	4300	4000	330	390	0.51%
GRAND AVE								
e/o Fordyce Rd	2600	2000	2200	2000	2000	260	230	-5.25%
w/o Fordyce Rd	2100	2000	2200	2000	2100	270	240	0.00%
GRIMES CANYON RD								
n/o L.A. Ave (SR118)	2600	2800	3000	3300	3500	340	360	5.95%
GUIBERSON RD								
e/o Chambersburg Rd (SR23)	900	900	900	900	1000	90	120	2.11%
HARBOR BLVD								
n/o Gonzales Rd	18800	19900	19800	22000	21700	1860	2180	2.87%
s/o Gonzales Rd	17600	---	17700	19500	20200	1700	2030	3.44%
HITCH BLVD								
s/o L.A. Ave (SR118)	2400	2500	2700	2500	2600	200	240	1.60%
HOWE RD								
e/o Torrey Rd	500	500	800	800	800	80	90	9.40%
HUENEME RD								
e/o Las Posas Rd	10300	11200	11200	12200	12800	1320	1370	4.35%
e/o Nauman Rd	10100	10500	10800	11100	11300	930	1220	2.25%
e/o Wood Rd	9900	10400	10500	11200	10300	1080	920	0.79%
w/o Olds Rd	12300	12300	12600	14800	15500	1360	1590	4.62%
KANAN RD								
e/o Lindero Canyon Rd	14900	14100	14300	13800	13600	1830	1520	-1.83%
e/o Hollytree Dr / Oak Hills Dr	14700	13600	13600	12700	---	---	---	-3.66%
s/o Tamarind St	21100	21200	21200	18900	20100	1820	1840	-0.97%

LOCATION	2014 ADT	2015 ADT	2016 ADT	2017 ADT	2018 ADT	2018 HOURLY PEAK		AAG
						AM PEAK	PM PEAK	
LA LUNA AVE								
s/o Lomita Ave	4000	4100	4100	4300	4400	400	350	1.91%
LA VISTA AVE								
n/o L.A. Ave (SR118)	1100	1000	800	1000	800	110	100	-6.37%
LAGUNA RD								
e/o Pleasant Valley Rd	1800	2200	2000	1900	1900	340	190	1.08%
n/o Hueneme Rd	1900	2100	2000	2200	2400	200	300	4.67%
LAS POSAS RD								
n/o E Fifth St (SR34)	8400	8400	8100	9100	9600	640	940	2.67%
s/o E Fifth St (SR34)	8800	8900	9200	10100	10100	720	1420	2.76%
s/o Hueneme Rd	6100	6100	6200	6800	6800	560	920	2.17%
E LAS POSAS RD								
n/o Santa Rosa Rd	2700	2600	2700	2900	3200	260	260	3.40%
LEWIS RD								
s/o Pleasant Valley Rd	14900	15500	16400	18700	19700	1830	2080	5.59%
n/o Potrero Rd	8800	9500	9600	10500	11600	1020	1270	5.53%
LOCKWOOD VALLEY RD								
w/o Kern County Line	800	800	900	900	900	80	90	2.36%
e/o Maricopa Hwy (SR33)	200	400	100	200	100	10	20	-13.86%
LOMITA AVE								
e/o Tico Rd	4100	4100	4100	4300	4300	490	380	0.95%
MAIN ST (Piru)								
n/o Telegraph Rd (SR126)	4200	4200	4200	4800	3800	310	350	-2.00%
McANDREW RD								
n/o Reeves Rd	500	500	500	400	500	50	50	0.00%
MOORPARK RD								
n/o Santa Rosa Rd	16200	17100	17200	17800	20700	2490	1780	4.90%
OLD TELEGRAPH RD								
w/o Grand Ave	3600	4200	4500	4400	4100	370	410	2.60%
OLDS RD								
n/o Hueneme Rd	1600	1800	1800	1800	1900	210	250	3.44%
OLIVAS PARK DR								
w/o Victoria Ave	11500	12000	11800	12300	12400	820	1290	1.51%

LOCATION	2014	2015	2016	2017	2018	2018 HOURLY PEAK		AAG
	ADT	ADT	ADT	ADT	ADT	AM PEAK	PM PEAK	
PANAMA DR								
s/o Lake Shore Dr	500	400	400	400	300	40	30	-10.22%
PASADENA AVE								
e/o Sespe St	200	300	300	400	400	30	60	13.86%
PATTERSON RD								
s/o Doris Ave	1000	1000	1100	1000	1050	230	160	0.98%
PIRU CANYON RD								
n/o Orchard St	500	500	500	700	600	73	60	3.65%
PLEASANT VALLEY RD								
s/o E Fifth St (SR34)	15600	15900	16300	17000	16200	1550	1500	0.75%
w/o Las Posas Rd	14500	14400	14700	16100	15000	1300	1440	0.68%
POTRERO RD								
e/o Lake Sherwood Dr (E)	6400	8600	9000	8700	8600	720	680	5.91%
w/o Stafford Rd	3200	3400	3500	3600	3500	320	300	1.79%
w/o Hidden Valley Rd	1900	2300	2200	2300	2300	210	310	3.82%
Milepost 2.75	3200	3400	3400	3700	3800	600	520	3.44%
e/o Lewis Rd	5000	4800	4800	5000	4700	650	560	-1.24%
PRICE RD								
n/o L.A. Ave (SR118)	400	600	400	500	400	50	40	0.00%
RICE AVE								
s/o E Fifth St (SR34)	31300	31700	32400	37200	36700	2500	2700	3.18%
n/o Channel Islands Blvd	27100	26200	26700	31200	30000	2300	3000	2.03%
n/o Hueneme Rd	3600	3600	3800	5100	---	---	---	8.71%
RICE RD (Meiners Oaks)								
s/o Lomita Ave	2000	2100	2100	2100	2000	180	190	0.00%
RIVERSIDE AVE								
w/o Chambersburg Rd (SR23)	700	700	700	700	900	60	150	5.03%
ROSE AVE								
s/o L.A. Ave (SR118)	7700	8300	8600	9800	9100	640	800	3.34%
s/o Central Ave	11200	10500	11100	12400	11100	805	1380	-0.18%
n/o Collins St	17600	18700	18300	16900	18500	1880	1700	1.00%
SANTA ANA BLVD								
e/o Riverside Rd	2300	2200	2400	2400	2400	200	220	0.85%
s/o Baldwin Rd (SR150)	1000	1000	1000	900	700	70	120	-7.13%
s/o Santa Ana Blvd	2000	1900	1900	1800	2100	250	210	0.98%

LOCATION	2014 ADT	2015 ADT	2016 ADT	2017 ADT	2018 ADT	2018 HOURLY PEAK		AAG
						AM PEAK	PM PEAK	
SANTA CLARA AVE								
n/o Friedrich Rd	13100	12900	13200	14600	15100	1500	1480	2.84%
s/o L.A. Ave (SR118)	16100	15400	15700	16600	18500	1850	1440	2.78%
SANTA ROSA RD								
w/o Moorpark Rd	20200	19700	19700	22100	22100	2130	2240	1.80%
w/o E Las Posas Rd	15100	16500	16700	15500	14800	1380	1350	-0.40%
SANTA SUSANA PASS RD								
e/o Katherine Rd	4600	4800	4700	4700	4500	460	510	-0.44%
SESPE ST								
n/o South Mountain Rd	1700	1900	2100	2100	2700	230	330	9.25%
s/o Pasadena Ave	600	600	600	700	700	60	100	3.08%
SOUTH MOUNTAIN RD								
e/o Balcom Canyon Rd	1800	1900	2000	2200	2100	250	270	3.08%
s/o Santa Clara River	---	3900	3900	3700	3800	350	460	-0.65%
STOCKTON RD								
e/o Balcom Canyon Rd	1100	1200	1100	1100	1000	90	80	-1.91%
STURGIS RD								
w/o Pleasant Valley Rd	3400	3800	3700	3900	4500	420	790	5.61%
TAPO CANYON RD								
s/o Bennett Rd	1400	1700	1600	1600	1300	110	130	-1.48%
TELEGRAPH RD								
w/o Briggs Rd	5000	5000	5400	6300	7600	900	1170	8.37%
w/o Hallock Dr	---	---	---	---	---	---	---	---
w/o Olive Rd	5500	5500	5700	6400	7300	780	1160	5.66%
TELEPHONE RD								
n/o Olivias Park Dr	12700	13600	13500	12800	12400	900	1200	-0.48%
TICO RD								
n/o Ventura Ave (SR150)	3100	3100	3000	3200	3000	270	260	-0.66%
TIERRA REJADA RD								
e/o Moorpark Fwy (SR23)	16100	16300	16300	18900	24900	2270	3260	8.72%
TORREY RD								
s/o Telegraph Rd (SR126)	500	500	800	500	750	70	80	8.11%
VALLEY VISTA DR								
s/o Calle Aurora	5400	5600	5300	5500	5500	430	460	0.37%

LOCATION	2014 ADT	2015 ADT	2016 ADT	2017 ADT	2018 ADT	2018 HOURLY PEAK		AAG
						AM PEAK	PM PEAK	
VENTURA AVE								
n/o Canada Larga Rd	800	800	800	900	900	80	90	2.36%
n/o Shell Rd	6000	6000	6100	5900	5500	360	490	-1.74%
VICTORIA AVE								
s/o Olivas Park Dr	44500	44900	42500	43700	44900	3430	3850	0.18%
VILLANOVA RD								
e/o Ventura Ave (SR33)	2200	2400	2500	2500	2600	220	280	3.34%
WALNUT AVE								
n/o L.A. Ave (SR118)	500	400	400	500	400	50	50	-4.46%
WENDY DR								
n/o Gerald Dr	12600	13100	13100	13400	14200	1120	1200	2.39%
WOOD RD								
s/o Hueneme Rd	1900	1900	1700	1700	1400	190	120	-6.11%
s/o E Fifth St (SR34)	1300	1200	1100	1000	1000	140	90	-5.25%
WOOLEY RD								
w/o Rice Ave	9500	9700	9900	9300	10300	840	980	1.62%
WRIGHT RD								
e/o Santa Clara Ave	1400	1400	1300	1300	1200	150	130	-3.08%
YERBA BUENA RD								
n/o Pacific Coast Hwy (SR1)	600	700	700	600	600	40	50	0.00%

2018 SPECIAL COUNTS

Road	Location	2018 ADT	AM PEAK	PM PEAK	DAYS COUNTED
Barranca Rd	1335 ft e/o Palo Verde Ct	196	20	23	1
Camino Concordia	200 ft w/o Camino Portada	870	81	79	1
Happy Camp Rd	1000 ft n/o Broadway	1076	89	100	1
Matilija Rd	3258 N Matilija Rd	196	26	31	1
Medea Creek Lane	600 ft s/o Oak Hills Dr	1329	191	142	1
Santa Clara Ave	MB Ventura Blvd and Eucalyptus Dr	17763	1426	1826	1
Sunnycrest Dr	100 ft e/o Countryside Rd	978	83	90	1
Wheeler Canyon Road	1000 ft n/o Wheeler Canyon Rd	770	36	46	1

2018 APPROACH COUNTS

Road	Location	2018 ADT	AM 3HR PEAK	PM 3HR PEAK	DAYS COUNTED
El Roblar Drive	Poli St at El Roblar Dr - North Bound	167	28	50	1
El Roblar Drive	Poli St at El Roblar Dr - South Bound	132	27	42	1
El Roblar Drive	Alvarado St at El Roblar Dr - North Bound	89	30	17	1
El Roblar Drive	Alvarado St at El Roblar Dr - South Bound	120	27	30	1
El Roblar Drive	Encinal Dr at El Roblar Dr - North Bound	81	21	11	1
El Roblar Drive	Encinal Dr at El Roblar Dr - South Bound	111	27	28	1

INTERSECTION COUNT DATA

SR-34 & SR-118

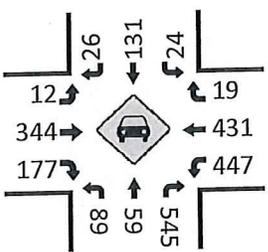
Peak Hour Turning Movement Count

ID: 19-05117-001
City: Somis

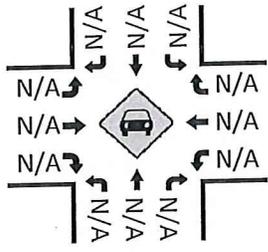
Day: Tuesday
Date: 03/12/2019

SR-34 SOUTHBOUND		SR-118 EASTBOUND		SR-118 WESTBOUND	
AM	26	131	24	0	90
NOON	0	0	0	0	0
PM	17	129	26	0	154
CONTROL		AM NOON PM		PM NOON AM	
0		546 0 322		0 9 0 19	
TEV		0 0 0		0 217 0 431	
2304		12 0 11		0 362 0 447	
AM		344 0 301		0 0 0 0	
NOON		177 0 116		953 0 913	
PM		0 0 0		PM NOON AM	
0.92		AM NOON PM		608 1 88 134 626	
0.84		608 1 88 134 626		NOON 0 0 0 0	
		AM NOON PM		AM 755 0 89 59 545	

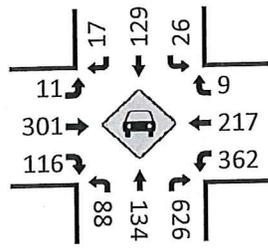
Total Vehicles (AM)



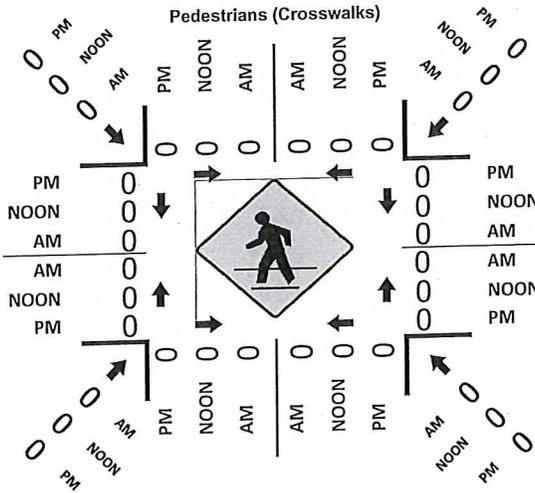
Total Vehicles (Noon)



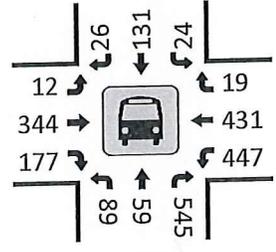
Total Vehicles (PM)



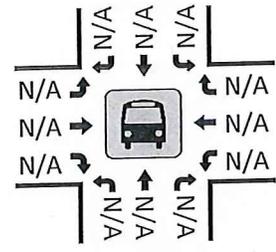
SR-34 NORTHBOUND		SR-118 WESTBOUND	
AM	26	131	24
NOON	0	0	0
PM	17	129	26
AM	12	344	11
NOON	0	0	0
PM	0	0	0
AM	344	0	301
NOON	177	0	116
PM	0	0	0
AM	608	1	88
NOON	0	0	0
PM	755	0	89
AM	19	431	447
NOON	9	0	19
PM	217	0	431
AM	362	0	447
NOON	0	0	0
PM	953	0	913



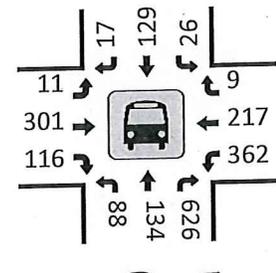
(AM)



(NOON)



(PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-34 & SR-118

City: Somis

Control:

Project ID: 19-05117-001

Date: 3/12/2019

Total

NS/EW Streets:	SR-34										SR-118										SR-118									
	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND					TOTAL				
	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	WL	WT	WR	WU	0	WL	WT	WR	WU	0	TOTAL				
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:00 AM	26	34	107	0	0	8	13	1	0	0	24	73	31	0	0	94	110	3	0	0	0	0	0	0	0	0	524			
7:15 AM	12	19	115	0	0	4	29	9	0	0	5	98	50	0	0	104	138	9	0	0	0	0	0	0	0	0	592			
7:30 AM	26	10	127	0	0	9	35	3	0	0	0	72	49	0	0	107	107	5	0	0	0	0	0	0	0	550				
7:45 AM	23	10	163	0	0	7	46	10	0	0	3	90	46	0	0	123	106	2	0	0	0	0	0	0	0	629				
8:00 AM	28	20	140	0	0	4	21	4	0	0	4	84	32	0	0	113	80	3	0	0	0	0	0	0	0	533				
8:15 AM	15	10	151	0	0	6	13	2	0	0	4	96	37	0	0	122	78	3	0	0	0	0	0	0	0	537				
8:30 AM	23	5	107	0	0	5	30	3	0	0	3	100	34	0	0	109	96	6	0	0	0	0	0	0	0	521				
8:45 AM	15	16	94	0	0	6	23	0	0	0	1	104	34	0	0	107	102	2	0	0	0	0	0	0	0	504				
TOTAL VOLUMES :	168	124	1004	0	0	49	210	32	0	0	44	717	313	0	0	879	817	33	0	0	0	0	0	0	0	4390				
APPROACH %'s :	12.96%	9.57%	77.47%	0.00%	0.00%	16.84%	72.16%	11.00%	0.00%	0.00%	4.10%	66.76%	29.14%	0.00%	0.00%	50.84%	47.25%	1.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.916				
PEAK HR :	89	59	545	0	0	24	131	26	0	0	12	344	177	0	0	447	431	19	0	0	0	0	0	0	0	2304				
PEAK HR VOL :	0.795	0.738	0.836	0.000	0.000	0.667	0.712	0.650	0.000	0.000	0.600	0.878	0.885	0.000	0.000	0.909	0.781	0.528	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.916				
PEAK HR FACTOR :	0.884					0.718					0.871					0.893										0.916				
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:00 PM	1	64	123	3	0	9	66	0	0	0	0	50	40	0	0	68	0	1	0	0	0	0	0	0	0	425				
4:15 PM	0	47	125	0	0	10	79	0	0	0	3	62	44	0	0	74	0	1	0	0	0	0	0	0	0	445				
4:30 PM	0	60	151	1	0	12	62	0	0	0	2	44	31	0	0	78	0	2	0	0	0	0	0	0	0	443				
4:45 PM	0	65	148	3	0	6	53	0	0	0	1	35	43	0	0	78	0	1	0	0	0	0	0	0	0	433				
5:00 PM	0	47	135	1	0	11	39	0	0	0	4	59	41	0	0	78	0	1	0	0	0	0	0	0	0	416				
5:15 PM	6	56	148	0	0	9	50	3	0	0	2	60	26	0	0	78	1	1	0	0	0	0	0	0	0	440				
5:30 PM	38	13	180	0	0	6	22	9	0	0	1	67	26	0	0	106	101	3	0	0	0	0	0	0	0	572				
5:45 PM	44	18	163	0	0	0	18	5	0	0	4	115	23	0	0	100	115	4	0	0	0	0	0	0	0	609				
TOTAL VOLUMES :	89	370	1173	8	0	63	389	17	0	0	17	492	274	0	0	660	217	14	0	0	0	0	0	0	0	3783				
APPROACH %'s :	5.43%	22.56%	71.52%	0.49%	0.00%	13.43%	82.94%	3.62%	0.00%	0.00%	2.17%	62.84%	34.99%	0.00%	0.00%	74.07%	24.35%	1.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.836				
PEAK HR :	88	134	626	1	0	26	129	17	0	0	11	301	116	0	0	362	217	9	0	0	0	0	0	0	0	2037				
PEAK HR VOL :	0.500	0.598	0.869	0.250	0.000	0.591	0.645	0.472	0.000	0.000	0.688	0.654	0.707	0.000	0.000	0.854	0.472	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.836				
PEAK HR FACTOR :	0.919					0.694					0.754					0.671										0.836				

Camino Alvarez/High School Dwy & Las Posas Rd

Peak Hour Turning Movement Count

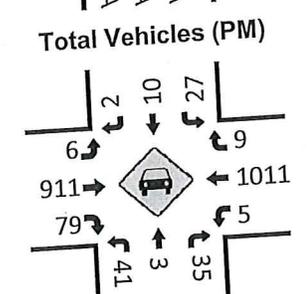
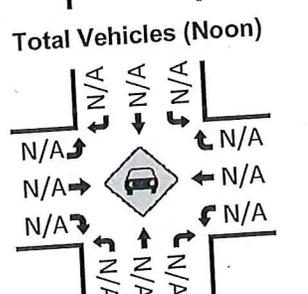
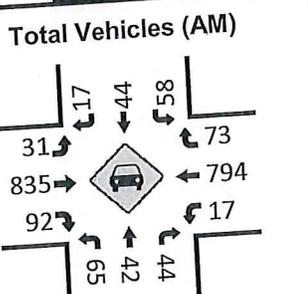
ID: 19-05117-008
City: Somis

Day: Tuesday
Date: 03/12/2019

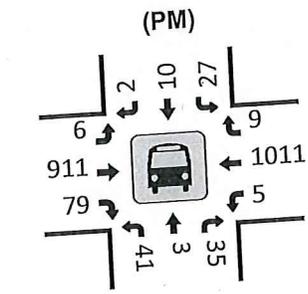
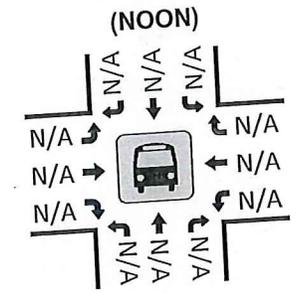
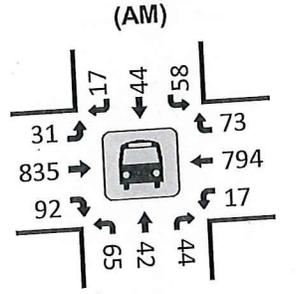
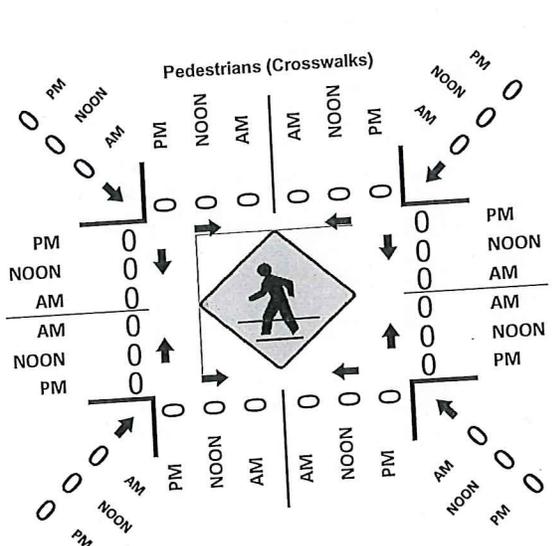
PEAK HOURS	Camino Alvarez/High School Dwy					COUNT PERIODS
	AM	NOON	PM	AM	NOON	
07:30 AM - 08:30 AM	17	44	58	0	146	07:00 AM - 09:00 AM
NONE	0	0	0	0	0	NONE
04:30 PM - 05:30 PM	2	10	27	0	18	04:00 PM - 06:00 PM

Las Posas Rd	EASTBOUND			Las Posas Rd	WESTBOUND		
	AM	NOON	PM		PM	NOON	AM
	876	0	1054		9	0	73
	0	0	0		1011	0	794
	31	0	6		5	0	17
	835	0	911		0	0	0
	92	0	79		973	0	937

CONTROL		
0		
TEV	2112	0
	AM	NOON
PHF	0.87	0.97
	AM	PM



Camino Alvarez/High School Dwy	NORTHBOUND			
	AM	NOON	PM	AM
PM	94	0	41	3
NOON	0	0	0	0
AM	153	0	65	42



National Data & Surveying Services

Intersection Turning Movement Count

Location: Camino Alvarez/High School
 City: Somis
 Control: **Total**
 Project ID: 19-05117-008
 Date: 3/12/2019

NS/EW Streets:	Camino Alvarez/High School Dwy						Camino Alvarez/High School Dwy						Las Posas Rd					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	5	9	5	0	4	0	1	0	2	105	13	0	2	52	7	0	205	
7:15 AM	10	21	12	0	13	16	0	0	7	133	22	0	2	89	27	0	352	
7:30 AM	20	32	12	0	32	28	12	0	24	203	32	0	7	147	59	0	608	
7:45 AM	19	6	12	0	21	14	5	0	4	233	24	0	3	219	9	0	569	
8:00 AM	10	2	12	0	1	0	0	0	1	221	18	0	2	191	1	0	459	
8:15 AM	16	2	8	0	4	2	0	0	2	178	18	0	5	237	4	0	476	
8:30 AM	16	4	12	0	3	2	0	0	0	127	24	0	4	169	3	0	364	
8:45 AM	12	9	11	0	5	4	1	0	0	135	24	0	1	175	7	0	384	
TOTAL VOLUMES:	108	85	84	0	83	66	19	0	40	1335	175	0	26	1279	117	0	3417	
APPROACH %'s:	38.99%	30.69%	30.32%	0.00%	49.40%	39.29%	11.31%	0.00%	2.58%	86.13%	11.29%	0.00%	1.83%	89.94%	8.23%	0.00%		
PEAK HR:	07:30 AM	08:30 AM			07:30 AM				07:30 AM									
PEAK HR VOL:	65	42	44	0	58	44	17	0	31	835	92	0	17	794	73	0	2112	
PEAK HR FACTOR:	0.813	0.328	0.917	0.000	0.453	0.393	0.354	0.000	0.323	0.896	0.719	0.000	0.607	0.838	0.309	0.000	0.868	
											0.918						0.898	

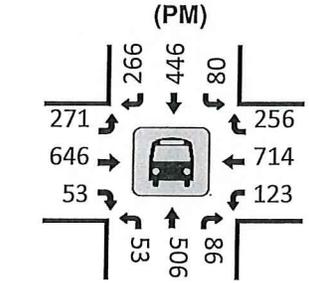
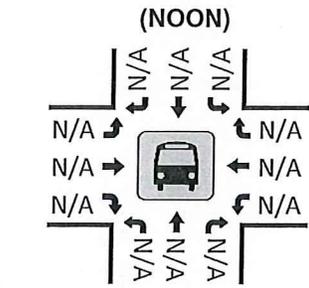
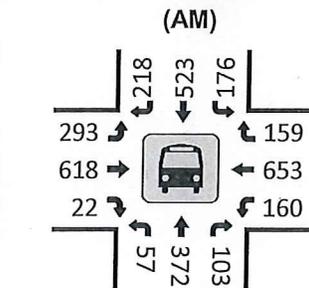
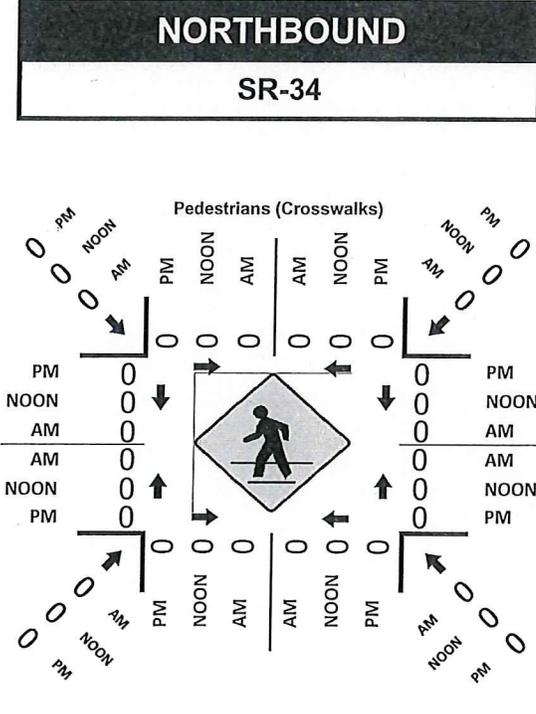
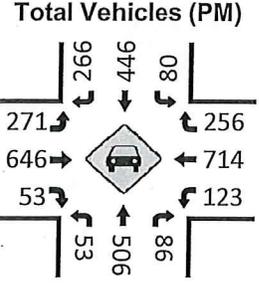
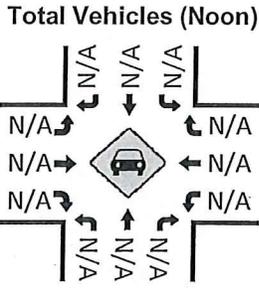
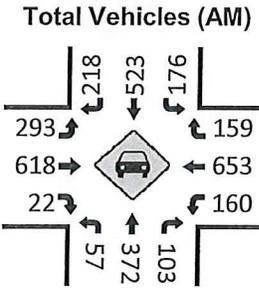
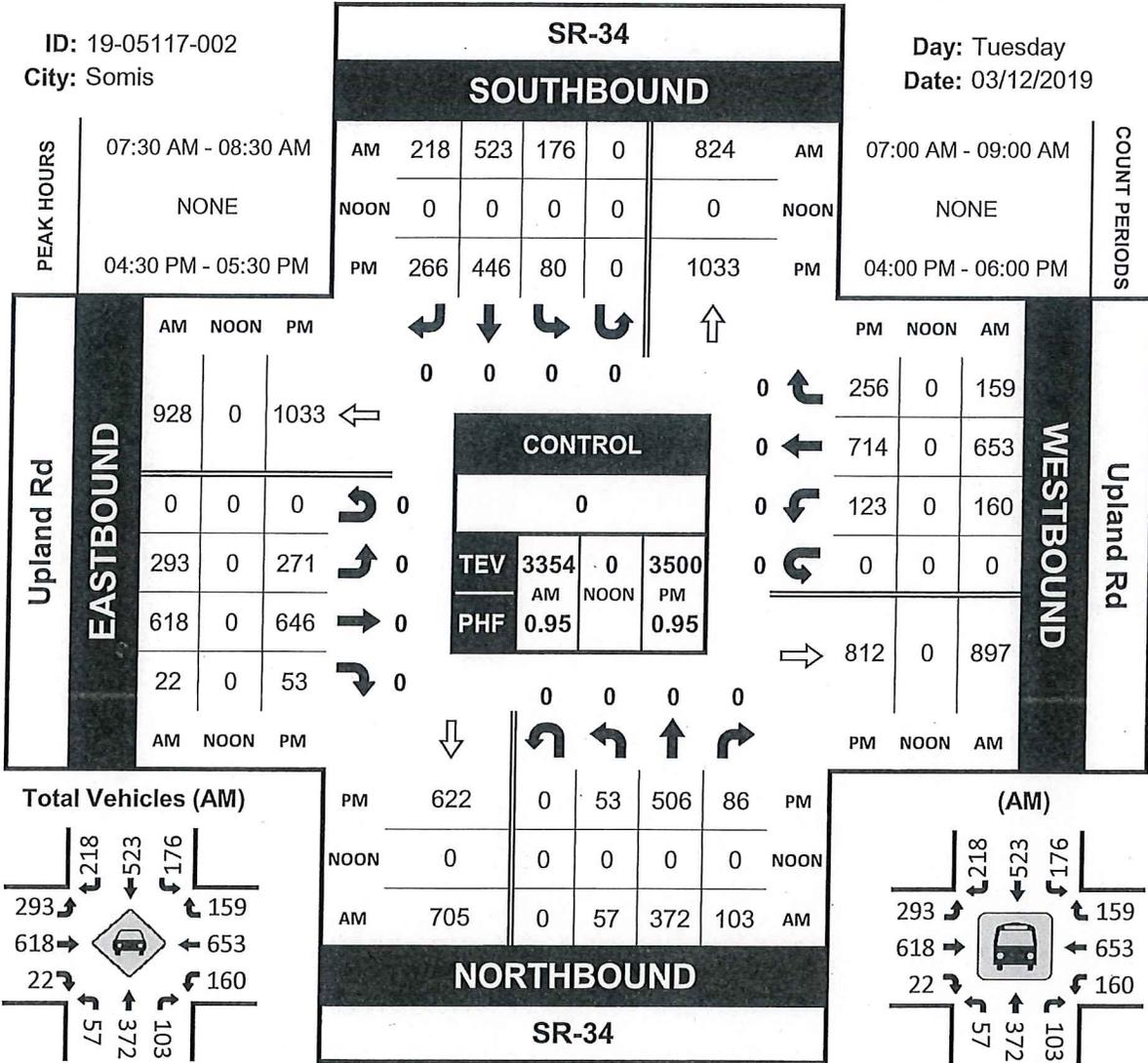
NS/EW Streets:	Camino Alvarez/High School Dwy						Camino Alvarez/High School Dwy						Las Posas Rd					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	13	1	8	0	13	11	8	0	3	192	15	0	1	268	3	0	536	
4:15 PM	11	1	9	0	2	3	2	0	0	176	9	0	1	244	5	0	463	
4:30 PM	9	0	10	0	4	4	0	0	2	225	16	0	2	258	4	0	534	
4:45 PM	11	1	8	0	9	6	0	0	2	224	22	0	0	250	0	0	533	
5:00 PM	12	0	7	0	7	0	0	0	1	245	21	0	0	257	4	0	554	
5:15 PM	9	2	10	0	7	0	2	0	1	217	20	0	3	246	1	0	518	
5:30 PM	5	3	9	0	11	4	2	0	1	187	11	0	0	256	4	0	493	
5:45 PM	12	1	11	0	13	5	4	0	4	192	16	0	2	209	3	0	472	
TOTAL VOLUMES:	82	9	72	0	66	33	18	0	14	1658	130	0	9	1988	24	0	4103	
APPROACH %'s:	50.31%	5.52%	44.17%	0.00%	56.41%	28.21%	15.38%	0.00%	0.78%	92.01%	7.21%	0.00%	0.45%	98.37%	1.19%	0.00%		
PEAK HR:	04:30 PM	05:30 PM			04:30 PM				05:00 PM									
PEAK HR VOL:	41	3	35	0	27	10	2	0	6	911	79	0	5	1011	9	0	2139	
PEAK HR FACTOR:	0.854	0.375	0.875	0.000	0.750	0.417	0.250	0.000	0.750	0.930	0.898	0.000	0.417	0.980	0.563	0.000	0.965	
																	0.971	

SR-34 & Upland Rd

Peak Hour Turning Movement Count

ID: 19-05117-002
City: Somis

Day: Tuesday
Date: 03/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR-34 & Upland Rd
 City: Somis
 Control:

Project ID: 19-05117-002
 Date: 3/12/2019

Total

NS/EW Streets:	SR-34												Upland Rd						TOTAL										
	NORTHBOUND						SOUTHBOUND						EASTBOUND			WESTBOUND													
AM	NL	NT	NR	NU	0	0	SL	ST	SR	SU	0	0	EL	ET	ER	EU	0	0	0	0	WL	WT	WR	WU	0	0	0		
7:00 AM	8	107	10	0	0	0	26	104	16	0	0	0	47	60	5	0	20	45	23	0	0	0	0	0	0	0	0	0	471
7:15 AM	11	76	17	0	0	0	44	122	40	0	0	0	53	87	3	0	17	87	14	0	17	187	41	0	0	0	0	0	571
7:30 AM	14	100	22	0	0	0	66	132	47	0	0	0	81	149	5	0	42	187	41	0	42	187	41	0	886				
7:45 AM	14	80	30	0	0	0	41	144	60	0	0	0	79	189	4	0	34	152	44	0	34	152	44	0	871				
8:00 AM	15	113	33	0	0	0	46	130	55	0	0	0	73	161	5	0	37	154	39	0	37	154	39	0	861				
8:15 AM	14	79	18	0	0	0	23	117	56	0	0	0	60	119	8	0	47	160	35	0	47	160	35	0	736				
8:30 AM	10	65	18	0	0	0	33	115	46	0	0	0	52	84	6	0	26	112	19	0	26	112	19	0	586				
8:45 AM	20	55	15	0	0	0	22	123	55	0	0	0	52	99	5	0	24	114	22	0	24	114	22	0	606				
TOTAL VOLUMES :	106	675	163	0	0	0	301	987	375	0	0	0	497	948	41	0	247	1011	237	0	247	1011	237	0	5588				
APPROACH %'s :	11.23%	71.50%	17.27%	0.00%	0.00%	0.00%	18.10%	59.35%	22.55%	0.00%	0.00%	0.00%	33.45%	63.80%	2.76%	0.00%	16.52%	67.63%	15.85%	0.00%	16.52%	67.63%	15.85%	0.00%					
PEAK HR :	07:30 AM	07:30 AM - 08:30 AM					37	37	218	0	44	293	618	22	0	0.904	0.817	0.688	0.000	0.851	0.873	0.903	0.000	0.851	0.873	0.903	0.000	0.946	
PEAK HR VOL :	57	372	103	0	0	0	176	523	218	0	44	293	618	22	0	0.904	0.817	0.688	0.000	0.851	0.873	0.903	0.000	0.851	0.873	0.903	0.000	0.946	
PEAK HR FACTOR :	0.950	0.823	0.780	0.000	0.000	0.000	0.667	0.908	0.908	0.000	0.000	0.667	0.908	0.908	0.000	0.667	0.908	0.908	0.000	0.667	0.908	0.908	0.000	0.667	0.908	0.908	0.000	0.946	
PM	NL	NT	NR	NU	0	0	SL	ST	SR	SU	0	0	EL	ET	ER	EU	0	0	0	0	WL	WT	WR	WU	0	0	0		
4:00 PM	18	125	19	0	0	0	13	136	73	0	0	0	58	132	11	0	23	158	66	0	23	158	66	0	832				
4:15 PM	25	112	24	0	0	0	18	135	51	0	0	0	55	127	18	0	23	194	53	0	23	194	53	0	835				
4:30 PM	16	130	23	0	0	0	26	130	69	0	0	0	69	138	21	0	36	160	55	0	36	160	55	0	873				
4:45 PM	14	121	27	0	0	0	23	104	75	0	0	0	55	183	10	0	24	179	51	0	24	179	51	0	866				
5:00 PM	10	124	15	0	0	0	12	114	73	0	0	0	80	177	11	0	36	181	88	0	36	181	88	0	921				
5:15 PM	13	131	21	0	0	0	19	98	49	0	0	0	67	148	11	0	27	194	62	0	27	194	62	0	840				
5:30 PM	10	122	14	0	0	0	12	116	59	0	0	0	65	133	8	0	29	176	35	0	29	176	35	0	779				
5:45 PM	16	132	20	0	0	0	19	86	50	0	0	0	60	141	10	0	22	150	40	0	22	150	40	0	746				
TOTAL VOLUMES :	122	997	163	0	0	0	142	919	499	0	0	0	509	1179	100	0	220	1392	450	0	220	1392	450	0	6692				
APPROACH %'s :	9.52%	77.77%	12.71%	0.00%	0.00%	0.00%	9.10%	58.91%	31.99%	0.00%	0.00%	0.00%	28.47%	65.94%	5.59%	0.00%	10.67%	67.51%	21.82%	0.00%	10.67%	67.51%	21.82%	0.00%					
PEAK HR :	04:30 PM	04:30 PM - 05:30 PM					80	446	266	0	296	271	646	53	0	0.847	0.883	0.631	0.000	0.854	0.920	0.727	0.000	0.854	0.920	0.727	0.000	0.950	
PEAK HR VOL :	53	506	86	0	0	0	769	0.858	0.887	0.000	0.000	271	646	53	0	0.847	0.883	0.631	0.000	0.854	0.920	0.727	0.000	0.854	0.920	0.727	0.000	0.950	
PEAK HR FACTOR :	0.828	0.966	0.796	0.000	0.000	0.000	0.769	0.858	0.887	0.000	0.000	0.847	0.883	0.631	0.000	0.847	0.883	0.631	0.000	0.854	0.920	0.727	0.000	0.854	0.920	0.727	0.000	0.950	

Prepared by National Data & Surveying Services

Flynn Rd & Upland Rd

Peak Hour Turning Movement Count

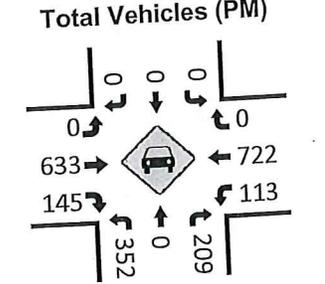
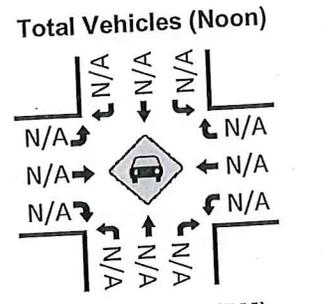
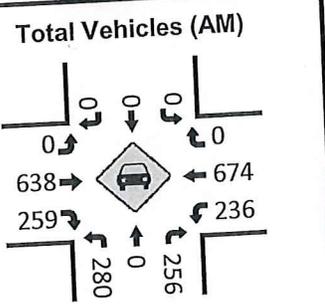
ID: 19-05117-009
City: Somis

Day: Tuesday
Date: 03/12/2019

PEAK HOURS	Flynn Rd					COUNT PERIODS
	SOUTHBOUND					
07:30 AM - 08:30 AM	AM	0	0	0	0	07:00 AM - 09:00 AM
NONE	NOON	0	0	0	0	NONE
04:30 PM - 05:30 PM	PM	0	0	0	0	04:00 PM - 06:00 PM

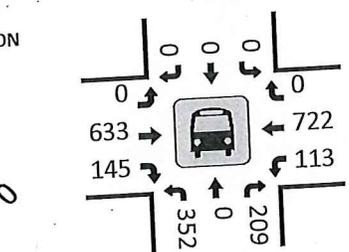
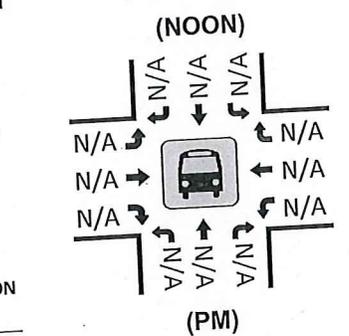
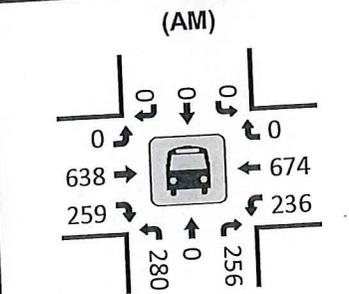
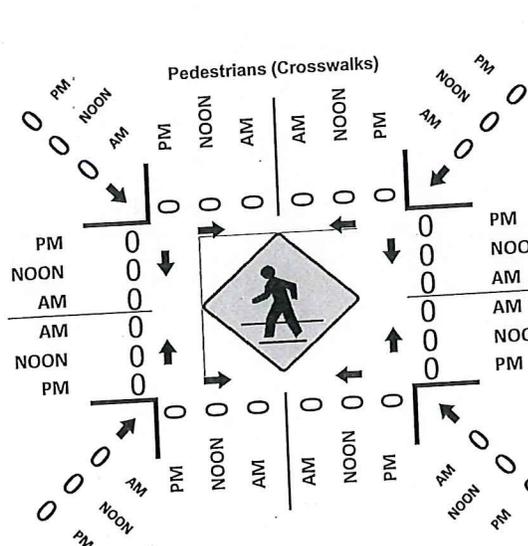
Upland Rd	EASTBOUND			CONTROL	WESTBOUND		
	AM	NOON	PM		PM	NOON	AM
	954	0	1074	0	722	0	674
	0	0	0	0	113	0	236
	638	0	633	0	1	0	1
	259	0	145	0	843	0	895

Flynn Rd		NORTHBOUND	
AM	NOON	AM	NOON
2344	0	2175	0
0.87		0.92	



Pedestrians (Crosswalks)

Direction	AM	NOON	PM
Upland Rd Eastbound	0	0	0
Flynn Rd Southbound	0	0	0
Upland Rd Westbound	0	0	0



National Data & Surveying Services

Intersection Turning Movement Count

Location: Flynn Rd & Upland Rd
 City: Somis
 Control:

Project ID: 19-05117-009
 Date: 3/12/2019

Total

NS/EW Streets:	Flynn Rd						Flynn Rd						Upland Rd					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	245
7:00 AM	22	0	25	0	0	0	0	0	0	67	30	0	38	63	0	0	0	366
7:15 AM	45	0	20	0	0	0	0	0	0	111	54	0	43	93	0	0	0	604
7:30 AM	109	0	24	0	0	0	0	0	0	167	86	0	42	176	0	0	0	588
7:45 AM	61	0	69	0	0	0	0	0	0	159	78	0	65	155	0	1	0	673
8:00 AM	67	0	110	0	0	0	0	0	0	187	63	0	66	180	0	0	0	479
8:15 AM	43	0	53	0	0	0	0	0	0	125	32	0	63	163	0	0	0	342
8:30 AM	31	0	19	0	0	0	0	0	0	109	30	0	27	125	0	1	0	327
8:45 AM	40	0	14	0	0	0	0	0	0	91	40	0	21	121	0	0	0	TOTAL
TOTAL VOLUMES:	418	0	334	0	0	0	0	0	0	1016	413	0	365	1076	0	2	0	3624
APPROACH %'s:	55.59%	0.00%	44.41%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	71.10%	28.90%	0.00%	25.29%	74.57%	0.00%	0.14%	0.00%	
PEAK HR:	280	0	256	0	0	0	0	44	0	638	259	0	236	674	0	1	0	2344
PEAK HR VOL:	0.642	0.000	0.582	0.000	0.000	0.000	0.000	0.000	0.000	0.853	0.753	0.000	0.894	0.936	0.000	0.250	0.000	0.871
PEAK HR FACTOR:										0.886				0.926				
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	536
4:00 PM	72	0	64	0	0	0	0	0	0	142	33	0	29	196	0	0	0	490
4:15 PM	69	0	48	0	0	0	0	0	0	133	26	0	34	180	0	0	0	515
4:30 PM	84	0	52	0	0	0	0	0	0	160	27	0	26	166	0	0	0	555
4:45 PM	78	0	42	0	0	0	0	0	0	156	55	0	29	175	0	0	0	594
5:00 PM	106	0	55	0	0	0	0	0	0	167	32	0	38	195	0	1	0	531
5:15 PM	84	0	60	0	0	0	0	0	0	150	31	0	20	186	0	0	0	474
5:30 PM	65	0	52	0	0	0	0	0	0	128	36	0	19	174	0	0	0	453
5:45 PM	55	0	45	0	0	0	0	0	0	143	33	0	24	153	0	0	0	TOTAL
TOTAL VOLUMES:	613	0	418	0	0	0	0	0	0	1179	273	0	219	1425	0	1	0	4128
APPROACH %'s:	59.46%	0.00%	40.54%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	81.20%	18.80%	0.00%	13.31%	86.63%	0.00%	0.06%	0.00%	
PEAK HR:	352	0	209	0	0	0	0	296	0	633	145	0	113	722	0	1	0	2175
PEAK HR VOL:	0.830	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.948	0.659	0.000	0.743	0.926	0.000	0.250	0.000	0.915
PEAK HR FACTOR:										0.922				0.893				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lewis Rd & Adolfo Rd
 City: Somis
 Control:

Project ID: 19-05117-003
 Date: 3/12/2019

Total

NS / EW Streets:	Lewis Rd						Lewis Rd						Adolfo Rd						Adolfo Rd					
	NORTHBOUND			SOUTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			WESTBOUND			WESTBOUND					
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	WL	WT	WR	WU	TOTAL			
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:00 AM	5	128	61	0	33	134	1	0	5	52	8	0	18	25	24	0	18	33	16	0	24	0		
7:15 AM	4	117	62	0	49	149	3	0	12	117	11	0	37	33	16	0	35	55	29	0	16	0		
7:30 AM	8	131	55	0	91	183	3	0	9	207	20	0	35	55	29	0	39	97	22	0	22	0		
7:45 AM	12	120	80	0	80	181	7	0	13	129	9	0	48	90	28	0	48	90	28	0	28	0		
8:00 AM	12	117	64	0	60	123	9	0	15	120	15	0	27	46	23	0	27	46	23	0	23	0		
8:15 AM	6	100	51	0	40	158	10	0	9	78	3	0	21	33	17	0	21	33	17	0	17	0		
8:30 AM	3	79	32	0	37	160	5	0	6	56	6	0	18	47	24	0	18	47	24	0	24	0		
8:45 AM	8	81	46	0	41	117	4	0	6	88	10	0	6	47	24	0	6	47	24	0	24	0		
TOTAL VOLUMES :	58	873	451	0	431	1205	42	0	75	847	82	0	243	426	183	0	243	426	183	0	183	0		
APPROACH %'s :	4.20%	63.17%	32.63%	0.00%	25.69%	71.81%	2.50%	0.00%	7.47%	84.36%	8.17%	0.00%	28.52%	50.00%	21.48%	0.00%	28.52%	50.00%	21.48%	0.00%	21.48%	0.00%		
PEAK HR :	36	485	261	0	280	636	37	44	49	573	55	0	159	275	95	0	159	275	95	0	95	0		
PEAK HR VOL :	0.750	0.926	0.816	0.000	0.769	0.869	0.611	0.000	0.817	0.692	0.688	0.000	0.828	0.709	0.819	0.000	0.828	0.709	0.819	0.000	0.819	0.000		
PEAK HR FACTOR :																						0.797		
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:00 PM	10	140	61	0	29	162	8	0	3	88	7	0	81	150	39	0	81	150	39	0	39	0		
4:15 PM	21	138	51	0	24	160	5	0	8	108	8	0	56	190	47	0	56	190	47	0	47	0		
4:30 PM	12	140	62	0	21	149	10	0	9	81	7	0	71	137	49	0	71	137	49	0	49	0		
4:45 PM	15	152	61	0	29	169	6	0	13	88	8	0	60	125	41	0	60	125	41	0	41	0		
5:00 PM	9	136	60	0	23	178	6	0	9	113	13	0	56	185	46	0	56	185	46	0	46	0		
5:15 PM	9	138	81	0	23	128	3	0	8	88	4	0	51	157	48	0	51	157	48	0	48	0		
5:30 PM	9	151	52	0	26	146	4	0	8	75	2	0	63	152	47	0	63	152	47	0	47	0		
5:45 PM	6	124	69	0	22	118	7	0	7	77	9	0	44	128	64	0	44	128	64	0	64	0		
TOTAL VOLUMES :	91	1119	497	0	197	1210	49	0	65	718	58	0	482	1224	381	0	482	1224	381	0	381	0		
APPROACH %'s :	5.33%	65.55%	29.12%	0.00%	13.53%	83.10%	3.37%	0.00%	7.73%	85.37%	6.90%	0.00%	23.10%	58.65%	18.26%	0.00%	23.10%	58.65%	18.26%	0.00%	18.26%	0.00%		
PEAK HR :	57	566	234	0	97	656	27	0	39	390	36	0	243	637	183	0	243	637	183	0	183	0		
PEAK HR VOL :	0.679	0.931	0.944	0.000	0.836	0.921	0.675	0.000	0.750	0.863	0.692	0.000	0.856	0.838	0.934	0.000	0.856	0.838	0.934	0.000	0.934	0.000		
PEAK HR FACTOR :																						0.907		

Lewis Rd & Daily Dr

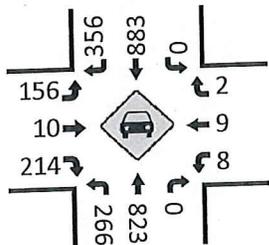
Peak Hour Turning Movement Count

ID: 19-05117-004
City: Somis

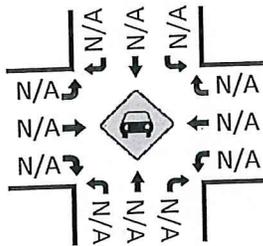
Day: Tuesday
Date: 03/12/2019

PEAK HOURS		Lewis Rd						COUNT PERIODS																																																																					
07:15 AM - 08:15 AM NONE 04:15 PM - 05:15 PM	AM	356	883	0	0	981	AM	07:00 AM - 09:00 AM	NONE 04:00 PM - 06:00 PM																																																																				
	NOON	0	0	0	0	0	NOON																																																																						
	PM	278	772	0	0	1476	PM																																																																						
		<table border="1"> <tr><th colspan="3">SOUTHBOUND</th></tr> <tr><td>←</td><td>↓</td><td>↶</td></tr> </table>				SOUTHBOUND			←	↓	↶	<table border="1"> <tr><th colspan="3">CONTROL</th></tr> <tr><td>0</td><td></td><td></td></tr> <tr><td>TEV</td><td>2727</td><td>0</td></tr> <tr><td>PHF</td><td>0.88</td><td>0.97</td></tr> </table>		CONTROL			0			TEV	2727	0	PHF	0.88	0.97	<table border="1"> <tr><th colspan="3">WESTBOUND</th></tr> <tr><td>↷</td><td>↶</td><td>↑</td></tr> </table>				WESTBOUND			↷	↶	↑																																										
SOUTHBOUND																																																																													
←	↓	↶																																																																											
CONTROL																																																																													
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TEV	2727	0																																																																											
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↷	↶	↑																																																																											
		<table border="1"> <tr><th colspan="3">EASTBOUND</th></tr> <tr><td>↷</td><td>↶</td><td>↑</td></tr> </table>				EASTBOUND			↷	↶	↑	<table border="1"> <tr><th colspan="3">DAILY DR</th></tr> <tr><td>↷</td><td>↶</td><td>↑</td></tr> </table>		DAILY DR			↷	↶	↑	<table border="1"> <tr><th colspan="3">DAILY DR</th></tr> <tr><td>↷</td><td>↶</td><td>↑</td></tr> </table>				DAILY DR			↷	↶	↑																																																
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		<table border="1"> <tr><th colspan="3">EASTBOUND</th></tr> <tr><td>AM</td><td>NOON</td><td>PM</td></tr> <tr><td>631</td><td>0</td><td>599</td></tr> <tr><td>0</td><td>0</td><td>0</td></tr> <tr><td>156</td><td>0</td><td>264</td></tr> <tr><td>10</td><td>0</td><td>3</td></tr> <tr><td>214</td><td>0</td><td>189</td></tr> <tr><td>AM</td><td>NOON</td><td>PM</td></tr> </table>				EASTBOUND			AM	NOON	PM	631	0	599	0	0	0	156	0	264	10	0	3	214	0	189	AM	NOON	PM	<table border="1"> <tr><th colspan="3">WESTBOUND</th></tr> <tr><td>PM</td><td>NOON</td><td>AM</td></tr> <tr><td>5</td><td>0</td><td>2</td></tr> <tr><td>11</td><td>0</td><td>9</td></tr> <tr><td>3</td><td>0</td><td>8</td></tr> <tr><td>0</td><td>0</td><td>0</td></tr> <tr><td>5</td><td>0</td><td>10</td></tr> <tr><td>PM</td><td>NOON</td><td>AM</td></tr> </table>		WESTBOUND			PM	NOON	AM	5	0	2	11	0	9	3	0	8	0	0	0	5	0	10	PM	NOON	AM	<table border="1"> <tr><th colspan="3">NORTHBOUND</th></tr> <tr><td>PM</td><td>NOON</td><td>AM</td></tr> <tr><td>964</td><td>0</td><td>310</td></tr> <tr><td>0</td><td>0</td><td>0</td></tr> <tr><td>1105</td><td>0</td><td>266</td></tr> <tr><td>PM</td><td>NOON</td><td>AM</td></tr> </table>				NORTHBOUND			PM	NOON	AM	964	0	310	0	0	0	1105	0	266	PM	NOON	AM
EASTBOUND																																																																													
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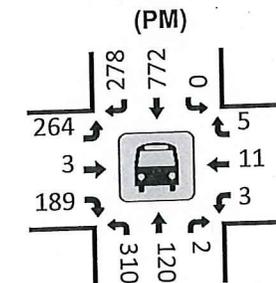
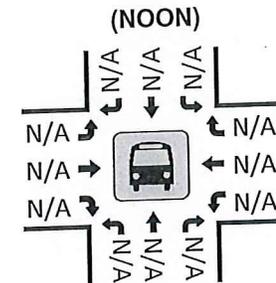
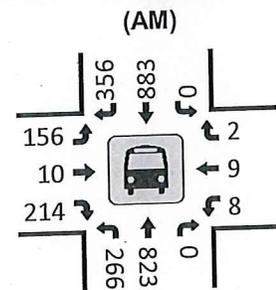
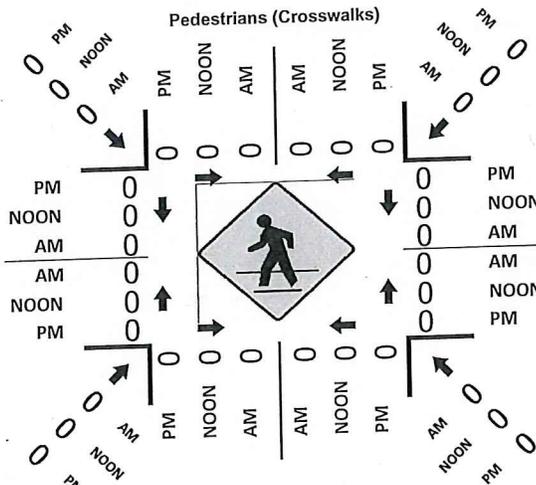
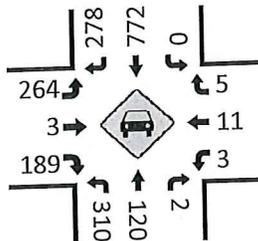
Total Vehicles (AM)



Total Vehicles (Noon)



Total Vehicles (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lewis Rd & Daily Dr
 City: Somis
 Control:

Project ID: 19-05117-004
 Date: 3/12/2019

Total

NS/EW Streets:	Lewis Rd						Lewis Rd						Daily Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			WESTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	526
7:15 AM	32	173	0	0	1	181	68	0	16	1	45	0	3	6	0	0	0	592
7:30 AM	0	197	0	0	0	202	74	0	21	2	45	0	1	5	0	0	0	689
7:45 AM	62	182	0	0	0	239	107	0	33	2	61	0	1	1	1	0	0	777
8:00 AM	84	225	0	0	0	246	92	0	55	5	63	0	5	1	1	0	0	669
8:15 AM	75	219	0	0	0	196	83	0	47	1	45	0	1	2	0	0	0	546
8:30 AM	53	156	2	0	0	168	78	0	25	4	59	0	0	1	0	0	0	508
8:45 AM	30	119	0	0	0	183	73	0	39	4	55	0	3	2	0	0	0	518
	47	142	0	0	0	164	77	0	40	2	43	0	0	2	1	0	0	
TOTAL VOLUMES:	428	1413	2	0	1	1579	652	0	276	21	416	0	14	20	3	0	0	4825
APPROACH %'s:	23.22%	76.67%	0.11%	0.00%	0.04%	70.74%	29.21%	0.00%	38.71%	2.95%	58.35%	0.00%	37.84%	54.05%	8.11%	0.00%	0.00%	
PEAK HR:	07:15 AM - 08:15 AM	07:15 AM - 08:15 AM	0	0	0	38	37	44	07:45 AM	10	214	0	8	9	2	0	0	2727
PEAK HR VOL:	266	823	0	0	0	883	356	0	156	0.500	0.849	0.000	0.400	0.450	0.500	0.000	0.877	
PEAK HR FACTOR:	0.792	0.914	0.000	0.000	0.000	0.897	0.832	0.000	0.709	0.772	0.000	0.000	0.400	0.679	0.500	0.000	0.877	

NS/EW Streets:	Lewis Rd						Lewis Rd						Daily Dr					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			WESTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	625
4:15 PM	70	248	1	0	0	146	60	0	44	2	47	0	3	4	0	0	0	780
4:30 PM	75	316	0	0	0	196	68	0	73	1	47	0	1	3	0	0	0	781
4:45 PM	72	328	1	0	0	198	67	0	57	0	50	0	1	5	2	0	0	731
5:00 PM	85	287	1	0	0	180	71	0	65	1	40	0	0	0	1	0	0	752
5:15 PM	78	276	0	0	0	198	72	0	69	1	52	0	1	3	2	0	0	723
5:30 PM	82	288	0	0	0	161	62	0	65	1	61	0	0	1	2	0	0	708
5:45 PM	72	262	0	0	0	170	69	0	78	0	52	0	4	1	0	0	0	702
	70	260	0	0	0	167	60	0	79	1	51	0	0	11	3	0	0	
TOTAL VOLUMES:	604	2265	3	0	0	1416	529	0	530	7	400	0	10	28	10	0	0	5802
APPROACH %'s:	21.03%	78.86%	0.10%	0.00%	0.00%	72.80%	27.20%	0.00%	56.56%	0.75%	42.69%	0.00%	20.83%	58.33%	20.83%	0.00%	0.00%	
PEAK HR:	04:15 PM - 05:15 PM	04:15 PM - 05:15 PM	0	0	0	290	289	296	04:30 PM	3	189	0	3	11	5	0	0	3044
PEAK HR VOL:	310	1207	2	0	0	772	278	0	264	0.750	0.909	0.000	0.750	0.550	0.625	0.000	0.974	
PEAK HR FACTOR:	0.912	0.920	0.500	0.000	0.000	0.975	0.965	0.000	0.904	0.934	0.000	0.000	0.750	0.550	0.625	0.000	0.974	

US Hwy 101 NB Ramps & Daily Dr

Peak Hour Turning Movement Count

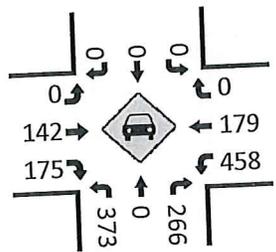
ID: 19-05117-006
City: Somis

Day: Tuesday
Date: 03/12/2019

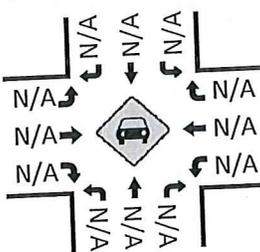
PEAK HOURS		US Hwy 101 NB Ramps					COUNT PERIODS	
DAILY DR	07:30 AM - 08:30 AM	SOUTHBOUND					07:00 AM - 09:00 AM	DAILY DR
	NONE	AM	NOON	PM	AM	NOON	NONE	
	04:45 PM - 05:45 PM	AM	NOON	PM	AM	NOON	PM	
		552	0	1642	0	0	0	WESTBOUND
		0	0	0	0	0	0	
		0	0	0	0	0	0	
		142	0	198	0	0	0	
		175	0	86	0	0	0	
		AM	NOON	PM	AM	NOON	PM	DAILY DR
		380	0	1309	0	279	0	
		0	0	0	0	0	0	
		633	0	373	0	266	0	
		0	0	0	0	0	0	

CONTROL		
0		
TEV	1593	0
	AM	NOON
PHF	0.88	0.97
	AM	PM

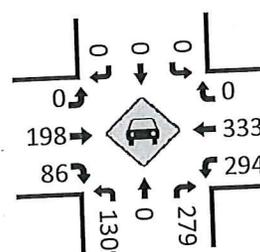
Total Vehicles (AM)



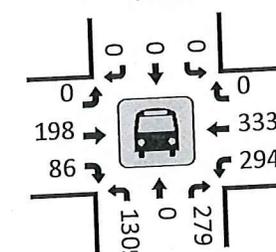
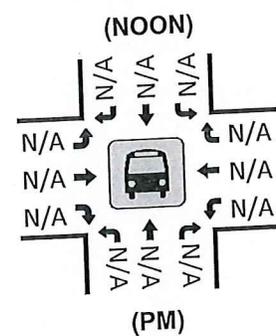
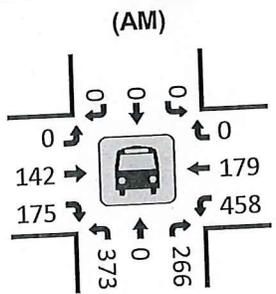
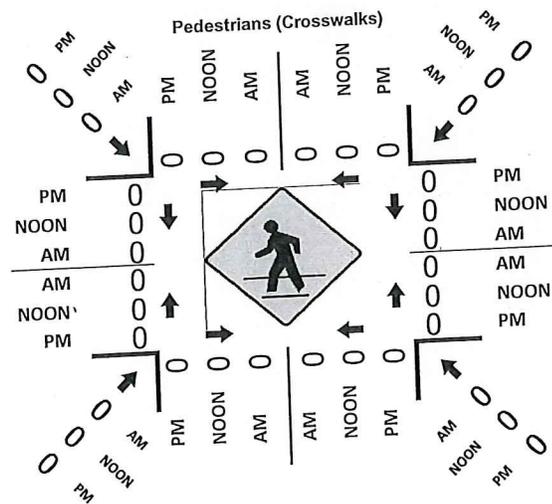
Total Vehicles (Noon)



Total Vehicles (PM)



NORTHBOUND US Hwy 101 NB Ramps



US Hwy 101 SB Ramps & Ventura Blvd

Peak Hour Turning Movement Count

ID: 19-05117-007
City: Somis

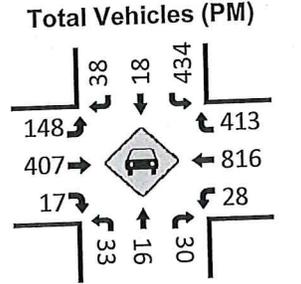
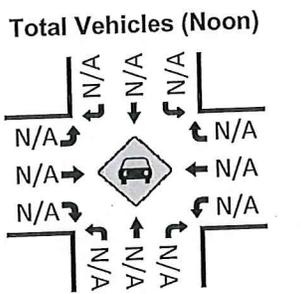
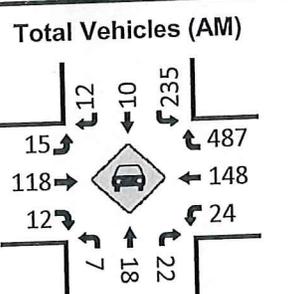
Day: Tuesday
Date: 03/12/2019

PEAK HOURS		US Hwy 101 SB Ramps						COUNT PERIODS	
07:30 AM - 08:30 AM		SOUTHBOUND						07:00 AM - 09:00 AM	
NONE		AM	12	10	235	0	520	AM	NONE
04:45 PM - 05:45 PM		NOON	0	0	0	0	0	NOON	04:00 PM - 06:00 PM
		PM	38	18	434	0	577	PM	

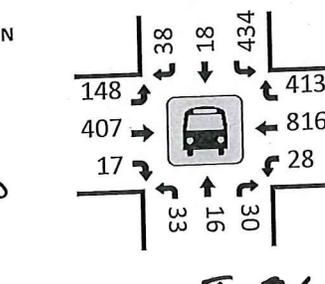
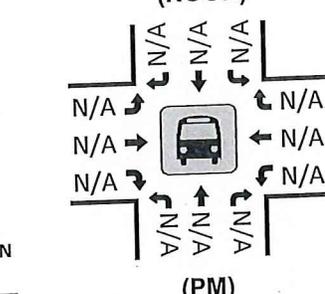
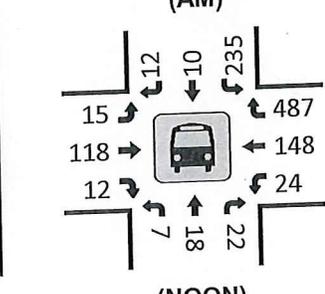
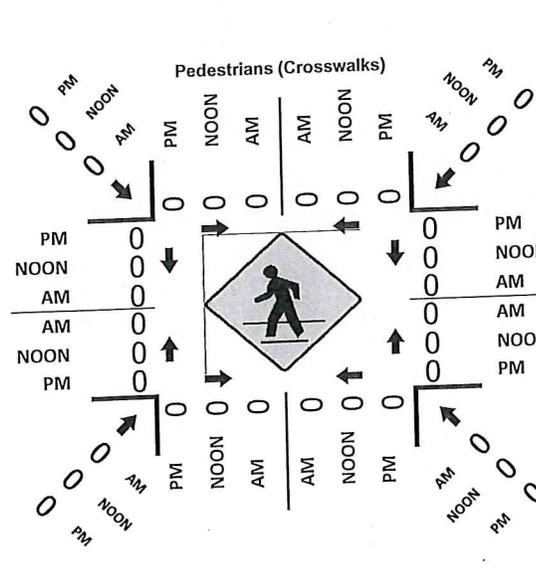
Ventura Blvd		EASTBOUND		
	AM	NOON	PM	
←	167	0	887	←
↪	0	0	0	↪
↪	15	0	148	↪
→	118	0	407	→
↪	12	0	17	↪
	AM	NOON	PM	

CONTROL			
0			
TEV	1108	0	2398
PHF	0.98		0.95

Ventura Blvd		WESTBOUND		
	PM	NOON	AM	
↪	413	0	487	↪
↪	816	0	148	↪
↪	28	0	24	↪
↪	0	0	0	↪
→	871	0	375	→
	PM	NOON	AM	



US Hwy 101 SB Ramps					
PM	NOON	AM	NOON	AM	PM
63	0	46	0	7	22
0	0	0	0	0	0
0	0	0	0	0	0
33	0	0	0	18	0
16	0	0	0	0	0
30	0	0	0	0	0



National Data & Surveying Services

Intersection Turning Movement Count

Location: US Hwy 101 SB Ramps & Ventura Blvd
 City: Somis
 Control: Total

Project ID: 19-05117-007
 Date: 3/12/2019

Total

NS/EW Streets:	US Hwy 101 SB Ramps						Ventura Blvd						Ventura Blvd					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			WESTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	221
7:15 AM	2	2	4	0	39	3	2	0	7	14	3	0	3	27	115	0	0	247
7:30 AM	7	1	2	0	55	6	1	0	4	35	7	0	6	26	97	0	0	278
7:45 AM	2	4	3	0	57	4	3	0	2	24	1	0	2	31	149	0	0	284
8:00 AM	0	7	9	0	64	1	2	0	3	39	5	0	7	49	100	0	0	270
8:15 AM	1	5	6	0	52	4	5	0	5	32	2	0	5	40	111	0	0	276
8:30 AM	4	2	4	0	62	5	2	0	5	23	4	0	10	28	127	0	0	232
8:45 AM	0	6	0	0	53	2	4	0	5	27	0	0	7	39	89	0	0	241
	2	0	4	0	79	3	6	0	2	23	3	0	4	32	83	0	0	
TOTAL VOLUMES :	18	27	32	0	461	24	25	0	33	217	25	0	44	272	871	0	0	2049
APPROACH %'s :	23.38%	35.06%	41.56%	0.00%	90.39%	4.71%	4.90%	0.00%	12.00%	78.91%	9.09%	0.00%	3.71%	22.91%	73.38%	0.00%	0.00%	
PEAK HR :	7	18	22	0	235	10	12	0	15	118	12	0	24	148	487	0	0	1108
PEAK HR VOL :	0.438	0.643	0.611	0.000	0.918	0.500	0.600	0.000	0.750	0.756	0.600	0.000	0.600	0.755	0.817	0.000	0.000	0.975
PEAK HR FACTOR :										0.771					0.905			

NS/EW Streets:	US Hwy 101 SB Ramps						Ventura Blvd						Ventura Blvd					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			WESTBOUND			WESTBOUND		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	566
4:15 PM	9	3	10	0	83	9	8	0	44	105	1	0	12	207	75	0	0	516
4:30 PM	8	5	7	0	69	5	13	0	29	201	2	0	10	201	75	0	0	495
4:45 PM	5	3	10	0	72	5	9	0	42	85	2	0	7	167	88	0	0	551
5:00 PM	7	1	9	0	111	6	7	0	31	95	7	0	10	190	77	0	0	630
5:15 PM	8	6	5	0	100	4	12	0	30	124	3	0	3	207	128	0	0	601
5:30 PM	9	6	7	0	103	3	8	0	46	94	4	0	5	209	107	0	0	616
5:45 PM	6	4	5	0	89	5	11	0	41	94	3	0	10	210	101	0	0	526
	6	4	5	0	89	3	15	0	21	75	5	0	13	210	80	0	0	
TOTAL VOLUMES :	61	31	62	0	747	40	83	0	284	764	27	0	70	1601	731	0	0	4501
APPROACH %'s :	39.61%	20.13%	40.26%	0.00%	85.86%	4.60%	9.54%	0.00%	26.42%	71.07%	2.51%	0.00%	2.91%	66.65%	30.43%	0.00%	0.00%	
PEAK HR :	33	16	30	0	434	18	38	0	148	407	17	0	28	816	413	0	0	2398
PEAK HR VOL :	0.917	0.667	0.833	0.000	0.904	0.750	0.792	0.000	0.804	0.821	0.607	0.000	0.700	0.971	0.807	0.000	0.000	0.952
PEAK HR FACTOR :										0.911					0.930			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lewis Rd & Ventura Blvd
 City: Somis
 Control:

Project ID: 19-05117-005
 Date: 3/12/2019

Total

NS/EW Streets:	Lewis Rd						Ventura Blvd						Ventura Blvd					
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			EASTBOUND			WESTBOUND		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL			
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:00 AM	17	107	6	5	148	76	94	6	75	0	3	3	1	0	541			
7:15 AM	24	153	4	5	146	96	91	6	79	0	1	1	1	0	607			
7:30 AM	38	140	5	4	175	121	98	6	73	0	1	5	2	0	668			
7:45 AM	57	216	7	9	167	134	95	11	107	0	1	5	2	0	811			
8:00 AM	59	175	0	4	149	77	116	3	82	0	1	1	0	0	667			
8:15 AM	34	121	3	5	158	77	88	10	98	0	2	1	1	0	598			
8:30 AM	15	89	3	3	156	78	64	6	118	0	1	0	1	0	534			
8:45 AM	31	108	4	1	136	59	77	10	118	0	1	3	1	0	549			
TOTAL VOLUMES :	275	1109	32	36	1235	718	723	58	750	0	11	19	9	0	4975			
APPROACH %'s :	19.42%	78.32%	2.26%	1.81%	62.09%	36.10%	47.22%	3.79%	48.99%	0.00%	28.21%	48.72%	23.08%	0.00%				
PEAK HR VOL :	178	684	16	22	637	428	400	26	341	0	4	12	5	0	2753			
PEAK HR FACTOR :	0.754	0.792	0.571	0.611	0.910	0.799	0.862	0.591	0.797	0.000	1.000	0.600	0.625	0.000	0.849			
							0.784		0.900				0.656					
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:00 PM	93	179	3	3	114	72	143	3	93	0	2	3	0	0	708			
4:15 PM	100	252	4	4	172	77	135	6	79	0	2	2	0	0	833			
4:30 PM	100	267	3	3	174	75	140	2	68	0	4	4	2	0	838			
4:45 PM	116	219	4	3	128	86	140	3	65	0	4	3	5	0	776			
5:00 PM	97	230	4	2	182	81	126	5	71	0	0	8	4	0	810			
5:15 PM	110	239	4	5	131	74	123	4	72	0	0	4	3	0	769			
5:30 PM	97	206	4	4	157	71	134	5	68	0	3	5	1	0	755			
5:45 PM	102	197	9	5	148	76	138	10	70	0	3	4	4	0	766			
TOTAL VOLUMES :	815	1789	35	29	1206	612	1079	38	586	0	14	33	19	0	6255			
APPROACH %'s :	30.88%	67.79%	1.33%	1.57%	65.30%	33.13%	63.36%	2.23%	34.41%	0.00%	21.21%	50.00%	28.79%	0.00%				
PEAK HR VOL :	413	968	15	12	656	319	541	16	283	0	6	17	11	0	3257			
PEAK HR FACTOR :	0.890	0.906	0.938	0.750	0.901	0.927	0.966	0.667	0.896	0.000	0.375	0.531	0.550	0.000	0.972			
							0.931		0.955				0.708					

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 118/Santa Clara Ave & SR 118/Los Angeles Ave
 City: Somis
 Control: Signalized

Project ID: 19-05670-001
 Date: 11/5/2019

Total

NS/EW Streets:	SR 118/Santa Clara Ave										SR 118/Los Angeles Ave										SR 118/Los Angeles Ave																																	
	NORTHBOUND					SOUTHBOUND					SL					EL					ET					ER					EU					WL					WT					WR					WU			
AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:00 AM	47	56	72	0	0	0	0	0	0	0	69	104	0	0	0	82	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:15 AM	83	72	0	0	0	0	63	88	0	0	86	85	0	0	0	85	0	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	87	124	0	0	0	0	82	81	0	0	85	0	118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	84	132	0	0	0	0	122	73	0	0	82	97	0	0	0	82	0	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:00 AM	53	109	0	0	0	0	93	84	0	0	72	89	0	0	0	72	0	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	71	66	0	0	0	0	115	89	0	0	47	99	0	0	0	47	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	58	46	0	0	0	0	53	67	0	0	50	93	0	0	0	50	0	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	77	41	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
TOTAL VOLUMES :	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
APPROACH %'s :	46.40%	53.52%	0.08%	0.00%	0.00%	0.00%	51.10%	48.90%	0.00%	0.00%	41.55%	0.00%	58.45%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	0.250	0.250	0.000	0.00%	0.00%	0.250	0.250	0.000	0.00%	0.00%	0.250	0.250	0.000														
PEAK HR :	307	437	0	0	0	0	341	332	0	0	335	0	421	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
PEAK HR VOL :	0.882	0.828	0.000	0.000	0.000	0.000	0.699	0.922	0.000	0.000	0.974	0.000	0.870	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000														
PEAK HR FACTOR :	0.861					0.863					0.931					0.500																																						
PM	1	1	0	0	0	0	1	1	0	0	0.5	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
4:00 PM	77	71	0	0	0	0	130	91	0	0	62	0	46	0	0	69	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
4:15 PM	67	68	0	0	0	0	134	75	0	0	61	0	92	0	0	61	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
4:30 PM	89	83	0	0	0	1	112	36	0	0	87	0	81	0	0	81	0	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
4:45 PM	94	73	0	0	0	0	94	20	0	0	67	0	89	0	0	67	0	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
5:00 PM	99	86	0	0	0	0	65	41	0	0	53	0	78	0	0	53	0	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
5:15 PM	100	87	0	0	0	0	100	78	0	0	74	0	68	0	0	74	0	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
5:30 PM	77	50	1	0	0	0	96	108	0	0	57	0	62	0	0	57	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
5:45 PM	71	48	0	0	0	0	116	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
TOTAL VOLUMES :	NL	NT	NR	NU	0	SL	ST	SR	SU	0	EL	ET	ER	EU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
APPROACH %'s :	54.31%	45.61%	0.08%	0.00%	0.00%	0.07%	61.92%	38.01%	0.00%	0.00%	47.41%	0.00%	52.59%	0.00%	0.00%	83.33%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.250	0.250	0.000	0.00%	0.00%	0.250	0.250	0.000	0.00%	0.00%	0.250	0.250	0.000														
PEAK HR :	327	295	0	0	0	1	470	222	0	0	279	0	291	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
PEAK HR VOL :	0.870	0.889	0.000	0.000	0.000	0.250	0.877	0.610	0.000	0.000	0.802	0.000	0.791	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.250	0.250	0.250	0.000	0.250	0.250	0.250	0.250	0.000	0.250	0.250	0.250	0.250	0.000														
PEAK HR FACTOR :	0.904					0.784					0.848					0.375																																						

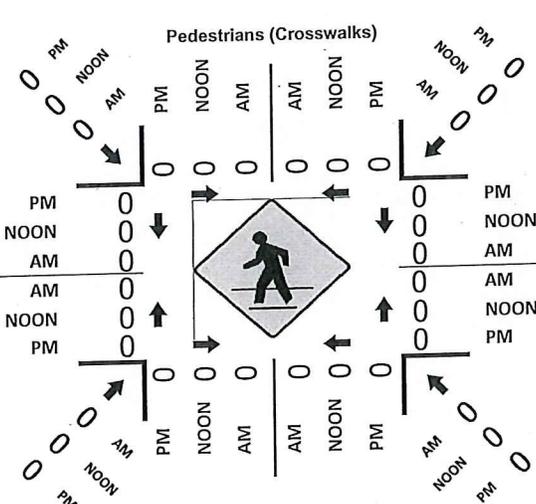
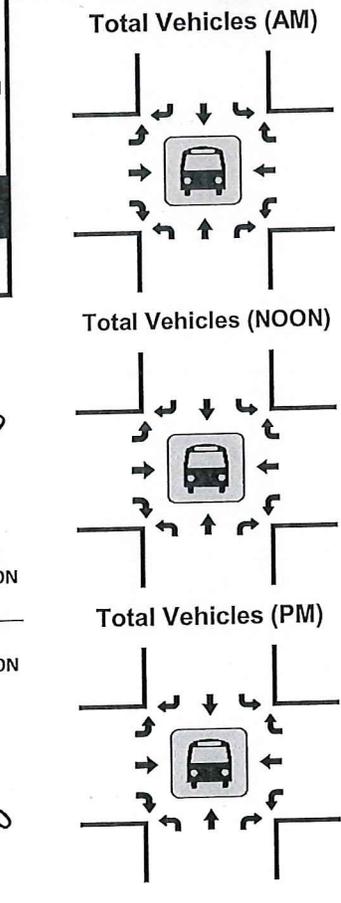
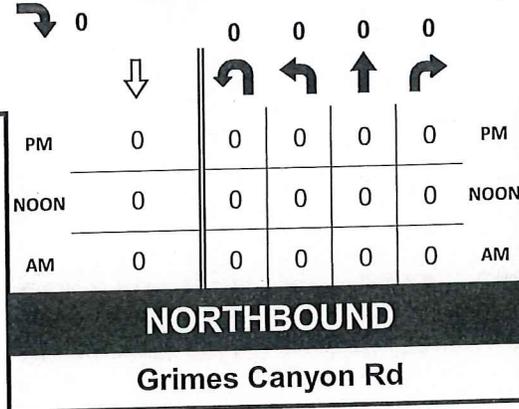
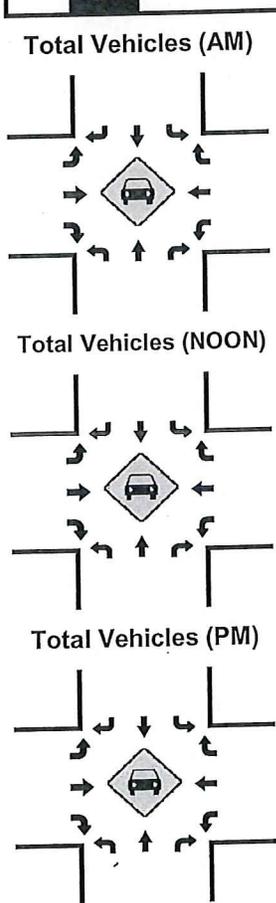
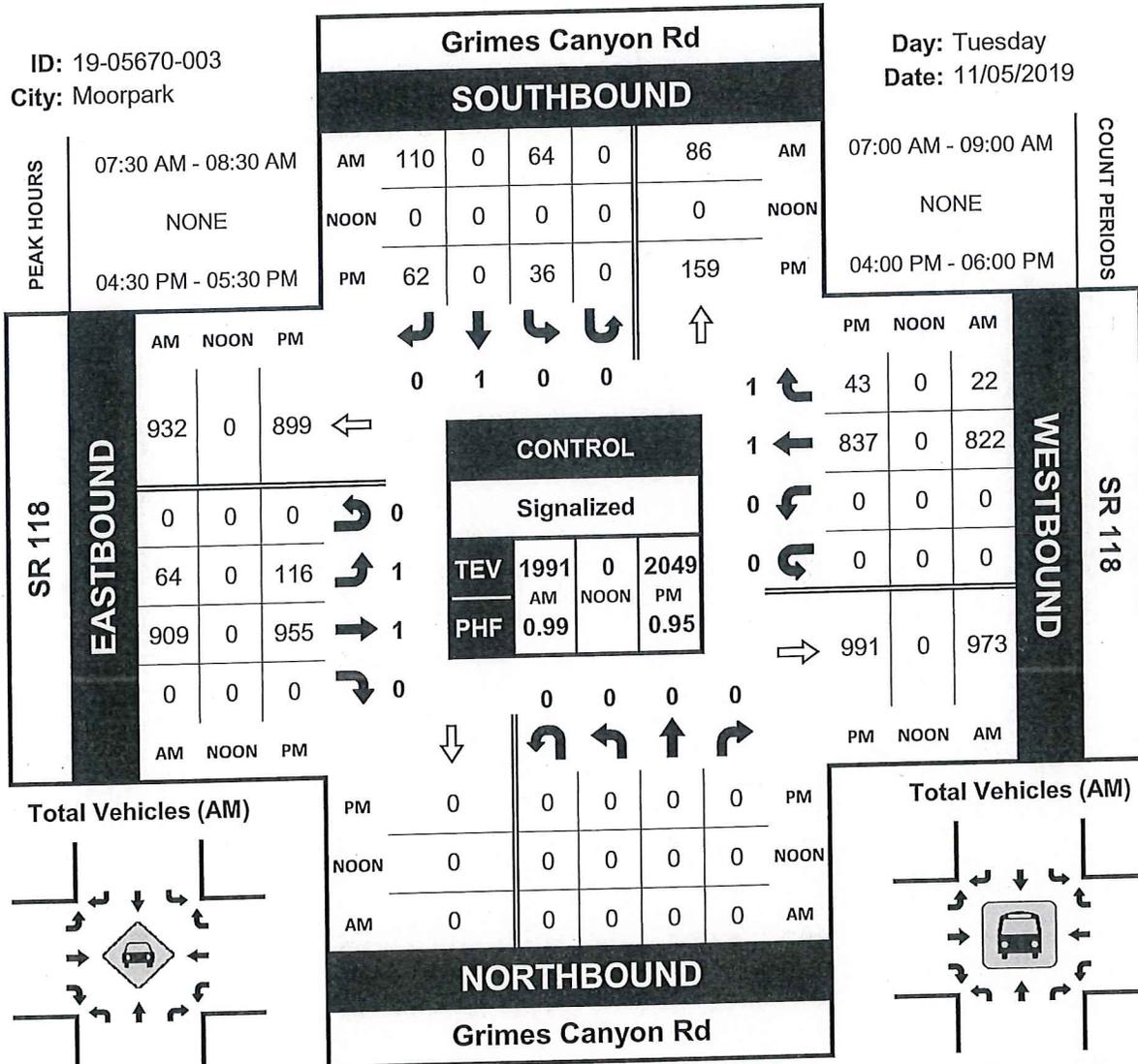
Prepared by National Data & Surveying Services

Grimes Canyon Rd & SR 118

Peak Hour Turning Movement Count

ID: 19-05670-003
City: Moorpark

Day: Tuesday
Date: 11/05/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Grimes Canyon Rd & SR 118
 City: Moorpark
 Control: Signalized
 Project ID: 19-05670-003
 Date: 11/5/2019

Total

NS/EW Streets:	Grimes Canyon Rd										SR 118										SR 118														
	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					EASTBOUND					WESTBOUND									
	NL	NT	NR	NU	SL	ST	SR	SU	TL	TR	EL	ET	ER	EU	WL	WT	WR	WU	TL	TR	EL	ET	ER	EU	WL	WT	WR	WU	TL	TR					
AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	7	0	0	0	0	0	16	172	0	0	0	0	191	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	6	0	33	0	0	0	14	189	0	0	0	0	195	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	15	0	31	0	0	0	17	235	0	0	0	0	190	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	9	0	22	0	0	0	19	225	0	0	0	0	226	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	20	0	31	0	0	0	14	235	0	0	0	0	196	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	20	0	26	0	0	0	14	214	0	0	0	0	210	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	22	0	17	0	0	0	17	206	0	0	0	0	152	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	7	0	14	0	0	0	23	205	0	0	0	0	157	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	106	0	200	0	0	0	134	1681	0	0	0	0	1517	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :					34.64%	0.00%	65.36%	0.00%			7.38%	92.62%	0.00%	0.00%		0.00%	97.37%	2.63%								0.00%	97.37%	2.63%							
PEAK HR :					07:30 AM	39	37	44			64	909	0	0		0	822	22								0	0	0	0		0	0	0	0	
PEAK HR VOL :	0.000	0.000	0.000	0.000	0.800	0.000	0.887	0.000			0.842	0.967	0.000	0.000		0.000	0.909	0.917								0.000	0.909	0.917			0.000	0.000	0.000	0.000	
PEAK HR FACTOR :					0.853							0.965					0.917																		

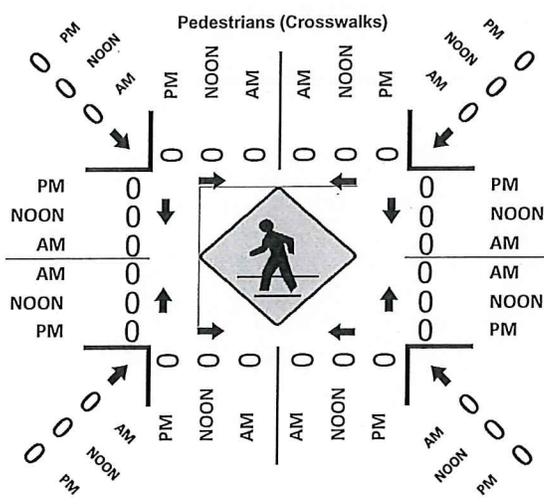
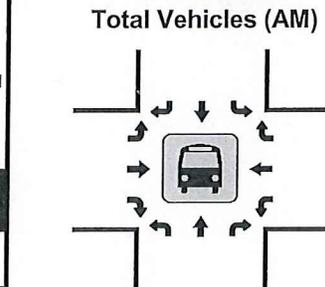
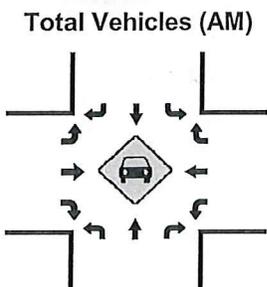
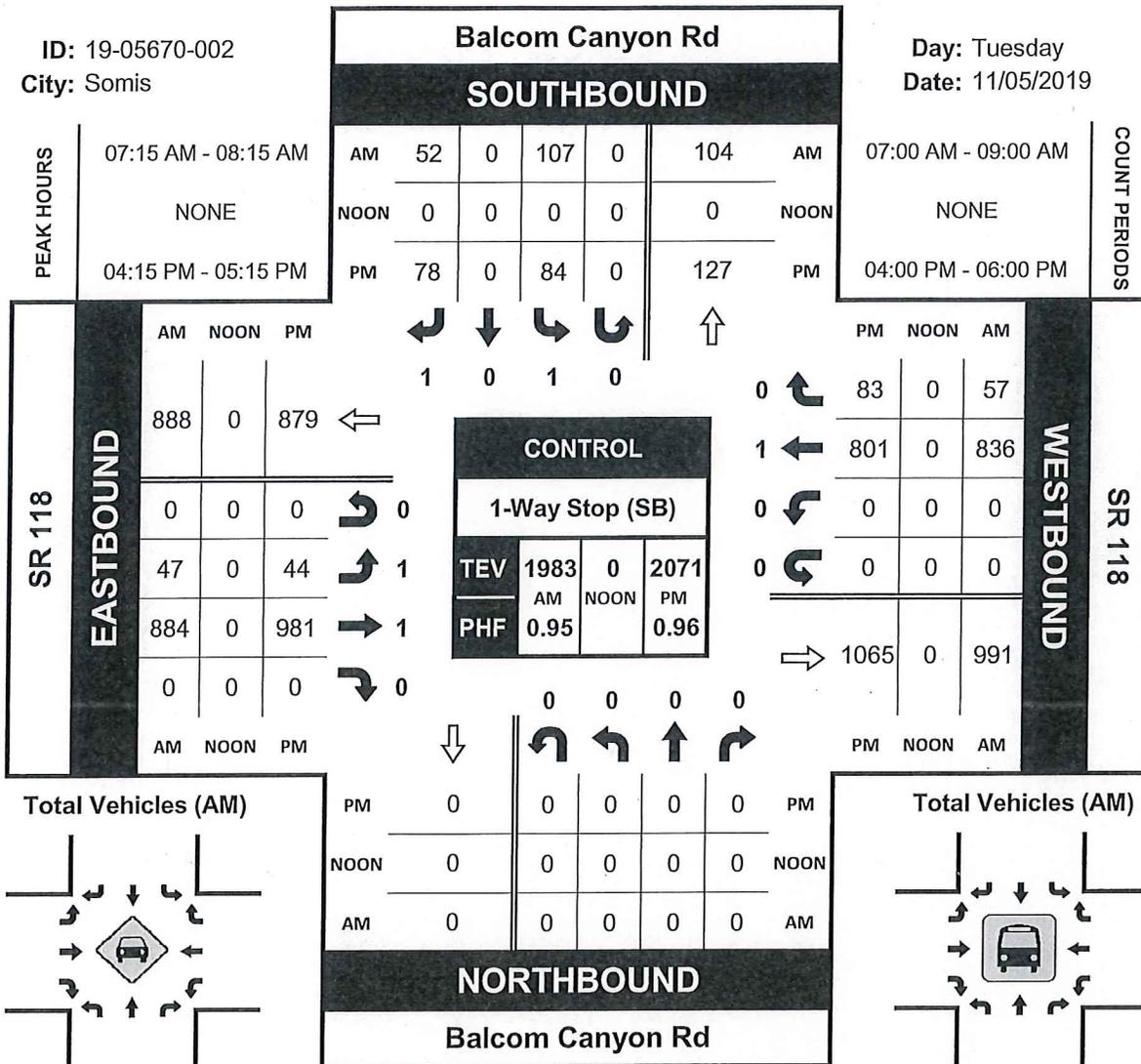
NS/EW Streets:	Grimes Canyon Rd										SR 118										SR 118														
	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					EASTBOUND					WESTBOUND									
	NL	NT	NR	NU	SL	ST	SR	SU	TL	TR	EL	ET	ER	EU	WL	WT	WR	WU	TL	TR	EL	ET	ER	EU	WL	WT	WR	WU	TL	TR					
PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	7	0	25	0	0	0	18	191	0	0	0	0	232	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	6	0	13	0	0	0	34	232	0	0	0	0	200	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	11	0	20	0	0	0	21	236	0	0	0	0	216	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	6	0	10	0	0	0	22	246	0	0	0	0	185	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	13	0	22	0	0	0	32	242	0	0	0	0	224	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	6	0	10	0	0	0	41	231	0	0	0	0	212	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	8	0	19	0	0	0	23	226	0	0	0	0	215	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	4	0	12	0	0	0	27	217	0	0	0	0	158	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	61	0	131	0	0	0	218	1821	0	0	0	0	1642	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :					31.77%	0.00%	68.23%	0.00%			10.69%	89.31%	0.00%	0.00%		0.00%	94.53%	5.47%								0.00%	94.53%	5.47%							
PEAK HR :					04:30 PM	291	289	296			116	955	0	0		0	837	43								0	0	0	0		0	0	0	0	
PEAK HR VOL :	0.000	0.000	0.000	0.000	0.692	0.000	0.705	0.000			0.707	0.971	0.000	0.000		0.000	0.934	0.632								0.000	0.934	0.632			0.000	0.000	0.000	0.000	
PEAK HR FACTOR :					0.700							0.977					0.944																		

Balcom Canyon Rd & SR 118

Peak Hour Turning Movement Count

ID: 19-05670-002
City: Somis

Day: Tuesday
Date: 11/05/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Balcom Canyon Rd & SR 118
 City: Somis
 Control: 1-Way Stop (SB)

Project ID: 19-05670-002
 Date: 11/5/2019

Total

NS/EW Streets:	Balcom Canyon Rd						Balcom Canyon Rd						SR 118						SR 118																													
	NORTHBOUND			SOUTHBOUND			SOUTHBOUND			SOUTHBOUND			EASTBOUND			EASTBOUND			WESTBOUND			WESTBOUND																										
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL														
7:00 AM	0	0	0	0	1	0	1	0	14	184	0	0	0	0	211	13	0	454	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	454														
7:15 AM	0	0	0	0	17	0	15	0	12	200	0	0	0	0	200	13	0	465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	465														
7:30 AM	0	0	0	0	30	0	10	0	13	234	0	0	0	0	223	12	0	522	0	0	0	0	0	0	0	0	0	0	0	0	0	0	522															
7:45 AM	0	0	0	0	24	0	13	0	10	225	0	0	0	0	219	15	0	506	0	0	0	0	0	0	0	0	0	0	0	0	0	0	506															
8:00 AM	0	0	0	0	30	0	12	0	12	225	0	0	0	0	194	17	0	490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	490															
8:15 AM	0	0	0	0	17	0	6	0	11	189	0	0	0	0	203	15	0	441	0	0	0	0	0	0	0	0	0	0	0	0	0	0	441															
8:30 AM	0	0	0	0	14	0	7	0	7	219	0	0	0	0	171	16	0	434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	434															
8:45 AM	0	0	0	0	20	0	11	0	7	176	0	0	0	0	150	13	0	377	0	0	0	0	0	0	0	0	0	0	0	0	0	0	377															
TOTAL VOLUMES :	0	0	0	0	175	0	91	0	86	1652	0	0	0	0	1571	114	0	3689	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3689															
APPROACH %'s :	65.79%						34.21%						95.05%						0.00%						0.00%						93.23%						6.77%											
PEAK HR :	07:15 AM - 08:15 AM						07:30 AM						0.904						0.942						0.937						0.838																	
PEAK HR VOL :	0						107						47						884						0						836						57											
PEAK HR FACTOR :	0.000						0.892						0.000						0.765						0.946						0.000						0.937						0.838					

NS/EW Streets:	Balcom Canyon Rd						Balcom Canyon Rd						SR 118						SR 118																							
	NORTHBOUND			SOUTHBOUND			SOUTHBOUND			SOUTHBOUND			EASTBOUND			EASTBOUND			WESTBOUND			WESTBOUND																				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL								
4:00 PM	0	0	0	0	1	0	1	0	12	232	0	0	0	0	216	16	0	519	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	519								
4:15 PM	0	0	0	0	12	0	11	0	12	243	0	0	0	0	206	19	0	503	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	503								
4:30 PM	0	0	0	0	26	0	34	0	14	243	0	0	0	0	202	21	0	540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	540									
4:45 PM	0	0	0	0	27	0	20	0	10	246	0	0	0	0	185	19	0	507	0	0	0	0	0	0	0	0	0	0	0	0	0	0	507									
5:00 PM	0	0	0	0	19	0	13	0	8	249	0	0	0	0	208	24	0	521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521									
5:15 PM	0	0	0	0	14	0	14	0	8	244	0	0	0	0	207	11	0	498	0	0	0	0	0	0	0	0	0	0	0	0	0	0	498									
5:30 PM	0	0	0	0	15	0	11	0	13	251	0	0	0	0	217	19	0	526	0	0	0	0	0	0	0	0	0	0	0	0	0	0	526									
5:45 PM	0	0	0	0	18	0	8	0	8	193	0	0	0	0	195	14	0	436	0	0	0	0	0	0	0	0	0	0	0	0	0	0	436									
TOTAL VOLUMES :	0	0	0	0	150	0	135	0	85	1901	0	0	0	0	1636	143	0	4050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4050									
APPROACH %'s :	52.63%						47.37%						95.72%						0.00%						91.96%						8.04%											
PEAK HR :	04:15 PM						04:30 PM						0.786						0.997						0.963						0.865											
PEAK HR VOL :	84						78						44						981						0						801						83					
PEAK HR FACTOR :	0.000						0.574						0.000						0.675						0.000						0.953											

LEVEL OF SERVICE CALCULATION WORKSHEETS

- Reference 1 - State Route 118/Somis Rd.**
- Reference 2 - Las Posas Rd./Camino Alvarez**
- Reference 3 - Somis Rd./Las Posas Rd.**
- Reference 4 - Upland Rd./Flynn Rd.**
- Reference 5 - Lewis Rd./Adolfo Rd.**
- Reference 6 - Lewis Rd./Daily Dr.**
- Reference 7 - U.S. Highway 101 Northbound Ramps/Daily Dr.**
- Reference 8 - U.S. Highway 101 Southbound Ramps/Ventura Blvd.**
- Reference 9 - Lewis Rd./Ventura Blvd.**
- Reference 10 - State Route 118/Santa Clara Ave.**
- Reference 11 - State Route 118/Grimes Canyon Rd.**
- Reference 12 - State Route 118/Balcom Canyon Rd.**

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **A.M. PEAK HOUR**
 N/S STREET: **SOMIS ROAD**
 E/W STREET: **STATE ROUTE 118**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	89	59	545	24	131	26	12	344	177	447	431	19
(B) PROJECT-ADDED:	35	0	32	0	0	0	0	0	10	10	0	0
(C) CUMULATIVE:	103	59	573	24	131	26	12	346	182	472	438	19

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L T R	SOUTH BOUND L TR	EAST BOUND L TR	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	89	124	103	138	-	-	-	-		
NBT	1	1600	59	59	59	59	0.093 *	0.114 *	0.101 *	0.123 *		
NBR	1	1600	98	104	103	109	0.061	0.065	0.064	0.068		
SBL	1	1600	24	24	24	24	0.015	0.015	0.015	0.015		
SBT	1	1600	131	131	131	131	0.098 *	0.098 *	0.098 *	0.098 *		
SBR	0	0	26	26	26	26	-	-	-	-		
EBL	1	1600	12	12	12	12	0.01	0.01	0.01	0.01		
EBT	1	1600	344	344	346	346	0.326 *	0.332 *	0.330 *	0.336 *		
EBR	0	0	177	187	182	192	-	-	-	-		
WBL	1	1600	447	457	472	482	0.28 *	0.29 *	0.30 *	0.30 *		
WBT	1	1600	431	431	438	438	0.281	0.281	0.286	0.286		
WBR	0	0	19	19	19	19	-	-	-	-		
<i>LOST TIME:</i>							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.796	0.830	0.824	0.858		
SCENARIO LEVEL OF SERVICE:							C	D	D	D		

NOTES: Northbound Right-Turn Overlap with Westbound Left-Turn

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **P.M. PEAK HOUR**
 N/S STREET: **SOMIS ROAD**
 E/W STREET: **STATE ROUTE 118**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	88	134	626	26	129	17	11	301	116	362	217	9
(B) PROJECT-ADDED:	20	0	19	0	0	0	0	0	34	32	0	0
(C) CUMULATIVE:	105	134	668	26	129	17	11	308	149	405	220	9

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LT R	SOUTH BOUND L TR	EAST BOUND L TR	WEST BOUND L TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	88	108	105	125	-	-	-	-		
NBT	1	1600	134	134	134	134	0.139	0.151	0.149	0.162		
NBR	1	1600	264	272	282	290	0.165 *	0.170 *	0.176 *	0.181 *		
SBL	1	1600	26	26	26	26	0.016	0.016	0.016	0.016		
SBT	1	1600	129	129	129	129	0.091 *	0.091 *	0.091 *	0.091 *		
SBR	0	0	17	17	17	17	-	-	-	-		
EBL	1	1600	11	11	11	11	0.01	0.01	0.01	0.01		
EBT	1	1600	301	301	308	308	0.261 *	0.282 *	0.286 *	0.307 *		
EBR	0	0	116	150	149	183	-	-	-	-		
WBL	1	1600	362	394	405	437	0.23 *	0.25 *	0.25 *	0.27 *		
WBT	1	1600	217	217	220	220	0.141	0.141	0.143	0.143		
WBR	0	0	9	9	9	9	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.743	0.789	0.806	0.852		
SCENARIO LEVEL OF SERVICE:							C	C	D	D		

NOTES: Northbound Right-Turn Overlap with Westbound Left-Turn

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **A.M. PEAK HOUR**
 N/S STREET: **CAMINO ALVAREZ**
 E/W STREET: **LAS POSAS ROAD**
 CONTROL TYPE: **SIGNAL**

VOLUMES	TRAFFIC VOLUME SUMMARY											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	65	42	44	58	44	17	31	835	92	17	794	73
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	1	0	0	2	0
(C) CUMULATIVE:	65	42	44	58	44	17	31	843	92	17	828	73

LANE GEOMETRICS	GEOMETRICS											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS				
			1	2	3	4	1	2	3	4	
			NBL	1	1600	65	65	65	65	0.04 *	0.04 *
NBT	1	1600	42	42	42	42	0.031	0.031	0.031	0.031	
NBR	0	0	8	8	8	8	-	-	-	-	
SBL	1	1600	58	58	58	58	0.036	0.036	0.036	0.036	
SBT	1	1600	44	44	44	44	0.038 *	0.038 *	0.038 *	0.038 *	
SBR	0	0	17	17	17	17	-	-	-	-	
EBL	1	1600	31	31	31	31	0.02	0.02	0.02	0.02	
EBT	2	3200	835	836	843	844	0.290 *	0.290 *	0.292 *	0.293 *	
EBR	0	0	92	92	92	92	-	-	-	-	
WBL	1	1600	17	17	17	17	0.01 *	0.01 *	0.01 *	0.01 *	
WBT	2	3200	794	796	828	830	0.271	0.272	0.282	0.282	
WBR	0	0	73	73	73	73	-	-	-	-	
LOST TIME:						0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:						0.380	0.380	0.382	0.383		
SCENARIO LEVEL OF SERVICE:						A	A	A	A		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: MARCH 12, 2019
 TIME PERIOD: P.M. PEAK HOUR
 N/S STREET: CAMINO ALVAREZ
 E/W STREET: LAS POSAS ROAD
 CONTROL TYPE: SIGNAL

VOLUMES	TRAFFIC VOLUME SUMMARY											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	41	3	35	27	10	2	6	911	79	5	1011	9
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	3	0	0	2	0
(C) CUMULATIVE:	41	3	35	27	10	2	6	938	79	5	1026	9

LANE GEOMETRICS	GEOMETRICS											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	1	1600	41	41	41	41	0.03 *	0.03 *	0.03 *	0.03 *		
NBT	1	1600	3	3	3	3	0.006	0.006	0.006	0.006		
NBR	0	0	6	6	6	6	-	-	-	-		
SBL	1	1600	27	27	27	27	0.017	0.017	0.017	0.017		
SBT	1	1600	10	10	10	10	0.008 *	0.008 *	0.008 *	0.008 *		
SBR	0	0	2	2	2	2	-	-	-	-		
EBL	1	1600	6	6	6	6	0.00 *	0.00 *	0.00 *	0.00 *		
EBT	2	3200	911	914	938	941	0.309	0.310	0.318	0.319		
EBR	0	0	79	79	79	79	-	-	-	-		
WBL	1	1600	5	5	5	5	0.00	0.00	0.00	0.00		
WBT	2	3200	1011	1013	1026	1028	0.319 *	0.319 *	0.323 *	0.324 *		
WBR	0	0	9	9	9	9	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION: SCENARIO LEVEL OF SERVICE:							0.357 A	0.357 A	0.361 A	0.362 A		

NOTES:

T-44

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT

REF: 03 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: MARCH 12, 2019
 TIME PERIOD: A.M. PEAK HOUR
 N/S STREET: SOMIS ROAD
 E/W STREET: LAS POSAS ROAD-UPLAND ROAD
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	57	372	103	176	523	218	293	618	22	160	653	159
(B) PROJECT-ADDED:	0	17	0	1	58	2	1	0	0	0	0	0
(C) CUMULATIVE:	57	404	103	176	536	218	293	626	22	178	687	164

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L T T R	SOUTH BOUND L T T R	EAST BOUND L L T T R	WEST BOUND L T T R
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TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
NBL	1	1600	57	57	57	57	0.04	0.04	0.04	0.04
NBT	2	3200	372	389	404	421	0.116 *	0.122 *	0.126 *	0.132 *
NBR	1	1600	43	43	43	43	0.027	0.027	0.027	0.027
SBL	1	1600	176	177	176	177	0.110 *	0.111 *	0.110 *	0.111 *
SBT	2	3200	523	581	536	594	0.163	0.182	0.168	0.186
SBR	1	1600	218	220	218	220	0.14	0.14	0.14	0.14
EBL	2	3200	293	294	293	294	0.09	0.09	0.09	0.09
EBT	2	3200	618	618	626	626	0.200 *	0.200 *	0.203 *	0.203 *
EBR	0	0	22	22	22	22	-	-	-	-
WBL	1	1600	160	160	178	178	0.10 *	0.10 *	0.11 *	0.11 *
WBT	2	3200	653	653	687	687	0.204	0.204	0.215	0.215
WBR	1	1600	159	159	164	164	0.099	0.099	0.103	0.103
LOST TIME:							0.00	0.00	0.00	0.00
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.526	0.533	0.550	0.557
SCENARIO LEVEL OF SERVICE:							A	A	A	A

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: MARCH 12, 2019
 TIME PERIOD: P.M. PEAK HOUR
 N/S STREET: SOMIS ROAD
 E/W STREET: LAS POSAS ROAD-UPLAND ROAD
 CONTROL TYPE: SIGNAL

VOLUMES	TRAFFIC VOLUME SUMMARY											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	53	506	86	80	446	266	271	646	53	123	714	256
(B) PROJECT-ADDED:	0	57	0	0	34	2	3	0	0	0	0	1
(C) CUMULATIVE:	53	555	86	80	508	266	271	673	53	130	729	258

LANE GEOMETRICS	GEOMETRICS			
	NORTH BOUND L T T R	SOUTH BOUND L T T R	EAST BOUND L L T T R	WEST BOUND L T T R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
NBL	1	1600	53	53	53	53	0.03	0.03	0.03	0.03
NBT	2	3200	506	563	555	612	0.158 *	0.176 *	0.173 *	0.191 *
NBR	1	1600	36	36	36	36	0.023	0.023	0.023	0.023
SBL	1	1600	80	80	80	80	0.050 *	0.050 *	0.050 *	0.050 *
SBT	2	3200	446	480	508	542	0.139	0.150	0.159	0.169
SBR	1	1600	266	268	266	268	0.17	0.17	0.17	0.17
EBL	2	3200	271	274	271	274	0.09 *	0.09 *	0.09 *	0.09 *
EBT	2	3200	646	646	673	673	0.218	0.218	0.227	0.227
EBR	0	0	53	53	53	53	-	-	-	-
WBL	1	1600	123	123	130	130	0.08	0.08	0.08	0.08
WBT	2	3200	714	714	729	729	0.223 *	0.223 *	0.228 *	0.228 *
WBR	1	1600	256	257	258	259	0.160	0.161	0.161	0.162
LOST TIME:							0.00	0.00	0.00	0.00
TOTAL INTERSECTION CAPACITY UTILIZATION: SCENARIO LEVEL OF SERVICE:							0.516 A	0.535 A	0.536 A	0.555 A

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: MARCH 12, 2019
 TIME PERIOD: A.M. PEAK HOUR
 N/S STREET: FLYNN ROAD
 E/W STREET: UPLAND ROAD
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	280	0	256	0	0	0	0	638	259	236	674	0
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	1	0	0	0	0
(C) CUMULATIVE:	280	0	292	0	0	0	0	685	259	283	730	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LL R	SOUTH BOUND	EAST BOUND TTR	WEST BOUND LTT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
NBL	2	3200	280	280	280	280	0.09 *	0.09 *	0.09 *	0.09 *
NBT	0	0	0	0	0	0	-	-	-	-
NBR	1	1600	46	46	53	53	0.029	0.029	0.033	0.033
SBL	0	0	0	0	0	0	-	-	-	-
SBT	0	0	0	0	0	0	-	-	-	-
SBR	0	0	0	0	0	0	-	-	-	-
EBL	0	0	0	0	0	0	-	-	-	-
EBT	2	3200	638	639	685	686	0.199 *	0.200 *	0.214 *	0.214 *
EBR	1	1600	259	259	259	259	0.16	0.16	0.16	0.16
WBL	1	1600	236	236	283	283	0.15 *	0.15 *	0.18 *	0.18 *
WBT	2	3200	674	674	730	730	0.211	0.211	0.228	0.228
WBR	0	0	0	0	0	0	-	-	-	-
LOST TIME:							0.00	0.00	0.00	0.00
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.435	0.436	0.479	0.479
SCENARIO LEVEL OF SERVICE:							A	A	A	A

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: *MARCH 12, 2019*
 TIME PERIOD: *P.M. PEAK HOUR*
 N/S STREET: *FLYNN ROAD*
 E/W STREET: *UPLAND ROAD*
 CONTROL TYPE: *SIGNAL*

VOLUMES	TRAFFIC VOLUME SUMMARY									WEST BOUND		
	NORTH BOUND			SOUTH BOUND			EAST BOUND			L	T	R
	L	T	R	L	T	R	L	T	R			
(A) EXISTING:	352	0	209	0	0	0	0	633	145	113	722	0
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	0	0	0	1	0
(C) CUMULATIVE:	352	0	220	0	0	0	0	647	145	134	746	0

LANE GEOMETRICS	GEOMETRICS											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	LL	R				T	T	R	L	T	T	R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	2	3200	352	352	352	352	0.11 *	0.11 *	0.11 *	0.11 *		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR	1	1600	38	38	40	40	0.024	0.024	0.025	0.025		
SBL	0	0	0	0	0	0	-	-	-	-		
SBT	0	0	0	0	0	0	-	-	-	-		
SBR	0	0	0	0	0	0	-	-	-	-		
EBL	0	0	0	0	0	0	-	-	-	-		
EBT	2	3200	633	633	647	647	0.198 *	0.198 *	0.202 *	0.202 *		
EBR	1	1600	145	145	145	145	0.09	0.09	0.09	0.09		
WBL	1	1600	113	113	134	134	0.07 *	0.07 *	0.08 *	0.08 *		
WBT	2	3200	722	723	746	747	0.226	0.226	0.233	0.233		
WBR	0	0	0	0	0	0	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.379	0.379	0.396	0.396		
SCENARIO LEVEL OF SERVICE:							A	A	A	A		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **A.M. PEAK HOUR**
 N/S STREET: **LEWIS ROAD**
 E/W STREET: **ADOLFO ROAD**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	36	485	261	280	636	22	49	573	55	159	275	95
(B) PROJECT-ADDED:	0	17	0	0	58	0	0	0	0	0	0	0
(C) CUMULATIVE:	36	523	261	280	666	23	49	573	55	159	275	95

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND LT TR	SOUTH BOUND LL T TR	EAST BOUND LT TR	WEST BOUND LT TR

TRAFFIC SCENARIOS

- SCENARIO 1 = EXISTING VOLUMES (A)
- SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
- SCENARIO 3 = CUMULATIVE (C)
- SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	1	1600	36	36	36	36	0.02	0.02	0.02	0.02		
NBT	2	3200	485	502	523	540	0.186 *	0.191 *	0.198 *	0.203 *		
NBR	0	0	110	110	110	110	-	-	-	-		
SBL	2	3200	280	280	280	280	0.088 *	0.088 *	0.088 *	0.088 *		
SBT	2	3200	636	694	666	724	0.206	0.224	0.215	0.233		
SBR	0	0	22	22	23	23	-	-	-	-		
EBL	1	1600	49	49	49	49	0.03	0.03	0.03	0.03		
EBT	2	3200	573	573	573	573	0.196 *	0.196 *	0.196 *	0.196 *		
EBR	0	0	55	55	55	55	-	-	-	-		
WBL	1	1600	159	159	159	159	0.10 *	0.10 *	0.10 *	0.10 *		
WBT	2	3200	275	275	275	275	0.116	0.116	0.116	0.116		
WBR	0	0	95	95	95	95	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION: SCENARIO LEVEL OF SERVICE:							0.569 A	0.574 A	0.581 A	0.586 A		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **P.M. PEAK HOUR**
 N/S STREET: **LEWIS ROAD**
 E/W STREET: **ADOLFO ROAD**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	57	566	234	97	656	27	39	390	36	243	637	183
(B) PROJECT-ADDED:	0	57	0	0	34	0	0	0	0	0	0	0
(C) CUMULATIVE:	57	623	234	97	725	27	40	390	36	243	637	183

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L T TR	SOUTH BOUND LL T TR	EAST BOUND L T TR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	1	1600	57	57	57	57	0.04 *	0.04	0.04	0.04		
NBT	2	3200	566	623	623	680	0.208	0.226 *	0.226 *	0.243 *		
NBR	0	0	99	99	99	99	-	-	-	-		
SBL	2	3200	97	97	97	97	0.030	0.030 *	0.030 *	0.030 *		
SBT	2	3200	656	690	725	759	0.213 *	0.224	0.235	0.246		
SBR	0	0	27	27	27	27	-	-	-	-		
EBL	1	1600	39	39	40	40	0.02	0.02	0.03	0.03		
EBT	2	3200	390	390	390	390	0.133 *	0.133 *	0.133 *	0.133 *		
EBR	0	0	36	36	36	36	-	-	-	-		
WBL	1	1600	243	243	243	243	0.15 *	0.15 *	0.15 *	0.15 *		
WBT	2	3200	637	637	637	637	0.256	0.256	0.256	0.256		
WBR	0	0	183	183	183	183	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.534	0.541	0.541	0.558		
SCENARIO LEVEL OF SERVICE:							A	A	A	A		

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: MARCH 12, 2019
 TIME PERIOD: A.M. PEAK HOUR
 N/S STREET: LEWIS ROAD
 E/W STREET: DAILY DRIVE
 CONTROL TYPE: SIGNAL

VOLUMES	TRAFFIC VOLUME SUMMARY											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	266	823	0	0	883	356	156	10	214	8	9	2
(B) PROJECT-ADDED:	0	16	0	0	39	19	1	0	0	0	0	0
(C) CUMULATIVE:	266	861	0	0	905	364	156	10	241	8	9	2

LANE GEOMETRICS	GEOMETRICS											
	NORTH BOUND L T TR			SOUTH BOUND TT TR			EAST BOUND L LT R			WEST BOUND LTR		

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
			NBL	1	1600	266	266	266	266	0.17 *
NBT	2	3200	823	839	861	877	0.257	0.262	0.269	0.274
NBR	0	0	0	0	0	0	-	-	-	-
SBL	0	0	0	0	0	0	-	-	-	-
SBT	3	4800	883	922	905	944	0.258 *	0.270 *	0.264 *	0.276 *
SBR	0	0	356	375	364	383	-	-	-	-
EBL	0	0	156	157	156	157	0.052 *	0.052 *	0.052 *	0.052 *
EBT	2	3200	10	10	10	10	0.13	0.13	0.15	0.15
EBR	1	1600	214	214	241	241	-	-	-	-
WBL	0	0	8	8	8	8	0.012 *	0.012 *	0.012 *	0.012 *
WBT	1	1600	9	9	9	9	-	-	-	-
WBR	0	0	2	2	2	2	-	-	-	-
LOST TIME:						0.00	0.00	0.00	0.00	
TOTAL INTERSECTION CAPACITY UTILIZATION: SCENARIO LEVEL OF SERVICE:						0.488 A	0.500 A	0.494 A	0.506 A	

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: MARCH 12, 2019
 TIME PERIOD: P.M. PEAK HOUR
 N/S STREET: LEWIS ROAD
 E/W STREET: DAILY DRIVE
 CONTROL TYPE: SIGNAL

VOLUMES	TRAFFIC VOLUME SUMMARY											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	310	1207	2	0	772	278	264	3	189	3	11	5
(B) PROJECT-ADDED:	0	56	0	0	22	12	1	0	0	0	0	0
(C) CUMULATIVE:	310	1273	2	0	838	281	265	3	314	3	11	5

LANE GEOMETRICS	GEOMETRICS											
	NORTH BOUND L T TR			SOUTH BOUND TT TR			EAST BOUND L LT R			WEST BOUND LTR		

TRAFFIC SCENARIOS	
SCENARIO 1 = EXISTING VOLUMES (A)	
SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)	
SCENARIO 3 = CUMULATIVE (C)	
SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)	

MOVE- MENTS	# OF LANES	CAPACITY	LEVEL OF SERVICE CALCULATIONS									
			SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	1	1600	310	310	310	310	0.19 *	0.19 *	0.19 *	0.19 *		
NBT	2	3200	1207	1263	1273	1329	0.378	0.395	0.398	0.416		
NBR	0	0	1	1	1	1	-	-	-	-		
SBL	0	0	0	0	0	0	0.219 *	0.226 *	0.233 *	0.240 *		
SBT	3	4800	772	794	838	860	-	-	-	-		
SBR	0	0	278	290	281	293	-	-	-	-		
EBL	0	0	264	265	265	266	0.083 *	0.084 *	0.084 *	0.084 *		
EBT	2	3200	3	3	3	3	0.12	0.12	0.20	0.20		
EBR	1	1600	189	189	314	314	-	-	-	-		
WBL	0	0	3	3	3	3	0.012 *	0.012 *	0.012 *	0.012 *		
WBT	1	1600	11	11	11	11	-	-	-	-		
WBR	0	0	5	5	5	5	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.508	0.516	0.523	0.530		
SCENARIO LEVEL OF SERVICE:							A	A	A	A		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **A.M. PEAK HOUR**
 N/S STREET: **U.S. HIGHWAY 101 NORTHBOUND RAMPS**
 E/W STREET: **DAILY DRIVE**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	373	0	266	0	0	0	0	198	86	458	179	0
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	1	0	17	2	0
(C) CUMULATIVE:	373	0	281	0	0	0	0	210	86	521	193	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L L R	SOUTH BOUND	EAST BOUND T R	WEST BOUND L L T
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TRAFFIC SCENARIOS

- SCENARIO 1 = EXISTING VOLUMES (A)
- SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
- SCENARIO 3 = CUMULATIVE (C)
- SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	2	3200	373	373	373	373	0.12 *	0.12 *	0.12 *	0.12 *		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR	1	1600	112	112	118	118	0.070	0.070	0.074	0.074		
SBL	0	0	0	0	0	0	-	-	-	-		
SBT	0	0	0	0	0	0	-	-	-	-		
SBR	0	0	0	0	0	0	-	-	-	-		
EBL	0	0	0	0	0	0	-	-	-	-		
EBT	1	1600	198	199	210	211	0.124 *	0.124 *	0.131 *	0.132 *		
EBR	1	1600	86	86	86	86	0.05	0.05	0.05	0.05		
WBL	2	3200	458	475	521	538	0.14 *	0.15 *	0.16 *	0.17 *		
WBT	1	1600	179	181	193	195	0.112	0.113	0.121	0.122		
WBR	0	0	0	0	0	0	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION: SCENARIO LEVEL OF SERVICE:							0.384 A	0.389 A	0.411 A	0.417 A		

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT

REF: 07 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: MARCH 12, 2019
 TIME PERIOD: P.M. PEAK HOUR
 N/S STREET: U.S. HIGHWAY 101 NORTHBOUND RAMPS
 E/W STREET: DAILY DRIVE
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	1309	0	279	0	0	0	0	142	175	294	333	0
(B) PROJECT-ADDED:	0	0	0	0	0	0	0	1	0	10	2	0
(C) CUMULATIVE:	1309	0	359	0	0	0	0	188	175	375	353	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L L R	SOUTH BOUND	EAST BOUND T R	WEST BOUND L L T
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TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	2	3200	1309	1309	1309	1309	0.41 *	0.41 *	0.41 *	0.41 *		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR	1	1600	118	118	151	151	0.074	0.074	0.094	0.094		
SBL	0	0	0	0	0	0	-	-	-	-		
SBT	0	0	0	0	0	0	-	-	-	-		
SBR	0	0	0	0	0	0	-	-	-	-		
EBL	0	0	0	0	0	0	-	-	-	-		
EBT	1	1600	142	143	188	189	0.089	0.089	0.118	0.118		
EBR	1	1600	175	175	175	175	0.11	0.11	0.11	0.11		
WBL	2	3200	294	304	375	385	0.09	0.10	0.12	0.12		
WBT	1	1600	333	335	353	355	0.208 *	0.209 *	0.221 *	0.222 *		
WBR	0	0	0	0	0	0	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.617	0.618	0.630	0.631		
SCENARIO LEVEL OF SERVICE:							B	B	B	B		

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: MARCH 12, 2019
 TIME PERIOD: A.M. PEAK HOUR
 N/S STREET: U.S. HIGHWAY 101 SOUTHBOUND RAMPS
 E/W STREET: DAILY DRIVE
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	7	18	22	235	10	12	15	118	12	24	148	487
(B) PROJECT-ADDED:	0	0	0	5	0	0	0	0	0	24	151	487
(C) CUMULATIVE:	7	18	22	255	10	22	30	118	12	24	151	487

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND L TR	SOUTH BOUND L LT R	EAST BOUND LLTR	WEST BOUND L T TR
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TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	7	7	7	7	-	-	-	-	-	-
NBT	1	1600	18	18	18	18	0.021 *	0.021 *	0.021 *	0.021 *	-	-
NBR	0	0	9	9	9	9	-	-	-	-	-	-
SBL	0	0	235	240	255	260	-	-	-	-	-	-
SBT	2	3200	10	10	10	10	0.077 *	0.078 *	0.083 *	0.084 *	-	-
SBR	1	1600	12	12	22	22	0.01	0.01	0.01	0.01	-	-
EBL	2	3200	15	15	30	30	0.01 *	0.01 *	0.01 *	0.01 *	-	-
EBT	1	1600	118	118	118	118	0.081	0.081	0.081	0.081	-	-
EBR	0	0	12	12	12	12	-	-	-	-	-	-
WBL	1	1600	24	24	24	24	0.02	0.02	0.02	0.02	-	-
WBT	2	3200	148	151	151	154	0.198 *	0.199 *	0.199 *	0.200 *	-	-
WBR	0	0	487	487	487	487	-	-	-	-	-	-
LOST TIME:							0.00	0.00	0.00	0.00	-	-
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.301	0.303	0.312	0.314	-	-
SCENARIO LEVEL OF SERVICE:							A	A	A	A	-	-

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: *MARCH 12, 2019*
 TIME PERIOD: *P.M. PEAK HOUR*
 N/S STREET: *U.S. HIGHWAY 101 SOUTHBOUND RAMPS*
 E/W STREET: *DAILY DRIVE*
 CONTROL TYPE: *SIGNAL*

VOLUMES	TRAFFIC VOLUME SUMMARY											
	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	33	16	30	434	18	38	148	407	17	28	816	413
(B) PROJECT-ADDED:	0	0	0	16	0	0	0	0	0	0	1	0
(C) CUMULATIVE:	33	16	30	523	18	83	173	407	17	28	817	413

LANE GEOMETRICS	GEOMETRICS			
	NORTH BOUND L TR	SOUTH BOUND L LTR	EAST BOUND LLTR	WEST BOUND L T TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS								
			1	2	3	4	1	2	3	4					
			NBL	0	0	33	33	33	33	-	-	-	-	0.039 *	0.039 *
NBT	1	1600	16	16	16	16	-	-	-	-	-	-	-	-	
NBR	0	0	13	13	13	13	-	-	-	-	-	-	-	-	
SBL	0	0	434	450	523	539	-	-	-	-	-	-	-	-	
SBT	2	3200	18	18	18	18	0.141 *	0.146 *	0.169 *	0.174 *	0.02	0.05	0.05	0.05	
SBR	1	1600	38	38	83	83	0.02	0.02	0.05	0.05	0.05 *	0.05 *	0.05 *	0.05 *	
EBL	2	3200	148	148	173	173	0.05 *	0.05 *	0.05 *	0.05 *	0.265	0.265	0.265	0.265	
EBT	1	1600	407	407	407	407	-	-	-	-	-	-	-	-	
EBR	0	0	17	17	17	17	-	-	-	-	-	-	-	-	
WBL	1	1600	28	28	28	28	0.02	0.02	0.02	0.02	0.384 *	0.384 *	0.384 *	0.385 *	
WBT	2	3200	816	817	817	818	0.384 *	0.384 *	0.384 *	0.384 *	-	-	-	-	
WBR	0	0	413	413	413	413	-	-	-	-	-	-	-	-	
LOST TIME:							0.00	0.00	0.00	0.00					
TOTAL INTERSECTION CAPACITY UTILIZATION: SCENARIO LEVEL OF SERVICE:							0.610 B	0.615 B	0.646 B	0.652 B					

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT

REF: 09 AM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: MARCH 12, 2019
 TIME PERIOD: A.M. PEAK HOUR
 N/S STREET: LEWIS ROAD
 E/W STREET: VENTURA BOULEVARD
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	178	684	16	22	656	428	400	26	341	4	12	5
(B) PROJECT-ADDED:	0	11	0	0	36	3	5	0	0	0	0	0
(C) CUMULATIVE:	226	781	16	22	702	431	404	26	368	4	12	5

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
	LL	TT	RR	LL	TT	RR	LL	TT	RR	LT	RT	

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	2	3200	178	178	226	226	0.06	0.06	0.07	0.07		
NBT	2	3200	684	695	781	792	0.216 *	0.219 *	0.246 *	0.250 *		
NBR	0	0	7	7	7	7	-	-	-	-		
SBL	1	1600	22	22	22	22	0.014 *	0.014 *	0.014 *	0.014 *		
SBT	2	3200	656	692	702	738	0.205	0.216	0.219	0.231		
SBR	1	1600	428	431	431	434	0.27	0.27	0.27	0.27		
EBL	0	0	400	405	404	409	-	-	-	-		
EBT	2	3200	26	26	26	26	0.133 *	0.135 *	0.134 *	0.136 *		
EBR	1	1600	341	341	368	368	0.21	0.21	0.23	0.23		
WBL	0	0	4	4	4	4	-	-	-	-		
WBT	1	1600	12	12	12	12	0.010 *	0.010 *	0.010 *	0.010 *		
WBR	1	1600	5	5	5	5	0.003	0.003	0.003	0.003		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.373	0.378	0.404	0.410		
SCENARIO LEVEL OF SERVICE:							A	A	A	A		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **MARCH 12, 2019**
 TIME PERIOD: **P.M. PEAK HOUR**
 N/S STREET: **LEWIS ROAD**
 E/W STREET: **VENTURA BOULEVARD**
 CONTROL TYPE: **SIGNAL**

VOLUMES	TRAFFIC VOLUME SUMMARY										WEST BOUND		
	NORTH BOUND			SOUTH BOUND			EAST BOUND			L	T	R	
	L	T	R	L	T	R	L	T	R				
(A) EXISTING:	413	968	15	12	637	319	541	16	283	6	17	11	
(B) PROJECT-ADDED:	0	36	0	0	21	1	16	0	0	0	0	0	
(C) CUMULATIVE:	486	1120	15	12	827	320	553	16	408	6	17	11	

LANE GEOMETRICS	GEOMETRICS										WEST BOUND	
	NORTH BOUND LL T TR			SOUTH BOUND L T TR			EAST BOUND L L T R			L	T	R

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
			1	2	3	4	1	2	3	4		
NBL	2	3200	413	413	486	486	0.13 *	0.13 *	0.15 *	0.15 *		
NBT	2	3200	968	1004	1120	1156	0.304	0.316	0.352	0.363		
NBR	0	0	6	6	6	6	-	-	-	-		
SBL	1	1600	12	12	12	12	0.008	0.008	0.008	0.008		
SBT	2	3200	637	658	827	848	0.199 *	0.206 *	0.258 *	0.265 *		
SBR	1	1600	319	320	320	321	0.20	0.20	0.20	0.20		
EBL	0	0	541	557	553	569	-	-	-	-		
EBT	2	3200	16	16	16	16	0.174 *	0.179 *	0.178 *	0.183 *		
EBR	1	1600	283	283	408	408	0.18	0.18	0.26	0.26		
WBL	0	0	6	6	6	6	-	-	-	-		
WBT	1	1600	17	17	17	17	0.014 *	0.014 *	0.014 *	0.014 *		
WBR	1	1600	11	11	11	11	0.007	0.007	0.007	0.007		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.516	0.528	0.602	0.614		
SCENARIO LEVEL OF SERVICE:							A	A	A	B		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT
INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: **NOVEMBER 5, 2019**
 TIME PERIOD: **A.M. PEAK HOUR**
 N/S STREET: **SANTA CLARA AVENUE - STATE ROUTE 118**
 E/W STREET: **LOS ANGELES AVENUE - STATE ROUTE 118**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	307	437	0	0	341	332	335	0	421	0	1	1
(B) PROJECT-ADDED:	0	0	0	0	1	20	6	0	0	0	0	0
(C) CUMULATIVE:	310	440	0	0	351	337	340	0	421	0	1	1

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND		SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	TR	L	TR	L	R	L	TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE- MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
NBL	1	1600	307	307	310	310	0.19 *	0.19 *	0.19 *	0.19 *
NBT	1	1600	437	437	440	440	0.273	0.273	0.275	0.275
NBR	0	0	0	0	0	0	-	-	-	-
SBL	0	0	0	0	0	0	-	-	-	-
SBT	1	1600	341	342	351	352	0.213 *	0.214 *	0.219 *	0.220 *
SBR	1	1600	332	352	337	357	0.21	0.22	0.21	0.22
EBL	0	0	335	341	340	346	-	-	-	-
EBT	1	1600	0	0	0	0	0.473 *	0.476 *	0.476 *	0.479 *
EBR	0	0	421	421	421	421	-	-	-	-
WBL	0	0	0	0	0	0	-	-	-	-
WBT	1	1600	1	1	1	1	0.001 *	0.001 *	0.001 *	0.001 *
WBR	0	0	1	1	1	1	-	-	-	-
LOST TIME:							0.00	0.00	0.00	0.00
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.879	0.883	0.890	0.894
SCENARIO LEVEL OF SERVICE:							D	D	D	D

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: NOVEMBER 5, 2019
 TIME PERIOD: P.M. PEAK HOUR
 N/S STREET: SANTA CLARA AVENUE - STATE ROUTE 118
 E/W STREET: LOS ANGELES AVENUE - STATE ROUTE 118
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	327	295	0	0	470	222	279	0	291	2	1	0
(B) PROJECT-ADDED:	0	1	0	0	1	12	20	0	0	0	0	0
(C) CUMULATIVE:	330	300	0	0	480	232	289	0	291	2	1	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND		SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	TR	L	TR	L	R	L	TR

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	1	1600	327	327	330	330	0.20 *	0.20 *	0.21 *	0.21 *		
NBT	1	1600	295	296	300	301	0.184	0.185	0.188	0.188		
NBR	0	0	0	0	0	0	-	-	-	-		
SBL	0	0	0	0	0	0	-	-	-	-		
SBT	1	1600	470	471	480	481	0.294 *	0.294 *	0.300 *	0.301 *		
SBR	1	1600	222	234	232	244	0.14	0.15	0.15	0.15		
EBL	0	0	279	299	289	309	-	-	-	-		
EBT	1	1600	0	0	0	0	0.356 *	0.369 *	0.363 *	0.375 *		
EBR	0	0	291	291	291	291	-	-	-	-		
WBL	0	0	2	2	2	2	-	-	-	-		
WBT	1	1600	1	1	1	1	0.002 *	0.002 *	0.002 *	0.002 *		
WBR	0	0	0	0	0	0	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.856	0.869	0.871	0.884		
SCENARIO LEVEL OF SERVICE:							D	D	D	D		

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT
 INTERSECTION CAPACITY UTILIZATION WORKSHEET
 COUNT DATE: NOVEMBER 5, 2019
 TIME PERIOD: A.M. PEAK HOUR
 N/S STREET: BALCOM CANYON ROAD
 E/W STREET: STATE ROUTE 118
 CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	0	0	0	107	0	52	47	884	0	0	836	57
(B) PROJECT-ADDED:	0	0	0	0	0	2	6	7	0	0	8	0
(C) CUMULATIVE:	0	0	0	107	0	52	47	914	0	0	868	57

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND		SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	R	L	R	L	T	TR	

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
NBL	0	0	0	0	0	0	-	-	-	-
NBT	0	0	0	0	0	0	-	-	-	-
NBR	0	0	0	0	0	0	-	-	-	-
SBL	1	1600	107	107	107	107	0.067 *	0.067 *	0.067 *	0.067 *
SBT	0	0	0	0	0	0	-	-	-	-
SBR	1	1600	52	54	52	54	0.03	0.03	0.03	0.03
EBL	1	1600	47	53	47	53	0.03 *	0.03 *	0.03 *	0.03 *
EBT	1	1600	884	891	914	921	0.553	0.557	0.571	0.576
EBR	0	0	0	0	0	0	-	-	-	-
WBL	0	0	0	0	0	0	-	-	-	-
WBT	1	1600	836	844	868	876	0.558 *	0.563 *	0.578 *	0.583 *
WBR	0	0	0	0	0	0	-	-	-	-
LOST TIME:							0.00	0.00	0.00	0.00
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.654	0.663	0.674	0.683
SCENARIO LEVEL OF SERVICE:							B	B	B	B

NOTES:

#19015 - SOMIS RANCH FARMWORHER HOUSING PROJECT

REF: 11 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: **NOVEMBER 5, 2019**
 TIME PERIOD: **P.M. PEAK HOUR**
 N/S STREET: **BALCOM CANYON ROAD**
 E/W STREET: **STATE ROUTE 118**
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	0	0	0	84	0	78	44	981	0	0	801	83
(B) PROJECT-ADDED:	0	0	0	0	0	7	4	15	0	0	25	0
(C) CUMULATIVE:	0	0	0	84	0	78	44	1030	0	0	847	83

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND			SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	T	R	L	R	L	T	T	R

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)
 SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
 SCENARIO 3 = CUMULATIVE (C)
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	0	0	0	0	-	-	-	-		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR	0	0	0	0	0	0	-	-	-	-		
SBL	1	1600	84	84	84	84	0.053 *	0.053 *	0.053 *	0.053 *		
SBT	0	0	0	0	0	0	-	-	-	-		
SBR	1	1600	78	85	78	85	0.05	0.05	0.05	0.05		
EBL	1	1600	44	48	44	48	0.03	0.03	0.03	0.03		
EBT	1	1600	981	996	1030	1045	0.613 *	0.623 *	0.644 *	0.653 *		
EBR	0	0	0	0	0	0	-	-	-	-		
WBL	0	0	0	0	0	0	-	-	-	-		
WBT	1	1600	801	826	847	872	0.553	0.568	0.581	0.597		
WBR	0	0	83	83	83	83	-	-	-	-		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.666	0.676	0.697	0.706		
SCENARIO LEVEL OF SERVICE:							B	B	B	C		

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT

INTERSECTION CAPACITY UTILIZATION WORKSHEET

COUNT DATE: NOVEMBER 5, 2019

TIME PERIOD: A.M. PEAK HOUR

N/S STREET: GRIMES CANYON ROAD

E/W STREET: STATE ROUTE 118

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	0	0	0	64	0	110	64	909	0	0	822	22
(B) PROJECT-ADDED:	0	0	0	0	0	5	19	7	0	0	3	0
(C) CUMULATIVE:	0	0	0	64	0	110	64	939	0	0	854	22

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND		SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	T	L	R	L	T	L	T

TRAFFIC SCENARIOS

- SCENARIO 1 = EXISTING VOLUMES (A)
- SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
- SCENARIO 3 = CUMULATIVE (C)
- SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS			
			1	2	3	4	1	2	3	4
NBL	0	0	0	0	0	0	-	-	-	-
NBT	0	0	0	0	0	0	-	-	-	-
NBR	0	0	0	0	0	0	-	-	-	-
SBL	0	0	64	64	64	64	-	-	-	-
SBT	1	1600	0	0	0	0	0.109 *	0.112 *	0.109 *	0.112 *
SBR	0	0	110	115	110	115	-	-	-	-
EBL	1	1600	64	83	64	83	0.04	0.05	0.04	0.05
EBT	1	1600	909	916	939	946	0.568 *	0.573 *	0.587 *	0.591 *
EBR	0	0	0	0	0	0	-	-	-	-
WBL	0	0	0	0	0	0	-	-	-	-
WBT	1	1600	822	825	854	857	0.514	0.516	0.534	0.536
WBR	1	1600	22	22	22	22	0.014	0.014	0.014	0.014
LOST TIME:							0.00	0.00	0.00	0.00
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.677	0.685	0.696	0.703
SCENARIO LEVEL OF SERVICE:							B	B	B	B

NOTES:

#19015 - SOMIS RANCH FARMWORKER HOUSING PROJECT

INTERSECTION CAPACITY UTILIZATION WORKSHEET

REF: 12 PM

COUNT DATE: NOVEMBER 5, 2019

TIME PERIOD: P.M. PEAK HOUR

N/S STREET: GRIMES CANYON ROAD

E/W STREET: STATE ROUTE 118

CONTROL TYPE: SIGNAL

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	0	0	0	36	0	62	116	955	0	0	822	43
(B) PROJECT-ADDED:	0	0	0	0	0	19	11	4	0	0	6	0
(C) CUMULATIVE:	0	0	0	36	0	62	116	1004	0	0	883	43

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		LR	L T R	T R

TRAFFIC SCENARIOS

- SCENARIO 1 = EXISTING VOLUMES (A)
- SCENARIO 2 = EXISTING + PROJECT VOLUMES (A+B)
- SCENARIO 3 = CUMULATIVE (C)
- SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	0	0	0	0	-	-	-	-		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR	0	0	0	0	0	0	-	-	-	-		
SBL	0	0	36	36	36	36	-	-	-	-		
SBT	1	1600	0	0	0	0	0.061 *	0.073 *	0.061 *	0.073 *		
SBR	0	0	62	81	62	81	-	-	-	-		
EBL	1	1600	116	127	116	127	0.07	0.08	0.07	0.08		
EBT	1	1600	955	959	1004	1008	0.597 *	0.599 *	0.628 *	0.630 *		
EBR	0	0	0	0	0	0	-	-	-	-		
WBL	0	0	0	0	0	0	-	-	-	-		
WBT	1	1600	822	828	883	889	0.514	0.518	0.552	0.556		
WBR	1	1600	43	43	43	43	0.027	0.027	0.027	0.027		
LOST TIME:							0.00	0.00	0.00	0.00		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.658	0.672	0.689	0.703		
SCENARIO LEVEL OF SERVICE:							B	B	B	B		

NOTES:

PROJECT TRIP DISTRIBUTION SUMMARY

Exhibit "A"



Delivering Excellence through Experience

1672 Donlon Street
Ventura, CA 93003
Phone: (805) 654-6977
www.jdscivil.com

PLA02.5893
November 25, 2019

Justin Bertoline
County of Ventura Planning Division
800 S. Victoria Avenue
Ventura, CA 93009

SUBJECT: SOMIS RANCH FARMWORKER HOUSING PROJECT (PL19-0046)
Detailed Farm/Agricultural Site Trip Distributions

Dear Mr. Bertoline,

In accordance with County staff comments and direction, we have prepared detailed trip distributions for within the three major farm and cropland travel areas as depicted in the September 24, 2019 *Revised Trip Distribution and Justification* memorandum and in Exhibit A attached hereto. These three major areas, along with the number of acres planted, are summarized below:

Highway 101 & Oxnard Plain	50,752 Acres	48.1%
Highway 118 West	28,805 Acres	27.3%
Highway 118 East	25,956 Acres	24.6%
TOTAL:	105,513 Acres	100.0%

The results of our detailed sub-analysis of each of these three areas is outlined below. These trip distribution findings, along with previous findings contained in the September 24, 2019 memorandum, serve as the basis of trip distribution to agricultural sites for the updated Traffic Study prepared by Associated Transportation Engineers (ATE).

Highway 101 & Oxnard Plain Area Trip Distribution (Exhibit B)

Subarea	Acreage	% of 101/Oxnard	% of County Total
Subarea 1 (South Lewis Rd.)	15,685 AC	30.9 %	14.9%

K:\PLA25893\Planning\Exhibits\2019-11-25 Detailed Agricultural Site Trip Distribution Memo.docx

ENGINEERS PLANNERS SURVEYORS CONSTRUCTION MANAGERS

T-65

Subarea 2 (Pleasant Valley/Fifth Street)	13,669 AC	27.0%	13.0%
Subarea 3 (Highway 101)	21,397 AC	42.1%	20.3%
TOTAL	50,752 AC	100.0%	48.1%

Highway 118 West Travel Area Trip Distribution (Exhibit C)

Subarea	Acreage	% of 118 West	% of County Total
Subarea 1 (Las Posas Valley-West)	10,770 AC	37.4%	10.2%
Subarea 2 (Santa Clara Road)	762 AC	2.7%	0.7%
Subarea 3 (Heritage Valley-West)	17,271 AC	59.9%	16.4%
TOTAL	28,805 AC	100.0%	27.3%

Highway 118 East Travel Area Trip Distribution (Exhibit D)

Subarea	Acreage	% of 118 East	% of County Total
Subarea 1 (Las Posas Valley- East/Simi)	5,111 AC	19.7%	4.8%
Subarea 2 (Balcom Canyon Road)	4,955 AC	19.1%	4.7%
Subarea 3 (Grimes Canyon- Heritage Valley East)	15,889 AC	61.2%	15.0%
TOTAL	25,956 AC	100.0%	24.6%

As noted in the previous memorandum dated September 24, 2019 the dataset including the location, size in acres, and attributes (i.e. crop type and owner name of each operation) of

agricultural operations was sourced from GIS data. This GIS dataset was obtained from Ventura County Agricultural Commissioner's staff on June 20th, 2018.

Although Jensen Design & Survey staff divided the agricultural lands into three distinctive sub-areas for each travel area, it should be noted that the data and acreages provided by the Ventura County Agricultural Commissioner's office remained unchanged. The attributes for each property are associated with the parcel data and do not change based upon grouping their grouping into the three categories described above.

Should you have any further questions regarding our methodology, data, or any other items contained in this memorandum, please do not hesitate to contact us at (805) 654-6977 or by email at lisaw@jds civil.com or tshelton@jds civil.com.

Respectfully Submitted,



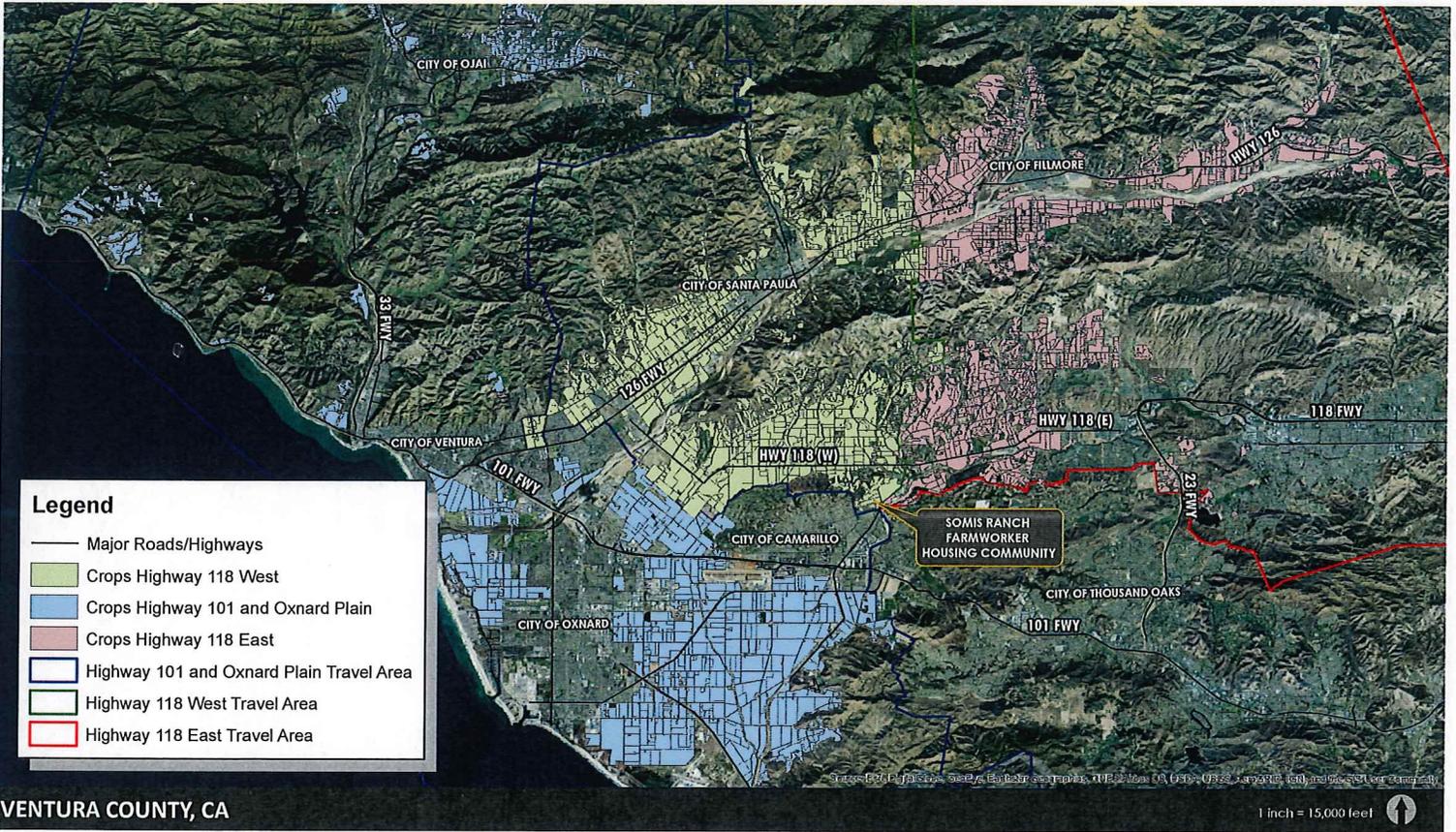
Lisa Woodburn
Planning Manager



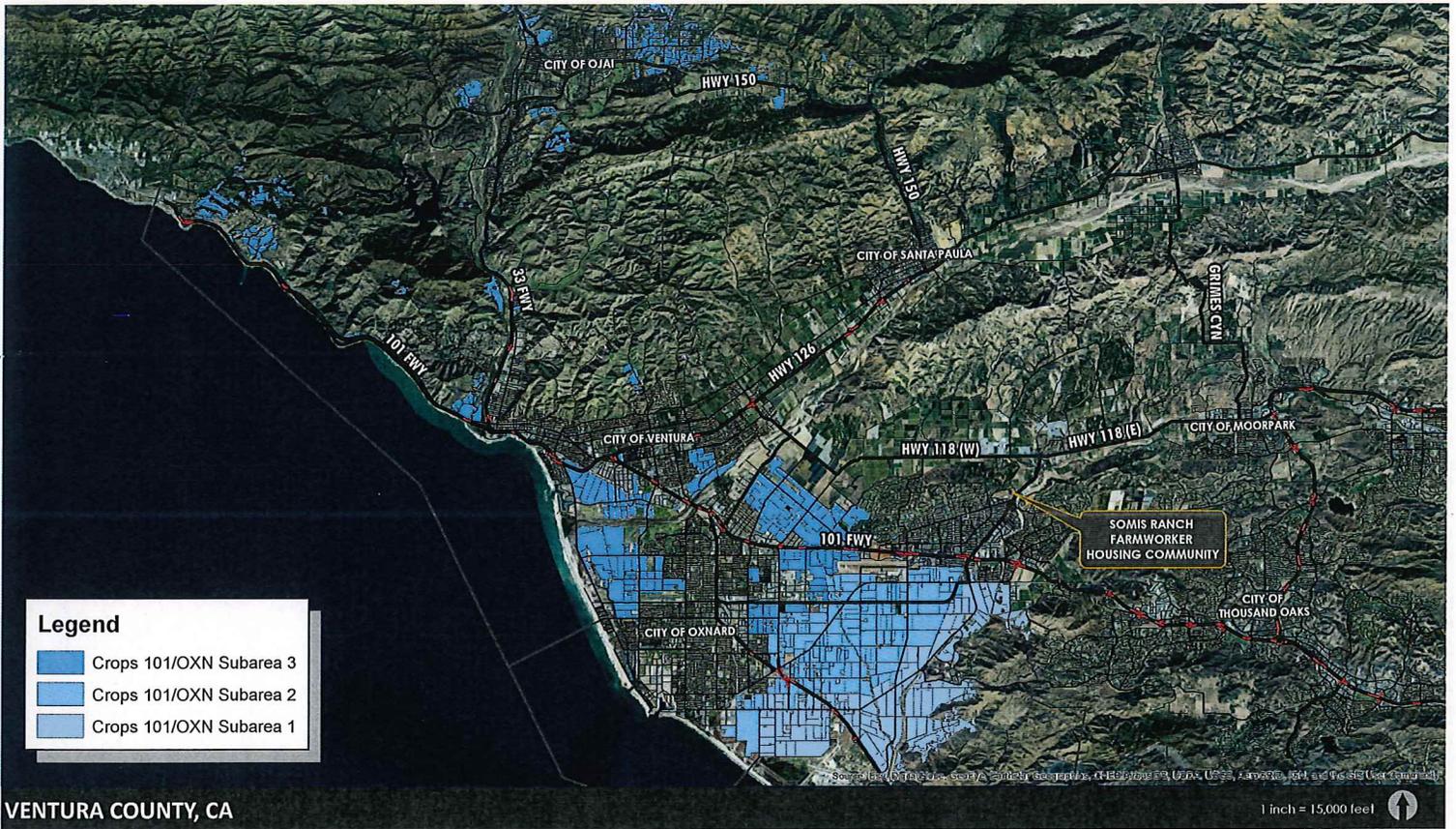
Tanner Shelton
Planner II

Encl: Attachment A: Somis Ranch Surrounding Farm Trip Distribution
Attachment B: Highway 101 & Oxnard Plain Trip Distribution
Attachment C: Highway 118 West Trip Distribution
Attachment D: Highway 118 East Trip Distribution

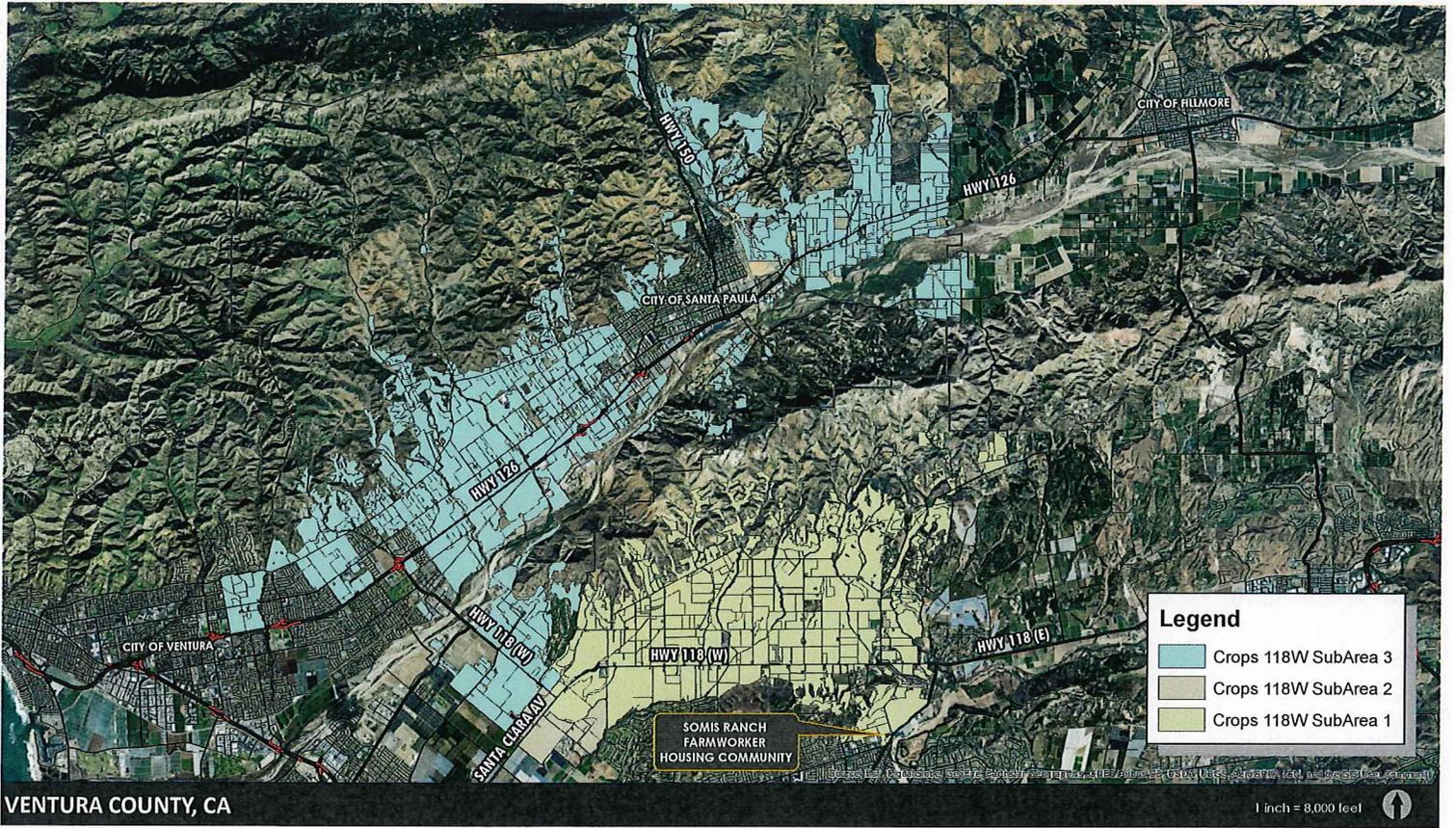
CC: Darryl Nelson, Associated Transportation Engineers
Bill Teller & Dave White Sr, Somis Ranch Partners LLC
Karen Flock, Homecomings, Inc.



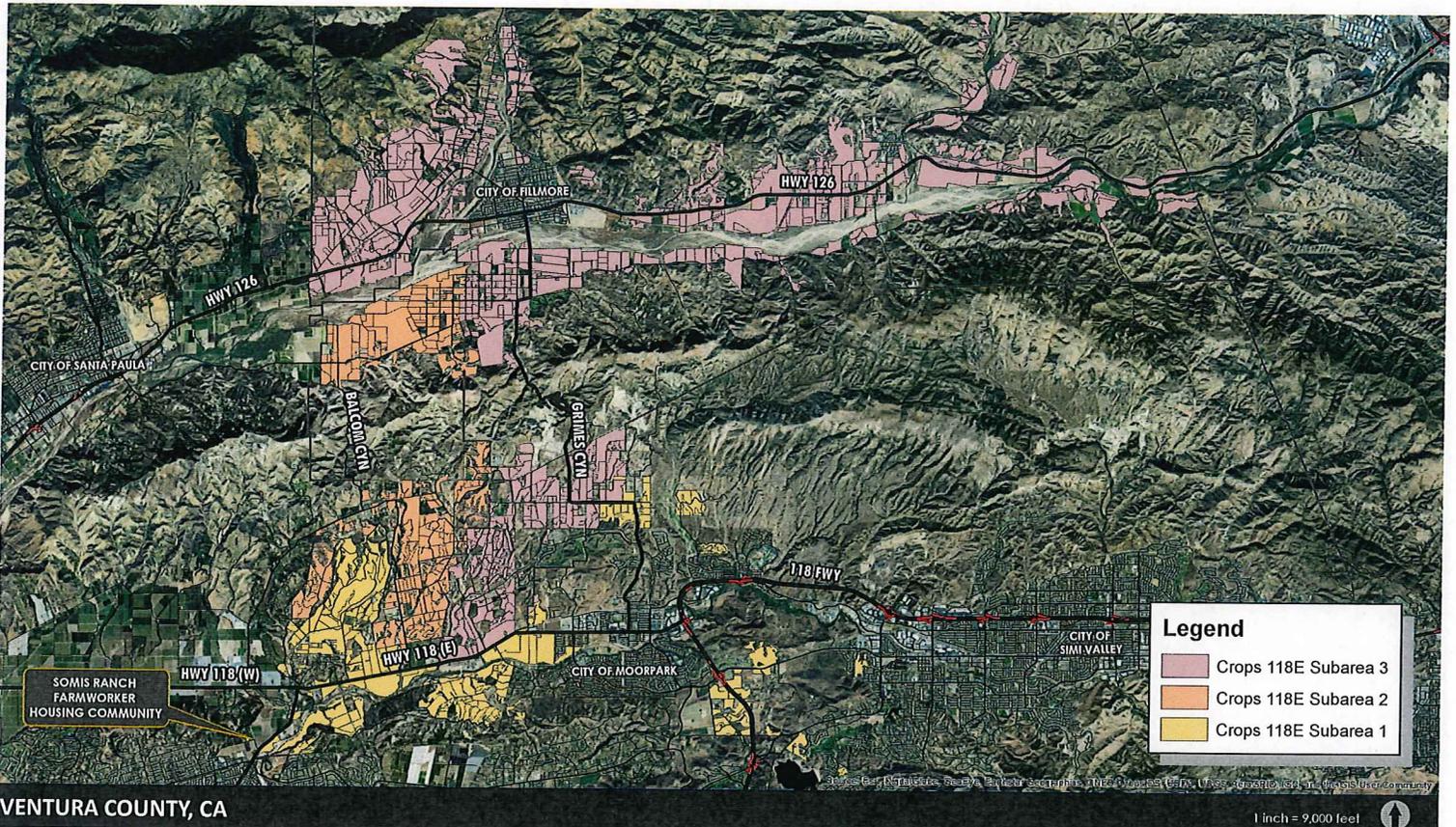
SOMIS RANCH: SURROUNDING FARM TRIP DISTRIBUTION



SOMIS RANCH: 101 FWY/OXNARD PLAIN TRIP DISTRIBUTION



SOMIS RANCH: HIGHWAY 118 WEST TRIP DISTRIBUTION



VENTURA COUNTY, CA

Legend

- Crops 118E Subarea 3
- Crops 118E Subarea 2
- Crops 118E Subarea 1

Path: J:\PLAZA5893\Data\GIS\5893 Travel Area_Subarea Analysis_118E.mxd
 1 inch = 9,000 feet
 Parcel boundaries on this exhibit are a graphical representation only. They should not be used in place of record boundary information and/or field survey data and parcel boundary define property boundaries.



SOMIS RANCH: HIGHWAY 118 EAST TRIP DISTRIBUTION

T-71

SIGNAL WARRANTS

California MUTCD 2014 Edition
(FHWA's MUTCD 2009 Edition, including Revisions 1 & 2, as amended for use in California)

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE _____
 CALC _____ DATE _____
 CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____
 Major St: State Route 34
 Minor St: Northern Driveway

Critical Approach Speed _____ mph
 Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... }
 In built up area of isolated community of < 10,000 population..... } RURAL (R)
 } URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume
 (Condition A or Condition B or combination of A and B must be satisfied)

SATISFIED YES NO

Condition A - Minimum Vehicle Volume

100% SATISFIED YES NO
 80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				Hour							
	U	R	U	R	7-8	8-9	9-10	10-11	11-5	5-6	6-7	7-8
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)								
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	83	77	43	47	38	48	50	53

1 (circled in U column)
 2 or More (in R column)
 350 Meets Min. (handwritten note)

Condition B - Interruption of Continuous Traffic

100% SATISFIED YES NO
 80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				Hour							
	U	R	U	R	7-8	8-9	9-10	10-11	11-5	5-6	6-7	7-8
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)								
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	83	77	43	47	38	48	50	53

1 (circled in U column)
 2 or More (in R column)
 525 Meets Min. (handwritten note)

Combination of Conditions A & B

SATISFIED YES NO

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		Yes <input type="checkbox"/> No <input type="checkbox"/>
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

State Route 34
 Northern Driveway

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES NO

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One		2 or More		Hour				
	One	More	7-8	8-9	9-10	10-11	11-12	1-2	
Both Approaches - Major Street	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
Higher Approach - Minor Street	<input checked="" type="checkbox"/>	<input type="checkbox"/>	83	77	50	53			

* 60 is minimum volume

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

WARRANT 3 - Peak Hour
 (Part A or Part B must be satisfied)

SATISFIED YES NO

PART A

SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

PART B

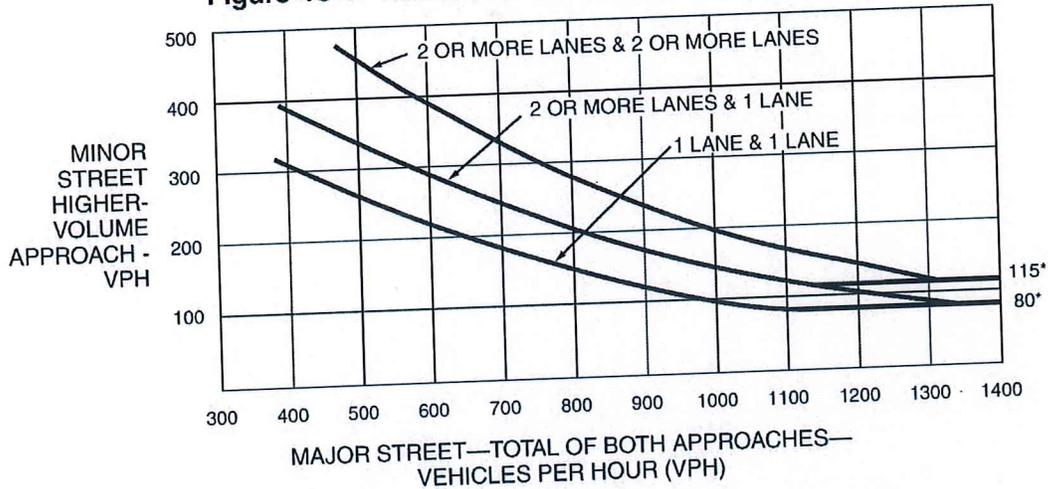
SATISFIED YES NO

APPROACH LANES	One		2 or More		Hour
	One	More	One	More	
Both Approaches - Major Street					
Higher Approach - Minor Street					

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

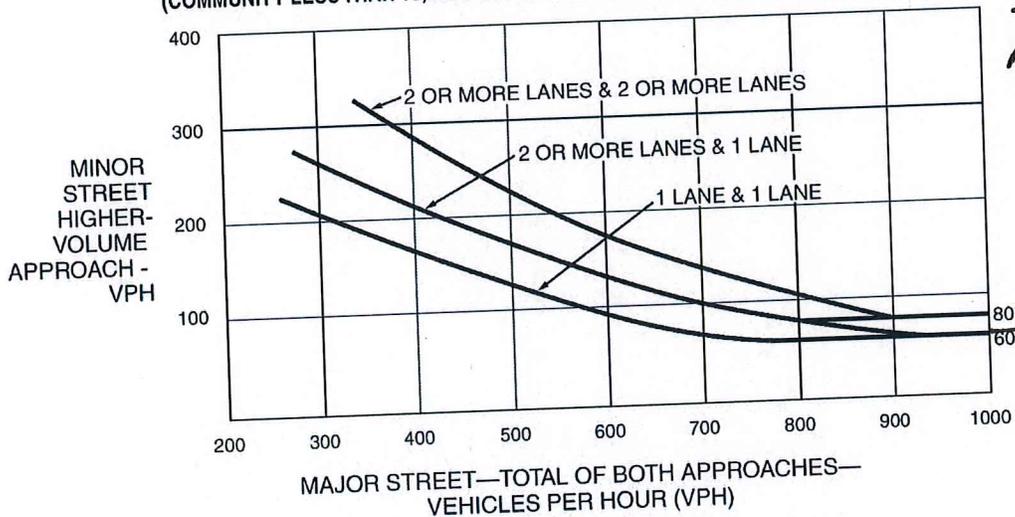
The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

*State Route 34
 Northern Driveway*

*83
 77
 53
 50*

California MUTCD 2014 Edition
 (FHWA's MUTCD 2009 Edition, including Revisions 1 & 2, as amended for use in California)

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
 (Average Traffic Estimate Form)**

COUNT DATE _____
 CALC _____ DATE _____
 CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____

Major St: State Route 34
 Minor St: Northern Drive

Critical Approach Speed _____ mph
 Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... } RURAL (R)
 or
 In built up area of isolated community of < 10,000 population..... } URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

		Minimum Requirements EADT			
		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
		Urban	Rural	Urban	Rural
URBAN..... RURAL..... <input checked="" type="checkbox"/>					
CONDITION A - Minimum Vehicular Volume Satisfied _____ Not Satisfied <input checked="" type="checkbox"/>					
Number of lanes for moving traffic on each approach Major Street Minor Street 1..... 1..... 2 or More..... 2 or More..... 2 or More..... 2 or More..... 1..... 2 or More.....		8,000	<u>5,600</u>	2,400	<u>1,680</u>
		9,600	6,720	2,400	1,680
		9,600	6,720	3,200	2,240
		8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic Satisfied _____ Not Satisfied <input checked="" type="checkbox"/>					
Number of lanes for moving traffic on each approach Major Street Minor Street 1..... 1..... 2 or More..... 2 or More..... 2 or More..... 2 or More..... 1..... 2 or More.....		12,000	<u>8,400</u>	1,200	<u>850</u>
		14,400	10,080	1,200	850
		14,400	10,080	1,600	1,120
		12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B Satisfied _____ Not Satisfied _____ No one condition satisfied, but following conditions fulfilled 80% or more..... A B		2 CONDITIONS 80%		2 CONDITIONS 80%	

686 ADI

686 AI

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.
 The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE _____
 CALC _____ DATE _____
 CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____

Major St: State Route 34 Critical Approach Speed _____ mph
 Minor St: Southern Driveway Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... }
 or } RURAL (R)
 In built up area of isolated community of < 10,000 population..... }
 URBAN (U)

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES NO
 (Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES NO
 80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				Hour							
	U	R	U	R	1-8	8-9	9-10	10-11	11-5	5-6	6-7	7-8
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)								
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)	76	72	31	34	28	34	34	38

① 350 Meets Min.

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES NO
 80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)				Hour							
	U	R	U	R	1-8	8-9	9-10	10-11	11-5	5-6	6-7	7-8
Both Approaches Major Street	750 (600)	525 (420)	900 (720)	630 (504)								
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)	76	72	31	34	28	34	36	38

525 Meets Min.

Combination of Conditions A & B SATISFIED YES NO

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

State Route 34
 Southern Driveway

WARRANT 2 - Four Hour Vehicular Volume

SATISFIED* YES NO

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	2 or More		Hour			
	One	More	1-8	8-9	1	1-8
Both Approaches - Major Street	<input checked="" type="checkbox"/>					
Higher Approach - Minor Street	<input checked="" type="checkbox"/>		76	72	36	38

* 60 is minimum volume

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

WARRANT 3 - Peak Hour
 (Part A or Part B must be satisfied)

SATISFIED YES NO

PART A

SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

PART B

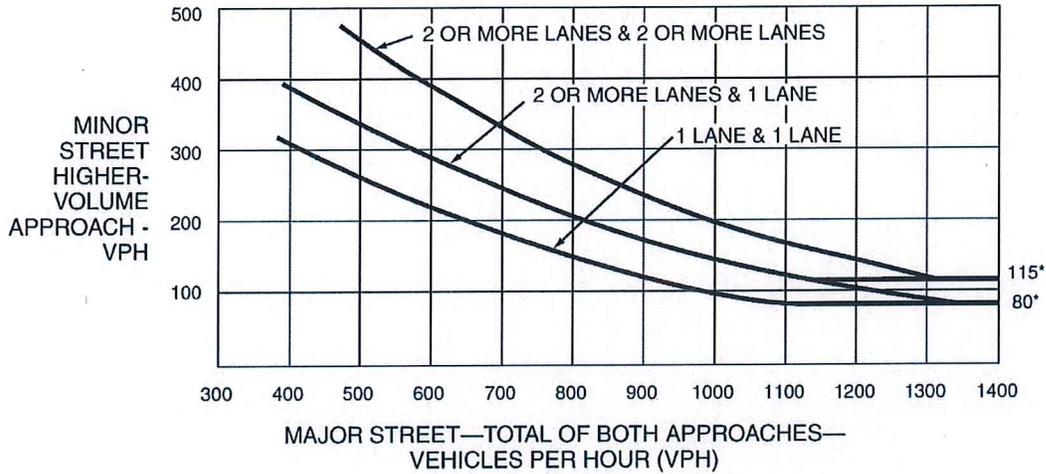
SATISFIED YES NO

APPROACH LANES	2 or More		Hour
	One	More	
Both Approaches - Major Street			
Higher Approach - Minor Street			

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

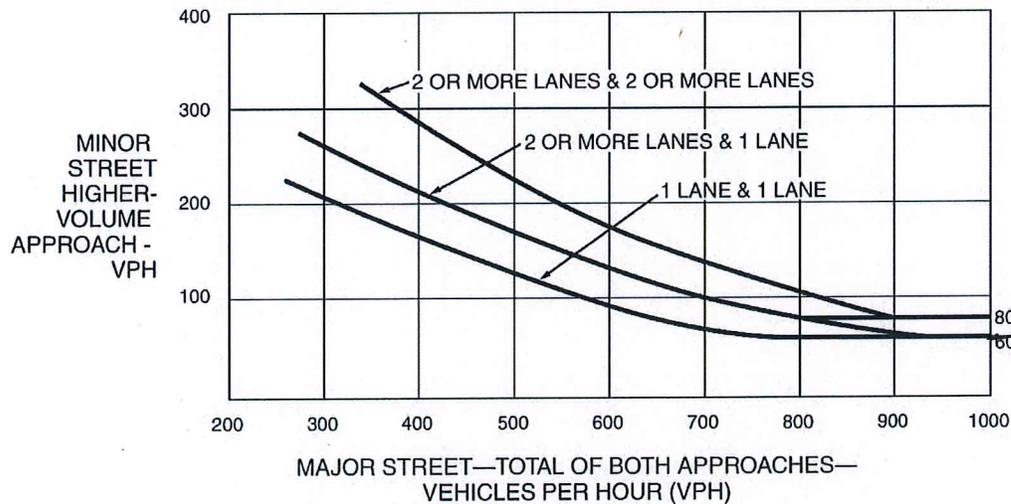
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

*State Route 39
 Sutton Driveway*

*2572
 38
 36*

**Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
 (Average Traffic Estimate Form)**

COUNT DATE _____
 CALC _____ DATE _____
 CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____

Major St: State Route 34 Critical Approach Speed _____ mph
 Minor St: Southern Driveway Critical Approach Speed _____ mph

Speed limit or critical speed on major street traffic > 40 mph..... } RURAL (R)
 or }
 In built up area of isolated community of < 10,000 population..... } URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN..... RURAL.....		Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied _____ Not Satisfied <input checked="" type="checkbox"/>		Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach		8,000	5,600	2,400	1,680
Major Street	Minor Street	9,600	6,720	2,400	1,680
1.....	1.....	9,600	6,720	3,200	2,240
2 or More.....	2 or More.....	8,000	5,600	3,200	2,240
2 or More.....	2 or More.....				
1.....	2 or More.....				
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied _____ Not Satisfied <input checked="" type="checkbox"/>		Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach		12,000	8,400	1,200	850
Major Street	Minor Street	14,400	10,080	1,200	850
1.....	1.....	14,400	10,080	1,600	1,120
2 or More.....	2 or More.....	12,000	8,400	1,600	1,120
2 or More.....	2 or More.....				
1.....	2 or More.....				
Combination of CONDITIONS A + B		2 CONDITIONS 80%		2 CONDITIONS 80%	
Satisfied _____ Not Satisfied _____					
No one condition satisfied, but following conditions fulfilled 80% or more..... A _____ B _____					

633 AD

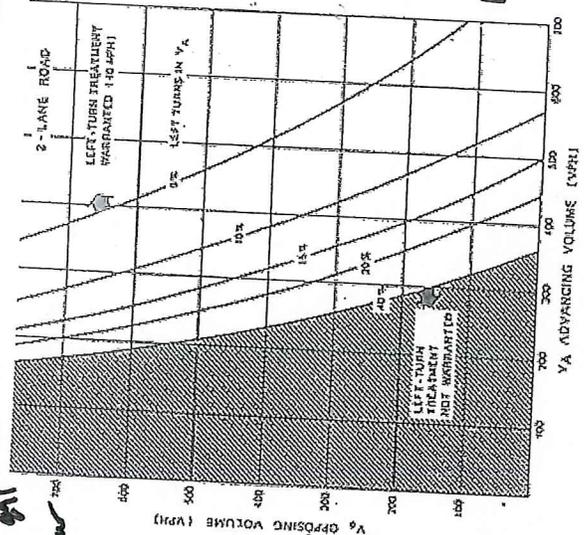
633 ADT

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

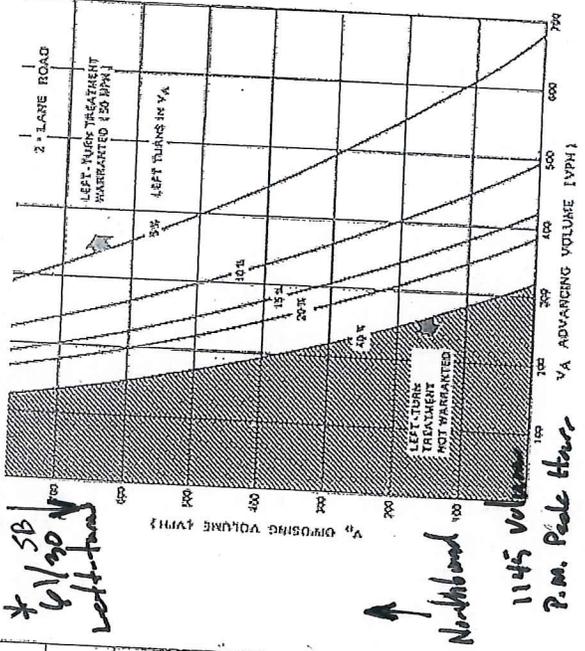
The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

LEFT-TURN WARRANT GRAPH

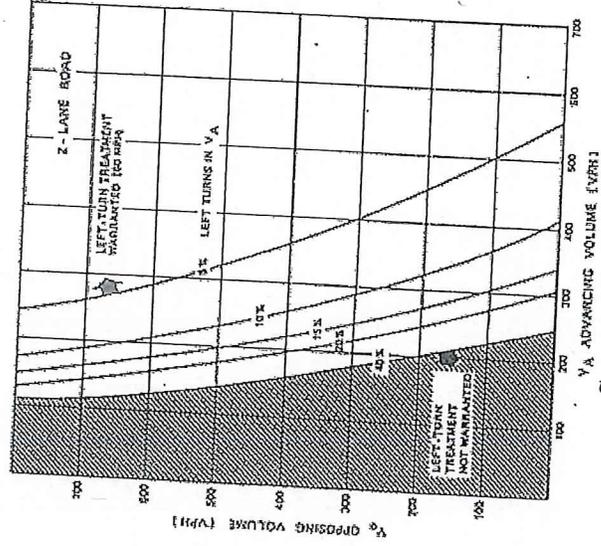
P.M. Peak Hour
 911 volume
 Southbound



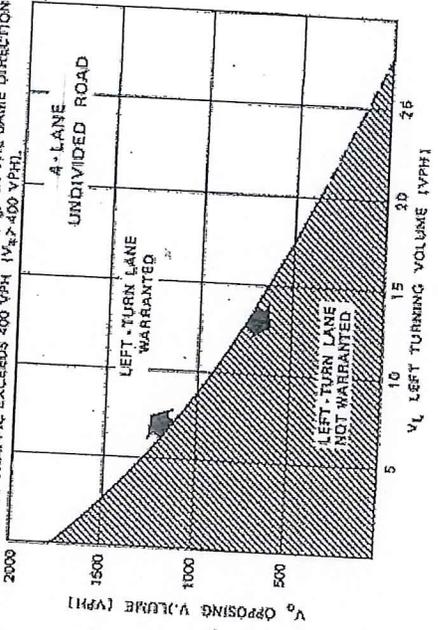
P.M. Peak Hour
 911 volume



↑ NB
 1145 volume
 P.M. Peak Hour



NOTE: WHEN $V_b \leq 400$ VPH (shaded here), A LEFT-TURN LANE IS NOT NORMALLY WARRANTED UNLESS THE ADVANCING VOLUME (V_a) IN THE SAME DIRECTION AS THE LEFT-TURNING TRAFFIC EXCEEDS 400 VPH ($V_a > 400$ VPH).



Source: Neuman, T., *Intersection Channelization Design Guide*, NCHRP Report 279. Copyright, National Academy of Sciences, Washington, D.C., 1985.

Figure 3. NCHRP Report 279 (10) left-turn lane guidelines, 1985.

VENTURA COUNTY AND CITY OF CAMARILLO DEVELOPMENT ACTIVITY LISTS

Permit Number	Parcel Number	Address	Permit Type	Status	Permit Description	Case Planner	Applicant
PL15-0005	7000070375		Parcel Map	Prep for Hearing	<p>The applicant requests approval of a CCC-PM (No. 5949) and a Coastal PD Permit (Case No. PL15-0005) in order to bring an existing 19.16 acre lot into compliance with the Subdivision Map Act and the VCISO. As stated in Section A.8 of this staff report (above), in 1980, Malibu 65 Investment Co., the property owner at that time, conveyed the subject property to the applicant. The subdivision required the approval and recordation of tentative and parcel maps pursuant to the Subdivision Map Act; however, the Malibu 65 Investment Co. did not obtain approval of, or record, the requisite tentative and parcel maps for the subdivision. Therefore, the applicant is requesting approval of a CCC-PM and a Coastal PD Permit in order to bring the subject property into compliance with the Subdivision Map Act and the VCISO.</p> <p>The proposed project does not include any grading or construction of the subject property. The subject property currently is not developed with buildings or structures. However, the property has been cleared of Environmentally Sensitive Habitat Areas (ESHA) (Ventura County CZO, § 8172-1), most recently in 2015 as part of unpermitted clearing of vegetation that the current property owner conducted. The unpermitted vegetation clearance that occurred in 2015 is the subject of Planning Violation Case No. PV15-0027, and will be abated by the property owner's restoration and permanent protection of onsite ESHA and/or preservation of equivalent ESHA off-site. The subject property currently does not have a water source or source of sewage disposal for development of the property. An existing, onsite dirt driveway/road to Pacific Coast Highway currently provides access to the subject property</p>	Jennifer Welch; (805) 654-2465	Lynn Heacox 209 Avenida San Pablo San Clemente, CA 92672 714-766-6525
PL15-0014	1630010795	3100 SOMIS RD, CAMARILLO, CA 93012	General Plan Amendment	Environmental Doc Prep	<p>Major Modification for Development Plan DP-244-1 (Case No. PL15-0014) for the continued use, operation and expansion of a wholesale lumber yard located at 3100 Somis Road, Somis, California. The project site includes Tax Assessor Parcels 163-0-010-795 and 163-0-010-850, totaling 46.4 acres. Between 1992 and 2005, the Applicant incrementally imported fill and paved on an 11.5 acre area on Tax Assessor Parcel 163-0-010-795 outside the approved DP 244-1 permit boundary and without the required County permits and approvals. The Applicant also constructed a 6,000 square foot steel frame canopy shed on Tax Assessor Parcel 163-0-010-795 without the required County permits and approvals. The project consists of the following: (1) General Plan Amendment (GPA) to change the land use designation for an approximately 10.6 acre area on Tax Assessor Parcel 163 0 010 795 from Agricultural (40 acre minimum) to Existing Community and Rezone the same acreage from Agricultural Exclusive (AE 40) to Limited Industrial (M2); (2) Expansion of DP 244 1 permit boundary from 7.63 acres to 18.9 acres gross and 16.2 acres net;</p> <p>(3) Entitlement of approximately 15,811 cubic yards of imported, crushed asphalt fill installed on Tax Assessor Parcel 163-0-010-795 without the required County permits or approvals;</p> <p>(4) Entitlement of a 6,000 square foot steel frame canopy shed with a height of 22 feet from adjacent grade and constructed without the required County permits or approvals;</p> <p>(5) Construction of a 94 foot wide by 340 foot long storm water detention basin. Area to be graded is approximately 31,960 square feet with 7,440 cubic yards of cut. Salvageable (soil) cut material would be used to supplement fill for proposed landscape screening. Surface asphalt and compacted base will be exported to an approved land fill as necessary;</p> <p>(6) Construction of a new on-site waste water treatment system, to replace the existing undersized system. The new system will consist of a 2,000 gallon septic tank and two 30 feet deep seepage pits. The existing 1,500 gallon tank will be removed and replaced with the new 2,000 gallon tank. The new seepage pits will be constructed as shown on the site plan. The existing seepage pit will be abandoned in place.</p> <p>(7) Reconfiguration of the 57 existing parking spaces to 61 spaces including two designated carpool and two handicapped parking spaces and a bicycle rack as shown on the site plan;</p> <p>(8) Designation of 16 new truck loading parking spaces;</p> <p>(9) Installation of additional landscaping as shown on the preliminary landscape plan totaling approximately (35,284 s.f.) or 5% of the net permit area after installation.</p> <p>(10) Entitlement of one existing 30 ft high light pole located within the original DP permit in the lumber storage area approximately 180 ft south of the northern property line and 680 ft east of the western property line;</p> <p>(11) Establishment of a 30-foot "Perimeter Access and Fuel Modification Zone" providing clearance from all grass and brush from combustible material within the project site;</p> <p>(12) Entitlement of a 6 foot high chain link fence topped with three strands of barbed wire around the perimeter of the expanded planned development permit area for security reasons.</p>	John Oquendo;	Ralph Hagle P.O. Box 120 Somis, CA 93066-0120 (805) 987-3887

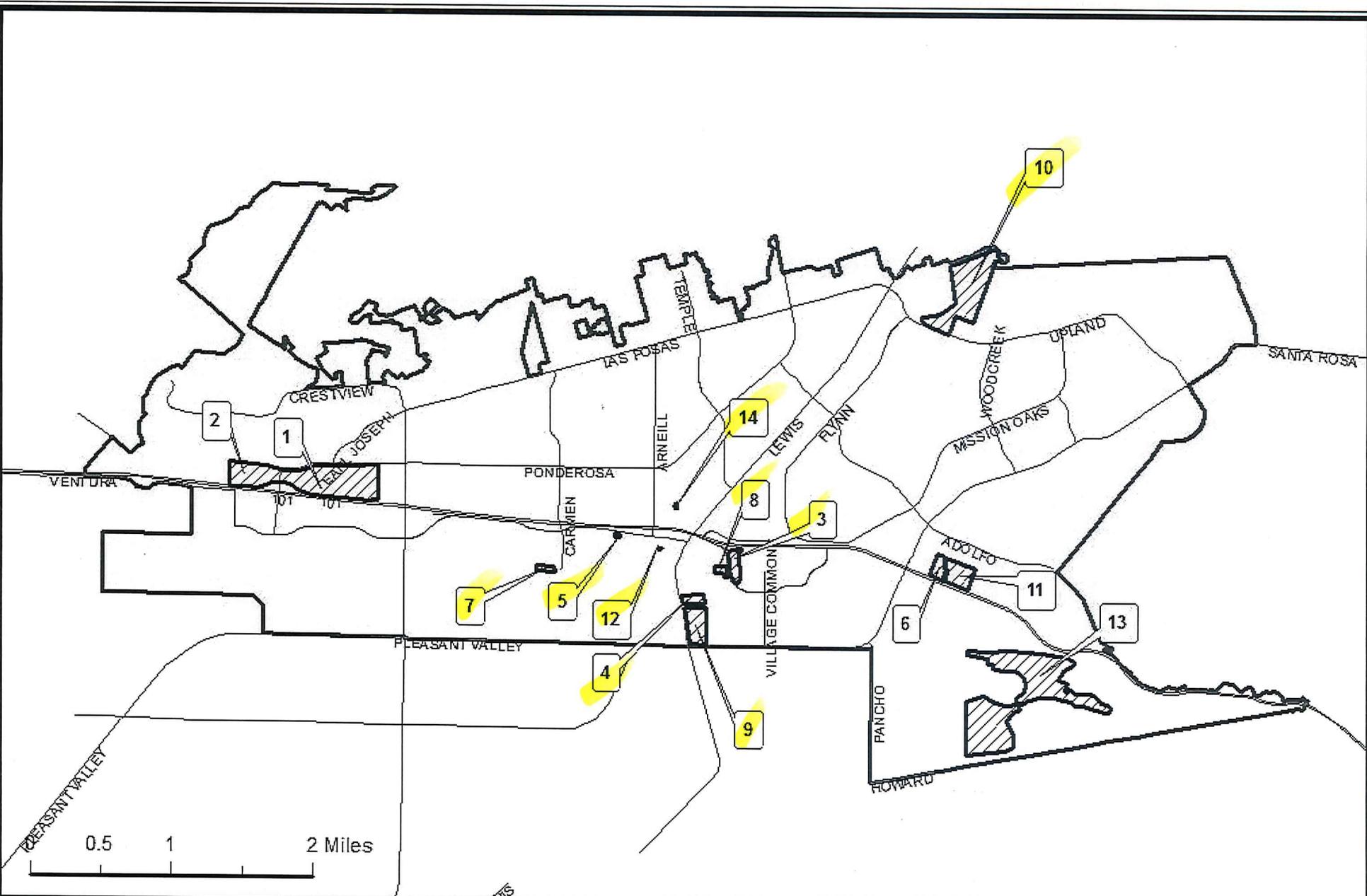
7-81

Permit Number	Parcel Number	Address	Permit Type	Status	Permit Description	Case Planner	Applicant
18-0081	5110190225	10951 W LOS ANGELES AV, MOORPARK, CA 93021	Minor Modification	Prep for Hearing	<p>The applicant (Peach Hills Soils) requests that a modified Conditional Use Permit (CUP) be granted to authorize the continued operation of an Organics Processing Operation (composting, chipping, grinding, soil amendment and mulching operations with sales of incidental landscape materials). The request also includes expansion of the facility stock pile area and addition of a vermiculture operations and area.</p> <p>The request includes:</p> <ol style="list-style-type: none"> 1) Increase the existing CUP (CUP 5319) boundary by 17.2 acres from a total of 26.94 acres to a total of 44.14 acres. The additional CUP area will include a 17.2-acre area east of the existing CUP boundary for the manufacturing and storage of compost and soil amendments. 2) Modify the hours of operation for the facility. The proposed hours of operation are Monday through Friday, between 7:00 a.m. to 4:30 p.m., Saturday 7:00 a.m. to 2:00 p.m., and closed on Sunday. With improvements to the SR 118/SR 34 intersection and Donlon Road intersection improvements, truck deliveries are proposed to be unrestricted during hours of operation. 3) Increase the number of employees on-site from 4 to 7, and increase the average daily trips to/from the project site from approximately 88 per day to approximately 128 per day (Condition 6). 4) Install water service infrastructure to meet Ventura County Fire Department fire flow requirements. This includes correcting the description of the 18,000 existing water tank to a 30,000 gallon water tank and installing three new 20,000 gallon water tanks. 5) Install a 4-inch water service line from an existing 2-inch water meter, including installing underground, per approved UPRR pipeline crossing agreement, to serve on-site water storage tanks, on-site water trucks, and dust control. 6) Proposed new use of vermiculture on-site which includes installation of an approximately 10,000-square-foot hoop house to cover the worm beds. Proposed Engineered Site Plan and Drainage Plan. Worm beds are proposed to be located at a minimum of 300 feet distance from a residence, nearby property, or public facility, 100 feet from the property line, any surface water, and 200 feet from the existing on-site well, as required per Section 8107-36.4.4. <p>All other operational components and the on-site equipment described in CUP 5319 and the LEA Notification Tier Permit would remain unchanged.</p> <p>No additional buildings are proposed, though a new vermiculture bed will be added that will utilize temporary hoop structures for shade and protection from the environment. Existing water is provided by an offsite fire hydrant (across Los Angeles Avenue). The hydrant is metered through an agreement with Ventura County Waterworks District 1. As there are no domestic water connections on the property no domestic waste water is produced.</p> <p>ALL OF THE SUPPORTING DOCUMENTS SUBMITTED WITH THE APPLICATION ARE DOWNLOADED IN THE DOCUMENT TAB UNDER ACCELA RECORD PL18-0081; INCLUDING THE INITIAL STUDY AND THE MITIGATED NEGATIVE DECLARATION.</p>	Becky Linder; (805) 654-2469	Robert Medrano Po Box 158 Moorpark, CA 93021 805-529-6164
18-0086	1630180055		Land Conservation Act	Submittal In Progress	10-year Open Space Wildlife Habitat LCA Contract for Fitzgerald Ranches. This contract is for Lot 25, 53.04 acres, of the Fitzgerald Ranches APN 163-0-180-055)	Justin Bertoline;	Fitzgerald Ranch Po Box 1473 Camarillo, CA 93011-1473 805-469-9779
18-0087	6490030180	645 BOX CANYON RD, CANOGA PARK, CA 91304	Conditional Use Permit	Environmental Doc Prep	AT&T new wireless communication facility.	Thomas Chaffee; (805) 654-2406	Jacob Finney 630 Grand Ave # 101 Santa Ana, CA 92705 949-702-0566
18-0088	0030250450	16011 MOUNTAIN LILAC TR, FRAZIER PARK, CA 93225	Conditional Use Permit	Environmental Doc Prep	Conditional Use Permit for construction of a new unmanned wireless communication facility at 16011 Mountain Lilac Trail in Lockwood Valley. Operator-AT&T, Site number-CSL05969. Facility consists of 12 antennas mounted on individual 15' poles (popsicle sticks). One separate 800 sq.ft. lease area with a 137 sq.ft. masonry shelter with two battery racks, two power plants, three equipment racks, equipment panel and a GPS antenna. The lease area will be enclosed with an 8' chainlink fence. The antennas will be located 234' from the lease area with connecting underground fiber/power/coax cables in a 3' wide trench. No water service provided.	Thomas Chaffee; (805) 654-2406	Jacob Finney 630 Grand Ave #101 Santa Ana, CA 92705 (805) 702-0566

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Permit Number	Parcel Number	Address	Permit Type	Status	Permit Description	Case Planner	Applicant
PL18-0107	2300062325	2034 E FIFTH ST, CAMARILLO, CA 93012	Minor Modification	Environmental Doc Prep	<p>Minor modification to CUP LU05-141 to increase number of event from 60 to 90 events per calendar year. PL17-0026 was approved for the following: The Project is a Minor Modification to CUP LU05-0141 to authorize the continued operation of McCormick Home Ranch for an additional 10-year period.</p> <p>McCormick Home Ranch provides a venue for temporary outdoor events, including, but not limited to, weddings, quinceañeras, bar mitzvahs, fundraisers, retirement celebrations, anniversary parties, and corporate events. Temporary outdoor events will be limited to 250 guests for a maximum of 60 days within the calendar year and will be held primarily on weekends and holidays. Each event host will have use of the property beginning at 9:00 a.m. the day of the event and ending at midnight; however, no music will be played after 11:00 p.m. Deliveries for events will occur between 8:00 a.m. and 5:00 p.m., will not exceed 10 deliveries per month, and are not included as part of the 60 days per calendar year event maximum.</p> <p>Events will take place in the developed area of the parcel surrounding the existing structures; more specifically, events will be located in the northern portion of the parcel in the front of the property and in-between the existing residence and barn. A 400-square foot dressing room structure that does not contain any plumbing will be used as a dressing room, and a 1,000-square foot barn structure (North Barn # 2) will be used for the storage of the property owner's event furniture, equipment, and supplies (i.e. tables, chairs, dance floor, linens, arbors, heaters, umbrellas, and signs). The property owner will set up for events the day before or day of the event, and will break down and clean the site on the next available day.</p> <p>All existing structures on the project site will remain, and no new permanent structures will be constructed for the proposed temporary outdoor events. An existing single-family dwelling and barn (South Barn #1), located on the subject property, will be restricted to the owner's use and will not be leased out (Exhibit 3).</p> <p>All food on site will be provided by self-sufficient, licensed catering services. Dishes, flatware, and glasses will be provided by the caterer or delivered by a rental company. Six to eight portable restrooms and portable pump sinks will be provided; permanent restrooms and well water will not be used for events. Trash will be collected into a dumpster and removed from the site weekly. An unpaved parking area on an approximately 70 feet x 700 feet (approximately 49,000 square foot) strip along the westerly property line will accommodate up to 125 vehicles. Lighting will be provided by lights attached to existing structures and near the trash area, landscape lights, and pole lights along the parking strip. The site entrance to the project site is marked with an existing lamp post and sign showing the property owner's name and site address, and arrows will direct guests to the parking area (see final conditions of approval, Condition No. 1, for the table with the existing structures for temporary outdoor event use onsite).</p>	Sarah McGurk; 805-654-3136	Mccormick J D Jr Test Tr Est 2034 E Fifth St Camarillo, CA 93012 (805) 482-1549
PL18-0109	5030060145	5500 GRIMES CANYON RD, MOORPARK, CA 93021	Conditional Use Permit	Awaiting Resubmittal	<p>The applicant requests a Conditional Use Permit for a new dog kennel and sales facility on an approx. 20 acre lot in the Agricultural Exclusive zone. When fully constructed, the proposed project will include areas for breeding, selling and housing 300 dogs/puppies. The existing residence on the lot will remain and the existing garage will be converted into a sales office for the proposed kennel. The existing caretaker dwelling will be demolished and areas of existing farmland will be removed for/covered by the proposed kennel and sales facility. The proposed kennel and sales facility will be constructed in five phases and includes seven kennel buildings, an administration building, the aforementioned sales office, sales patio, shade trellis, guest seating area, pergola/gazebo, play pens for dogs and people, and parking. In addition, the proposed project includes a new septic system, storm water management system, animal waste treatment system, landscaping and irrigation, hardscaping, and electrical services. The proposed project will require 5,800 cubic yards of cut and 4,900 cubic yards of fill. Additional road grading will be required for the project. No export or import of materials will be required. Domestic water to the existing residence is provided by the Ventura County (VC) Water and Sanitation Department. VC Water and Sanitation Department states that the subject property is within the boundaries of the VC Waterworks District No. 1 for water service. Any existing water facilities required to be upgraded or replaced to service a new connection on the subject property must be completed prior to installation of a new meter. The applicant must comply with the VC Waterworks District Rules and Regulations for water service. An onsite water well provides irrigation water for the existing orchard which will remain.</p>	Chuck Anthony; (805) 654-3683	Tim Hoke 12085 Clinton Street Moorpark, CA 93021 805-532-2216

7-83



Updated on 4-18-19
 Department of
 Community Development
 City of Camarillo

City of Camarillo Residential Projects



RESIDENTIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	UNITS BUILT	TOTAL UNITS	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
				ACREAGE							
2	RPD-195 / TT-5671M(3)	Ran Rancho Dennis Hardgrave 211 Village Commons Bl, Ste 15 Camarillo, CA 93012 (805) 484-8303	Northwest corner of US 101 and Springville Dr (Springville)	157-0-020-210 / 185	Single family	0	158	Pending (GPA)	J. Lee	n/a	n/a
				22.87 acres							
3	CUP-307M(2)	Hiji Investment Co Dennis Hardgrave 211 Village Commons Bl, Ste 15 Camarillo, CA 93012 (805) 484-8303	Between Village at the Park Dr and Westpark Ct (Village at the Park)	157-0-020-195	Mixed use rental ?	0	10	Pending	J. Lee	n/a	n/a
				3.21 acres							
4	RPD-188	Aldersgate Inv, LLC Park West Townhomes Matt Mansi 300 E. Esplanade Dr. Ste 1550 Oxnard, CA 93036 (805) 988-4114	350 Lewis Road, northeast of Lewis Road and Mike Loza Dr (Village Gateway Townhomes)	229-0-070-210	Condominiums (includes 9 moderate income units)	0	87	Under Construction	M. D'Anna	11/7/2014	n/a
				7.8 acres							
5	CUP-330	Aldersgate Inv, LLC Cedar Oak Jordan Marshall 300 E. Esplanade Dr, Suite 1550 Oxnard, CA 93036 (805) 988-4114	2024 Ventura Blvd between Cedar Drive and Oak Street	162-0-104-010, 162-0-135-050 & -060	Mixed-Use rentals (1 low and 22 moderate income units)	0	23	Under Construction	D. Moe	11/5/2013	n/a
				0.59 acres							
6	TT-5956 RPD-194	Comstock Homes Teso Robles Townhomes Harriet Rapista 2301 Rosecrans Avenue #1150 El Segundo, CA 90245 (310) 546-5781	North side of Hwy 101 between Camino Ruiz and Verdugo Way	160-0-091-055 / 065 / 105 / 125	Townhomes (includes 13 moderate income units)	89	129	Under Construction	C. Torres	04/7/2015 - RPD & 8/26/2015 - Tract	n/a
				8.66 acres							
7	LD-537 RPD-199	Jim Sandefer 5450 Ralston St Ventura, CA 93003 (805) 207-4894	Southerly terminus of Barcelona Street	162-0-200-015	4 single family lots	0	4	Pending	C. Torres	n/a	n/a
				3 acres							

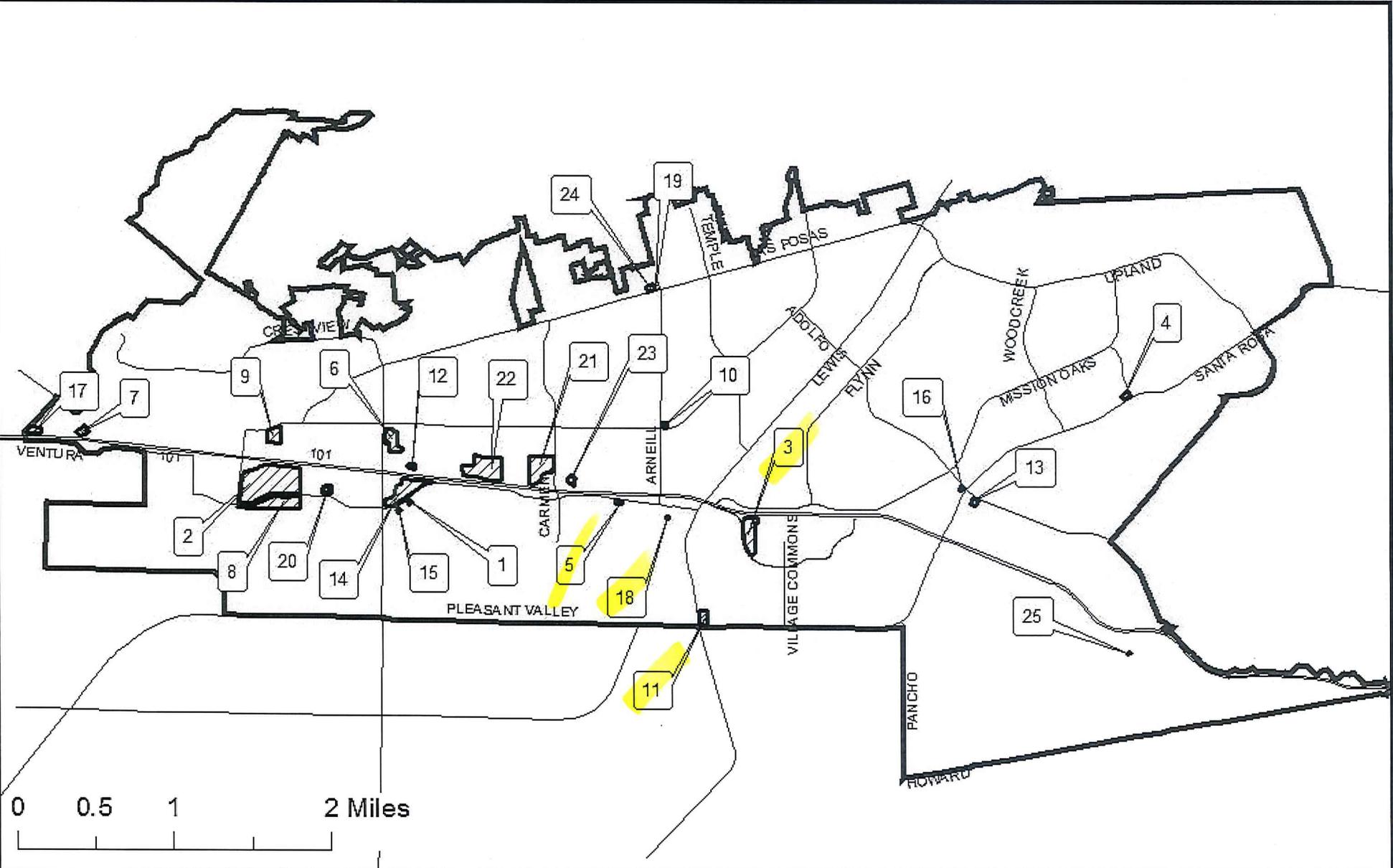
RESIDENTIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	UNITS BUILT	TOTAL UNITS	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
				ACREAGE							
8	RPD-189M(2)	Hiji Investment Co Dennis Hardgrave 211 Village Commons Bl, Ste 15 Camarillo, CA 93012 (805) 484-8303	West of Village at the Park Dr between Petit Street and Westpark Court (Village at the Park)	229-0-320-085, 095, 105	Rental units	0	96	Approved	Senior Planner	9/19/2017	9/19/2019
				4.63 acres							
9	TT-5969 RPD-196	Camarillo Village Homes, LLC Gerald J. Marcil 43D Malaga Cove Plaza Palos Verdes Estates, CA 90274 (310) 791-2000	Northeast corner of Pleasant Valley and Lewis Road	229-0-070-240	Townhomes (includes 29 moderate income units)	0	285	Approved	Senior Planner	9/20/2016	RPD-196 - 9/20/2019 TT-5969 - 8/24/2019
				19.88 acres							
9	CUP-369	Camarillo Village Homes, LLC Gerald J. Marcil 43D Malaga Cove Plaza Palos Verdes Estates, CA 90274 (310) 791-2000	Northeast corner of Pleasant Valley and Lewis Road	229-0-070-240	Mixed Use Commercial and rental units (3 low income)	0	24	Approved	Senior Planner	9/20/2016	9/20/2019
				3.44 acres							
10	TT-5976 RPD-198	Shea Homes Kevin Harbison 2 Ada, Suite 200 Irvine, CA 92618 (310) 926-6363	Northeast corner of Somis and Upland Roads	163-0-017-275 and -185	281 Senior Single-family, Cluster, and Townhome units	0	281	Approved	M. D'Anna	2/6/2018	TT-5976 10/25/2019 RPD-198 2/6/20
				83.1 acres							
11	RPD-201	Camino Ruiz, LLC and ZDI, Inc. 16509 Saticoy Street Van Nuys, CA 91406 (310) 392-7899	Southeast corner of Camino Ruiz and Verdugo Way	160-0-093-195	Rental apartments, mix of studio, one- and two-bedroom units	0	386	Pending (GPA)	D. Moe	n/a	n/a
				13.79 acres of an overall 19.98-acre site							
12	RPD-202	Lustra Development, Inc Rick Town 99 South Glenn Street Camarillo, CA 93010 (818) 661-8931	Southeast corner of Glenn Drive and Chapel Drive	162-0-160-400 162-0-160-180	Rental town homes	0	6	Pending	C. Torres	n/a	n/a
				.34 acres							

RESIDENTIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	UNITS BUILT	TOTAL UNITS	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
				ACREAGE							
12	CUP-391	Lustra Development, Inc Rick Town 99 South Glenn Street Camarillo, CA 93010 (818) 661-8931	99 South Glenn Drive	162-0-154-110 162-0-154-120 .24 acres	Mixed use, 12 apartments, 2 retail spaces	0	12	Pending	C. Torres	n/a	n/a
13	TT-6016	NUWI Camarillo, LLC Jason Han 1733 Ocean Avenue, Suite 350 Santa Monica, CA 90401 (310) 864-2427	791 Camarillo Spring Road	234-0-040-595 182 acres	300 Senior for-sale units	0	300	Pending (GPA)	J. Lee	n/a	n/a
14	LD-544/RPD-203	Habitat for Humanity Darcy Taylor 1850 Eastman Avenue Oxnard, CA 93030 (805) 485-6065 x105	2521 Barry Street	162-0-014-120 8,012 s.f.	2 low-income units	0	2	Approved	O. Buck	11/20/2018	RPD-203 - 11/20/19 LD-544 - 11/20/20

MAP ID	GPA	DEVELOPER	UNITS	LOCATION	DESCRIPTION
2	2014-1	Rancho Associates	158	Springville Specific Plan	Public to Medium Density Residential
11	2017-1	Camino Ruiz LLC & ZDI Inc	386	5153 Camino Ruiz	Industrial to High Density Residential
13	2017-2	New Urban West, Inc	Up to 300	791 Camarillo Springs Rd	Re-designate 30 acres from the current Quasi-Public land use designation to Low-Medium Density Residential (10 dwelling units per acre maximum)



Updated on 4/4/19
 Department of
 Community Development
 City of Camarillo

City of Camarillo Commercial Projects



COMMERCIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	BLDG SF	ACRES	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
1	CPD-197M(13)	Red Rock Restaurant Constantino Papanicolaou 3301 Sturgis Rd Oxnard, CA 93030 (805) 604-0909	Southside of Ventura Blvd at the Promenade Outlets	Parcel B of LD-519A	Restaurant and brewery	10,990	0.46	Approved	C. Torres	11/16/2010	11/16/2019
2	CPD-226M(3)	Amara Shopping Center Springville Camarillo Owner Jessica Ramirez 201 S. Figueroa St, Suite 300 Los Angeles, CA 90012 (310) 652-1177	Northeast corner of W. Ventura Blvd and Springville Drive	230-0-020- 230/240, 230-0-010- 470/480	Commercial center	491,776	44.84	Approved	J. Vacca / J. Lee	4/19/2016	4/19/2020
3	CPD-236	Hiji Inv Co/TFR Inv Co Dennis Hardgrave 211 Village Commons Bl, Ste 15 Camarillo, CA 93012 (805) 484-9303	Between Village at the Park Drive and Westpark Court (Village at the Park)	219-0-150- 125/315	Commercial mixed-use center	42,630	10.02	Approved	J. Lee	9/15/2009	9/15/2019
3	CPD-236M(1)	Hiji Inv Co/TFR Inv Co Dennis Hardgrave 211 Village Commons Bl, Ste 15 Camarillo, CA 93012 (805) 484-9303	Between Village at the Park Drive and Westpark Court (Village at the Park)	219-0-150-125 / 315	2 Commerical Pads ?	8,000	1.54	Pending	J. Lee	n/a	n/a
4	CPD-232M(2)	Carol D'Egido 17401 Gresham St Northridge, CA 91325 (310) 821-2725	Northwest corner of Santa Rosa Road and Oak Canyon Road	171-0-250-325	2 office/retail buildings	8,828	1.26	Approved	J. Lee	6/14/2016	6/14/2019
5	CUP-330	Aldersgate Inv. LLC Cedar Oak Jordan Marshall 300 E. Esplanade Dr, Suite 1550 Oxnard, CA 93036 (805) 988-4114	2024 Ventura Blvd between Cedar and Oak Streets (Old Town)	162-0-104-010, 162-0-135- 050/060	Mixed use ?	6,100	0.58	Under Construction	D. Moe	11/5/2013	n/a

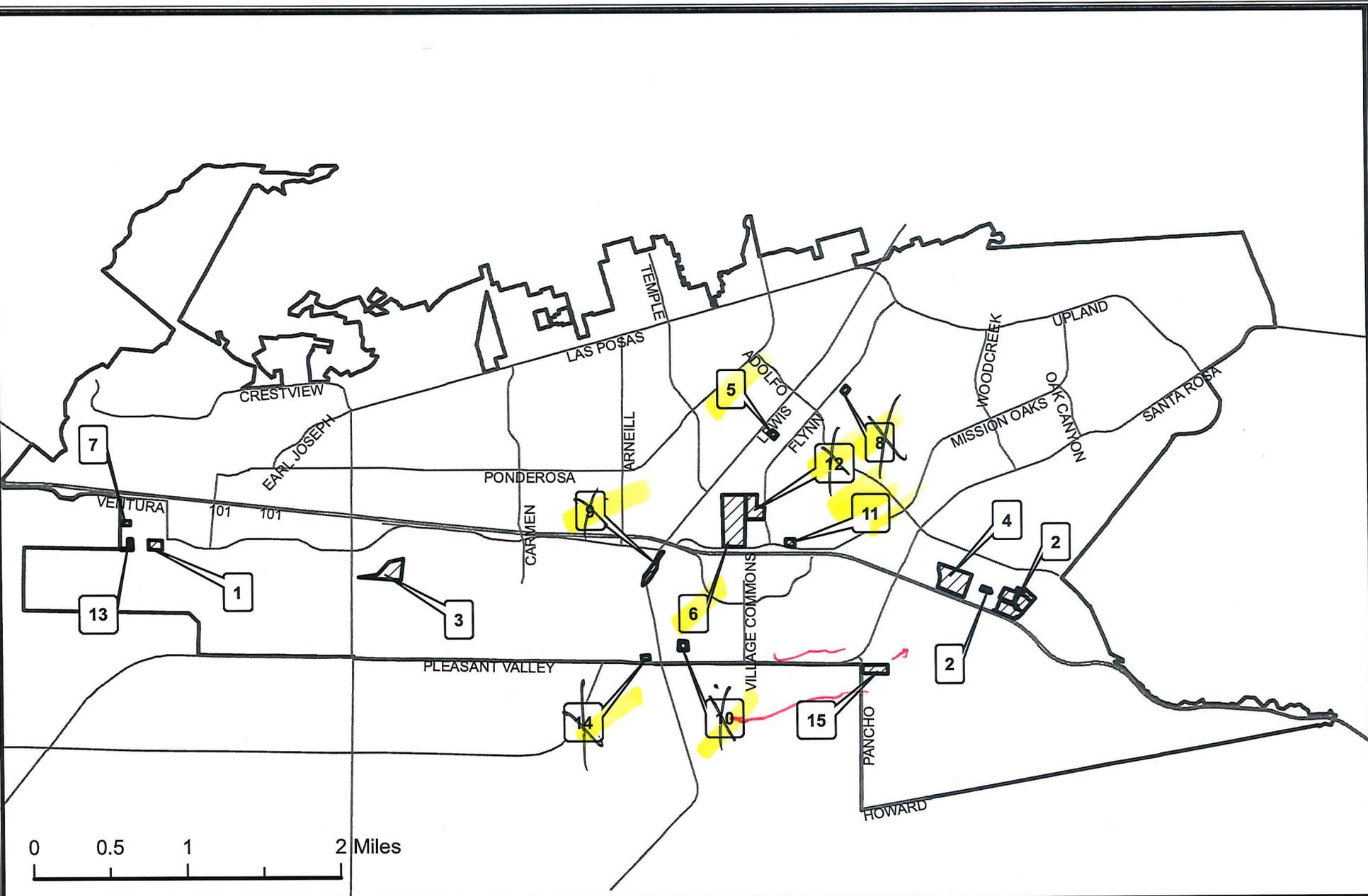
COMMERCIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	BLDG SF	ACRES	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
6	CPD-4M(29)	Las Posas Plaza, LP Tim Wolfe PO Box 151 Camarillo, CA 93011 (805) 482-2761	676 Ponderosa 602 Las Posas 506 Las Posas 62 Daily Drive 61 Daily Drive	164-0-121-105 164-0-121-105 164-0-121-135 164-0-121-125 164-0-131-115	New roof and signage	n/a	11.62	Under Construction	Senior Planner	7/18/2017	n/a
7	CPD-77M(5)	Fairfield Inn and Suites Jennifer Schamberger Plantation Bay Hotels, LLC 9271 Research Drive Irvine, CA 92618 (949) 336-8085	4444 Central Avenue	148-0-012-085	Hotel conversion / renovation / minor addition	1,175	1.9	Under Construction	J. Vacca/ C. Torres	1/20/2016	n/a
8	CUP-334	City of Camarillo 601 Carmen Dr Camarillo, CA 93010 (805) 388-5360	South of W. Ventura Blvd East of Springville Drive	230-0-020-220, 230-0-010-460	Bowling alley and 2-sheet ice rink	108,481	11.68	Pending	D. Moe	n/a	n/a
9	CUP-350	Fore Property Company Jonathan Cornelius 1004 Santa Barbara St Santa Barbara, CA 93101 (805) 456-8344	Southwest corner of Ponderosa Drive and Camino Tierra Santa (Springville)	157-0-020-195	Mixed Use	6,000	3.94	Under Construction	J. Lee	10/7/2014	n/a
10	CPD-6M(19)	Sphear Investments LLC C/O Investec, Dave Pintard 200 E. Carrillo St, Ste 200 Santa Barbara, CA 93101 (805) 962-8989	Northeast corner of Ponderosa Drive and Arneill Road	166-0-210-065	Commerical Bank Office	5,500	0.51	Approved	C. Torres	9/1/2015	9/1/2019
11	CUP-369	Camarillo Village Homes LLC Gerald J. Marcil 43D Malaga Cove Plaza Palos Verdes Estates, CA 90274 (310) 791-2000	Northeast corner of Pleasant Valley and Lewis Road	229-0-070-240	Mixed Use Commercial	12,000	2.82	Approved	Senior Planner	9/20/2016	9/20/2019
12	CPD-245	Alism Camarillo, LLC Sam Siam 21241 Ventura Blvd Ste 181 Woodland Hills, CA 91364 (805) 807-6611	301 E. Daily Drive	164-0-132-095	Automated Carwash	5,000	0.88	Grading	O. Buck	1/16/2018	1/16/2020

COMMERCIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	BLDG SF	ACRES	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
13	CPD-99M(4)/ CUP-381	Mohammad Rad Raad Enterprises LP 4676 Adolfo Road Camarillo, CA 93012 (562) 434-2835	4676 Adolfo Road	160-0-201-075	Convert auto repair facility to convenience store	3,000	0.83	Approved	O. Buck	7/18/2017	7/18/2019
14	CUP-384 / CPD-246	Mr. T.M. Mian Mian Development 831 Corte La Cienega Camarillo, CA 93010 (496) 688-9740	Northeast corner of Las Posas Road and Ventura Blvd	229-0-010-630, -110, -590, -610, -090, -100, -140, -150	Hotel and Conference Center	192,194	14	Approved	J. Lee	12/13/2017	12/13/2019
15	CPD-247	Lynn Vezina Cracker Barrel 307 Hartmann Dr Rancho Cordova, TN 37088 (615) 235-4086	Southside of Ventura Blvd at the Promenade Outlets	229-0-340-020	Restaurant	10,486	0.32	Approved	M. D'Anna	3/6/2018	3/6/2020
16	CUP-389	Brandy Picard Camarillo Progressive Montessori 4451 Las Posas Rd Camarillo, CA 93010 (805) 484-1460	Northwest corner of Adolfo and Santa Rosa Roads	160-0-050-235	Pre-School	4,000	0.88	Under Construction	C. Torres	6/19/2018	n/a
17	CPD-96M(2)/ CUP-388	Vishal Mirpuri Holiday Inn Express RV Heritage Investments 8925 Research Drive, Suite 100 Irvine, CA 92618 (703) 981-8814	1405 Del Norte Road	198-0-020-195	Façade renovation to existing hotel	59,000	2.09	Under Construction	Senior Planner	3/6/2018	n/a
18	CUP-391	Lustra Development, Inc Rick Town 99 South Glenn Street Camarillo, CA 93010 (818) 661-8931	99 South Glenn Drive	162-0-154-110 162-0-154-120	Mixed use, 12 apartments, 2 retail spaces	1,400	0.16	Pending	C. Torres	n/a	n/a
19	CUP-392	Reliant Land Services Stella Smith 1745 W Orangewood Ave Orange, CA 92868 (714) 685-0123	2275 Las Posas Road	151-0-060-205	New stealth roof-mounted wireless facility	0	0.62	Pending	J. Lee	n/a	n/a

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City of Camarillo Industrial Projects



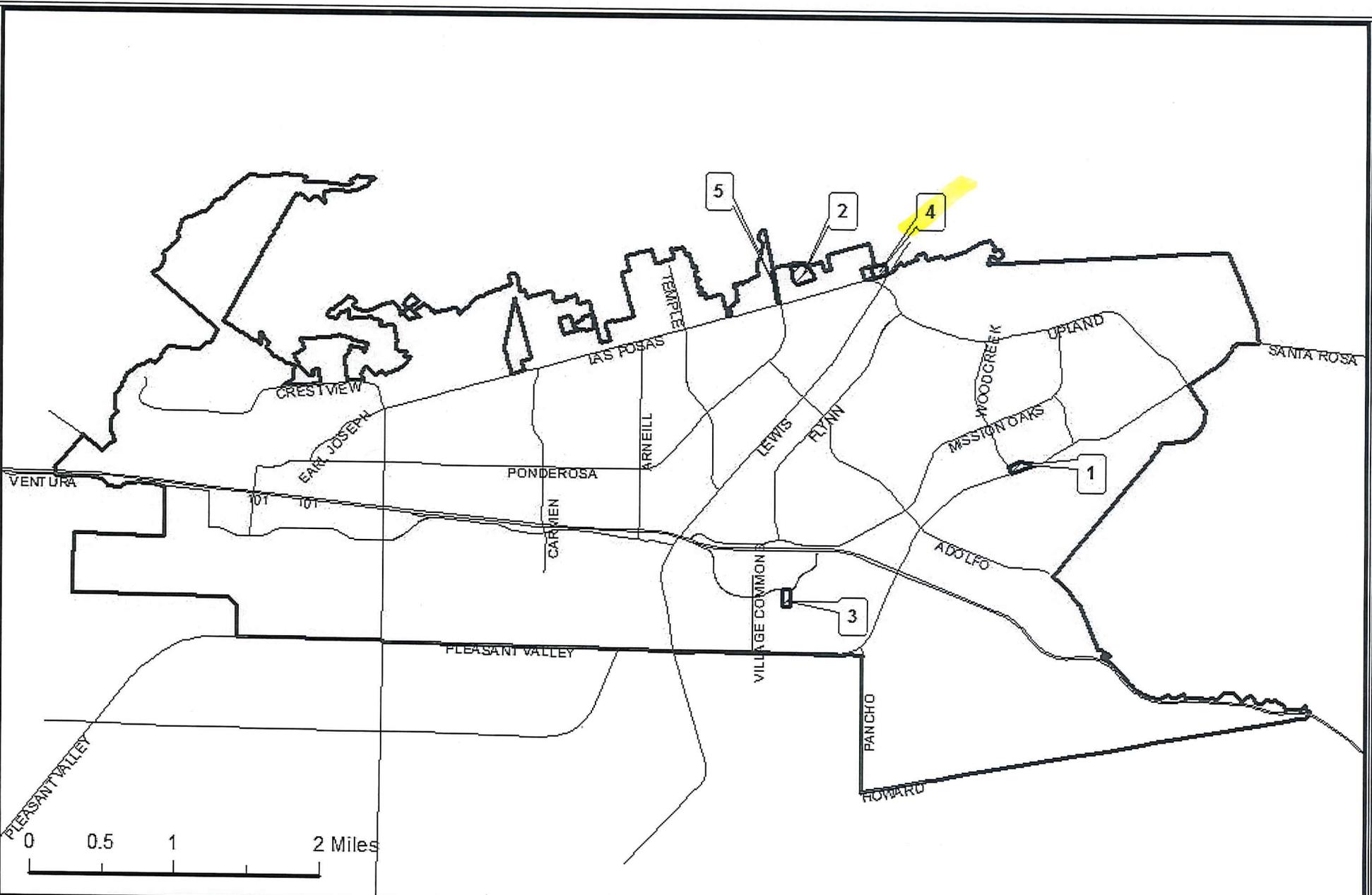
INDUSTRIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	BLDG SF	ACRES	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
2	IPD-396	PEGH Inv LLC, Trilliad Dev Inc Valerie Draeger 4812 Lakeview Canyon Rd Westlake Village, CA 91361 (818) 991-7033	West side of Camino Carillo, approximately 230' south of Verdugo Way	160-0-093-265	Single tenant industrial	14,430	1.12	Approved	C. Torres	9/6/2011	9/6/2019
2	TT-5979	PEGH Inv LLC, Trilliad Dev Inc Valerie Draeger 4812 Lakeview Canyon Rd Westlake Village, CA 91361 (818) 991-7033	Terminus of Camino Carillo, west of Conejo Creek	160-0-111-065, 075, 085, 095, 105, 115, 125, 135	Tentative Tract Map for Lots 4- 7	n/a	21.43	Approved	C. Torres	2/14/2018	2/14/2020
3	IPD-398 T-5890	Hiji Investment Co Dennis Hardgrave 211 Village Commons Bl, Ste 15 Camarillo, CA 93012 (805) 484-8303	South side of Camarillo Center Dr, between Las Posas Rd and Factory Stores Dr	229-0-010- 660/400/430	4 Industrial condo buildings	129,016	10.78	Approved	C. Torres	9/14/2011 - TRACT & 8/2/2011 - IPD	9/14/2019 - TRACT & 8/2/2019 - IPD
4	LD-539	Camino Ruiz, LLC Lark Christensen ZDI, Inc. 16509 Saticoy St Van Nuys, CA 91406 (310) 392-7899	5151, 5153, 5155 Camino Ruiz	160-0-093-195	Land Division	n/a	19.98	Approved	D. Moe	5/15/2018	5/15/2020
5	CUP-383	Santa Monica Mountains Farmstead 1706 Maria Ave Thousand Oaks, CA 91310 (805) 907-8898	853 Via Alondra	160-0-030-085	Microbrewery with tasting room	11,836	1.34	Under Construction	J. Lee	7/18/2017	n/a
6	IPD-53M(6)	Bruce Herbkersman Rexford Industrial Realty, Inc 11620 Wilshire Blvd, Suite 1000 Los Angeles, CA 90025 (310) 966-3812 x112	3233 E. Mission Oaks Blvd	160-0-010-730	Parking lot with 65 parking spaces	n/a	31.89	Approved	C. Torres	5/20/2015	11/20/2019
6	IPD-53M(9)	Bruce Herbkersman Rexford Industrial Realty, Inc 11620 Wilshire Blvd, Suite 1000 Los Angeles, CA 90025 (310) 966-3812 x112	3233 E. Mission Oaks Blvd	160-0-010-730	Modify industrial building	4,800	31.89	Under Construction	C. Torres	9/19/2017	n/a

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MARCH 2019

INDUSTRIAL PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	BLDG SF	ACRES	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
7	CUP-386	MCB Enterprises, Inc Mike Brown 4730 Stagecoach Ct. Moorpark, CA 93021 (805) 558-6552	126 N. Wood Road. Suites 100, 102, 104, and 106	230-0-132-035	Microbrewery, distillery, and winery	39,900	0.91	Under Construction	J. Lee	1/16/2018	n/a
8	CUP-387	Jerry Ambrose Verizon Wireless 3905 State Street, Suite 7-188 Santa Barbara, CA 93105 (805) 637-7407	4053 Calle Tesoro	160-0-042-025	Wireless Facility	n/a	n/a	Pending	C. Torres	n/a	n/a
9	LD-536	Union Pacific Railroad Company Chris Goble 1400 Douglas St. STOP 1690 Omaha, NE 68179 (405) 544-8549	140-212 Dawson Drive	162-0-160-510	Lot split to create two lots	n/a	1.52	Approved	D. Moe	7/18/2017	7/18/2019
10	CUP-385	Verizon Wireless Eukon Group Elizabeth Brown 65 Post, Suite 1000 Irvine, CA 92618 (949) 413-9876	553 Constitution Avenue	229-0-070-115	New Wireless Facility	300	1.77	Pending	C. Torres	n/a	n/a
11	CUP-364M(1)	Roger Smith Institution Ale Company 3841 Mission Oaks Blvd Camarillo, CA 93012 (805) 482-3777	3841 Mission Oaks Blvd. Suite B	160-0-340-58	Expansion of existing brewery	24,102	1.9	Under Construction	C. Torres	3/20/2018	n/a
12	LD-545	Robert F. Goetsch 617 North Catalina Street Burbank, CA 91505 (805) 648-1234 ext 18	201 Flynn Road	160-0-140-145, 155, & 135	Subdivide parcel into two parcels	n/a	11.16	Pending	C. Torres	n/a	n/a
13	IPD-403	RGM Architects Rick Moraga 350 N. Lantana St, Suite 22 Camarillo, CA 93012 (805) 482-1836	950 W. Verdulera St.	230-0-131-035	New Industrial Building	17,506	1.19	Pending	C. Torres	n/a	n/a



Updated on 12-10-18
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City of Camarillo Institutional / Public Projects



INSTITUTIONAL / PUBLIC PROJECTS

MAP ID	CASE	DEVELOPER	LOCATION	APN	DESCRIPTION	BLDG SF	ACRES	STATUS	PLANNER	APPROVAL DATE	EXPIRATION DATE
1	CUP-312	St. Demetrios Greek Church Keith Valle PO Box 1970 Camarillo, CA 93010 (805) 377-3919	5575 Santa Rosa Road	171-0-250-655	Church (total of 31,240 sf in 3 phases)	9,058	4.07	Under Construction	J. Lee	10/19/2010	n/a
2	SUP-14M(15)	Dignity Health 2309 Antonio Av Camarillo, CA 93010 (805) 389-5800	2309 Antonio Avenue	156-0-150-080	Acute Care and chapel addition	72,342	9.66	Under Construction	J. Lee	4/7/2015	n/a
3	RPD-200	Oakmont Senior Living EJM Development Co. Bill Mabry 9240 Old Redwood Hwy Ste 200 Windsor, CA 95492 (707) 535-3208	Southwest corner of Village at the Park Dr and Davenport Street	229-0-203-105	93-bed senior assisted living facility	87,287	3.12	Under Construction	C.Torres	5/16/2017	n/a
4	CUP-394	City of Camarillo Lucie McGovern 601 Carmen Drive Camarillo, CA 93010 (805) 388-5360	Northwest of the intersection of Las Posas and Lewis Roads	156-0-180-285	North Pleasant Valley Groundwater Treatment Facility	6,541	4.7	Approved	J. Lee	11/20/2018	11/20/2019
5	CUP-379	Jerry Doran Pleasant Valley Mutual Water Co 1863 Las Posas Rd Camarillo CA 93010 (805) 482-5061	2411 Ponderosa Drive	153-0-180-555	Desalter	1,600	1.64	Approved	O. Buck	11/20/2018	11/20/2019