SCH No. 2015041049

THE GROVE SPECIFIC PLAN PROJECT

DRAFT ENVIRONMENTAL IMPACT REPORT

City of San Buena Ventura, California

Prepared for:
City of San Buenaventura

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Volume 1

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Appendix 4.7 Greenhouse Gas Emissions Technical Report prepared by Pomeroy Environmental Services dated January 2016
Appendix 4.8 Phase I Environmental Site Assessment prepared by TRAK Environmental Group dated October 31, 2014
Appendix 4.9 Preliminary Hydrology and Hydraulic Report prepared by Jensen Design & Survey, Inc. dated October 8, 2012
Appendix 4.11 1) Update to the Noise Study for The Grove Residential Project prepared by Rincon Consultants dated February 29, 2012; 2) 2011 Update to the Traffic Noise Study prepared by Rincon Consultants dated March 15, 2011
Appendix 4.15 1) Traffic Study for The Grove Project dated October 30, 2015 prepared by Stantec; 2) an update to the Traffic Study prepared by Austin-Foust Associates, Inc. dated February 22, 2012; 3) a Memorandum from Stantec dated June 30, 2014 with attached "Land Use and Trip Generation Summary" and "2014 Traffic Count Data"; 4) The Grove Traffic Study prepared by Austin-Foust Associates, Inc. dated March 4, 2011
Appendix 4.16 Sewer Infrastructure Review prepared by Kennedy/Jenks Consultants dated July 20, 2015; Letter prepared by Jensen Design & Survey, Inc. regarding Broome – "The Grove Specific Plan" Sewer Monitoring dated July 31, 2013, with an attached Broom Sewer Study prepared by DownStream Services, Inc. dated July 11, 2013; and Draft Water System Hydraulic Evaluation and Supply Requirements for The Grove Specific Plan prepared by RBF Consulting dated July 11, 2013; and the Water System Hydraulic Evaluation and Supply Requirements for The Grove Specific Plan prepared by Michael Baker International dated June 16, 2015 and updated August 4, 2015

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1. Introduction

This introduction is included to provide the reader with a general overview of 1) the purpose of an environmental impact report (EIR); 2) a description of the environmental review process conducted for this Project to date; 3) the lead, responsible, and trustee agencies for the Project; and 4) the general format of this EIR.

1.1 Purpose and Legal Authority

The Draft EIR evaluates The Grove Specific Plan Project (Project). The proposed Project consists of a Development Agreement, Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre) bounded on the north by State Route 126 (SR-126), on the east by the Thille Community Neighborhood, on the south by Telephone Road and Copland Drive, and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange (see **Figure 1-1, Regional Vicinity Map**). The property is currently within unincorporated area, but is within the City of Ventura's Sphere of Interest, and is designated on the General Plan as Medium Density Residential; 9-20 dwelling units per acre.

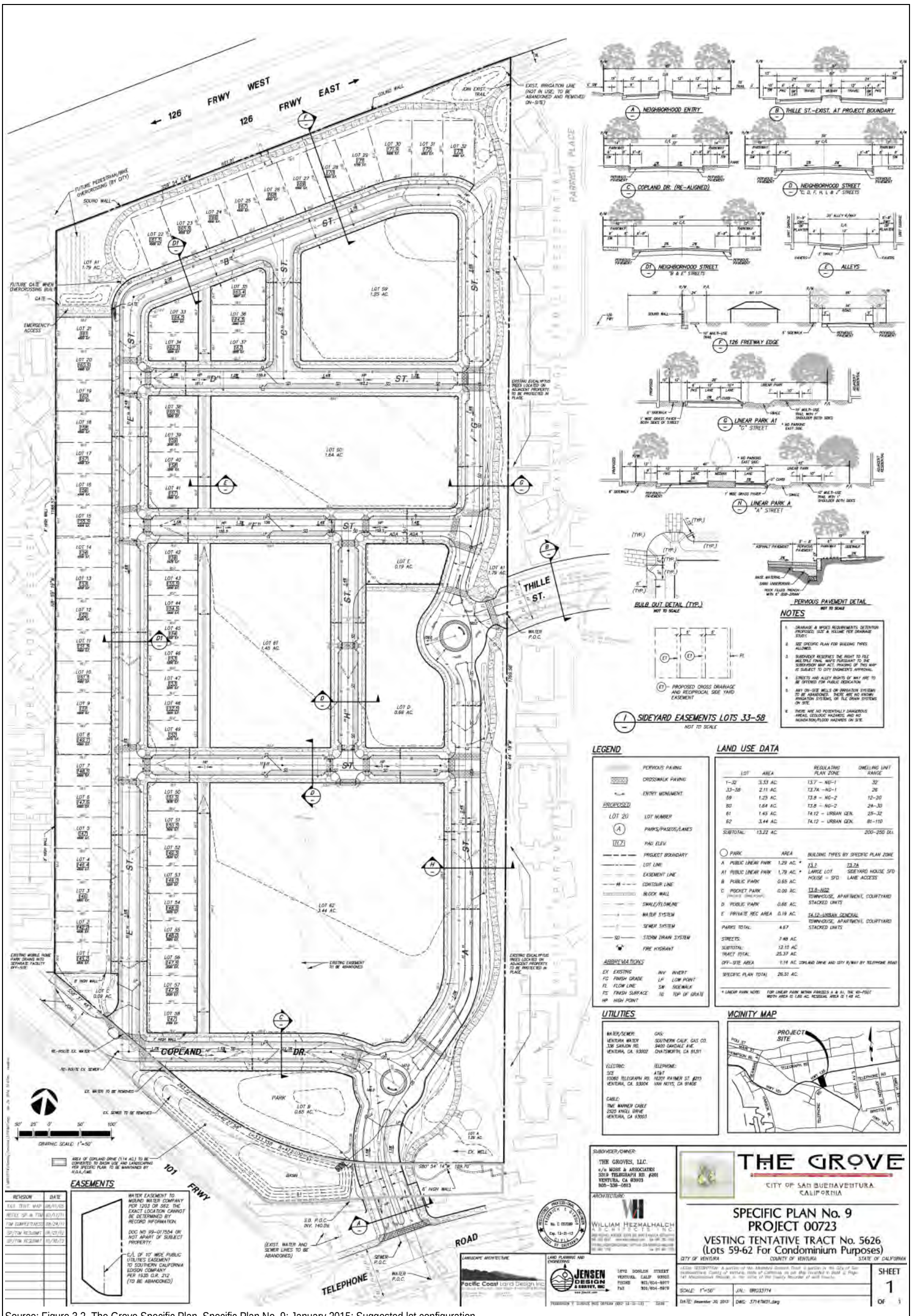
The Tentative Map (**Figure 1-2**) would create individual lots for 32 front-loaded single-family residences, 26 alley-loaded single-family residences, and 4 larger lots that could accommodate up to 192 units in a combination of alley-loaded single-family homes, townhouses, and courtyard or stacked multi-family housing (see **Figure 1-2**).

A Development Agreement (DA) has been submitted. The DA does not require of obligate the permittee or the City to pursue any physical changes to the environment different to that of the proposed Project and, therefore has no potential to cause additional environmental impacts.

The Specific Plan would be divided into six neighborhood blocks containing a mix of residential housing types with a goal to create a traditional neighborhood. It emphasizes the public realm, pedestrian-friendly streets and blocks, and a diversity of building types to generate a distinct sense of neighborhood identity. As a traditional-design neighborhood, the Project has a center and edge linked by a series of walkable connections to the open spaces, includes communal residential services, and functions contained within the site.

Source: The Grove Specific Plan No. 9, June 5, 2014

Figure 1-1 Regional Vicinity Map



Source: Figure 3.2, The Grove Specific Plan, Specific Plan No. 9; January 2015; Suggested lot configuration

Figure 1-2 Vesting Tentative Tract Map No. 5626

A Draft Project EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), the state guidelines for the implementation of CEQA, and applicable City of Ventura adopting procedures for implementation of CEQA and the CEQA Guidelines, including §15124 (Project EIRs) and §15120 through §15131. This EIR identifies and discusses potential Project-specific and cumulative environmental impacts that may occur if the proposed Project is implemented. The intent of this EIR is to: to 1) be an informational document that serves to inform public agency decision makers and the general public of the potential environmental impacts of a project, 2) identify possible ways to minimize or avoid any potential significant impacts either through mitigation or the adoption of alternatives, and 3) disclose to the public required agency approvals.

The principal use of an EIR is to provide input and information to the comprehensive planning analysis. Given the important role of the EIR in this planning and decision-making process, it is important that the information presented in the EIR be factual, adequate, and complete. The standards for adequacy of an EIR, defined in §15151 of the CEQA Guidelines, are as follows:

> An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.2 Scope and Content

The City determined that an EIR should be prepared for The Grove project. As a result, a Notice of Preparation (NOP) was prepared and circulated between April 14, 2015 and May 14, 2015 for the required 30-day review period. The purpose of the NOP was to solicit early comments from public agencies with expertise in subjects that will be discussed in the Draft EIR. The NOP and written responses to the NOP are contained in **Appendix 1.0** of this EIR. The City of Ventura held a scoping meeting on the Project to solicit oral and written comments from the public and public agencies. The public scoping meeting was held April 29, 2015. Comments received at the meeting are contained in **Appendix 1.0** of this EIR.

Topics requiring a detailed level of analysis evaluated in this Draft EIR have been identified based upon the responses to the NOP and a review of the Project by the City of Ventura. The City determined through the initial review process that impacts related to the following topics were potentially significant and required a detailed level of analysis in this Draft EIR:

Aesthetics
Agricultural Resources
Air Quality/Health Risk Assessment
Biological Resources
Cultural Resources
Geology/Soils
Greenhouse Gas Emissions/Climate Change
Hazards and Hazardous Materials
Hydrology/Water Quality
Land Use
Noise
Population/Employment/Housing
Public Services
Transportation/Traffic
Utilities/Service Systems

Other environmental issues were eliminated or "scoped out" from detailed review in this EIR during the NOP process, as the impacts were determined to have no impact, less than significant impacts, or significant impacts that could be mitigated to a less than significant level. These environmental issues are not discussed in detail within this Draft EIR.[1] For a complete discussion of the environmental issues that were scoped out from this Draft EIR (refer to **Appendix 1.0 and Section 6, Effects Found Not To Be Significant**).

1. Lead, Responsible and Trustee Agencies

The City as the public agency with authority for approval of The Grove Specific Plan Project is the "Lead Agency" of the EIR, as defined by CEQA. As such, the City is responsible for ensuring that the EIR satisfies the procedural and informational requirements of CEQA and for the consideration and certification of the adequacy of the EIR prior to making any decision regarding the Project.

"Responsible Agency" means a public agency, which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purpose of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency having discretionary approval over the project. During the NOP review period, Ventura Local Agency Formation Commission (LAFCo) identified itself as a Responsible Agency.

"Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. During the NOP review period, no public agency identified itself as a Trustee Agency.

1 CEQA Guidelines, §15063(c)(3)

2. EIR Review Process

This EIR is being circulated for a 45-day public review period. During this public review period, written comments concerning the adequacy of the document may be submitted by any interested person and/or affected agency, to the City of Ventura, P.O. Box 99, California 93002, Attention Jerry Hittleman, Senior Planner.

Following the public review period, all oral and written comments will be responded to in writing, and incorporated into a final EIR. At least 10 days prior to a hearing to certify the final EIR, proposed responses to comments on the Draft EIR by public agencies will be sent to those agencies. In addition, a Mitigation Monitoring and Reporting Program will be prepared as part of the final EIR package. This final EIR will then be presented to the City of Ventura City Council for potential certification as the environmental document for the Project. All persons who commented on the Draft EIR will be notified of the availability of the final EIR and the date of the public hearing before the City Council.

1.3 Report Format

As stated, a principal objective of CEQA is that the environmental review process be a public one. In meeting this objective, the EIR must inform members of the general public, decision-makers, and technically oriented reviewers of the physical impacts associated with a proposed project. To this end, specific features have been incorporated into this Project EIR to make it more understandable for non-technically oriented reviewers, yet provide the technical information necessary for agency personnel.

A description of the organization of this Draft EIR and the content of each section is provided below to assist the reader in using this EIR as a source of information about the proposed Project. Sections of the Draft EIR following this introduction are organized as follows.

Section **1, Introduction** includes the purpose of a Subsequent EIR, the environmental review process, identifies the lead, responsible, and trustee agencies, and provides the general format of the Subsequent EIR.

Section 2, Executive Summary, includes a general description of the environmental setting, project description, and alternatives to the proposed Project. Environmental impacts and mitigation measures are summarized in a tabular form.

Section 3, Project Description, presents a detailed description of the proposed Project as required by the CEQA Guidelines. Topics addressed in this section include the Project objectives and the characteristics of the Project.

Section 4, Environmental Impact Analysis, contains analysis of each of the environmental topics addressed in this EIR. Each topic is addressed in separate subsections as follows:

environmental setting; project impacts; cumulative impacts; mitigation measures; and residual impacts after mitigation.

Section 5, Alternatives, provides analysis of alternatives to the proposed Project. As required by the CEQA Guidelines, a discussion of the reasons for selection of alternatives analyzed is provided with a comparative analysis of each alternative with the Project.

Section 6, Effects Found Not To Be Significant, discusses those effects identified as not significant during the NOP process.

Section 7, Growth-Inducing Impacts, discusses the ways in which the proposed Project could foster economic or population growth in the area.

Section 8, Organizations and Persons Consulted, provides a list of persons involved in the preparation of this EIR.

Section 9, Significant Irreversible Effects on the Environment, evaluates whether the Project would result in the irretrievable commitment of resources or would cause irreversible change in the environment.

Section 10, References provides a list of organizations and persons contacted during preparation of the Draft EIR, and a list of documents used as a basis of information for the Draft EIR.

Appendices to this EIR include the NOP and written responses, as well as selected technical reports and data generated during the preparation of the Draft EIR.

1.4 Intended Uses of This EIR

At this time, the City of Ventura has identified the following actions that will need to be taken by the City, acting as lead agency for this Project, and by Responsible Agencies. The list of Responsible Agencies and project actions is preliminary, and the City anticipates that additional actions may be identified as a result of consultation facilitated by the environmental review process.

The City of Ventura would be responsible for the following actions:

- Development Agreement
- Pre-Zone and Amendment to the City's Zoning Ordinance to incorporate The Grove Specific Plan
- Approval of the Tentative Tract Map
- Certification of the Final Environmental Impact Report
- File application to amend the sphere of influence and annex the Project site into the City of Ventura
- Design Review of the proposed Project

The Ventura County Local Agency Formation Commission (LAFCO) would be responsible for the following actions related to the Project:

- Approval of an amendment to the City's Sphere of Influence to include The Grove Specific Plan site
- Approval of reorganization of Special Districts

1.5 Incorporation by Reference

The following documents are incorporated by reference in this Draft EIR, consistent with §15150 of the CEQA Guidelines, and are available for review at the City of Ventura in the City's Planning Division.

- City of Ventura General Plan, 2005
- City of Ventura General Plan EIR, 2005
- The Grove Specific Plan, 2015

2. Executive Summary

This section summarizes the characteristics of the proposed Olivas Park Drive Extension, alternatives, environmental impacts associated with the Project, recommended mitigation measures, and the level of significance of impacts after mitigation.

2.1 Project Synopsis

Project Proponent

The Grove LLC
4515 Copland Drive
Ventura, CA 93002

2.2 Project Description

2.2-1 Project Characteristics

The proposed Project consists of a Development Agreement, Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre) bounded on the north by State Route 126 (SR-126), on the east by the Thille Community Neighborhood, on the south by Telephone Road and Copland Drive, and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange

The property is currently within unincorporated area, but is within the City of Ventura's Sphere of Interest, and is designated on the General Plan as Medium Density Residential; 9-20 dwelling units per acre.

The Vesting Tentative Map (**Figure 3-4**, page 3-7) would create individual lots for 32 front-loaded single-family residences, 26 alley-loaded single-family residences, and 4 larger lots that could accommodate up to 192 units in a combination of alley-loaded single-family homes, townhouses, and courtyard or stacked multi-family housing

The Specific Plan would be divided into six neighborhood blocks containing a mix of residential housing types with a goal to create a traditional neighborhood. It emphasizes the public realm, pedestrian-friendly streets and blocks, and a diversity of building types to generate a distinct sense of neighborhood identity. As a traditional-design neighborhood, the Project has a center and edge linked by a series of walkable connections to the open spaces, includes communal residential services, and functions contained within the site.

The plan area includes up to 4.67 acres of park area, which includes a linear park, public and pocket parks, and an open space area reserved for a potential future pedestrian and bike bridge connection to El Camino Real Park to the north of and over SR-126. A portion of the open space would serve as storm water detention area located off-site in the Copland Drive vacated right of way.

2.2-2 Project Objectives

The Applicant's Objectives for the proposed Project are as follows:

- Complete the Thille Community with an attractive residential neighborhood pursuant to the requirements of the City of Ventura Comprehensive Plan; and requirements for efficiently providing municipal services.
- Create neighborhoods within the Specific Plan area that balance vehicular circulation with bike and pedestrian travel, while improving public access into and throughout the site.
- Buildout of The Grove Specific Plan Specific Plan shall respect the natural environment. Protect residents of The Grove Specific Plan from harmful and nuisance highway noise with the construction of a retaining wall.
- Ensure that proposed development and land use conserve energy and natural resources.
- Provide for compatibility with existing residential uses in the area through effective and appropriate urban and architectural design.
- Complete the public recreational component of the City Comprehensive Plan by finishing the linear bike pathway system in the Thille Community.
- Provide additional public parkland, including the provision of a future site pad to allow a bike and pedestrian connection over the 126 Freeway to Camino Real Park.

2.3 Required Approvals

Implementation of the proposed Grove Specific Plan Project would require the following discretionary approvals from the City and other agencies:

- Development Agreement
- Pre-Zone and Amendment to the City's Zoning Ordinance to incorporate The Grove Specific Plan
- Approval of the Tentative Tract Map
- Certification of the Final Environmental Impact Report
- File application to amend the sphere of influence and annex the Project site into the City of Ventura
- Design Review of the proposed Project

The Ventura County Local Agency Formation Commission (LAFCO) would be responsible for the following actions related to the Project:

- Approval of an amendment to the City's Sphere of Influence to include The Grove Specific Plan site
- Approval of reorganization of Special Districts

2.4 Alternatives

This EIR examines three alternatives, as described below.

1. No Project Alternative – Existing General Plan and Zoning
2. No Project/High Density Alternative
3. Mixed Use Alternative

Each of the alternatives would address one or more of the significant environmental impacts of the proposed Project.

The No Project Alternative would avoid all of the proposed Project's adverse environmental impacts. Moreover, it would not meet all of the Project objectives. Both the Existing General Plan Alternative and Minimal Prime or Statewide Importance Farmland conversion alternatives would have reduced impacts as compared to the proposed Project in most issue areas due to the overall reduction or development intensity in development potential. Both of these alternatives would also substantially reduce, but not eliminate, the unavoidably significant impact related to conversion of Prime and Statewide Importance farmland to non-agricultural uses. However, these alternatives would not meet objectives related to development of the Project site.

2.5 Areas of Public Controversy

Based on the responses to the Notice of Preparation of a Draft EIR, areas of public controversy

include air emissions (construction and operation), The Grove Specific Plan Project EIR greenhouse gas emissions, floodplain and floodway impacts, water quality, increased traffic on the City of Ventura County Regional Road Network, water supply, wastewater conveyance and treatment.

These issues are discussed in EIR as appropriate. **Appendix 1.0** lists these comments and the location where they are addressed.

2.6 Summary of Impacts and Mitigation Measures

Table 2-1 lists the environmental impacts of the proposed Project, proposed mitigation measures, and residual impacts. Impacts are categorized by classes. Class I impacts are defined as significant, unavoidable adverse impacts, which require a statement of overriding considerations pursuant to §15093 of the CEQA Guidelines if the Project is approved. Class I impacts are significant environ-

mental impacts for which there is no feasible mitigation to reduce the impact to below a level of significance. Class II impacts are significant adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the CEQA Guidelines. Class III impacts are adverse, but less than adopted significance thresholds. Class IV effects are those where there is no impact or the effect would be beneficial.

As noted in **Table 2-1** below, several Project impacts were found to be significant and unavoidable (Class I), and the Project would contribute to a cumulative impact that is likewise significant and unavoidable (Class I). The Project impact pertains to the conversion of Prime Farmland (AG-1). The remaining Project-generated direct, indirect, and cumulative impacts can be mitigated to a less than significant level through implementation of proposed mitigation measures, or were found to be less than significant without mitigation.

Table 2-1 Summary of Environmental Impacts and Mitigation Measures

Impacts	Mitigation Measures	Significance after Mitigation
Aesthetics		
Impact AES-1 – The Project site does not offer any scenic vistas or scenic resources. Impacts to scenic vistas and scenic resources would be Class III, less than significant.	None required	Less than Significant
Impact AES-2 – The Specific Plan area is not within a state scenic highway and does not contain any unique rock outcroppings. There are no designated scenic highways within the City.	None required	Less than Significant
Impact AES-3 – Each district's standards and guidelines are designed to reinforce the individual district's desired development pattern, character, and image. These tools would help achieve the Specific Plan's overall vision and ensure that future projects are compatible with the surrounding neighborhood character. Therefore, buildout of the Specific Plan would not substantially degrade the existing visual character or quality of the Specific Plan area, and impacts would be less than significant.	None required	Less than Significant
Impact AES-4 – Development standards, including height restrictions, have been established for each district (see Specific Plan Section 3 –Development Code & Land Use Regulations). Future projects located in the Urban General District would be permitted to be 40 feet tall (the greatest building height allowed within the specific plan area), while building heights in the remaining districts would be 50 feet or less. The height limit would be comparable to the neighboring Thille Community. Thus, under buildout of the Specific Plan, impacts from light, glare, and shadow would be less than significant.	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
Agricultural Resources		
Impact AG-1 – The aforementioned significance threshold states that a significant impact would occur if a project converts prime agricultural land to non-agricultural uses. Development of the Project site would result in the permanent loss of agricultural productivity on this acreage. While there are organizations that will accept agricultural conservation easements, there is no established program or mechanism to facilitate the purchase of such an easement. Recently, a conservation easement has been processed through the City of Ventura at a ratio of 1:1 replacement as part of the Olivas Park Drive Extension Final EIR. The proposed Project would convert the entire Project site to non-agricultural uses, and would constitute a significant agricultural impact.	MM Ag-1 – Agricultural Conservation Easement. Mitigation shall be provided for the loss of state-designated Prime Farmland and Farmland of Statewide Importance in existence at the time property in the Project area containing such state-designated Farmland is developed. Applicants seeking to develop such state-designated Farmland may cause to be set aside in perpetuity agricultural lands of equivalent acreage (a 1:1 ratio) and with soil and farming conditions equivalent or superior to the state-designated Farmland that the applicant seeks to convert to other uses. The applicant shall either purchase one or more permanent, irreversible agricultural easements for the benefit of the City or other qualifying entity acceptable to the City, or contribute funds to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural easements, to be earmarked for the purchase of permanent, irreversible agricultural easements. The protected acreage equal to the total acreage of, and of equivalent soil and farming conditions to, the state-designated Farmland within the entire Specific Plan area to be converted shall be set aside prior to the commencement of any development activity, including grading permits or recordation of final map, whichever occurs first.	Significant and Unavoidable
Impact AG-2 – The existing zoning for the site is Ventura County: Agriculture Exclusive (AE-40-AC). The City's land use designation is Medium Density Residential; 9-20 du/acre; and proposed zoning for residential uses is T 3.7 Neighborhood General, T 3.7A Neighborhood General, T 3.8 Neighborhood General, Public/Private Open Space, and T 4.12 Urban General which will conflict with agricultural uses. As stated previously, the Property is not located within a Williamson Act Contract.	None required	Less than Significant
Impact AG-3 and AG-4 – Ag-3 and Ag-4 address issues regarding the rezoning of timberland lands and the loss of forest land or conversion of forest land. The Project does not contain any timberlands or forest lands and would not cause any conflicts regarding timber or forestlands; therefore, these items will not be addressed further.	None required	Less than Significant
Impact AG-5 – The State Department of	See MM Ag-1.	Significant and

Impacts	Mitigation Measures	Significance after Mitigation
Conservation requests that lead agencies evaluate the purchase of an agricultural land conservation easements to preserve other agricultural lands to compensate for the impact of converting agricultural land to a non-agricultural use. Guidance for consideration of this mitigation approach in EIRs was provided in two appellate court decisions issued in the last two years: *Friends of Kings River v. County of Fresno* (Court of Appeal of California, Fifth Appellate District, December 8, 2014) and *Masonite Corp. v. County of Mendocino*. (Court of Appeal of California, Fifth Appellate District, July 25, 2013). The *Friends of Kings River v. County of Fresno* decision considered the Masonite decision and determined that an agency is only required to consider, but not adopt, agricultural conservation easements to mitigate loss of farmland. To be consistent with the guidance in both of these decisions, the City's EIR should include discussion and evaluation of the feasibility of purchasing an agricultural conservation easement as has been done in Impact Ag-1 above.		Unavoidable
Cumulative The proposed Project would incrementally add to that significant cumulative impact. While proposed mitigation would reduce the Project's impact, the Project's impact is still considered cumulatively considerable, and therefore a significant and unmitigable, cumulative impact.		Significant and Unavoidable
Air Quality		
Impact AQ-1 – The VCAPCD has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, the VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NO_X emissions over 25 pounds per day. As shown above, construction emissions from the proposed Project would exceed 25 pounds per day for ROC and NO_X. Therefore, Mitigation Measure MM AQ-1 is necessary to reduce the construction emissions.	MM AQ-1 – The following control measures provided in the most recent version of the Ventura County Air Quality Assessment Guidelines (October 2003) pursuant to Mitigation Measure AQ-3 of the 2005 General Plan Final EIR would minimize the generation of fugitive dust (PM_{10} and $PM_{2.5}$), ROC, and NO_X during construction activities and shall be implemented during construction: 1. To reduce impacts associated with NOx emissions (a precursor to ozone) the following measures shall be implemented: a. Equipment idling time should be minimized; b. Equipment engines should be maintained in good condition and in proper tune, as per manufacture's specifications; c. During the smog seasons (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment	Less than Significant after Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
	operating at the same time; d. Alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, should be used if feasible. 2. During clearing, grading, earth moving, or excavation operation, excessive fugitive dust emissions shall be controlled by regular watering, paving construction roads, or other dust preventive measures using the following procedures: a. All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day, so that water penetrates sufficiently to minimize fugitive dust during grading activities. Reclaimed water should be used if available; b. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved roadways on-site, should be treated to prevent fugitive dust. Measures may include watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate; c. Graded and/or excavated inactive areas of the construction site should be monitored at least weekly for dust stabilization. If a portion of the site is inactive for over four days, soil on-site should be stabilized; d. Signs should be posted limiting on-site traffic to 15 miles per hour; e. All clearing, grading earth moving, or excavation activities shall cease during period of high winds (i.e., greater than 20 mph averaged over one hour) so as to prevent excessive amounts of dust; f. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust pursuant to California Vehicle Code §23114; g. Respiratory protection shall be used by all employees in accordance with California Division of Occupational Safety and Health regulations; h. Measures to reduce the fungus that causes Valley Fever should include the following:	

Impacts	Mitigation Measures	Significance after Mitigation
	i. Facemasks should be worn on employees involved in grading or excavation operations during dry period to reduce inhalation of dust. ii. Employment should be restricted to persons with positive coccidioidin skin tests. iii. Crews should be hired from local populations where possible, since it is more likely that they have previously been exposed to the fungus and are therefore immune. iv. Cabs of grading and construction equipment should be air-conditioned. v. Crews should work upwind from excavation sites. vi. Construction roads should be paved. vii. Weed growth should be controlled by mowing instead of discing. viii. The access way into the Project site should be paved or treated with environmentally-safe dust control agents during rough grading and construction. ix. The area disturbed by clearing, grading, earth moving, or excavation operations should be minimized so as to prevent excessive amounts of dust. 3. After clearing, grading, earth moving, or excavation operations, and during construction activities, fugitive dust emissions shall be controlled using the following procedures: a. All inactive portions of the construction site shall be seeded and watered until grass cover is grown; b. All active portions of the construction site shall be sufficiently watered to prevent excessive amounts of dust. 4. At all times, fugitive dust emissions shall be controlled by assuring that streets adjacent to the Project site shall be swept as needed to remove silt, which may be accumulated from construction activities so as to prevent excessive amounts of dust. Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible. Streets must be swept at least once a day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.	
Impact AQ-2 – The Project would not increase population figures over those that have been	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
planned for the area, and would not jeopardize attainment of state and federal ambient air quality standards. Therefore, for these reasons, the proposed Project would not conflict with or obstruct implementation of the applicable AQMP and this impact would be less than significant.		
Impact AQ-3 – While the Project would exceed two pounds per day or greater of ROC and two pounds per day or greater of NOx, the Project would be consistent with the AQMP as discussed previously. It should also be noted, as discussed previously, the Project's air quality emissions would be below the VCAPCD significance thresholds (25 pounds per day for ROC and NOX) and mitigation measures have been identified where appropriate consistent with VCAPCD recommendations.	None required	Less than Significant
Impact AQ-4 – The Project would not include the operations of any land uses routinely involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants. Thus, no appreciable operational-related toxic airborne emissions would result from Project implementation. With respect to construction, the construction activities associated with the Project would be typical of other similar land use development projects in the region, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions.	None required	Less than Significant
Impact AQ-5 – Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents as well as asphalt paving. However, the Project would be consistent with all applicable rules and regulations governing construction equipment and processes. As such, the Project would not create objectionable odors affecting a substantial number of people during construction or long-term operation.	None required	Less than Significant
Biological Resources		
The Project site has been in agricultural production since the early 1950s and presently is being used for flower agricultural production. The 2005 Ventura General Plan Final Environmental Impact Report (General Plan EIR) reviewed biological resources in Section 4.4. As shown on General Plan EIR Figure 4.4-1, Habitat Types, the Project site is designated as	MM Bio-1 – Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 704) and the *California Fish and Game Code* (§3503). If activities associated with construction or grading of previously undeveloped parcels are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and	Less than Significant After Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
Agriculture, with the areas surrounding the site designated as Urban. Neither of these habitats is considered a sensitive habitat. The California Natural Diversity Database, indicates no special status species (sensitive plants and wildlife) from the California Natural Diversity Database (December 2004) were documented for the Project site. A review of the California Department of Fish and Wildlife Biogeographic Information and Observation System (BIOS) 5 tool, accessed August 17, 2015, confirmed that no sensitive habitats or sensitive species occur on the Project site. Implementation of the Project would not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species nor on any riparian or other sensitive natural community. Given that no sensitive species occur on-site, implementation of the Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Also, implementation of the Project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Lastly, implementation of the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act as no wetlands exist on-site. A limited number of trees exist on-site along the northerly boundary adjacent to SR-126 and mature trees exist off-site immediately adjacent to the easterly boundary. Construction of the Project has the potential to affect mature trees that could support nests by native bird species. Such an impact would be a potentially significant under CEQA and a violation of state and federal laws pertaining to the protection of native bird species.	from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly, beginning 30 days prior to initiation of ground disturbing activities, with the last survey conducted no more than three days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days have elapsed between the survey and ground-disturbing activities. Surveys shall include examination of trees, shrubs, and the ground for nesting birds. Several bird species such as killdeer and night hawks are known to nest on bare ground. Protected bird nests that are found within or adjacent to the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Wildlife. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for raptor species. Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities. The buffer zone shall remain intact and maintained while the nest is active (i.e. occupied or being constructed by the adult bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.	
Cultural Resources		
Impact CR-1 – Because it is not eligible for listing in the National Register of Historic Places, California Register of Historical Resources, or as a Ventura County Cultural Heritage Site, or City of Ventura Landmark or Point of Interest, the residence and tractor shed at 4515 Copland Drive are not considered a historical resource under CEQA.	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
Impact CR-2 – Based on the excellent ground surface visibility within almost the entirety of the proposed Project site boundaries, the intensive archaeological survey results are considered reliable. Due to the absence of any prehistoric or historic remains identified during the survey, the reliable conditions, and the absence of prehistoric cultural materials identified by one other previous investigation adjacent to and overlapping (by 200 feet or 61 meters) along the eastern property boundary of The Grove Specific Plan Project, the potential for prehistoric and/or historic archaeological resources within the proposed Project site is considered low.	None required	Less than Significant
Impact CR-3 – Construction of the proposed Project would require grading of the Project site and excavation for the placement of building foundations. The ground-disturbing activities could potentially disturb subsurface paleontological resources.	Implementation of CR-1 will reduce impacts	Less than Significant after Mitigation
Impact CR-4 – There are no known cemeteries or burial grounds on the Project site. As previously discussed, the site has a history of use by Native Americans; therefore, there is potential for additional archaeological resources, including burial grounds, to exist. Because the potential exists for human remains to be unearthed during earthwork and grading of the Project site, impacts would be potentially significant.	MM CR-1 – If human remains are encountered during excavation and grading activities within the Project site, the contractor shall stop such activities. In the event of accidental discovery or recognition of any human remains there shall be no further excavation or disturbance of the subject site or any nearby areas reasonably suspected to overlie adjacent human remains and the following steps shall be taken: 1. The coroner of the City in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required; and, If the remains are of Native American origin, either of the following steps shall be taken: a. The coroner should contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. b. Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the	

Impacts	Mitigation Measures	Significance after Mitigation
	Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs: 1. The Native American Heritage Commission is unable to identify a descendent. 2. The descendant identified fails to make a recommendation. The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	
Geology and Soils		
Impact Geo 1 – Construction activity associated with the Project site development may result in wind- and water-driven erosion of soils due to grading activities if soil is stockpiled or exposed during construction. The proposed Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES program requires that the Project's grading operations include adequate provisions for wind and water erosion control during, as well as after, grading operations to reduce soil erosion during construction. The details of erosion control would be incorporated into the Project's Storm Water Pollution Prevention Plan.	MM Geo-1 – All mitigation measures recommended in the August 26, 2005 General Plan EIR and the January 4, 2011 GeoLabs Geotechnical Report shall be incorporated into the Project.	Less than Significant after Mitigation
Impact Geo-2 – Since the Project site is located in Southern California, an area of strong seismic activity, ground shaking on the Project site is anticipated. The intensity of ground shaking generally depends on several factors, including the distance to the earthquake epicenter, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. In order to reduce impacts due to ground shaking, building design and construction would adhere to the standards and requirements detailed in the California Building Code (*California Code of Regulations*, Title 24), the City of Ventura Building Code, and the professional engineering standards appropriate for the seismic zone in which the Project site is located. Conformance with these design standards would be enforced through building plan review and approval by the City of	Implementation of Mitigation Measure MM Geo-1 (page 4.6-14) will reduce any impacts for seismic shaking.	Less than Significant after Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
Ventura Department of Public Works (Building and Safety Division) prior to the issuance of building permits for any structure or facility on the Project site.		
Impact Geo-3 – No unique geologic or physical features would be destroyed, covered or modified with implementation of the proposed Project.	None required	Less than Significant
Impact Geo -4 – The liquefaction analyses indicate a potential for liquefaction in the upper 30 feet of the soil profile in the northwest area of the site. Therefore, we have further evaluated the potential impacts of liquefaction to determine the potential for ground surface disturbance from lateral spreading, ground oscillation, and other manifestations such and sand boils which could create local areas of bearing loss. The northwest portion of the site has a potential for lateral spreading. At this time the analysis indicates a potential of 1.5 feet of lateral spreading for the sloping ground case (the applicable condition). This lateral spreading may allow for localized areas of bearing loss during a design-level event in areas of weakened soil such as areas where sand boils or fissures occur. At this time, the area considered susceptible is the area within the State designated Seismic Hazard Zone. The potential for these effects can be significantly reduced if the loose sandy alluvium in the upper section of the soil profile (noted at depths of 10 to 13 feet in CPT l) could be replaced with compacted fill during grading or strengthened by alternative means.	Implementation of Mitigation Measure MM Geo-1 (page 4.6-14) will reduce any impacts for lateral spread and liquefaction.	Less than Significant after Mitigation
Impact Geo-5 – Topographic changes on the Project site would occur during grading operations to accommodate the proposed Project. The Project would include grading approximately 75,000 cut and 63,000 fill. All grading would concur consistent with the UBC.	None required	Less than significant
Climate Change/Greenhouse Gas Emissions		
Impact GHG – The GHG emissions resulting from operation of the Project, which involves the usage of on-road mobile vehicles, electricity, natural gas, water, landscape equipment, and generation of solid waste and wastewater have been calculated with CalEEMod. The increase in GHG emissions generated by the Project would be approximately 2,512.98 $MTCO_2e$ (metric tons of CO_2e) per year, which would be under the 3,500 $MTCO_2e$ per year Tier 3 threshold for residential projects.	None required	Less than Significant
Impact GHG-1 – In addition, and separate from the quantitative analysis above, there is substantial evidence to support that the Project is	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
qualitatively consistent with statewide goals and policies in place for the reduction of greenhouse gas emissions, including SB 375, AB 32 and the corresponding Scoping Plan. Consistent with the spirit and intent of state and local plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases, the Grove Specific Plan has identified several Project objectives and design features that would serve to reduce GHG emissions.		
Cumulative Impacts: To the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall greenhouse gas reductions necessary, one can reasonably argue that the Project's impact is not cumulatively considerable, because it is helping to solve the cumulative problem of greenhouse gas emissions as envisioned by California law.	None required	Less than Significant
Hazards and Hazardous Materials		
Impact Haz-1 – The operation of land uses that use, create, or dispose of hazardous materials is regulated and monitored by federal, state, and local regulations and policies. Specifically, future development within the City of Ventura would be subject to compliance with the programs administered by nearby agencies (cities of Camarillo, Oxnard, and Ventura County). The owners or operators of businesses that handle or store hazardous materials equal to or above the reportable quantities would be subject to compliance with regulatory agencies. These programs, as well as other federal, state, and local regulations and policies, provide a high level of protection to the public and the environment. Compliance with appropriate regulations and policies would limit the impact from routine use, transport, or disposal of significant amounts of hazardous materials.	None required.	Less than Significant
Impact Haz-2 – The severity of potential effects varies with the activity conducted and the concentration and type of waste involved. However, as discussed above, the land uses proposed as part of The Grove Specific Plan would not significantly increase the amount of hazardous materials used as it is a residential project only. Additionally, federal, state, and local regulations and policies governing the use of hazardous materials strictly regulate the proper handling of such materials and their containers to ensure that accidents involving the release of	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
toxic materials into the environment do not occur.		
Impact Haz-3 – Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, disclosure to the HHMD is required for any business that uses, handles, or stores hazardous materials or waste materials equal to or in excess of the basic quantities. Businesses must report information to CERS, to assure that businesses have appropriate procedures and policies in place and employees and contractors have adequate training for responding to a hazardous materials incident at the facility. Additionally, federal, state, and local regulations and policies governing the use of hazardous materials strictly regulate the proper handling of such materials and their containers to ensure that accidents involving the release of toxic materials into the environment do not occur.	None required	Less than Significant
Impact Haz-4 – California Spills, Leaks, Investigations and Cleanups (CA SLIC) (page 4.8-7) indicates three sites within the specific plan area could have hazardous contaminants. These sites have the potential to be developed as part of The Grove Specific Plan. The parcels could be redeveloped with sensitive uses, such as residential or sensitive uses may be developed adjacent to these sites. Construction workers could be at risk during earth moving activities. Residents on or adjacent to the hazardous materials sites could be exposed to hazardous materials. Therefore, the hazardous materials sites have the potential to pose a significant hazard to the public or the environment.	MM Haz-1 – The structures on-site were constructed prior to 1981. Based on the age of construction, building materials in on-site structures may contain asbestos containing materials (ACM), and certain building materials are presumed to contain ACM (PACM), unless testing has shown otherwise. As of October 1, 1995, OSHA made building owners responsible for complying with the asbestos construction standard, for buildings built in 1981 or earlier. The building owner is responsible for identifying the presence, location and quantity of asbestos containing building materials. The building owner must tell employees, other employers, and tenants in the building of the presence and location of asbestos or presumed asbestos containing materials (PACM). If the building owner intends to demolish or remodel the structure(s), it is suggested that the building owner contact a California Certified Asbestos Consultant for assistance in compliance.	Less than significant after mitigation
	MM Haz-2 – The subject parcel has been in agricultural land use for many decades, including citrus orchard (circa 1960s to 2003) and flower cultivation (to present). If future plans for the parcel contemplate possible change in land use, such as to residential uses, it may be warranted to investigate the site's shallow soils for the potential of agricultural chemicals possibly associated with historical farming activities, including organochlorine pesticides (OCP) and arsenic. Soil investigation might include reconnaissance sampling for general	Less than significant after mitigation

Impacts	Mitigation Measures	Significance after Mitigation
	evaluation, or more thorough sampling in accordance with guidelines of the *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, California Department of Toxic Substances Control (August 7, 2008).	
Impact Haz-7 – The City's Evacuation Map anticipates that the major streets, US 101 (north and southbound, Telephone Road, Telegraph Road, SR-33 and SR-126 and within the City would serve as evacuation routes. Construction activities associated with development under The Grove Specific Plan could reduce the number of lanes or temporarily close certain street segments, including those used for evacuation routes. Construction equipment and vehicles may block or slow traffic. Possible street closures and slower traffic during construction could interfere with emergency response including evacuations. However, construction would be temporary and would affect a limited number of streets or intersections at any one time. Additionally, the City's Police and Fire Departments, which provides guidance for the City's planned response to extraordinary emergency situations associated with natural disasters, terrorism, technological incidents, and nuclear defense operations, would continue to be implemented.	None required	Less than Significant
Hydrology and Water Quality		
Impact Hyd-1 – The planning and design phases of development or redevelopment projects may be spread over period of months or even years. Water quality BMPs incorporated into the planning and design phases would be more cost-effective than retrofitting of BMPs. Compliance with the County's 2010 TGM, would ensure that development under the Grove Specific Plan would not violate any water quality standards or waste discharge requirements.	None required	Less than Significant
Impact Hyd-2 – While new development and/or redevelopment could result in an increase in impervious surfaces, which decreases infiltration and percolation surfaces for groundwater recharge, this development will be required to comply with regulations that will mitigate this potential impact. The current NPDES permit and the 2010 TGM require all development projects to control and/or treat runoff contaminant prior to discharging urban storm runoff into storm drain system as receiving waters, as well as reduce or eliminate post-Project runoff. The latter requirement would typically utilize detention	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
basin(s) to detain volume to reduce peak flows, and gradually release the runoff so as not to exceed the existing flow conditions. Implementation of the proposed Project would result in less than significant impacts to groundwater supplies or groundwater recharge. As discussed above, the Ventura County 2010 TGM would require that new development to contain all runoff water on-site. This would provide additional recharge to the groundwater aquifer.		
Impacts Hyd-3, Hyd-4 and Hyd-5 – Runoff from the developed site will be mainly street flow from the north to the south. Runoff for the majority of the developed site will be directed to a system of on-site catch basins. Runoff entering these catch basins will discharge into an on-site storm drain line and eventually into a proposed detention area. Some of the runoff from the site will be directed towards proposed bio-swales located along the easterly boundary of the proposed development. Runoff collected by these bio-swales will discharge into propose inlet structures and allow to enter the on-site storm drain system previously mentioned. All inlet structures will be sized to capture the flow for the 10-year storm. Runoff exceeding this storm event will be allowed to sheet flow towards the south of the site, where it will be collected by sump type catch basins. Runoff entering the on-site storm drain system will be directed to a designated detention area.	None required	Less than Significant
Impact Hyd-6 – Storm flows that are less than the allowable flows (based on pre-developed conditions) will be allowed to flow through the diversion structure into a 24-inch storm drain line that will discharge directly into Telephone Road Drain. Storm runoff exceeding the allowable flows will be directed into the proposed detention basin. This detention area will provide the necessary detention for all storm events. Attenuated flows from the detention area will be released into Telephone Road Drain. The total runoff being released from the main on-site storm drain system and the detention area will not exceed the pre-developed runoff amounts for each storm event. The preliminary drainage system for this Project has been designed to meet the requirements of the City of Ventura, using the methods proscribed in the County of Ventura Hydrology Manual. All structures should be protected from the 100-year storm. On-site bio-swales and pervious pavement will provide the necessary storm water treatment.	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
The detention basin will prevent runoff from the site from exceeding the undeveloped runoff amounts		
Land Use		
Impact LU-1 – ensures that enhanced bicycle and pedestrian connections would also be provided. These features would enhance the pedestrian, bicycle, and motor vehicle circulation by adding street connections to the existing circulation network in the Thille Community. These roadway improvements would not physically divide the community.	None required	Less than Significant
Impact LU-2 – The Grove Specific Plan would be consistent with the Guidelines for Orderly Development. Additional analysis of the Project's consistency with Ventura LAFCo policies is included in the following sections: Section 4.2, Agricultural Resources; Section 4.12, Population and Housing; Section 4.16-3, Water Supply, Section 4.16-2, Wastewater; Section 4.13-2, Fire Services; and Section 4.13-1, Police Protection.	None required	Less than Significant
Noise		
Impact N-1 – The proposed 8-foot-high sound wall along the western property line and extending east to west at Lot 22 is adequate to meet noise reduction needs. Lot 33 is potentially exposed to high sound levels by the "gap" formed by proposed Public Park A1; however, the analysis indicates that the sound walls and the shielding effects of the proposed structures would achieve the 65 CNEL exterior for that lot.	MM N-1 – A sound barrier (solid concrete, masonry wall on berm, or other construction) should be constructed per the Sept 4, 2014 Concept Site Plan along the northern Project boundary along SR 126 with a height above the existing ground level of at least 10 feet and possibly up to 12 feet. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.	Less than Significant after Mitigation
The 8-foot-high sound wall along the west property line would meet the noise reduction needs of Lot 1 at the southwest corner of the site as currently designed. The "garden wall" for Lot 58 should be seven feet in height to provide that the backyard with sufficient noise reduction to meet the future 65 CNEL exterior criteria. The southernmost apartment building is exposed to high sound noise levels from US 101 on its westernmost side. No practical method is available to shield exterior balconies that face to the south.	MM N-2 – The sound wall to be built on the west property line adjacent to Lots 1-22 as illustrated in the Conceptual Site Plan (September 4, 2014) shall be at a height above the existing ground of at least 8 feet. The portion of the 8-foot-high wall on Lot 1 shall not extend into the required front yard setback. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.	Less than Significant after mitigation
	MM N-3 – A garden wall sound barrier 7 feet in height shall be constructed for Lot 58 located at the southern end of the site. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.	Significant
	MM N-4 – All unshielded units and the second floor of units facing SR 126, US 101, and Telephone Road shall be constructed to include sufficient noise attenuation to reduce interior noise levels	Less than Significant after mitigation

Impacts	Mitigation Measures	Significance after Mitigation
	to a CNEL of 45 dBA. This would require, at a minimum. The use of double-paned windows on all windows that are exposed to freeway noise. Such windows shall have a minimum of STC of 35. Solid core doors shall be used for those doorways facing the freeway or Telephone Road and they should be insulated in conformance with California Title 24 requirements. The exterior wall facing material shall be stucco, or other surface with an STC rating of at least 45. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.	
	MM N-5 – All units shall contain forced air ventilation. All duct work for ventilation shall include noise louvers at the exterior outlet and/or ducts shall be directed either opposite to or perpendicular to the nearest road. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.	Less than Significant after mitigation
Impact N-2 – Given that loaded trucks would be used in excess of 15 feet from the nearest sensitive land uses and given the infrequent number of vibration events per day, construction activities would not exceed the FTA ground-borne vibration threshold for the nearest sensitive land uses surrounding each of the sites. Impacts related to the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less than significant with implementation of the policies and actions contained in the General Plan.	None required	Less than Significant
Impact N-3 – Roadway noise levels would generally rise as traffic levels increase under any of the General Plan land use scenarios. However, implementation of proposed policies and actions, in combination with the additional action recommended above, would reduce impacts associated with projected development to a less than significant level for any of the six land use scenarios. The City of Ventura has used rubberized asphalt in repaving projects for other major streets in the City. Impacts related to a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project implementation of General Plan Goals and Policies.	None required	Less than Significant
Impact N-4 – A temporary increase in noise is considered substantial if it would be in conflict with	None required	Less than Significance

Impacts	Mitigation Measures	Significance after Mitigation
the City Noise Ordinance, which allows noise generating construction activity between the hours of 7:00 a.m. and 8:00 p.m. However, as concluded in the General Plan EIR for buildout construction Citywide, compliance with Noise Ordinance restrictions on construction timing would reduce this impact to less than significant. Impacts specific to The Grove Specific Plan Project area are not expected to be different from the Citywide assessment.		
Population and Housing		
Impact PH-1 – Project implementation would not require substantial development of unplanned or unforeseen public services and utility/service systems. Individual development projects would be reviewed on a project-by-project basis to determine if existing services and utilities are sufficient or if new and/or upgraded facilities are necessary to serve the development. The increased demands for public services and utility/service systems would not significantly reduce or impair any existing or future levels of services, either locally or regionally. Further, development within the Specific Plan Area is anticipated to occur over multiple years based on market demand, which would allow for development of necessary services and infrastructure to serve the anticipated growth.	None required	Less than Significant
Impact PH-2 – One site manager residence exists on-site. The Project proposes to discontinue agricultural operations, demolish the site manager residence, and construct up to 250 dwelling units on the 26.51-acre Project site. Thus, there would be a displacement of one on-site housing unit, but not the need to construct replacement housing elsewhere, as there is sufficient housing supply in the City. The Project would displace one resident, but this would not require the construction of replacement housing elsewhere in the City, given the available housing stock in the City. Thus, implementation of the Project would result in less than impacts with respect to resident displacement or the need for replacement housing.	None required	Less than Significant
Public Services		
Police Services		
Impact PS-1 – New development projects are subject to the review and approval by City departments. The Ventura Police Department would review the site plans of all proposed	MM PS-1 – New construction within the specific plan area shall be designed to provide for safety measures (e.g., alarm systems, security lighting, other on-site security measures, and crime	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
projects with respect to lighting, landscaping, building access and visibility, street circulation, building design, and defensible space. Incorporation of the Department's recommendations would reduce the potential for police protection impacts. Specific projects may also incorporate security features such as the use of appropriate landscape materials, parking area lighting, and building orientation, which would further reduce the number of calls for police protection services. Response times could increase within the Project area due to increased vehicle traffic generated from buildout of the Project, adversely affecting the operating condition of the local roadway network. With the Department's current staffing level, the officer to resident ratio is 1:850. Based on the projected potential increase in population of 653 residents, additional police officers would be absorbed over the lifetime of the Project.	prevention through environmental design policies) and subject to the review and approval of the City Planning Department and Ventura Police Department.	
Impact PS-2 – No specific development projects are proposed or analyzed at the project level in this program EIR at this time. Project-level review will be required for individual projects proposed within The Grove Planning area, such as new subdivisions. The VFD reviews building permits and the proper installation of fire sprinkler, fire alarm, and fire suppression systems. Fire inspectors conduct inspections during different phases of construction projects to ensure that current codes and standards are followed. Implementation of the actions provided in The Grove Specific Plan, and the General Plan would support VFD efforts to provide adequate fire protection services in the Project area.	None required	Less than Significant
Impact PS-3 – Elementary schools serving the planning area have capacity. Middle and high school students generated by the Project could be accommodated at existing schools. The additional elementary students generated by new residential development would not require additional school capacity in order to serve Project residents. However, this assumption is based on the assumption that no new schools would be developed and all 250 residential units would be developed at one time. In reality, these residential units are projected to be added gradually should the Project be approved. In addition, as discussed below, the VUSD monitors growth trends and capacity at its schools and makes adjustments as necessary. VUSD collects fees for new development within its service area. As discussed previously, payment of	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
these fees is considered full and complete mitigation for impacts to school services. Therefore, with payment of these fees and implementation of the policies provided in the City's 2005 General Plan.		
Impact PS-5 – Development forecasts would add approximately 653 residents to the City's population. Based on the standard of 2 volumes and 1 square foot of library space per capita, this would create the need for 1,306 additional volumes and 653 square feet of library space to serve residents in the planning area. Resources in the City fall short of this standard, providing approximately 192,504 volumes and 38,353 square foot of library space per capita. Library services are funded primarily by property tax increments collected by the state, supplemented by City general fund revenues	None required	Less than Significant
Parks and Recreation		
Impacts Rec-1 and Rec-2 – The plan area includes up to 4.67 acres of park area, which includes a linear park, public and pocket parks, a passive park, an active play area, a dog park, and an open space area reserved for a potential future pedestrian and bike bridge connection to El Camino Real Park to the north of and over SR-126. Lastly, a recreation facility including a pool, spa and facility room is proposed located east of the Thille Community Neighborhood. The Project would be subject to the Park and Recreational Facilities tax (based upon the number of bedrooms). Whether the subject property's parkland's would offset Quimby Fees for parks and recreation will be determined by the City Council.	None required	Less than Significant
Traffic and Circulation		
Impact T-1 – The addition of Project-generated traffic has no significant impact on the operation of any study intersections under existing conditions. The study intersections will continue to operate as LOS D or better during the AM and PM peak hours.	None required	Less than Significant
Impact T-2 – The County's CMP Traffic Impact Assessment guidelines require that intersection monitoring locations must be examined if the Project would add 50 or more trips during either the AM or PM weekday peak hours. The closest intersection monitoring location is Main/US 101 SB/Valentine and Telephone. This intersection is located within the specific plan area and is one of	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
the 3 study intersections examined in the traffic analysis report. Based on the Project trip distribution and trip generation, existing counts would not increase the CMP thresholds.		
Impact T-4 – Implementation of the Specific Plan would not result in the construction and/or operation of hazardous design features (e.g., sharp curves and/or dangerous intersections) or the interaction of incompatible uses. However, the Specific Plan's goals and policies do encourage pedestrian linkages, the implementation of bicycle facilities, and the reconfiguration of roadways. Thus, it is imperative that facilities designed for non-automobile modes include enhanced safety features to minimize conflicts between transit riders, bicyclists, pedestrians, and motor vehicles. The Specific Plan incorporates street improvement standards that would provide a defined and often separated space for pedestrians, motorists, and bicyclists.	None required	Less than Significant
Impact T-5 – Construction activities associated with buildout of the Specific Plan could reduce the number of vehicle lanes or temporarily close certain street segments, usually accessible to emergency vehicles, including those used for evacuation routes. Further, construction equipment and vehicles may block or slow traffic. Possible street closures and slower traffic during construction could interfere with emergency response, including evacuations. However, construction would be temporary and would affect a limited number of streets or intersections at any one time. Additionally, the City's Standardized Emergency Management System (SEMS) Multi-Hazard Emergency Functional Plan (MHEFP), which provides guidance for the City's planned response to extraordinary emergency situations associated with natural disasters, terrorism, technological incidents, and nuclear defense operations, would continue to be implemented.	None required	Less than Significant
Impact T-6 – The Specific Plan is consistent with the City's General Plan and Development Code. While the Specific Plan supersedes the Development Code within the specific plan area, its goals and principles provide for a more precise implementation of the City's existing, including providing district-specific development standards and design guidelines that support and encourage and increase safe, direct, and convenient pedestrian access, establish a potential by the City of Ventura to construct an overpass for safe access for pedestrians and bicyclists.	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
Utilities and Service Systems		
Solid Waste		
Impact Util-1 – However, under the City Model Ordinance, the Project would be required to provide adequate areas for collecting and loading recyclable materials in concert with countywide efforts and programs to reduce the volume of solid waste entering landfills. While the Project would generate approximately 0.00117 tons per day, it can also be assumed that the Project would meet the current recycling goals of the community and in actuality, only generate approximately 0.0039 tons per day due to state mandate to divert at least 50% of potential waste disposal. E.J. Harrison & Sons (trash hauler for the City of Ventura) is required to serve all customers within the jurisdiction pursuant to their franchise agreements. However, due to the urban design elements of the Project, the development cannot be served with the standard services described in the agreements. A standard collection vehicle cannot safely or legally traverse the streets with the bulb-out and round-about configurations. Special service rates will need to be developed and approved by the City of Ventura to provide service for this Project. Additionally, special service vehicles will be required due to the compact street figurations. Site design elements shall consider space for container storage and collection adequate to provide appropriate service levels for the various land uses.	MM Util-1 – Special service rates will need to be developed and approved by the City of Ventura to provide service for this Project. Special service vehicles will be required due to the compact street figurations.	Less than Significant
	MM Util-2 – Site design elements shall consider space for container storage and collection adequate to provide appropriate service levels for the various land uses. The space allocation guidelines discussed in Table 4.16-2 to The Grove Specific Plan EIR should be used to design container storage areas to provide adequate service levels. Components to consider include but are not limited to, horizontal and vertical clearances, enclosure functionality and protection elements, collection vehicle circulation, accessibility, pedestrian circulation, construction materials, roofing, fire sprinklers, and other utilities.	Less than Significant
	MM Util-3 – There is no protection provided for vehicles making right-turn movements off Telephone Road. Vehicles tend to move fast through the intersection trying to catch the next light, which is only 240 feet to the west. The Project applicant shall work with the City of Ventura to accommodate right-hand turn movements off Telephone Road.	Less than Significant
Impact UTIL-2 – AB 939 requires that California cities establish programs to divert 50% of all solid waste from landfills. As discussed above, the City of Ventura has established residential and commercial waste diversion programs, and diverted 70% of its solid waste in 2012, the most recent year for which information is available. New housing constructed through the Project's horizon year of 2025 would result in an estimated increase in population of 653 residents. Future development within the planning area is expected to divert 70% of its solid waste, or approximately 0.00195 tons per day, from disposal in landfills through compliance with City programs for reducing solid waste disposal. Furthermore, The Grove provides policies that would support City efforts regarding solid waste diversion. Development within The Grove Planning Area would comply with all actions provided in the General Plan,	None required	Less than Significant

Impacts	Mitigation Measures	Significance after Mitigation
Waste Water		
Impacts Util 3 and UTIL-4 – Results from the model that was updated with the revised flows for the Project and the recalibration effort. Results are shown both with and without the flows from the Project under peak wet weather flows for Existing and Ultimate conditions. The d/D ratios in blue are equal to or greater than 0.67. The d/D ratios shown in green are between from 0.5 to 0.67. The deficiencies are similar to what is shown in Master Plan Figure 5-4c.	MM Util-4 – The subdivider/developer shall enter into a reimbursement agreement with the City to design and construct the replacement of the existing public sewer main and associated improvements, including but not limited to manholes, cleanouts and laterals, as described below: • Replace 1,910 linear feet of existing 10" with 15" pipe. Pipe segments: P-3904, P-4443, P-4441, P-4442, P-4440 and P-4439. • Replace 2,190 linear feet of existing 12" with 15" pipe. Pipe segments: P-3905, P-3906, P-3907, P-3908, P-3909, P-3910, P-3912, P-3911 and PC-250. • Replace 740 linear feet of existing 15" with 18" pipe. Pipe segment: P-3976, P-3982, P-3981 and PC-251. The subdivider/developer shall construct the proposed public mains prior to issuance of a Certificate of Occupancy. The reimbursement agreement shall explain the details of how the subdivider/developer shall be reimbursed by the City for designing and constructing the public sewers in Main Street as described above.	Less than Significant
Impact Util-5 – The estimated flow from the 250 units is 48,500 gpd, or 33.68 gpm. This conservative analysis indicates the wastewater flow generated by the proposed Project would remain below the currently permitted treatment capacity of 14 mgd. Therefore, the proposed Project would not exceed the anticipated treatment capacity of the VWRF. Additionally, future water conservation measures implemented by this new development as well as ongoing measures by existing customers could reduce per capita water use inside the home, thus generating less sewage and providing adequate wastewater capacity.	None required	Less than Significant
Water Supply		
Impact Util-6 – Hydraulic model results indicated that the City's existing domestic water distribution system has available capacity to support the increased water demand of The Grove and is able to meet the required fire flow without introducing any new pressure or pipeline velocity deficiencies under current conditions. There are a few locations within the 330 Zone where the minimum pressure is not met; however, those deficiencies existed prior to the proposed Project, although these	MM Util-5 – The additional demand of the Project will require an increase in reservoir storage in the 330 Zone of 68,975 gallons (for 24-hour continuous pumping) or 134,731 gallons (for 9-hour off-peak pumping).	Less than Significant After Mitigation

Impacts	Mitigation Measures	Significance after Mitigation
deficiencies are expected to slightly worsen. Under the build out of all Planning Projects, six additional junctions will become deficient. These deficient junctions represent two separate locations at the north-central area of the 330 Zone at the pressure zone boundary at Walcott Avenue and near the intersection of Telephone Road and Johnson Drive.		
Cumulative		
Based on these findings, the proposed development Project will be reevaluated at the time building permits are issued and building permits will be issued contingent upon an adequate water supply available for this Project.	An adequate water supply for the proposed Project shall include the following: MM Util-6 – The property shall relinquish any water rights associated with the property to the City. For additional water supply required to meet the estimated water demand of the proposed Project (81.33 AF) in addition to the water rights relinquished to the City the following will be required: MM Util-7 – The development shall utilize best management practice (BMP) low water use standards. MM Util-8 – The City of San Buenaventura is considering a Water Resource Net Zero Policy to apply to future development. Because adequate water rights may not be available to offset the projected water demand of 81.33 AFY, if the City Council adopts a Water Resource Net Zero Policy that applies to the proposed Project, then the Applicant/Developer shall be subject to compliance with the Water Resource Net Zero Policy, which would include implementation of conservation offsets and/or payment of a Water Resource Net Zero Fee. If no Water Resource Net Zero Policy is in place when building permits are issued, the applicant shall acquire and secure water rights that are acceptable and deemed transferable to the City. MM Util-9 – In addition, if prior to the issuance of building permits the City declares a Stage 4 Water Shortage Event or any higher Water Shortage Event per the City's adopted Water Shortage Event Contingency Plan, the Applicant/ Developer shall acquire and secure water rights that are acceptable and deemed transferable to the City to offset the Project's water demand of 81.33 AFY.	

3. Project Description

3.1 Introduction

The purpose of the Project Description is to describe the Project in a way that will be meaningful to the public, reviewing agencies, and decision-makers. For this environmental impact report (EIR), the Project description will focus on program-level information pertaining to The Grove. As described in §15124 of the California Environmental Quality Act (CEQA) Guidelines, the Project Description in an EIR is required to contain the following information: 1) the location of the proposed Project; 2) a statement of Project objectives; 3) a general description of the Project's technical, economic, and environmental characteristics; and 4) a statement briefly describing the intended uses of the EIR. The CEQA Guidelines state that a project description need not be exhaustive, but should provide the level of detail needed for the evaluation and review of potential environmental impacts.

The Project Description is the starting point for all environmental analysis required by the CEQA Guidelines. Section 15146 of the CEQA Guidelines states that the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity, which is described in the EIR. In this case, the proposed Project consists of the development of a Specific Plan to govern development of a mix of uses including commercial, public/institutional, and residential uses. The following Project Description serves as the basis for the environmental analysis contained in this Draft EIR.

3.2 Project Location and Site Characteristics

The City of San Buenaventura is located in Ventura County, California (**Figure 3-1, Regional Vicinity Map**). The Grove Specific Plan area is located in the western portion of the City, specifically at the western terminus of Thille Street, north of Copland Drive (**Figure 3-2, Project Area Vicinity Map**). The Project site is bounded on the north by Highway 126 (SR-126), on the east by the Thille Community neighborhood, on the south by Telephone Road and Copland Drive, and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange. The plan area is approximately 26.51 acres in area and is currently within unincorporated area, but is within the City of Ventura's Sphere of Influence and is designated on the General Plan Map as Medium Density Residential; 9-20 du/acre. (**Figure 3-3, The Grove Specific Plan Regulating Plan**). The site is currently used for seasonal floral agricultural production.

The proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre).

Figure 3-1 Regional Vicinity Map

Source: The Grove Specific Plan No. 9, June 5, 2014

Figure 3-2 Project Area Vicinity Map

Source: Figure 3.1, The Grove Specific Plan; January 2015

Figure 3-3 The Grove Specific Plan Regulating Plan

The Tentative Map (see **Figure 3-4, Vesting Tentative Tract Map No. 5626**) would create individual lots for 32 front-loaded single-family residences, 26 alley-loaded single-family residences, and 4 larger lots that could accommodate up to 192 units in a combination of alley loaded single-family homes, townhouses, and courtyard or stacked multi-family housing (see **Figure 3-4**).

The Specific Plan would be divided into six separate neighborhood blocks containing a mix of residential housing types with a goal to create a traditional neighborhood. It emphasizes the public realm, pedestrian-friendly streets and blocks, and a diversity of building types to generate a distinct sense of neighborhood identity. As a traditional-design neighborhood, the Project has a center and edge linked by a series of walkable connections to the open spaces, includes communal residential services, and functions contained within the site.

The plan area includes up to 4.67 acres of park area, which includes a linear park, public and pocket parks, and an open space area reserved for a potential future pedestrian and bike bridge connection to El Camino Real Park to the north of and over SR-126. A portion of the open space would serve as storm water detention area located off-site in the Copland Drive vacated right of way. The storm water detention area is in addition to acreage set aside for onsite parks (4.67 acres).

The Project will improve neighborhood connectivity by continuing the linear park system as well as vehicular connection from Thille Road to Telephone Road.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

3.3 Statement of Project Objectives

The following are the Applicant's Project objectives for The Grove Specific Plan:

- Complete the Thille Community with an attractive residential neighborhood pursuant to the requirements of the City of Ventura Comprehensive Plan; and requirements for efficiently providing municipal services.
- Create neighborhoods within the Specific Plan area that balance vehicular circulation with bike and pedestrian travel, while improving public access into and throughout the site.
- Buildout of The Grove Specific Plan Specific Plan shall respect the natural environment. Protect residents of The Grove Specific Plan from harmful and nuisance highway noise with the construction of a retaining wall.
- Ensure that proposed development and land use conserve energy and natural resources.
- Provide for compatibility with existing residential uses in the area through effective and appropriate urban and architectural design.

- Complete the public recreational component of the City Comprehensive Plan by finishing the linear bike pathway system in the Thille Community.
- Provide additional public parkland, including the provision of a future site pad to allow a bike and pedestrian connection over the 126 freeway to Camino Real Park.

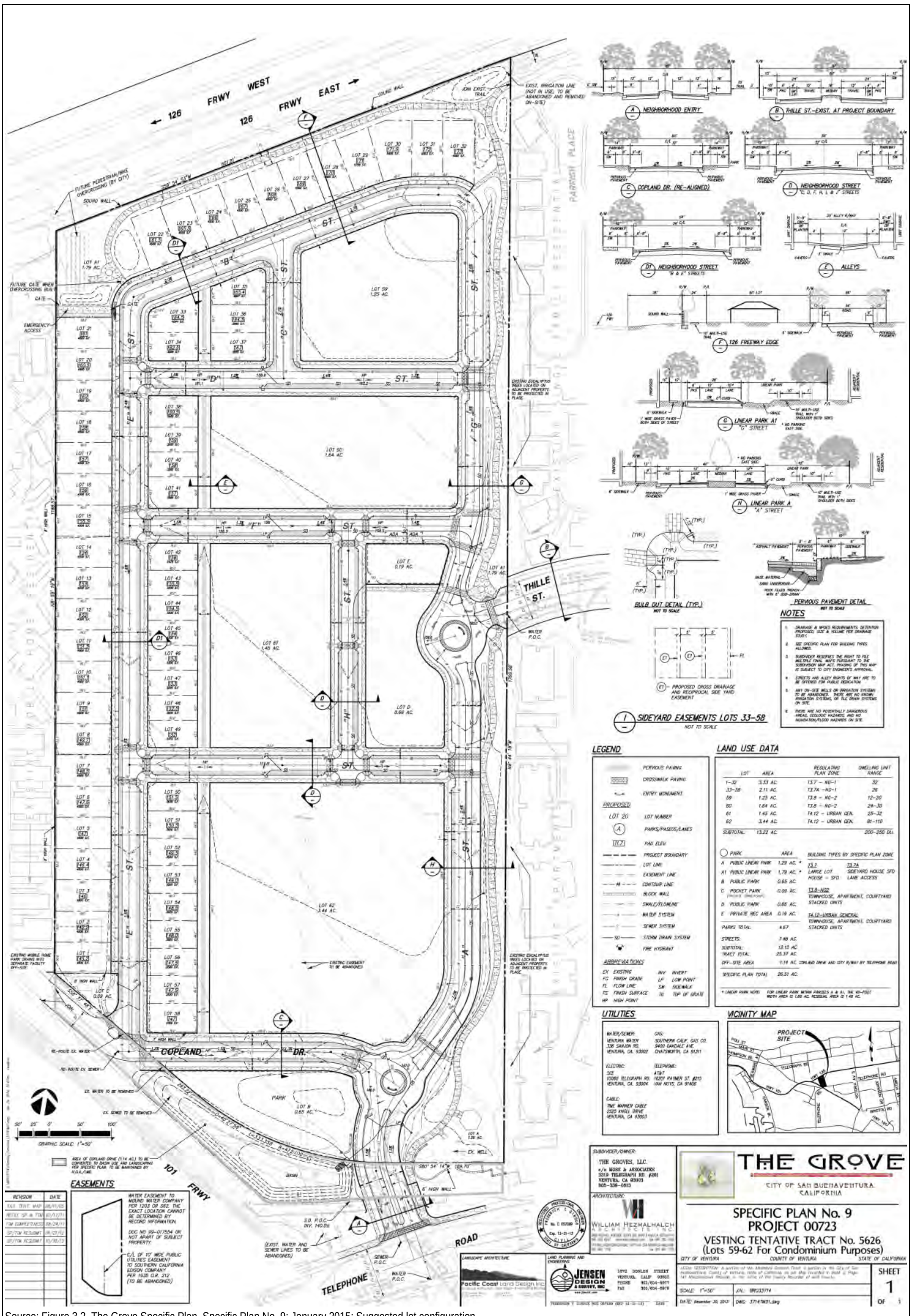
3.4 Description of Proposed Project

The purpose of this Project is to develop a Specific Plan with clear policies, a strong implementation plan, and a vision consistent with the General Plan. The Specific Plan will guide site development, infrastructure improvements, and design elements of The Grove development plan. As discussed previously, a Development Agreement (DA) has been submitted. In California, land use entitlement and related development issues have become increasingly complex, risky, and uncertain. On one hand, new development must constantly occur to accommodate a growing population and promote an expanding economy. On the other hand, government regulations--ranging from the protection of endangered species to slow growth policies--have made the land use entitlement process more lengthy, difficult, and expensive.

Besides decreasing developers' risks, this chapter discusses other benefits to development agreements, such as: (1) providing local government with the ability to require public improvements or other concessions from developers; and (2) encouraging developers and local governments to engage in a joint public/private participation planning process that often results in development that is consistent with the community's planning objectives.

The Project intent is to create a regulatory document to lay the foundation for a pedestrian-friendly development plan. The proposed Specific Plan is intended to be implemented over the next 8 years and includes the following components:

- **Land Use and Development Standards**. Addresses allowable land use and site development standards, such as height, setbacks, and parking, for each Specific Plan district.
- **Design Guidelines**. Provides direction for private property within the Specific Plan area for such topics as site planning and design, parking lot design and screening, building design, massing and articulation, lighting, utilitarian aspects of buildings, and landscape and hardscape.
- **Streetscape and Signage Improvements**. Streetscape improvements are prescribed for all streets within the Specific Plan area to create a unique and inviting atmosphere.
- **Public Facilities**. Recommendations for public facilities to support the proposed Specific Plan are a component of the plan, including utilities and infrastructure.



Source: Figure 3.2, The Grove Specific Plan, Specific Plan No. 9; January 2015; Suggested lot configuration

Figure 3-4 Vesting Tentative Tract Map No. 5626

- **Circulation and Parking**. Please refer to **Figure 3-5, Proposed Circulation Plan**, for an illustration of Specific Plan circulation concepts.
- **Infrastructure and Public Facilities**. The Specific Plan addresses issues concerning water, wastewater, solid waste, storm water, electrical, natural gas, police and fire protection, schools, parks, and other public service within the Specific Plan area.
- **Implementation**. Provides the implementation program for the Specific Plan. Issues include recommended timing of public improvements such as new access, public park, and parking structure, designation of lead agencies for implementation of Specific Plan actions, and analysis of potential funding sources and financing mechanisms for Specific Plan implementation.

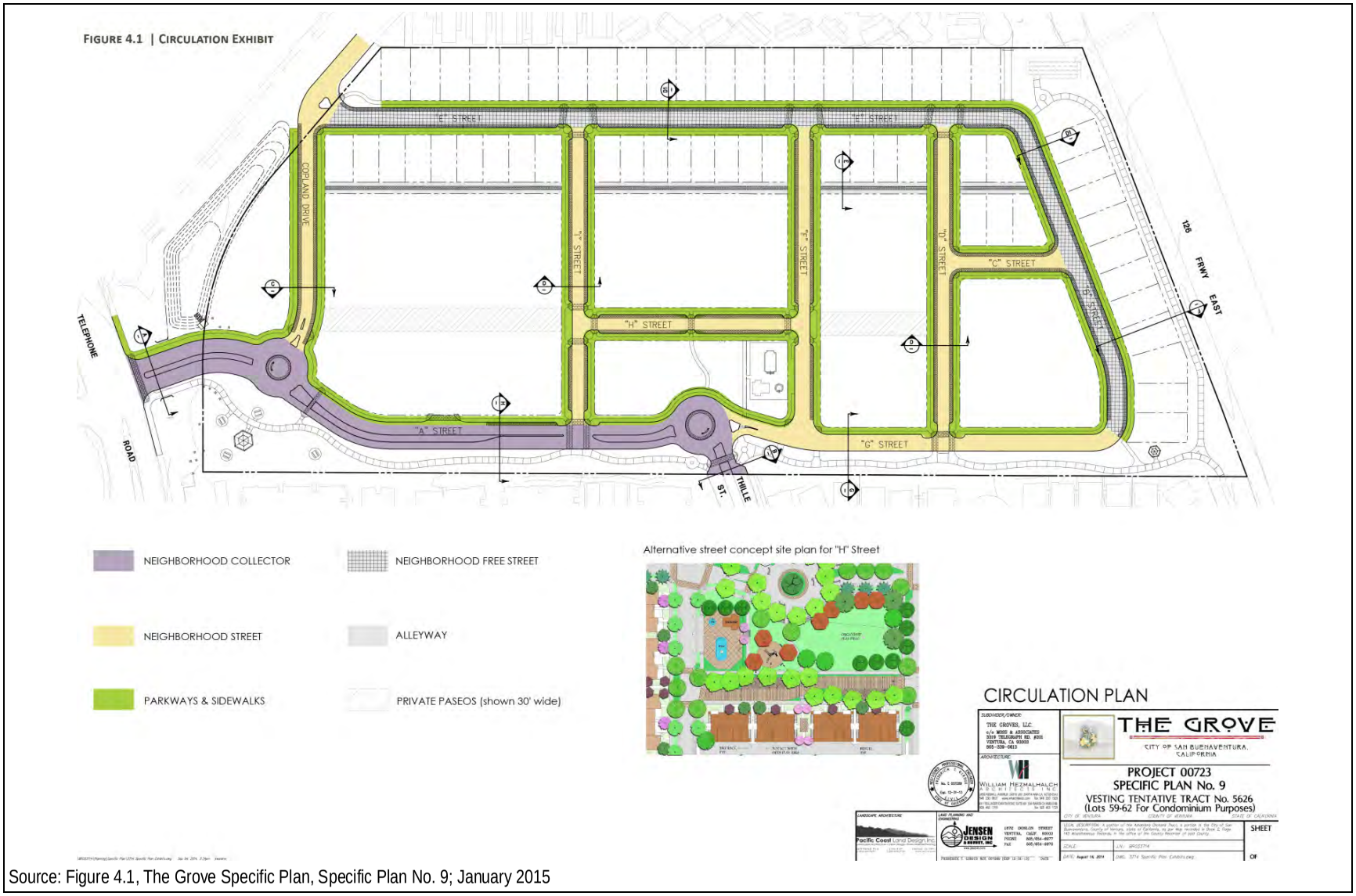
To create tailored guidelines and standards, five districts are proposed within the Specific Plan to carry out a particular vision for future development/redevelopment and character. Permitted land uses and development standards give direction for each of these districts to achieve the future envisioned by the community. The proposed districts are listed below in **Table 3-2** below, with the primary uses for each district listed. The boundaries of the five districts are shown in **Figure 3-3, The Grove Specific Plan Regulating Plan** (page 3-4).

The general vision for each of the five districts is discussed below along with preliminary land use intensities and development standards. The area is currently characterized by existing urban/suburban development with scattered vacant parcels.

Table 3-2 Specific Plan Land Use Districts

	Primary Land Uses	Number of Lots	Acres
Specific Plan Zoning District			
T 3.7 Neighborhood General	Single-family (8-10 du/ac)	32	3.33
T 3.7A Neighborhood General	Single-family (11-13 du/ac)	26	2.11
T 3.8 Neighborhood General	Single-family (12-18 du/ac)	12-20	1.25
		25-32	1.64
T 4.12 Urban General	Multi-family 21-29 du/ac	25-32	1.45
		81-110	3.44
Total			13.22
P.O.S Public Open Space/Parks	Playgrounds/Open Space		
Public Linear Parks			3.08
Public Parks			1.31
Private Open Space			
Pocket Park (Private)			0.09
Private Rec. Area			0.19
Total			4.67
Streets/Roadways			7.48
Tract Map Area			25.37
Off-Site Improvements			1.14
Specific Plan Total			26.51

Source: Vesting Tentative Tract No. 5626, December 2013
Note: The bike path, along with other park parcels will be dedicated to the City as public parks. The detention basin will also be public. Maintenance will be through a Landscape Maintenance District.



Source: Figure 4.1, The Grove Specific Plan, Specific Plan No. 9; January 2015

Figure 3-5 Proposed Circulation Plan

1. Neighborhood General 1 (T3.7)

The T3.7 zone is applied to areas appropriate for a mix of houses and lot sizes, characterized by detached single-family houses on larger lots. Intended net density excluding right-of-way is 8 to 10 dwelling units per acre with a typical minimum lot size of 50 feet by 90 feet. The T3.7A sub-zone denotes areas for single-family detached homes on smaller lots, with lane/alley access. Intended net density of the T3.7A sub-zone excluding right-of-way is 11 to 13 dwelling units per acre with a typical minimum lot size of 40 feet by 80 feet.[2]

2. Neighborhood General 2 (T3.8)

The T3.8 zone is applied to areas appropriate for a variety and mix of detached and multi-family houses on a variety of lot sizes and product types. Intended net density excluding right-of-way is 10 to 18 dwelling units per acre.

3. T4.12, Urban General

The T4.12 zone is applied to portions of the Specific Plan that are intended for higher density residential uses. Some residential types specified in the T3.8 Zone are permitted in the T4.12 zone. Intended net density excluding right-of-way is 18 to 21 dwelling units per acre.

The building types allowed in each zone (**Figure 3-6**) can be summarized as follows:

Table 3-3 Building Types Allowed by Zone

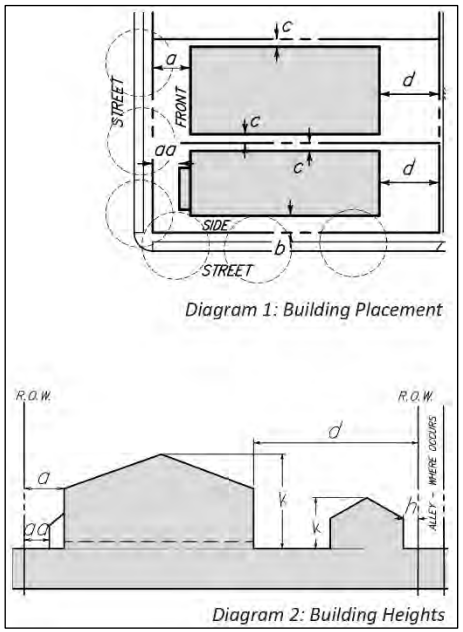
Zone	Description	Single Family (Large Lot)	Second Unit	Single Family (Small Lot)	Townhouse 2 to 6-plex	Courtyard 3 to 4-plex	Stacked Flats
T3-7	Neighborhood General	X	X				
T3-7A	Neighborhood General 1			X			
T3.8	Neighborhood General 2			X	X	X	X
T4.12	Urban General				X	X	X

Source: The Grove Specific Plan, January 2015

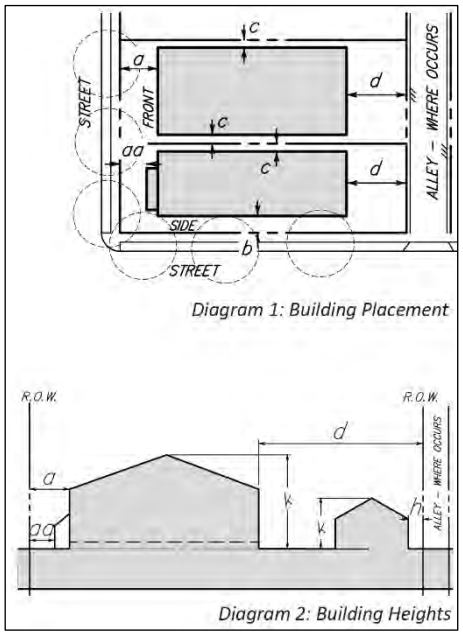
4. Parks and Open Space (POS)

The POS zone identifies areas reserved for outdoor recreation, community parks, squares, greenways, and other urban open spaces. Allowable structures in this zone are limited to those necessary to support the specific purposes of each individual open space site. The plan area includes up to 4.67 acres of park area, which includes a linear park, public and pocket parks, and an open space area reserved for a potential future pedestrian and bike bridge connection to El Camino Real Park to the north of and over SR-126 (**Figure 3-7, Park and Open Space Plan**). A portion of the open space would serve as storm water detention area located off-site in the Copland Drive vacated right of way.

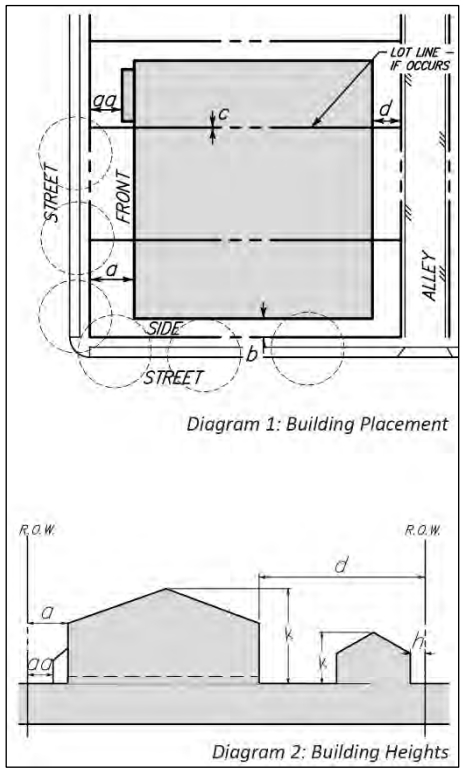
2 The Grove Specific Plan, January 2015, page 19.



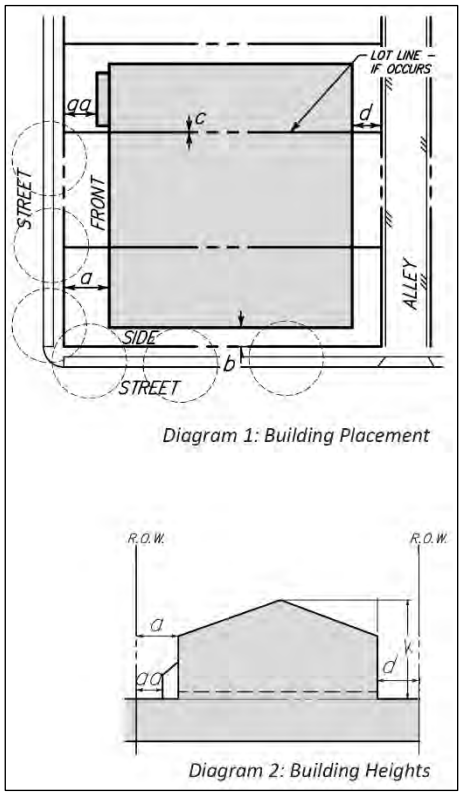
Single-Family (Large Lot)



Single Family (Small Lot)



Single-Family (Small Lot)
Townhouse (2- to 6-plex)
Courtyard (3- to 4-plex)
Stacked Flats



Townhouse (2- to 6-plex)
Courtyard (3- to 4-plex)
Stacked Flats

Source: The Grove Specific Plan, January 2015

Figure 3-6 Building Types Allowed by Zones

Source: Figure 3.7, The Grove Specific Plan, Specific Plan No. 9; January 2015

Figure 3-7 Park and Open Space Plan

5. Landscaping

Water-efficient landscaping will be introduced (utilizing a soil/climate analysis to determine the most appropriate indigenous and/or native-in-character). Drought tolerant landscaping will be restricted to recreation/play areas and passive open space. The linear park may have pockets of ornamental, drought-tolerant grasses with uncut grasses that have reduced water requirements. Wherever lawn is used, the selected species will be a deep-rooted variety with low watering requirements. All planted areas, except for lawn and seeded groundcover, will receive a surface layer of specified recycled mulch to assist in the retention of moisture and reduce watering requirements, while minimizing weed growth and reducing the need for chemical herbicide treatments.

Where irrigation is required, high efficiency irrigation technology with low-precipitation applications, rain shut-off device, low volume systems, and weather-based controllers will be used and will be certified by a landscape architect.

The efficiency and uniformity of water flow rate reduces evaporation and runoff and encourages deep percolation. After the initial growth period of three to seven years, irrigation can then be limited in most situations. The irrigation system will adhere to California State Assembly Bill 1881 (AB 1881), the Model Water Efficiency Landscape Ordinance.

The location and selection of all new tree planting will adhere to "green infrastructure" principles by visually expressing the underlying interconnectivity of the neighborhood. Species selection will be in character with local and regional environmental requirements, and will comprise an appropriate mix of evergreen and deciduous trees.

Trees will be used to define the landscape character of recreation and open space areas, identify entry points, and reinforce neighborhood identity by defining major and minor thoroughfares vehicles, pedestrians, and bicycles. Trees with distinctive character, either in form or foliage color, will be placed at major entry points to the community.[3] The Grove Conceptual Landscaping Plan is provided in **Figure 3-8, Conceptual Landscaping Plan**.

3 The Grove Specific Plan, January 2015, page 45.

Source: Figure 3.6, The Grove Specific Plan, Specific Plan No. 9; January 2015

Figure 3-8 Conceptual Landscaping Plan

3.5 Intended Uses of the EIR

This EIR will serve as the primary source of environmental information for the actions and approvals associated with The Grove Specific Plan. In accordance with §21002.1 of the CEQA Guidelines, the purpose of this EIR is to provide the City, serving as the lead agency, information on the potentially significant environmental impacts that would result from implementation of The Grove Specific Plan, alternatives to The Grove Specific Plan, and mitigation measures that may reduce or avoid any significant effects. This EIR will also be used as an information document by other public agencies in connection with any approvals or permits necessary for construction and operation of The Grove Specific Plan. The DRC approved the Project conceptually in June 2014.

Specific Plan adoption by the City of Ventura would be necessary for implementation of the Project. Discretionary approvals would include, but are not limited to, the following.

The City of Ventura would be responsible for the following actions:

- Pre-Zone and Amendment to the City's Zoning Ordinance to incorporate The Grove Specific Plan
- Development Agreement
- Approval of the Vesting Tentative Tract Map No. 5626
- Certification of the Final Environmental Impact Report (2015041049)
- File application to amend the sphere of influence and incorporate the Project site into the City of Ventura
- Design Review of the proposed Project (approved June 2014)

The Ventura County Local Agency Formation Commission (LAFCO) would be responsible for the following actions related to the Project:[4]

- Approval of an amendment to the City's Sphere of Influence to include The Grove Specific Plan site (Annexation to the City of Ventura)
- Approval of Detachment from the Ventura County Resource Conservation District
- Approval of Detachment from the Ventura County Service Area No. 32
- Approval of Detachment from Ventura County Service Area No. 33

The EIR is intended to serve as a Project EIR, as defined in §15162 of the CEQA Guidelines, for use by the City as lead/agency and by responsible agencies as needed. The most common type of an EIR is a Project EIR, which examines the environmental impacts of a specific development project. This type of EIR focuses primarily on the changes in the environment that would result from the development project. The EIR is expected to examine all phases of the project including planning, construction and operation.

4 Annexation of the project area to the Ventura Port District would occur automatically if the territory is annexed to the City. Correspondence from Ventura Local Agency Formation Commission dated May 27, 2015.

4. Environmental Impact Analysis

4.1 Aesthetics

4.1-1 Introduction

This section describes the existing visual resources within the City, identifies the regulatory framework with respect to regulations that address visual resources, and evaluates the significance of the potential changes to visual resources that could result from implementation of The Grove Specific Plan Project. Additionally, a Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

In addition, to reduce impacts, mitigation measures are included when applicable.

4.1-2 Existing Conditions

To provide context for the analysis presented below, a discussion of general definitions is necessary. Terms to be discussed include "viewsheds" and "visual quality," both key factors in addressing impacts to aesthetics and views. The environmental setting also generally describes those resources that are regionally significant and lists the designated scenic highways, byways, and vista points.

The aesthetics value of an area is a measure of its visual character and quality, combined with the viewer response to the area. The scenic quality component can best be described as the overall impression that an individual viewer retains after driving through, walking though, or flying over an area. Viewer response is a combination of viewer exposure and viewer sensitivity. Viewer exposure is a function of the number of viewers, the number of views seen, the distance of the viewers, and the viewing duration. Viewer sensitivity relates to the extent of the public's concern for particular viewsheds. These terms and criteria are described in detail below.

- **Viewshed:** A viewshed is a geographic area composed of land, water, biotic and/or cultural elements that may be seen from one or more viewpoints and has inherent scenic qualities and/or aesthetic value as determined by those who view it. The extent of a viewshed can be limited by a number of intervening elements, including trees and other vegetation, built structures, or topography such as hills and mountains.
- **Visual Quality:** Visual quality refers to the character of the landscape, which generally gives visual value to a setting. It is useful to think of scenic resources in terms of "typical views" seen throughout an area, because scenic resources are rarely

> encountered in isolation. A typical view may include several types of scenic resources, including both natural and man-made elements. It is also important to distinguish between public and private views. Private views are views seen from privately-owned land and are typically viewed by individual viewers, including views from private residences.

Public views are experienced by the collective public. These include views of significant landscape features, as seen from public viewing spaces, not privately-owned properties. CEQA (*California Public Resources Code* §21000 et seq.) case law has established that, in general, protection of public views is emphasized. For example, in *Association for Protection of Environmental Values in Ukiah v City of Ukiah* (1991) 2 Cal. App. 4th 720, 734, the court determined the following:

> … we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in Topanga Beach Renters Assn. v. Department of General Services (1976) 58 Cal. App. 3d 188 [129 Cal. Rptr. 739]: "[A]l government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.

Therefore, for this analysis, only public views are considered in analyzing the visual impacts of The Grove Project.

1. Project Location and Site Characteristics

The City of Ventura is located in Ventura County, California. The Grove Project is an approximately 26.51-acre parcel located at the western terminus of Thille Street, just east of the US 101/SR-126 interchange.

The Project site is relatively flat with minor sloping throughout the site. The Project site includes a caretaker's residence, various flowers, and various tools for the planting of flowers.

2. Surrounding Land Uses

The existing visual character of the surrounding local is largely defined by the built environment consisting of developed portions of the City, the SR-126 and US 101.

As illustrated in **Figure 4.1-1, The Grove Project Aerial** is located in the western portion of the City, bounded by SR-126, US 101, and Telegraph Road.

Views preeminently show the site with commercial uses to the south and west and residential to the east, west and north.

Figure 4.1-1 The Grove Project Aerial

3. State Scenic Highways

The California Department of Transportation (Caltrans) Scenic Highway System includes a list of Officially Designated State Scenic Highways and Eligible State Scenic Highways. Currently, there are no state scenic highways officially designated within the City of Ventura.

4. Light and Glare

For purpose of this analysis, "light" refers to light emission, or the degree of brightness, generated by a given source. Artificial lighting may be generated from point sources (i.e., focused points of origin representing unshielded light sources) or from indirectly illuminated sources of reflected light. Light may be directed downward to illuminate an area or surface, cast upward into the sky and refracted by atmospheric conditions (skyglow), or cast sideways and outwards onto off-site properties (overspill). Skyglow and overspill are considered forms of light pollution.

The effects of nighttime lighting are contextual and depend upon the light source's intensity, its proximity to light-sensitive land uses (i.e., sensitive receptors such as residential units and schools), and the existing lighting environment in the vicinity of a project site. The primary sources of nighttime illumination include street lighting, security and other types of outdoor lighting on commercial and residential properties, surface-parking illumination, and illuminated commercial signage. Nighttime lighting can impact views, alter the nature of community or neighborhood character, or illuminate a sensitive land use. Nighttime illumination of sensitive receptors also may adversely affect certain land use functions, such as those of a residential or institutional nature, since such uses are typically occupied during evening hours and can be disturbed by bright lights.

"Glare" or "unwanted source luminance" is defined as focused, intense light directly emanated by a source or indirectly reflected by a surface from a source. Daytime glare typically is caused by the reflection of sunlight from highly reflective surfaces at or above eye level. Reflective surfaces generally are associated with buildings clad with broad expanses of highly polished surfaces or with broad, light-colored areas of paving. Daytime glare generally is most pronounced during early morning and late afternoon hours when the sun is at a low angle and potential exists for intense reflected light to interfere with vision and driving conditions. Daytime glare also may hinder outdoor activities conducted in surrounding land uses, such as sports.

Within the specific plan area, existing light sources generally include buildings, recreational facilities, and lighting along roadways and parking lots. Interior light emanating from a structure; exterior light sources (i.e., security lighting); or lighting to illuminate features for safety or decorative purposes may be visible within the existing landscape.

Sunlight reflecting off a reflective surface can result in glare effects and unsafe visual conditions that may interfere with the vision of motorists operating vehicles in the proximity or that may otherwise generally degrade scenic views. Few structures within the specific plan area currently

exhibit highly reflective materials (e.g., high-rise buildings with extensive glazing), and therefore, potential glare effects are not considered to be of major concern.

4.1-3 Regulatory Framework

1. Federal

No federal statutes related to aesthetics would apply to the Project.

2. State of California

California Scenic Highways and Historic Parkways Program

The California Scenic Highways and Historic Parkways Program was created in 1963 to preserve and protect highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetics value of the adjacent lands. Caltrans maintains its State Scenic Highways and Historic Parkways Program, through which segments of the state highway system are designated as being of particular scenic value or interest. A highway may be designated *scenic* depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Interstates, state highways, byways, and parkways are eligible for designation or for recognition as eligible for designation. The program is governed by the regulations found in the *California Streets and Highways Code*, §260 et seq.

California Streets and Highways Code §261 requires local government agencies to take the following actions to protect the scenic appearance of the scenic corridor:

- Regulate land use and density of development
- Provide detailed land and site planning
- Prohibit off-site outdoor advertising and control of on-site outdoor advertising
- Pay careful attention to and control of earthmoving and landscaping
- Scrutinize the design and appearance of structures and equipment

California Streets and Highways Code §263 allows the California State Legislature the authority to identify highways as eligible for designation as a scenic highway. The government with jurisdiction over land abutting a highway considered to be scenic is required to adopt a "scenic corridor protection program" that restricts development, outdoor advertising, and earthmoving activities along the affected segment or corridor (Corridor Protection Program). Caltrans must also indicate that the highway segment meets established criteria in order for the roadway or segment to be designated as scenic.

As stated above, there are currently no officially designated state scenic highways in the City of Ventura.

California Code of Regulations Title 24 Part 6

The California Energy Code (*California Code of Regulations*, Title 24, Part 6) creates standards in an effort to reduce energy consumption. The type of luminaries and the allowable wattage of certain outdoor lighting applications are regulated.

California Environmental Quality Act

The California Environmental Quality Action (CEQA) affords protection for the environment, including aesthetics resources. The CEQA Guidelines provide four criteria that may be used to evaluate the significance of visual quality impacts: negative effects on a scenic vista, damage to scenic resources within a state scenic highway, degradation of the visual character or quality of a site and its surroundings, and creation of a new source of substantial light or glare affecting views.

3. Local

City of Ventura

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to visual character are included in Chapter 3, Our Well Planned and Designed Community and Chapter 4, Our Accessible Community of the City's General Plan. Policies relevant to the Project include the following:

Policy 1B Increase the area of open space protected from development impacts.

- Action 1.8 Buffer barrancas and creeks that retain natural soil slopes from development according to State and Federal guidelines.
- Action 1.11 Require that sensitive wetland and coastal areas be preserved as undeveloped open space wherever feasible and that future developments result in no net loss of wetlands or "natural" coastal areas.
- Action 1.12 Update the provisions of the Hillside Management Program as necessary to ensure protection of open space lands.
- Action 1.13 Recommend that the City's Sphere of Influence boundary be coterminous with the existing City limits in the hillsides in order to preserve the hillsides as open space.
- Action 1.23: Require, where appropriate, the preservation of healthy tree windrows associated with current and former agricultural uses, and incorporate trees into the design of new developments.

Policy 3A: Sustain and complement cherished community characteristics.

- Action 3.1: Preserve the stock of existing homes by carrying out Housing Element programs.

Action 3.2: Enhance the appearance of districts, corridors, and gateways (including views from highways) through controls on building placement, design elements, and signage.

Action 3.3: Require preservation of public view sheds and solar access.

Policy 3C: Maximize use of land in the city before considering expansion.

Action 3.14: Utilize infill, to the extent possible, development to accommodate the targeted number and type of housing units described in the Housing Element.

Action 3.15: Adopt new development code provisions that ensure compliance with Housing Element objectives.

Action 3.16: Renew and modify greenbelt agreements as necessary to direct development to already urbanized areas.

Action 3.17: Continue to support the Guidelines for Orderly Development as a means of implementing the General Plan, and encourage adherence to these Guidelines by all the cities, the County of Ventura, and the Local Agency Formation Commission (LAFCO); and work with other nearby cities and agencies to avoid urban sprawl and preserve the rural character in areas outside the urban edge.

Policy 4D: Protect views along scenic routes.

Action 4.36: Require development along the following roadways – including noise mitigation, landscaping, and advertising – to respect and preserve views of the community and its natural context.

- State Route 33
- U.S. Highway 101
- Anchors Way
- Brakey Road
- Fairgrounds Loop
- Ferro Drive
- Figueroa Street
- Harbor Boulevard
- Main Street
- Navigator Drive
- North Bank Drive
- Poli Street/Foothill Road
- Olivas Park Drive
- Schooner Drive
- Spinnaker Drive
- Summit Drive
- Victoria Avenue – south of U.S. 101
- Wells Road

Action 4.37: Request that State Route 126 and 33, and U.S. HWY 101 be designated as State Scenic Highways.

Action 4.38: Continue to work with Caltrans to soften the barrier impact of U.S. HWY 101 by improving signage, aesthetics and undercrossings and overcrossings.

Action 4.39: Maintain street trees along scenic thoroughfares, and replace unhealthy or missing trees along arterials and collectors throughout the City.

City of Ventura Municipal Code

The City has adopted a design review ordinance (Ventura Municipal Code §24.545, Design Review Procedure). The City's design review is intended to ensure that the design of proposed development and new land uses enhance the City's appearance. The design review goals include:

1. Recognize the interdependence of land values and aesthetics and provide a method by which the city may implement this interdependence to its benefit;
2. Encourage the orderly and harmonious appearance of structures and property within the city along with associated facilities, such as signs, landscaping, parking areas, and streets;
3. Maintain the public health, safety, and general welfare, and property and improvement values throughout the city;
4. Assist private and public developments in evaluating and implementing public concerns for the aesthetics of developments;
5. Reasonably insure that new development does not have an adverse aesthetic, health, safety, or architecturally related impact upon existing adjoining properties, or the city in general;
6. Foster attainment of goals, objectives, policies, and programs of the comprehensive plan by preserving and enhancing the particular character and unique assets of the city, and providing for harmonious development through encouraging private and public interests to assist in the implementation process; and
7. Otherwise further the purposes of this zoning ordinance.

4.1-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to visual resources are contained in the environmental checklist form contained in Appendix G of the most recent update of the CEQA Statutes and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to visual resources, if any of the following could occur:

Aes-1 Would the project have a substantial adverse effect on a scenic vista?
Aes-2 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
Aes-3 Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
Aes-4 Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

4.1-5 Environmental Impacts

Aes-1 Would the project have a substantial adverse effect on a scenic vista?

The City's General Plan does not identify any scenic vistas in the City. The Project would introduce residential uses to the site. Section 3 – Development Code & Land Use Regulations of the Specific Plan includes development standards for each land use including building height, massing, and setbacks. The design guidelines (General Plan, Section 3.4, Architectural & Design Guidelines) encourage variation in building heights and massing to avoid monolithic structures.

Future development associated with buildout of the Specific Plan would not result in the obstruction of any public scenic vistas. The scale of the future developments would not result in continuous obstructed views of the hillsides. The design of the sound wall along State Route 126 would be subject to Design Review to ensure that the wall is aesthetically treated consistent with the General Plan Action 3.2. Impacts would be less than significant.

Furthermore, the pad site for the pedestrian bridge may result in a future related project. As of this time, we do not know the specifics of the bridge (construction type, height, materials). At such time, the impacts analysis of the construction of the pedestrian bridge would be undertaken.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be less than significant.

Aes-2 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Specific Plan area is not within a state scenic highway and does not contain any unique rock outcroppings. There are no designated scenic highways within the City.

As discussed in Section **4.4, Biological Resources** of this Draft EIR, the City has not adopted a tree preservation ordinance. However, the 2005 Ventura General Plan includes the following action pertinent to the Project:

> Action 1.24: Require new development to maintain all indigenous tree species or provide adequately sized replacement native trees on a 3:1 basis.

As noted earlier, a limited number of non-native trees exist on-site along the northerly boundary adjacent to SR-126, and mature non-native trees exist off-site immediately adjacent to the easterly boundary. Construction of the Project has the potential to affect these mature trees.

The Grove Specific Plan Section 3.5, Landscape Guidelines includes a number of provisions for trees, both in the public and private realm.

> Section 3.5.A, Landscape Standards
>
> C. Sustainability
>
> The location and selection of all new tree planting will adhere to 'green infrastructure' principles by visually expressing the underlying interconnectivity of the neighborhood. Species selection will be in character with local and regional environmental requirements, and be comprised of an appropriate mix of evergreen and deciduous trees.
>
> Trees will be used to define the landscape character of recreation and open space areas, identify entry points, and reinforce neighborhood identity by defining major and minor thoroughfares vehicles, pedestrians and bicycles. Trees with distinctive character, either in form or foliage color, will be placed at major entry points to the community.

Specific Plan Figure 3.6, Conceptual Landscape Plan; Figure 3.7, Overall Park & Open Space Plan, and Figure 3.8, Street & Alley Trees, illustrate how trees would be incorporated throughout the Project area. Therefore, implementation of the Specific Plan landscape guidelines would ensure compliance with 2005 Ventura General Plan Action 1.24 and ensure that less than significant impacts occur.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be less than significant.

Aes-3 Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Change in visual character would occur with implementation of the Specific Plan, which would result in 1) infill and compact development including additional housing opportunities, 2) pedestrian-oriented development. The Specific Plan area is primarily developed with urban uses including single- and multi-family residential, commercial, institutional, recreational, lodging, and civic uses. The Specific Plan provides direction and design guidelines for future projects in each of the six land use districts (see Specific Plan Section 2 – Specific Plan Goals and Policies), as well as addressing traffic, bicycle, and pedestrian improvements, streetscape enhancements, (see Specific Plan Section 4 – Infrastructure and Public Services), infrastructure, and architectural character (see Specific Plan Section 3 – Development Code & Land Use Regulations).

Construction

Buildout of the specific plan area is anticipated to occur over a 3- to 4-year period (2017 to 2019). During that time, construction activities associated with future projects would result in short-term visual impacts including the presence of equipment and material storage, as well as grading and earth-moving activities. In a visual sense, construction impacts from future projects could be obtrusive or out of character with the surrounding landscape. The visual impacts would be created by mobile construction equipment including construction trucks that enter and exit the Project site, unfinished building pads, and unfinished structures without the final building materials, colors, and landscaping. Construction contractors would be responsible for screening the Project sites from view with temporary fencing or other means, to reduce visual intrusion on the neighborhood. While the construction truck trips would result in a change in the visual character surrounding the neighborhood, these activities would be temporary and end once the construction activities are complete. Although this impact could be adverse, it would be short-term, and thus impacts would be less than significant.

Operation

The specific plan area is characterized by a mix of residential uses. The Specific Plan includes standards, guidelines, and uses designed to reinforce the six individual Land Use area development patterns, character, and image; thus, buildout of the plan would include a cohesive palate of street trees, landscaping, and street furniture to ensure a unifying theme is established throughout the specific plan area. In addition, as a variety of development types (including low and medium density uses) are located throughout and adjacent to the specific plan area. Standards within the Specific Plan include setback, landscaping, lighting, and screening requirements for future projects that are adjacent to low- and medium-density uses. As such, buildout of the Specific Plan would improve the overall visual quality of the specific plan area. A description of each district's character (see Specific Plan Figure 3.3, Transect Zones and Their

Application for the boundary of each district) and proposed improvements is below. See also **Table 4.1-1** below.

Table 4.1-1 Building Types Allowed by Zone

Zone	Description	Single-Family (Large Lot)	Second Unit	Single-Family (Small Lot)	Townhouse 2- to 6-plex	Courtyard 3- to 4-plex	Stacked Flats
T3.7	Neighborhood General	✓	✓				
T3.7A	Neighborhood General 1			✓			
T3.8	Neighborhood General 2			✓	✓	✓	✓
T4.12	Urban General				✓	✓	✓

A variety of block simulations have been prepared to demonstrate the different perspectives associated with the Project. **Figure 4.1-2** shows the structures as the focus of the illustration. **Figure 4.1-3** shows the Project in relation to existing development. **Figure 4.1-4** shows the Project looking to the east. **Figure 4.1-5** shows the perspective from the SR 126/101 split. Additionally, **Figure 4.1-6** depicts the Project looking northeast from the 101 Freeway, and **Figure 4.1-7** depicts the northwest corner of the site at the Paseo.

The Neighborhood General 1 (T3.7) designation allows for 8 to 10 dwelling units per acre. Transect zone T3.7 applies to areas appropriate for a mix of houses and lot sizes, characterized by detached single-family houses on larger lots. Intended net density excluding right of way is 8 to 10 dwelling units per acre with a typical minimum lot size of 50 feet by 90 feet. The T3.7A subzone denotes areas for single-family detached homes on smaller lots, with lane/alley access. Intended net density of the T3.7A subzone excluding right of way is 11 to 13 dwelling units per acre with a typical minimum lot size of 40 feet by 80 feet.

Neighborhood General 2 (T3.8) is applied to areas appropriate for a variety and mix of detached and multi-family houses on a variety of lot sizes and product types. Intended net density excluding right-of-way is 10 to 18 dwelling units per acre.

Urban General (T4.12) is applied to portions of the Specific Plan that are intended for higher density residential uses. Some residential types specified in the T3.8 zone are permitted in the T4.12 zone. Intended net density excluding right of way is 18 to 21 dwelling units per acre.

Parks and Open Space (POS) identifies areas reserved for outdoor recreation, community parks, squares, greenways, and other urban open spaces. Allowable structures in this zone are limited to those necessary to support the specific purposes of each individual open space site.

Each district's standards and guidelines are designed to reinforce the individual district's desired development pattern, character, and image. These tools would help achieve the Specific Plan's overall vision and ensure that future projects are compatible with the surrounding neighborhood character. Therefore, buildout of the Specific Plan would not substantially degrade the existing visual character or quality of the Specific Plan area, and impacts would be less than significant.

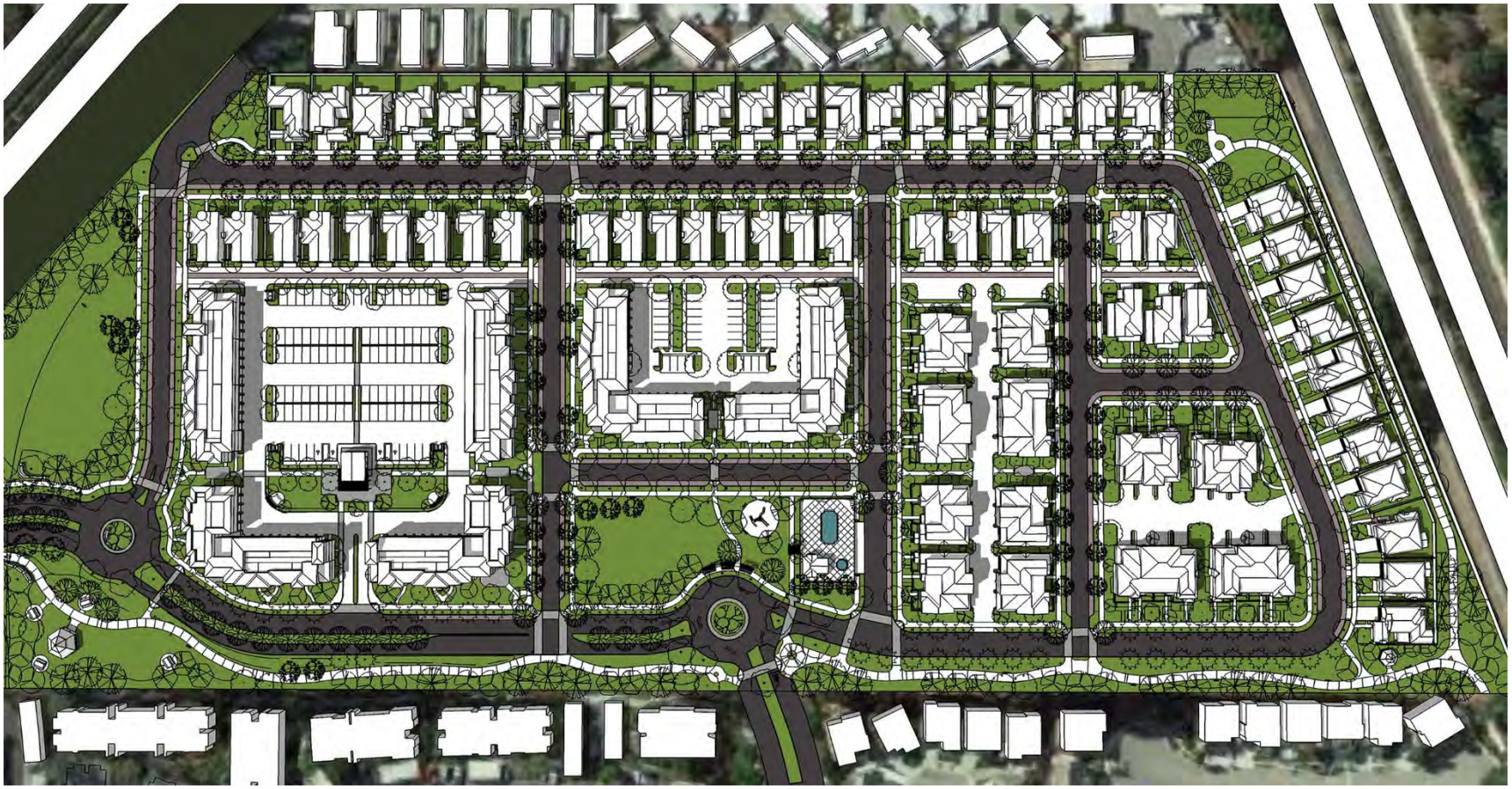


Figure 4.1-2 Close Up of Structures

Figure 4.1-3 Aerial Depicting Proposed Structures

Figure 4.1-4 Perspective from SR-126

Figure 4.1-5 Perspective from 101 and SR-126 Split

Figure 4.1-6 Perspective Looking Northeast from 101

Figure 4.1-7 Perspective Looking Northwest at Paseo

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Aes-4 Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Buildout of the Project would allow for future development of residential uses. Although future development would be constructed on vacant sites and would introduce new light and glare sources, the Specific Plan area is located in a developed portion of the City characterized by high levels of ambient nighttime illumination. Lighting sources could include interior and exterior lighting, illuminated signage, security lighting, and headlights associated with motor vehicles accessing the developed site. Reflective building materials, roofing materials, and windows could create new glare sources. These new sources of light and glare could disturb visually sensitive viewers, such as nearby residents and/or recreationists (e.g., bicyclists, runners, and pedestrians), surrounding development, and/or motorists.

Lighting in the Specific Plan area would include street and pedestrian scale lights. The Specific Plan includes district-wide policies to mitigate new sources of light and glare that would diminish day or nighttime views in the area. Specifically:

- all exterior lighting shall be focused internally within a property to decrease light pollution onto abutting residential properties, outdoor lighting shall be shielded to prevent a direct line between its luminary and any property zoned low or medium density, and
- buildings shall be sited to reduce light, glare, shadowing, and visual conflicts between commercial and residential users, and landscaping shall be incorporated to reduce light and glare conflicts.

The Specific Plan would be consistent with City's Municipal Code lighting standards (City of Ventura Municipal Code §24.415.110, Lighting), which requires that all on-site lighting devices be designed so as to limit glare/spillover onto adjacent properties. Additionally, all future development projects would undergo site plan review to ensure compliance with the development standards of the applicable zoning district. As such, potential impacts associated with light and glare would be less than significant.

As discussed previously, development standards, including height restrictions, have been established for each district (see Specific Plan Section 3 –Development Code & Land Use Regulations). Future projects located in the Urban General District would be permitted to be 40 feet tall (the greatest building height allowed within the specific plan area), while building heights in the remaining districts would be 50 feet or less. The height limit would be comparable to the neighboring Thille Community. Thus, under buildout of the Specific Plan, impacts from light, glare, and shadow would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.1-6 Cumulative Impacts

Cumulative impacts to visual resources are analyzed in terms of impacts within the City. While many of the related projects and the Project would be visible from public roads, trails, and parks, the combination of the related projects and the Project is not anticipated to significantly obstruct existing public scenic views in the immediate Project vicinity, particularly because new development would be limited to 40 feet and viewsheds of hillsides would be maintained. Further, views of the future projects would be limited by the relatively flat topography of the central and northern portions of the City and the existing intervening buildings. With regard to changes to the visual character of the area, the Project would create a cohesive visual theme within the Specific Plan area and nearby developments. As discussed under **Threshold Aes-3** (page 4.1-9 above), this consistent theme would enhance the visual character of the Specific Plan area through pedestrian and streetscape improvements. As the overall impact would be beneficial, The Grove Specific Plan would not contribute to a cumulative impact related to visual character. As no designated scenic highways exist within the City, impacts to scenic vistas/corridors would be less than significant.

With respect to potential light/glare impacts, development of related projects is expected to occur in accordance with adopted plans and regulations, and each related project would be required to determine whether its development could result in impacts to these areas. Compliance with the City's Municipal Code lighting standards would be required, so mitigation measures are unnecessary. In terms of the overall visual quality of the surrounding neighborhoods, each related project would be required to submit a landscape plan, a lighting plan, and a signage plan (if proposed) to the Ventura Community Development Department for review and approval by at

least the Design Review Committee prior to the issuance of grading permits. Therefore, cumulative impacts with respect to aesthetics would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.2 Agricultural Resources

4.2-1 Introduction

The proposed Project would convert 26.51 acres of Prime Agricultural land to residential units and is considered an unavoidable significant impact. No adjacent properties are designated as agricultural resources. Although the site if of lower value than larger and better suited parcels found southeast and east of the site (see Figure 4.2-1), any loss of agricultural productivity on prime agricultural land under such circumstances is considered a significant and unavoidable project and cumulative impact.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

1. History and Current Use

The current owners purchased this property in 1953 and 1954 and planted a lemon orchard on the original site of approximately 54 acres. Portions of this site were acquired for the widening of Telephone Road and the construction of the adjacent Santa Paula Freeway (SR-126) in the 1960s.

The lemon orchard, at ±50 years old, had declined in productivity and was removed in approximately late 2003. The trees were ground up as wood chips and spread on the site as mulch. Various vegetable crops were raised on the property from approximately 2004 until approximately 2007 when the property was leased to a flower grower. The use as a flower growing operation continues through the present time.

2. Farmland Classifications

The standard Environmental Checklist Form provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines identifies two approaches for use in determining when a proposed project may have a significant impact on agricultural resources. First, a project may be considered to have a significant impact on agricultural resources if it would "convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use." The second option is to the prepare the California Agricultural Land Evaluation and Site Assessment Model (1997). These classifications are described in further detail below.

3. Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the U.S. Department of Agriculture, Soil

Conservation Service (USDA-SCS). The intent of the USDA-SCS was to produce agricultural resource maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland maps are derived from the USDA-SCS soil survey maps using the LIM criteria.

Table 4.2-1 Storie Index Rating System

Grade	Index Rating	Definition
1 - Excellent	80 through 100	Soils are well suited to intensive use for growing irrigated crops that are climatically suited to the region.
2 – Good	60 through 79	Soils are good agricultural soils, although they may not be so desirable as Grade 1 because of moderately coarse, coarse, or gravelly surface soil texture; somewhat less permeable subsoil; lower plant available water holding capacity, fair fertility; less well drained conditions, or slight to moderate flood hazards, all acting separately or in combination.
3 – Fair	40 through 59	Soils are only fairly well suited to general agricultural use and are limited in their use because of moderate slopes; moderate soil depths; less permeable subsoil; fine, moderately fine or gravelly surface soil textures; poor drainage; moderate flood hazards; or fair to poor fertility levels, all acting alone or in combination.
4 – Poor	20 through 39	Soils are poorly suited. They are several that are limited in their agricultural potential because of shallow soil depths; less permeable subsoil; steeper slope; or more clayey or gravelly surface soil textures than Grade 3 soils, as well as poor drainage; greater flood hazards; hummocky microrelief; salinity; or fair to poor fertility levels, all acting alone or in combination.
5 – Very Poor	10 through 19	Soils are very poorly suited for agriculture, are seldom cultivated and are more commonly used for range, pasture, or woodland.
6 – Non-agricultural	Less than 10	Soils are not suited for agriculture at all due to very severe to extreme physical limitations, or because of urbanization.

Source USDA Soil Conservation Service Soil Survey of Ventura Area, January 1970

Since 1980, the State of California has assisted the USDA-SCS with completing its mapping in the state. The FMMP was created within the State Department of Conservation (DOC) to carry on the mapping activity on a continuing basis, and with a greater level of detail. The DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilize the SCS and Storie Index Rating systems, but also consider physical conditions such as a dependable water supply for agricultural production, soil temperature range, depth of the ground water table, flooding potential, rock fragment content, and rooting depth.

Important Farmland Maps for California are compiled using the modified LIM criteria (as described above) and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into the surrounding classification. The Important Farmland maps identify five agriculture-related categories: Prime

Farmland, Farmland of statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. Each is summarized below, based on "A Guide to the Farmland Mapping and Monitoring Program (1998)", prepared by the Department of Conservation.

The California Department of Conservation utilizes the following categories to designate farmland:

1. **Prime Farmland** has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
2. **Farmland of Statewide Importance** is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
3. **Unique Farmland** is farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
4. **Farmland of Local Importance** is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. Ventura County defines Farmland of Local Importance as Soils that are listed as Prime or Statewide that are not irrigated, and soils growing dryland crops such as beans, grain, dryland walnuts, or dryland apricots.
5. **Grazing Land** is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.
6. **Urban and Built-up Land** is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
7. **Other Land** is land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

According to the FMMP, the proposed Project site is considered to be Prime Farmland. **Figure 4.2-1, Farmland Mapping and Monitoring Program Classification Map**, shows the proposed Project site identified as Prime Farmland.

4.2-2 Existing Conditions

1. Contribution of Agriculture to Ventura County

The estimated gross value for Ventura County agriculture for calendar year 2014 is $2,137,033,000. This represents a 2.01% increase over 2013, or $42,118,000. In 2014, strawberries were again the number one crop at $627,964,000. This constituted a 3.154% increase over 2013, even with a decrease in total harvested acreage. Avocados and lemons alternated, with lemons holding the second place spot in the top ten. Lemons established a new record in value at $269,428,000. Raspberries were again in third place and continued to increase in value to $240,662,000. This was also a record, but not enough to beat lemons. Nursery stock came in at $180,499,000 a drop of 5.44% from 2013, but still enough to keep fourth place. Celery suffered a 19.464% decrease, but moved from sixth to fifth place. Avocados had the largest percentage drop in value from 2013 to 2014, with a 29.241% decrease; moving down to sixth place. Tomatoes, peppers and cut flowers kept their seventh, eighth and ninth places respectively. In recent years we saw cilantro enter the list of top 10 crops for the first time. Now, it is kale that has taken the precarious tenth spot at 35,932,000.

Table 4.2-2 below provides a 5-year comparison of Ventura County Crop Grouping Values.

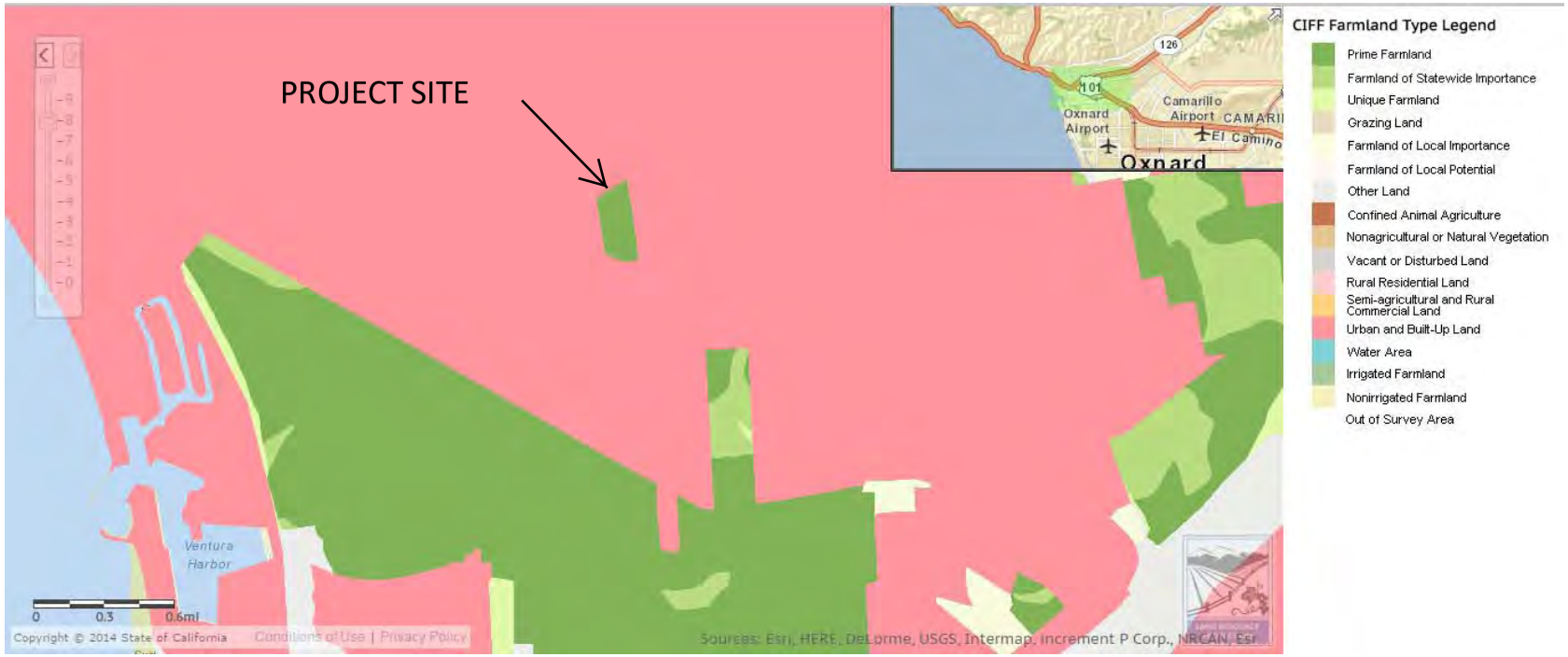
Table 4.2-2 Five Year Comparison of Ventura County Crop Grouping Values

	2010	2011	2012	2013	2014
Fruit/Nuts	$1,085,677,000	$1,124,860,000	$1,254,592,000	$1,280,274,000	$1,333,004,000
Vegetables	$533,473,000	$490,233,000	$460,280,000	$568,722,000	$557,614,000
Livestock	$6,161,000	$6,075,000	$6,872,000	$6,517,000	$7,887,000
Apiary	$1,505,000	$2,385,000	$3,326,000	$1,392,000	$554,000
Nursery	$180,057,000	$163,793,000	$186,351,000	$190,889,000	$180,499,000
Cut Flowers	$47,348,000	$52,217,000	$46,829,000	$43,079,000	$47,615,000
Field Crops	$2,463,000	$1,684,000	$2,491,000	$474,000	$1,417,000
Sustainable Agriculture	$2,253,000	$3,000,000	$3,045,000	$3,557,000	$3,443,000
Total	$1,859,151,000	$1,844,260,000	$1,963,798,000	$2,094,915,000	$2,137,033,000

Ventura County's Crop and Livestock Report, 2014/Office of the Agricultural Commissioner

2. Plans, Policies and Agreements for Agricultural Land

Agricultural activities in the State of California can be protected through a variety of legislative means, including the California Land Conservation Act and local Right-To-Farm Ordinances and Greenbelt Agreements. The California Land Conservation Act (CLA), also known as the Williamson Act, was adopted in 1965 to encourage the preservation of the state's agricultural lands and to prevent their premature conversion to urban uses.



California Department of Conservation Division of Land Resource Protection Farmland Mapping and Monitoring Program (FMMP)

Figure 4.2-1 Farmland Mapping and Monitoring Program Classification Map

To preserve these uses, the CLA established an agricultural preserve contract procedure by which any county or city within the state taxes landowners at a lower rate, using a scale based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. In return, the owners guarantee that these properties to remain under agricultural production for a ten-year period. The contract is renewed automatically unless the owner files a Notice of Non-Renewal. In this manner, each agricultural preserve contract (at any given date) is always operable at least nine years into the future. Currently, approximately 70% of the state's prime agricultural land is protected under the CLA .3 Prime Farmland under the Williamson Act includes land that qualifies as Class I and II in the SCS classification or land that qualifies for rating 80 to 100 in the Storie Index Rating. The Project site is not subject to the Williamson Act.

Right-To-Farm Ordinances have been adopted by several California counties to protect farmers in established farming areas from legal action that new residents in nearby urban settings may take against nuisances associated with normal, day-to-day farming activities, such as odor, noise, and dust.

The USDA places soil in capability classes that reflect the soils' suitability for farming (**Table 4.2-3**). The entire site is suitable for farming based on the site's capability classes.

Table 4.2-3 On-Site USDA Soil Suitability

Soil Type[1]	Most Suitable Agricultural Activity for Soil Type[2]	Meet Prime Land Criteria
Sorrento Silty clay loam SxA (0% to 2% slopes)	Used for vegetables, citrus crops, field crops, avocados	Yes
Mocho loam- MoA (0%-2% slopes)	Used for vegetables, citrus crops, field crops, avocados	Yes

Source: Compiled by Tebo Environmental Consulting Inc. 2015 from the Soil Survey for the Ventura Area
1 Column one indicates the soil type and the associated abbreviation according to the Ventura Area Soil Survey
2 Column two indicates the activity most suitable for the particular soil type and the third column indicates whether or not the soil is suitable as Prime farmland.

Soil types on the Project site are shown in **Figure 4.2-2, Soil Types on the Project Site**.

In addition, **Table 4.2-4** lists for each of the soils on the site their range site indices, Storie indices, and soil grades.

Table 4.2-4 Storie Index Rating for Soils on the Project Site

Soil Type	Profile	Texture	Slope	Other	Index Rating	Soil Grade
Sorrento Silty clay loam SxA (0% to 2% slopes)	100	90	100	100	90	1
Mocho loam- MoA (0%-2% slopes)	100	100	90	100	90	1

SxA = Sorrenty silty clay loam
MoA = Mocho loam

Figure 4.2-2 Soil Types on the Project Site

4.2-3 Regulatory Setting

1. California Government Code

California Government Code §56064 uses the following definition for prime agricultural land which is also followed by Ventura County LAFCo.

"Prime agricultural land" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets ***any*** of the following qualifications:

a) *Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.*

   The two soil types present on the Grove site are both rated as class I in the USDA Natural Resources Conservation Service land use capability classification. Therefore, the proposed Project meets this qualification.

b) *Land that qualifies for rating 80 through 100 Storie Index Rating.*

   The proposed Project site has land with a Storie Index Rating of 95.79. Therefore, the proposed Project meets this qualification.

c) *Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003.*

d) *The proposed project site does not support livestock used for the production of food and fiber. Therefore, this qualification does not apply to the proposed project.*

e) *Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.*

   The proposed Project site is not planted with fruit or nut-bearing trees, vines, bushes, or crops. Therefore, this qualification does not apply to the proposed Project.

f) *Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years.*

   The proposed Project site is used to grow flowers and the annual gross value of the flowers produced has been above the amount in this qualification. Therefore, the proposed Project meets this qualification.

Because the parcel meets qualifications (a), (b) and (e), the site would be considered "Prime agricultural land" under *California Government Code* §56064.

2. Ventura County LAFCo Commissioner's Handbook

The Ventura County LAFCo Commissioner's Handbook contains the following policies on agriculture preservation that are considered by the Commissioners in reviewing annexation requests.

Section 3.3.5 – Agriculture and Open Space Preservation

3.3.5.1 – Findings and Criteria for Prime Agricultural and Open Space Land Conversion:

LAFCo will approve a proposal for a change of organization or reorganization which is likely to result in the conversion of prime agricultural or open space land use to other uses only if the Commission finds that the proposal will lead to planned, orderly, and efficient development. For the purposes of this policy, a proposal for a change of organization or reorganization leads to planned, orderly, and efficient development only if ***all*** of the following criteria are met:

a) *The territory involved is contiguous to either lands developed with an urban use or lands which have received all discretionary approvals for urban development.*
The proposed Project site is contiguous with lands developed with urban uses. Therefore, the proposed Project meets this criterion.

b) *The territory is likely to be developed within 5 years and has been pre-zoned for nonagricultural or open space use. In the case of very large developments, annexation should be phased wherever possible.*
The City of Ventura General Plan identifies the site as zoned for a designation of Neighborhood Medium. This planning designation anticipates a mixture of detached and attached dwellings and higher building types at approximately 9 to 20 dwelling units per acre. Approval of the Grove Specific Plan will pre-zone the site for non-agricultural use. Therefore, the proposed Project meets this criterion.

c) *Insufficient non-prime agricultural or vacant land exists within the existing boundaries of the agency that is planned and developable for the same general type of use.*
The Commission will not make affirmative findings that insufficient non-prime agricultural or vacant land exists within the boundaries of the agency unless the applicable jurisdiction has prepared a detailed alternative site analysis. More information on this can be found in Section 3.3.5.2 below.

d) *The territory involved is not subject to voter approval for the extension of services or for changing general plan land use designations. Where such voter approval is required by local ordinance, such voter approval must be obtained prior to LAFCo action on any proposal unless exceptional circumstances are shown to exist.*

The proposed Project is not subject to voter approval for the extension of services or for changing general plan land use designations because it is located within the City of Ventura's Sphere of Influence and is not affected by the City's voter approved SOAR initiative. Therefore, the proposed Project meets this criterion.

e) *The proposal will have no significant adverse effects on the physical and economic integrity of other prime agricultural or open space lands.*

The proposed Project will have no significant adverse effects on the physical and economic integrity of other prime agricultural or open space lands. The proposed Project site is located adjacent to non-agricultural uses such as residences, and the nearest agricultural site is located approximately 0.50 miles (2,600 feet) to its southeast. Therefore, the proposed Project meets this criterion.

3.3.5.2 – Findings that Insufficient Non-Prime Agricultural or Vacant Land Exists: The Commission will not make affirmative findings that insufficient non-prime agricultural or vacant land exists within the boundaries of the agency unless the applicable jurisdiction has prepared a detailed alternative site analysis which at a minimum includes:

a) *An evaluation of all vacant, non-prime agricultural lands within the boundaries of the jurisdiction that could be developed for the same or similar uses.*

b) *An evaluation of the re-use and redevelopment potential of developed areas within the boundaries of the jurisdiction for the same or similar uses.*

c) *Determinations as to why vacant, non-prime agricultural lands and potential re-use and redevelopment sites are unavailable or undesirable for the same or similar uses, and why conversion of prime agricultural or open space lands are necessary for the planned, orderly, and efficient development of the jurisdiction.*

The Grove site is an unincorporated island, and annexation of islands is encouraged by both state law and Ventura LAFCo policies. The City has no other vacant, non-prime land within its sphere of influence available for annexation and development for the type of residential units proposed.

3.3.5.3 – Impacts on Adjoining Prime Agricultural or Open Space Lands: In making the determination whether conversion will adversely impact adjoining prime agricultural or open space lands, the Commission will consider the following factors:

a) The prime agricultural and open space significance of the territory and adjacent areas relative to other agricultural and open space lands in the region.

b) The economic viability of the prime agricultural lands to be converted.

c) The health and well-being of any urban residents adjacent to the prime agricultural lands to be converted.

d) The use of the territory and the adjacent areas.

e) Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of prime agricultural or open space land outside of the agency's sphere of influence, or will be extended through prime agricultural or open space lands outside the agency's sphere of influence.

f) Whether natural or man-made barriers serve to buffer prime agricultural or open space lands outside of the agency's sphere of influence from the effects of the proposal.

g) Applicable provisions of local general plans, applicable ordinances that require voter approval prior to the extension of urban services or changes to general plan designations, Greenbelt Agreements, applicable growth-management policies, and statutory provisions designed to protect agriculture or open space.

h) Comments and recommendations by the Ventura County Agricultural Commissioner.

Land adjoining the proposed site is not designated as Prime Agricultural or Open Space Land. Therefore, annexation of the Grove site would be consistent with this policy.

3.3.5.4 – Territory Subject to a Land Conservation Act (Williamson Act) Contract: LAFCo will not approve a proposal which includes the annexation of territory subject to an active Land Conservation Act contract to a city or special district that provides or would provide facilities and/or services other than those that support the land uses that are allowed under the contract. For purposes of this section, an active Land Conservation Act contract includes a contract for which a notice of non- renewal has been filed.

The proposed site is not subject to a Land Conservation Act (Williamson Act) Contract. Therefore, annexation of the Grove site would be consistent with this policy.

3. City of Ventura

Policy 3D: Continue to preserve agricultural and other open space lands within the City's Planning Area.

Action 3.20: Pursuant to SOAR, adopt development code provisions to "preserve agricultural and open space lands as a desirable means of shaping the City's internal and external form and size, and of serving the needs of the residents.

Action 3.21: Adopt performance standards for non-farm activities in agricultural areas that protect and support farm operations, including requiring non-farm uses to provide all appropriate buffers as determined by the Agriculture Commissioner's Office.

Action 3.22: Offer incentives for agricultural production operations to develop systems of raw product and product processing locally.

Save Our Agricultural Resources (SOAR) Initiative. In November 1995, a majority of voters (52%) in Ventura passed the Save Our Agricultural Resources (SOAR) Ordinance, which was also called the Agricultural Lands Preservation Initiative. The Ventura County SOAR Initiative (Measure B) passed in November 1998 by a 63% majority. The City's SOAR Ordinance requires voter approval for the re-designation of lands designated Agriculture, but specifies that the City Council may re-designate such lands if it makes certain findings that are supported by the evidence.

Greenbelt Agreements. Several cities, Ventura County, and the Local Agency Formation Commission (LAFCO) have adopted greenbelt agreements between jurisdictions to further the objectives of the Guidelines for Orderly Development and to assist in preserving agriculture and other open space lands located between cities. Greenbelt agreements are joint or co-adopted resolutions by cities, the County (when applicable) and LAFCO, whereby it is agreed to cooperatively administer a policy of non-annexation and non-development in a specific area. The basic purpose of greenbelts is to establish a mutual agreement between cities regarding the limits of urban growth for each city. A greenbelt agreement must be amended by all parties involved before the LAFCO will consider any proposal that may be in conflict with the agreement.

The City of Ventura is a participant in two greenbelt agreements. Ventura and Santa Paula adopted an agreement in 1967 to maintain the area between the Franklin Barranca east of the Ventura city limits and the Adams Barranca west of the Santa Paula city limits in agriculture production. The majority of agricultural lands in this greenbelt are under LCA contract. Ventura first entered into a greenbelt agreement with the City of Oxnard in 1994 and updated the agreement in 2002. No portion of the Project site is within either of the greenbelts to which the City of Ventura is a party.

Right-To-Farm Ordinances. In 1997, the City of Ventura adopted a Right-To-Farm Ordinance to provide protection to farmers against nuisance claims and frivolous lawsuits involving legal and accepted farming practices. The measure requires realtors to disclose potential conflicts with agriculture (e.g., pesticide odors, noise from machinery, pesticides use) when properties adjacent

to agricultural parcels are for sale. The ordinance also provides a statement that agriculture is not subject to nuisance claims if it is being properly conducted.

4.2-4 Thresholds of Significance

The City of Ventura Environmental Guidelines provide the following direction and identified criteria for whether a proposed Project will have a significant impact on agricultural resources if:

> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Ag-1	**Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**
Ag-2	**Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**
Ag-3	**Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**
Ag-4	**Would the project result in the loss of forest land or conversion of forest land to non-forest use?**
Ag-5	**Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

4.2-5 Environmental Impacts

Ag-1	**Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

The aforementioned significance threshold states that a significant impact would occur if a project converts prime agricultural land to non-agricultural uses. The proposed Project would convert the entire Project site to non-agricultural uses, and would constitute a significant agricultural impact.

As discussed above, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) (LESA) as an optional model to use in assessing impacts on agriculture and farmland. The State Department of Conservation rates the relative quality of land resources, based on specific measurable features. The LESA model comprises six relatively-weighted factors:

1. Two Land Evaluation (LE) factors are based on measures of soil resource quality
2. Four Site Assessment (SA) factors are based on a project's size, water resource availability, surrounding agricultural lands, and surrounding protected-resource lands

Each of these factors is separately rated on a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project's potential significance, based upon a range of established scoring thresholds.

The Grove site was evaluated using the LESA Model was performed on the proposed Project site, and was determined to have a final score of 71.4 out of 100. Under the scoring thresholds for LESA analysis, if the final rating is between 60 and 79 points, the impact to agricultural resources is considered significant unless either the LE or SA category subscore is less than 20 points. For the Grove site, the SA subscore was 22.5 and the LESA subscore was 48.5. Because the SA subscore is above 20, the impact is significant. LESA worksheets can be found in **Appendix 4.2**.

Development of the Project site would result in the permanent loss of agricultural productivity on this acreage. While there are organizations that will accept agricultural conservation easements, there is no established program or mechanism to facilitate the purchase of such an easement. Recently, a conservation easement has been processed through the City of Ventura at a ratio of 1:1 replacement as part of the Olivas Park Drive Extension Final EIR.

Level of Significance Before Mitigation

Impacts would be significant and unavoidable.

Mitigation Measures

As discussed in the Setting, the City of Ventura participates in a number of programs and policies specifically aimed at conserving agricultural lands both within and adjacent to the City limits. These include the SOAR Ordinance, which requires voter approval for re-designation of agriculturally-designated lands, and two separate greenbelt agreements that maintain farmland between Ventura and the cities of Oxnard and Santa Paula. Mitigation Measure **MM Ag-1** would further mitigate the impact related to conversion of Prime and Statewide Importance farmland to non-agricultural uses.

MM Ag-1	**Agricultural Conservation Easement.** Mitigation shall be provided for the loss of state-designated Prime Farmland and Farmland of Statewide Importance in existence at the time property in the Project area containing such state-designated Farmland is developed. Applicants seeking to develop such state-designated Farmland may cause to be set aside in perpetuity agricultural lands of equivalent acreage (a 1:1 ratio) and with soil and farming conditions equivalent or superior to the state-designated Farmland that the applicant seeks to convert to other uses. The applicant shall either purchase one or more permanent, irreversible agricultural easements for the benefit of the City or other qualifying entity acceptable to the City, or contribute funds to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural easements, to be earmarked for the purchase of permanent, irreversible agricultural easements. The protected acreage equal to the total acreage of, and of equivalent soil and farming conditions to, the state-designated Farmland within the entire Specific Plan area to be converted shall be set aside prior to the commencement of any development activity, including grading permits or recordation of final map, whichever occurs first.

Level of Significance After Mitigation

Mitigation Measure **MM Ag-1** would not fully compensate for the impact related to conversion of 26.51 acres of Prime and Statewide Importance Farmland to a non-agricultural use. Therefore, this impact is significant and unavoidable.

Ag-2	**Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The existing zoning for the site is Ventura County: Agriculture Exclusive (AE-40-AC). The City's land use designation is Medium Density Residential; 9-20 du/acre; and proposed zoning for residential uses is T 3.7 Neighborhood General, T 3.7A Neighborhood General, T 3.8 Neighborhood General, Public/Private Open Space, and T 4.12 Urban General, which will conflict with agricultural uses. As stated previously, the Property is not located within a Williamson Act Contract.

Agricultural/Urban Interface Issues.

Issues concerning the agricultural/urban interface include:

- Potential Issues for Urban Interests
    - Use of pesticides/dust problems in vicinity of high human intensity uses
    - Odors associated with pesticides and fertilizers
    - Noise related to farming equipment
    - General effects of agriculture on air quality

- Potential Issues for Agricultural Interests
    - Restrictions on activity
    - Restrictions on conversion
    - Loss of revenue and competitiveness
    - Competition for water and land
    - Pilferage, trespassing, and littering
    - Dust from adjacent construction activity

The proposed commercial, industrial, and manufacturing uses could include development of high -intensity human uses onsite. In the near term, the presence of agricultural activity on the Project site could present various conflicts with such uses, including health concerns related to pesticide use and dust from the operation of farm equipment. Odors and noise associated with farming operations could also adversely affect urban uses.

Development adjacent to farmland can also induce a range of adverse impacts on continued farm operations, such as vandalism to farm equipment or fencing, theft of products, and littering on farmland.

As discussed in the Setting, the Right-to-Farm ordinance protects normal farming operations against nuisance claims and frivolous lawsuits involving legal and accepted farming practices.

Odors and noise generated from agricultural operations would not be considered nuisances under the Right-to-Farm Ordinance.

Level of Significance Before Mitigation

The Project would conflict with agricultural zoning for the site but does not conflict with the Williamson Act Contract. Approval of the Project and its associated approval of the Grove Specific Plan would not create an impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact.

Ag-3	**Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**
Ag-4	**Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

Threshold Ag-3 and **Threshold Ag-4** address issues regarding the rezoning of timberland lands and the loss of forest land or conversion of forest land. The Project does not contain any timberlands or forest lands and would not cause any conflicts regarding timber or forestlands; therefore, these items will not be addressed further.

Ag-5	**Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

The State Department of Conservation requests that lead agencies evaluate the purchase of an agricultural land conservation easements to preserve other agricultural lands to compensate for the impact of converting agricultural land to a non-agricultural use. Guidance for consideration of this mitigation approach in EIRs was provided in two appellate court decisions issued in the last two years: *Friends of Kings River v. County of Fresno* (*Friends of the Kings River v. County of Fresno* (2014) 232 Cal.App.4th 105, 181 Cal.Rptr.3d 250) and *Masonite Corp. v. County of Mendocino*. (Masonite Corporation v. County of Mendocito (2013) 218 Cal.App.4th 230, 159 Cal.Rptr.3d 860).

The *Friends of Kings River v. County of Fresno* decision considered the Masonite decision and determined that an agency is only required to consider, but not adopt, agricultural conservation easements to mitigate loss of farmland. To be consistent with the guidance in both of these decisions, the City's EIR should include discussion and evaluation of the feasibility of purchasing an agricultural conservation easement as has been done in Mitigation Measure MM Ag-1 above.

Level of Significance Before Mitigation

Please see Mitigation Measure **MM Ag-1** above.

Mitigation Measures

Please see Mitigation Measure **MM Ag-1** above.

Level of Significance After Mitigation

Impacts would be significant and unavoidable.

4.2-6 Cumulative Impacts

Cumulative development in Ventura would have the potential to expose future area residents, employees, and visitors to hazards by developing and redeveloping areas that may previously have been contaminated. As discussed in Section 3.0, Environmental Setting, planned cumulative development under the City of Ventura 2005 General Plan would include the addition of approximately 8,300 dwelling units, 1.2 million square feet of retail development, 1.2 million square feet of office development, 2.2 million square feet of industrial development, and 500,000 square feet of hotel development. As discussed in the 2005 General Plan FEIR, this cumulative development would convert an estimated 674 acres of important farmlands, including 520 acres of Prime farmland, 138 acres of "Statewide Importance" farmland, and 16 acres of "Unique" farmland. This would incrementally contribute to the loss of farmland throughout the County and the state.

The proposed Project would incrementally add to that significant cumulative impact. While proposed mitigation would reduce the Project's impact, the Project's impact is still considered cumulatively considerable, and therefore a significant and unmitigable, cumulative impact.

Level of Significance Before Mitigation

Impacts would be significant and unavoidable.

Mitigation Measures

No mitigation measures are available under CEQA.

Level of Significance After Mitigation

Impacts would be significant and unavoidable.

4.3 Air Quality

4.3-1 Introduction

The purpose of this section is to examine the degree to which the Project may result in significant environmental impacts with respect to air quality. Short-term construction emissions occurring from activities such as demolition, site grading and truck trips, and long-term effects related to the ongoing operation of the Project are discussed in this report. The potential for the Project to conflict with or obstruct implementation of the applicable air quality plan, to violate an adopted air quality standard or contribute substantially to an existing or projected air quality violation, to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is designated to be in non-attainment, to expose sensitive receptors to substantial pollutant concentrations, or to create objectionable odors affecting a substantial number of people are discussed herein.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different than those of the proposed Project and therefore has no potential to cause additional environmental impacts.

This air quality analysis was based upon the "Air Quality Technical Report" prepared by Pomeroy Environmental Services, January 2016 (**Appendix 4.3**).

1. Project Location

The City of San Buenaventura is located in Ventura County, California. The Grove Specific Plan area is located in the western portion of the City, specifically at the western terminus of Thille Street, north of Copland Drive. The Project site is bounded on the north by Highway 126 (SR-126), on the east by the Thille Community neighborhood, on the south by Telephone Road and Copland Drive, and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange (see **Figure 4.3-1, Aerial Photograph of the Project Site**). The plan area is approximately 26.51 acres in area and is currently within unincorporated area, but is within the City of Ventura's Sphere of Influence and is designated on the General Plan Map as Medium Density Residential; 9 to 20 dwelling units per acre. The site is currently used for seasonal floral agricultural production.

2. Project Characteristics

The proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). The Tentative Map (see **Figure 3-4**, **Vesting Tentative Tract Map No. 5626**, page 3-7) would create individual lots for 32 front-loaded single-family residences, 26 alley-loaded single-family residences, and 4 larger lots that could accommodate up to 192 units in a combination of alley-loaded single-family homes, townhouses, and courtyard or stacked multi-family housing.

Source: Figure 1.1 (page 3), The Grove Specific Plan No. 9; January 2015.

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Figure 1
Aerial Photograph of the Project Site

Source: Air Quality Technical Report, Pomeroy Environmental Services, January 2016

Figure 4.3-1 Aerial Photograph of the Project Site

4.3-2 Existing Conditions

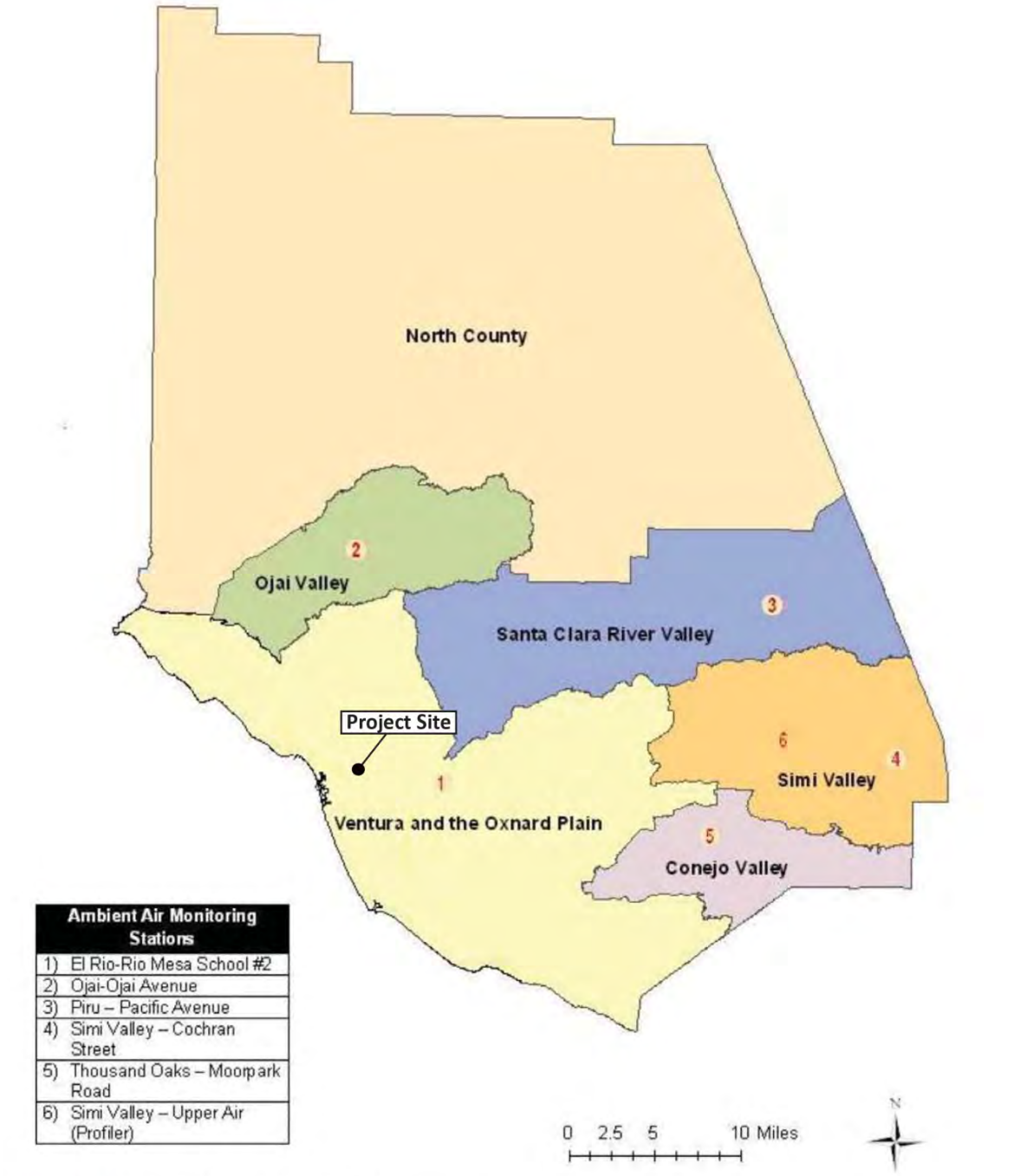
The Project Site, located within the Ventura County Air Pollution Control District (VCAPCD), is located in the South Central Coast Air Basin which is comprised of Ventura County, Santa Barbara County, and San Luis Obispo County.

Ventura County is located along the southern portion of the central California coast between Santa Barbara and Los Angeles Counties. Its diverse topography is characterized by mountain ranges to the north, two major river valleys (the Santa Clara, which trends east-west, and the Ventura, which trends roughly north-south), and the Oxnard Plain to the south and west. As pollutants are carried into the inland valleys by prevailing winds, they are frequently trapped against the mountain slopes by a temperature inversion layer, generally occurring between 1,500 and 2,500 feet above sea level. Above the temperature inversion layer, pollutants are allowed to disperse freely. The air monitoring stations are therefore found between the coast and the inland valley mountain foothills up to approximately 1,000 feet.

The purposes of the VCAPCD's air monitoring network are: 1) to determine Ventura County's attainment status for the National and California standards for ozone, $PM_{2.5}$ and PM_{10}; 2) to track Ventura County's air quality trends; 3) to provide information to the public about the quality of Ventura County's air (i.e., reporting of the Air Quality Index (AQI) and ozone and particulate episode forecasting); and 4) for data in air quality modeling efforts.

Ambient concentration data are collected for a wide variety of pollutants. The most important of these in Ventura County are ozone, $PM_{2.5}$, and PM_{10}. Other pollutants measured include oxides of nitrogen (NO_X), nitric oxide (NO), nitrogen dioxide (NO_2), toxics (hexavalent chromium, total metals and aldehydes), and volatile organic compounds (VOC). Measurement of meteorological parameters is also conducted at all monitoring stations. Data for all of the pollutants is used to better understand the nature of the ambient air quality in Ventura County, as well as to inform the public about the quality of the air.

The majority of the population resides in the southern half of Ventura County – the VCAPCD has focused its air monitoring efforts there. The south half of Ventura County is divided into five air monitoring regions: Ventura and the Oxnard Coastal Plain, Ojai Valley, Santa Clara River Valley, Simi Valley, and the Conejo Valley. The air monitoring network has been designed to provide air monitoring coverage to those regions of Ventura County. The Project Site is located in the Ventura and the Oxnard Coastal Plain (see **Figure 4.3-2, VCAPCD Monitoring Regions and Ambient Monitoring Stations)**.



Source: VCAPCD Ambient Air Monitoring Network Plan, 2014.

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Figure 3
VCAPCD Monitoring Regions & Ambient Monitoring Stations

Source: Air Quality Technical Report, Pomeroy Environmental Services, January 2016

Figure 4.3-2 VCAPCD Monitoring Regions and Ambient Monitoring Stations

The Ventura and the Oxnard Coastal Plain is a broad coastal area stretching from the Pacific Ocean to several inland valleys, covering 405 square miles, and having a population of 433,245 people. This area encompasses the cities of Port Hueneme, Ventura, Oxnard, and Camarillo. The Oxnard plain area is a relatively flat plain area with foothills and mountains at its northern border. This area is home to considerable agricultural activities and includes a deep water port and a number of Ventura County's major stationary sources, including two natural gas-fired electric generating units, two naval bases, several natural gas-fired cogeneration facilities, several oil and gas production and processing facilities, and a paper products manufacturer. The area is impacted by mobile sources and marine shipping operations occurring off Ventura County's coast.

1. Effects of Air Pollution[5]

Health Effects

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health and welfare. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, that have been adopted for them. The national and state standards have been set at levels considered safe to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Ambient air pollution is a major public health concern. The most well-known acute air pollution episodes occurred in the Meuse Valley, Belgium in 1930 (60 deaths); in Donora, Pennsylvania in 1948 (20 deaths); and London, England in 1952 (4,000 deaths). Although acute air pollution episodes with such readily evident excess deaths are now unlikely in the United States, air pollution continues to be linked to respiratory illness and a slight increase in death rates.

According to the ARB, 80,000 deaths that occur each year in California may be attributed to illnesses aggravated by air pollution. While air pollution affects everyone, some people are more susceptible to its effects than others. Research has established that air pollution:

- Aggravates heart and lung illnesses.
- Adds stress to the cardiovascular system, forcing the heart and lungs to work harder to provide oxygen to the body.
- Speeds the aging process of the lungs, accelerating the loss of lung capacity.
- Damages respiratory system cells even after symptoms of minor irritation disappear.
- May cause immunological changes.
- Causes lung inflammation.

5 Information contained herein regarding air pollution and health effects, effects on plants, criteria pollutants, TACs, odors and fugitive dust has been summarized from the Ventura County Air Quality Assessment Guidelines (October 2003).

- Increases health care utilization (hospitalization, physician, and emergency room visits).
- May contribute to the development of diseases such as asthma, bronchitis, emphysema, and cancer.
- May cause a reduction in life span.

The federal government estimates that between 10% and 12% of United States total health costs are attributable to air pollution-related illnesses. Air pollution is thought to be responsible for a 2% loss in United States worker efficiency. If ozone pollution were reduced in urban areas, there would be approximately 49.9 million fewer cases of air pollution-related illnesses annually in the United States; asthma attacks alone would decrease by 1.9 million annually.

On a per-capita basis, the health benefits measured in dollars from reducing ozone concentrations to federal and state one-hour standards are estimated to be $196 and $214 each year, respectively, for every person living in the South Coast Air Basin (the greater Los Angeles area). Per capita annual health benefits associated with meeting federal and state particulate standards are estimated to be $575 and $972, respectively. Assuming the per capita savings in the South Coast Air Basin are applicable to Ventura County, the projected health cost savings for achieving the PM_{10} standard in Ventura County is estimated to be $45 to $69 million per year. According to the U.S. EPA, for every dollar spent on air pollution controls since 1970, $45 has been gained in health and environmental benefits.

Effects on Plants

Damage to Agriculture

Increased health costs are only one portion of the total economic effects that result from air pollution. Many of the major agricultural crops grown in California, including Ventura County, are significantly damaged by air pollution, with from 20% to 50% of losses in some crop yields. Studies on the effects of smog exposure on fruit trees (specifically orange trees, ornamental plants, and home garden plants) have shown reductions in fruit yield and visible plant damage resulting from smog. One study showed that productivity of Valencia orange trees can be reduced by 30% when exposed to ozone levels that frequently occur in Southern California. Another study showed that naval orange trees produced about 50% more fruit when protected from smog. In addition, trees protected from smog dropped fewer leaves. The statewide average yield loss for citrus due to air pollution was about 11% in 1988.

Smog and particulates interfere with photosynthesis and can injure leaves, reduce growth, reduce crop quality, reduce reproductive capacity, increase weed and pest infestation, and/or kill the plant, thereby reducing crop yield. Damage often occurs before visible symptoms of injury are noticed. Particulates also can interfere with beneficial biological pest control by preventing beneficial insects from preying on agricultural crop-eating pests.

Areas in California where plant damage from air pollution has been reported coincides with the areas of highest population density. These areas include a triangular zone extending from the Mexican border to approximately 80 miles north and eastward of Ventura. Some of the greatest plant damage from air pollution is seen on fruit and vegetable crops, and flowers.

According to a 1987 study by the ARB, a number of important statewide crops suffer substantial yield losses due to ozone. Air pollution has been estimated to cost the agricultural industry in California between $150 million and $1 billion a year. An economic analysis of the costs of air pollution to agriculture attributes 90% of direct crop losses from air pollution to ozone. Nationally, ozone is estimated to account for a 5% to 10% loss in agricultural production. The cost of this loss from ozone is about $5 billion each year. The greatest agricultural losses due to air pollution are in those crops in which the foliage is the marketed portion of the plant, such as lettuces, alfalfa, and spinach. Beans are no longer commercially grown in Southern California because of their susceptibility to air pollution.

Damage to agricultural crops from air pollution is an economic concern in Ventura County. According to the ARB, several agricultural crops grown in Ventura County suffer from exposure to air pollution. One study concluded that ozone exposure in Ventura County caused a reduction in orange crop yield of 19% in 1991. For that same year, lemon crops suffered an 8% yield reduction, sweet corn 7%, and dry beans 19% yield reductions, respectively.

Damage to Natural Vegetation

Air pollution is known to harm all major native plant groups, including flowering plants, conifers, ferns, mosses, lichens, and fungi. The effects on native vegetation are similar to those of agricultural crops. In the Geysers region of Napa, Lake, and Sonoma counties, injury to native plants, such as oaks and maples, has taken place downwind of geothermal power plants. Trees and other plant life in the San Joaquin Valley and adjacent Sierra Nevada Mountains suffer from air pollution generated in the upwind urban areas. Ozone damage has been observed in the forests of Southern California and in the Sierra Nevada Mountains. Certain species of oak and pine trees are sensitive to air pollution.

Studies on Ponderosa and Jeffrey pines trees in the 1980s revealed that two out of every five Ponderosa and Jeffrey pine trees exhibited needle damage from air pollution. The National Park Service has measured an 11% reduction in the growth rate of selected Jeffrey pine trees since 1965. Pine needles exposed to ozone develop yellow, blotchy marks and needles older than two years fall off, giving branches a whiskbroom appearance. Needles and debris from trees killed by smog not only increase the risk of forest fire, but reduce seed germination and the chances of seedling survival.

Coastal sage scrub and chaparral also are sensitive to air pollutants. The most important effect is a reduced ability to cope with drought, disease, and insects. Air pollution may put these plants at a

reproductive disadvantage by causing them to produce fewer seeds. These conditions can lead to changes in succession, resulting in a totally different plant community occupying a site.

Total yield and quality of forage and range are all affected by air pollution. This presents serious consequences for the state's livestock industry. Compared to grasses grown in clean air, loss in yield of grasses grown in smoggy air is as high as 10% to 20%. Moreover, ozone reduces carbohydrate levels of grasses by up to 56%.

Damage to Materials

In addition to human health and vegetation, air pollution also damages materials such as plastics, rubber, paint, and metals. Damage includes erosion and discoloration of paint, cracking of rubber, corrosion of metals and electrical components, soiling and decay of building stone and concrete, fading, a reduction of tensile strengths of fabrics, and soiling and crumbling of nonmetallic building materials. High smog concentrations significantly shorten the lifespan of materials, which increases maintenance and replacement costs. The national cost of damage to materials caused by ozone is estimated to range from $1.5 to $3.9 billion every year.

2. Criteria Air Pollutants

A criteria air pollutant is any air pollutant for which ambient air quality standards have been set by the U.S. EPA or the ARB. Criteria pollutants include ozone (O_3), fine particulate matter ($PM_{2.5}$), respirable particulate matter (PM_{10}), carbon monoxide (CO), nitrogen dioxide (NO_2), lead (Pb), sulfur dioxide (SO_2), visibility-reducing particles, sulfates, and hydrogen sulfide. The sections below provide more detail about the criteria pollutants of concern in Ventura County.

Ozone

Ozone is formed in the atmosphere by a series of complex chemical reactions and transformations in the presence of sunlight. Oxides of nitrogen (NO_X) and reactive organic compounds (ROC) are the principal constituents in these reactions. Ozone is a pungent, colorless, toxic gas and is the major air pollutant of concern in Ventura County.

Ozone is known as a secondary pollutant because it is formed in the atmosphere through a complex series of chemical reactions, rather than emitted directly into the air. The major sources of NO_X in Ventura County are motor vehicles and other combustion processes. The major sources of ROC in Ventura County are motor vehicles, cleaning and coating operations, petroleum production and marketing operations, and solvent evaporation.

Ozone is a strong irritating gas that can chemically burn and cause narrowing of airways, forcing the lungs and heart to work harder to provide oxygen to the body. A powerful oxidant, ozone is capable of destroying organic matter – including human lung and airway tissue; it essentially burns through cell walls. Ozone damages cells in the lungs, making the passages inflamed and swollen. Ozone also causes shortness of breath, nasal congestion, coughing, eye irritation, sore

throat, headache, chest discomfort, breathing pain, throat dryness, wheezing, fatigue, and nausea. It can damage alveoli, the individual air sacs in the lungs where oxygen and carbon dioxide are exchanged. Ozone has been associated with a decrease in resistance to infections. People most likely to be affected by ozone include the elderly, the young, and athletes. Ozone may pose its worst health threat to people who already suffer from respiratory diseases such as asthma, emphysema, and chronic bronchitis.

Particulate Matter 10 Microns or Smaller in Diameter (PM_{10})

PM_{10} consists of particulate matter (fine dusts and aerosols) ten microns or smaller in aerodynamic diameter. Ten microns is about one-seventh the width of a human hair. When inhaled, particles larger than ten microns generally are caught in the nose and throat and do not enter the lungs. PM_{10} gets into the large upper branches of the lungs just below the throat, where they are caught and removed (by coughing, spitting, or swallowing).

The primary sources of PM_{10} include dust, paved and unpaved roads, diesel exhaust, acidic aerosols, construction and demolition operations, soil and wind erosion, agricultural operations, residential wood combustion, and smoke. Secondary sources of PM_{10} include tailpipe emissions and industrial sources. These sources have different constituents, and therefore, varying effects on health. Road dust is compost of many particles other than soil dust. It also includes engine exhaust, tire rubber, oil, and truck load spills. Diesel exhaust contains many toxic particle and elemental carbon (soot), and is considered a toxic air contaminant in California. Airborne particles absorb and adsorb toxic substances and can be inhaled and lodge in the lungs. Once in the lungs, the toxic substances can be adsorbed into the bloodstream and carried throughout the body.

PM_{10} concentrations tend to be lower during the winter months because meteorology greatly affects PM_{10} concentrations. During rain, concentrations are relatively low, and on windy days, PM_{10} levels can be high. Photochemical aerosols, formed by chemical reactions with manmade emissions, may also influence PM_{10} concentrations.

Elevated ambient particulate levels are associated with premature death, an increased number of asthma attacks, reduced lung function, aggravation of bronchitis, respiratory disease, cancer, and other serious health effects.

Short-term exposure to particulates can lead to coughing, minor throat irritation, and a reduction in lung function. Long-term exposure can be more harmful. The U.S. EPA estimates that 8% of urban non-smoker lung cancer risk is due to PM_{10} in soot from diesel trucks, buses, and cars. Additional studies by the U.S. EPA and the Harvard School of Public Health estimate that 50,000 to 60,000 deaths per year in the United States are caused by particulates. PM_{10} particles collect in the upper portion of the respiratory system, affecting the bronchial tubes, nose, and throat. They contribute to aggravation of asthma, premature death, increased number of asthma attacks, bronchitis, reduced lung function, respiratory disease, aggravation of respiratory and

cardiovascular disease, alteration of lung tissue and structure, changes in respiratory defense mechanisms, and cancer.

Particulate Matter 2.5 Microns or Smaller in Diameter ($PM_{2.5}$)

$PM_{2.5}$ is a mixture of particulate matter (fine dusts and aerosols) 2.5 microns or smaller in aerodynamic diameter. 2.5 micrometers is approximately one-thirtieth the size of a human hair; so small that several thousand of them could fit on the period at the end of this sentence. Particles 2.5 microns or smaller get down into the deepest portions of the lungs where gas exchange occurs between the air and the blood stream. These are the most dangerous particles because the deepest portions of the lungs have no efficient mechanisms for removing them. If these particles are soluble in water, they pass directly into the blood stream within minutes. If they are not soluble in water, they are retained deep in the lungs and can remain there permanently.

$PM_{2.5}$ particles are emitted from activities such as industrial and residential combustion processes, wood burning, and from diesel and gasoline-powered vehicles. They are also formed in the atmosphere from gases such as sulfur dioxide, nitrogen oxides, ammonia, and volatile organic compounds that are emitted from combustion activities, and then become particles as a result of chemical transformations in the air (secondary particles).

$PM_{2.5}$ infiltrates the deepest portions of the lungs and remains there longer, increasing the risks of long-term disease, including chronic respiratory disease, cancer, and increased and premature death. Other effects include increased respiratory stress and disease, decreased lung function, alterations in lung tissue and structure, and alterations in respiratory tract defense mechanisms.

Carbon Monoxide

Carbon monoxide is a common colorless, odorless, highly toxic gas. It is produced by natural and anthropogenic combustion processes.

The major source of CO in urban areas is incomplete combustion of carbon containing fuels (primarily gasoline, diesel fuel, and natural gas). However, it also results from combustion processes, including forest fires and agricultural burning. Over 80% of the CO emitted in urban areas is contributed by motor vehicles.

Ambient CO concentrations are generally higher in the winter, usually on cold, clear days and nights with little or no wind. Low wind speeds inhibit horizontal dispersion, and surface inversions inhibit vertical mixing.

Traffic-congested intersections have the potential to result in localized high levels of CO. These localized areas of elevated CO concentrations are termed CO “hotspots.” CO hotspots are defined as locations where ambient CO concentrations exceed the State Ambient Air Quality Standards (20 ppm, 1-hour; 9 ppm, 8-hour).

When inhaled, CO does not directly harm the lungs. The impact from CO is on oxygenation of the entire body. CO combines chemically with hemoglobin, the oxygen-transporting component of blood. This diminishes the ability of blood to carry oxygen to the brain, heart, and other vital organs. Red blood cells have 220 times the attraction for CO than for oxygen. This affinity interferes with movement of oxygen to the body's tissues. Effects from CO exposure include headaches, nausea, and death. People with heart ailments are at risk from low-level exposure to CO. Also sensitive are people with chronic respiratory disease, the elderly, infants and fetuses, and people suffering from anemia and other conditions that affect the oxygen-carrying capacity of blood. High levels of CO in a concentrated area can result in asphyxiation. Studies show a synergistic effect when CO and ozone are combined.

Nitrogen Dioxide

Nitrogen dioxide is formed in the atmosphere primarily by the rapid reaction of the colorless gas nitric oxide (NO) with atmospheric oxygen. It is a reddish brown gas with an odor similar to that of bleach. NO_2 participates in the photochemical reactions that result in ozone.

The greatest source of NO, and subsequently NO_2, is the high-temperature combustion of fossil fuels such as in motor vehicle engines and power plant boilers. NO_2 and NO are referred to collectively as NO_X.

NO_2 can irritate and damage the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections such as influenza. Researchers have identified harmful effects similar to those caused by ozone, with progressive changes over four hours of exposure. Negative health effects are apparent after exposure to NO_2 levels as low as 0.11 ppm for a few minutes. This level of exposure may elicit or alter sensory responses. Higher concentrations (0.45 - 1.5 ppm) may cause impaired pulmonary function, increased incidence of acute respiratory disease, and difficult breathing for both bronchitis sufferers and healthy persons.

Lead

Lead is a bluish-gray metal that occurs naturally in small quantities. Lead also occurs in a variety of compounds such as lead acetate, lead chloride, lead chromate, lead nitrate, and lead oxide. Pure lead is insoluble in water. However, some lead compounds are water soluble.

Lead and lead compounds in the atmosphere often come from fuel combustion sources, such as the burning of solid waste, coal, and oils. Historically, the largest source of lead in the atmosphere resulted from the combustion of leaded gasoline in motor vehicles. However, with the phase-out of leaded gasoline, concentrations of lead in the air have substantially decreased. Industrial sources of atmospheric lead include steel and iron factories, lead smelting and refining, and battery manufacturing. Atmospheric lead may also result from lead in entrained dust and dirt contaminated with lead. Lead-based paints were commonly used in the past, and lead paint chips or dust can be inhaled or ingested.

Acute health effects of lead may include gastrointestinal distress (such as colic), brain and kidney damage, and even death. Lead also has numerous chronic health effects, including anemia, central nervous system damage, and male and female reproductive dysfunction, as well as effects on blood pressure, kidney function, and vitamin D metabolism. Developing fetuses and children are particularly sensitive to lower concentrations of blood lead, and the effects may include increased risk of pre-term delivery, low birth weight, and the impairment of hearing, growth, and mental development. The U.S. EPA's Office of Air Quality Planning and Standards ranks lead as a "high concern" pollutant based on its severe chronic toxicity. Human studies regarding the cancer risks of lead have been inconclusive. However, the U.S. EPA considers lead to be a probable human carcinogen.

Sulfur Dioxide

Sulfur dioxide is a colorless gas with a sharp, irritating odor. It can react in the atmosphere to produce sulfuric acid and sulfates, which contribute to acid deposition and atmospheric visibility reduction. It also contributes to the formation of PM_{10}.

Most of the SO_2 emitted into the atmosphere is from burning sulfur-containing fossil fuels by mobile sources such as marine vessels and farm equipment, and stationary fuel combustion.

SO_2 irritates the mucous membranes of the eyes and nose, and may also affect the mouth, trachea, and lungs. Healthy people may experience sore throats, coughing, and breathing difficulties when exposed to high concentrations. SO_2 causes constriction of the airways and poses a health hazard to asthmatics, who are very sensitive to SO_2. Research indicates that normally-breathing asthmatics performing moderate to heavy exercise will experience SO_2-induced bronchoconstriction (breathing difficulties) when breathing SO_2 for at least five minutes at concentrations lower than one part per million. Consecutive SO_2 exposures (repeated within 30 minutes or less) result in a diminished response compared with the initial exposure. Children often experience more respiratory tract infections when they are exposed to SO_2.

Toxic Air Contaminants

Toxic air contaminants (TACs), also referred to as hazardous air pollutants, are air pollutants (excluding O_3, CO, SO_2, and NO_2) that may reasonably be anticipated to cause cancer, developmental effects, reproductive dysfunction, neurological disorders, heritable gene mutations, or other serious or irreversible acute or chronic health effects in humans.

TACs are regulated under different federal and state regulatory processes than ozone and the other criteria air pollutants. Health effects of TACs may occur at extremely low levels and it is typically difficult to identify levels of exposure that do not produce adverse health effects.

TACs generally consist of four types: organic chemicals, such as benzene, dioxins, toluene, and percholorethylene; inorganic chemicals such as chlorine and arsenic; fibers such as asbestos; and

metals such as mercury, cadmium, chromium, and nickel. These air contaminants are defined by the U.S. EPA, the State of California, and other governmental agencies. Currently, more than 900 substances are regulated TACs under federal, state, and local regulations.

Toxic air contaminants are produced by a great variety of sources, including industrial facilities such as refineries, chemical plants, chrome plating operations, and surface coating operations; commercial facilities such as dry cleaners and gasoline stations, motor vehicles, especially diesel-powered vehicles; and, consumer products. TACs can be released as a result of normal industrial operations, as well as from accidental releases during process upset conditions.

Health effects from TACs vary with the type of pollutant, the concentration of the pollutant, the duration of exposure, and the exposure pathway. TACs usually get into the body through breathing, although they can also be ingested, or absorbed through the skin.

Adverse effects on people tend to be either acute (short-term) or chronic (long-term). Acute effects result from short-term, high levels of airborne toxic substances. These effects may include nausea, skin irritation, cardiopulmonary distress, and even death. Chronic effects result from long-term, low level exposure to airborne toxic substances. Effects can range from relatively minor to life-threatening. Less serious chronic effects can include skin rashes, dry skin, coughing throat irritation, and headaches. More serious chronic effects can include lung, liver, and kidney damage; nervous system damage; miscarriages, and genetic and birth defects; and, cancer. Many TACs can have both carcinogenic and non-carcinogenic health effects.

Odors

Odors are substances in the air that pose a nuisance to nearby land uses such as residences, schools, daycare centers, and hospitals. Odors are typically not a health concern, but can interfere with the use and enjoyment of nearby property.

Odors may be generated by a wide variety of sources. Following are examples of facilities and operations that may generate significant odors: wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, asphalt batch plants, painting and coating operations, fiberglass operations, food processing facilities, feed lots/ dairies, petroleum (extraction, transfer, processing, and refining operations and facilities), chemical manufacturing operations and facilities, and rendering plants.

Objectionable odors created by a facility or operation may cause a nuisance or annoyance to surrounding populations.

Fugitive Dust

Fugitive dust refers to solid particulate matter that becomes airborne because of wind action and human activities. Fugitive dust particles are mainly soil minerals, but also can be sea salt, pollen, spores, tire particles, etc. About half of fugitive dust particles (by weight) are larger than 10

microns and settle quickly. Fugitive dust particles 10 microns or smaller can remain airborne for weeks.

The primary sources of fugitive dust are grading and excavation operations associated with road and building construction, aggregate mining and processing operations, and sanitary landfill operations. Unpaved roadways also are a large source of fugitive dust. Other sources of fugitive dust include demolition activities, unpaved roadway shoulders, vacant lots, material stockpiles, abrasive blasting operations, and off-road vehicles. The amount of fugitive dust created by such activities is dependent largely on the type of soil, type of operation taking place, size of the area, degree of soil disturbance, soil moisture content, and wind speed.

When fugitive dust particles are inhaled, they can travel easily to the deep parts of the lungs and may remain there, causing respiratory illness, lung damage, and even premature death in sensitive people. Fugitive dust also may be a nuisance to those living and working nearby. Dust blown across roadways can lead to traffic accidents by reducing visibility. Fugitive dust can soil and damage materials and property, such as fabrics, vehicles, and buildings. Particulates deposited on agricultural crops can lower crop quality and yield. Additionally, fugitive dust can lead to the spread of San Joaquin Valley Fever, a potential health hazard caused by a fungus that lives in the soil.

3. Ambient Air Quality Conditions

Local Air Quality

As stated previously, the majority of the population resides in the southern half of Ventura County – the VCAPCD has focused its air monitoring efforts there. The south half of Ventura County is divided into five air monitoring regions: Ventura and the Oxnard Coastal Plain, Ojai Valley, Santa Clara River Valley, Simi Valley, and the Conejo Valley. The air monitoring network has been designed to provide air monitoring coverage to those regions of Ventura County. The Project Site is located in the Ventura and the Oxnard Coastal Plain. This area is served by the VCAPCD's monitoring station at Rio Mesa School #2, Central Avenue, in Oxnard (see **Figure 4.3-2** on page 4.3-4). This station currently monitors for O_3, NO_2, PM_{10} and $PM_{2.5}$. **Table 4.3-1** below identifies the ambient pollutant concentrations that were measured from 2012 to 2014 (2014 is the latest year of available data per CARB).

Table 4.3-1 Summary of Ambient Air Quality in the Project Vicinity

Air Pollutants Monitored at Rio Mesa School #2, Central Avenue, Oxnard	Year		
	2012	2013	2014
O_3			
Maximum 1-hour concentration measured	0.082 ppm	0.067 ppm	0.112 ppm
Number of days exceeding national 0.12 ppm 1-hour standard	0	0	0
Number of days exceeding state 0.09 ppm 1-hour standard	0	0	1
Maximum 8-hour concentration measured	0.065 ppm	0.063 ppm	0.077 ppm
Number of days exceeding national 0.075 ppm 8-hour standard	0	0	1
Number of days exceeding State 0.07 ppm 8-hour standard	0	0	2
NO_2			
Maximum 1-hour concentration measured	0.057 ppm	0.040 ppm	0.039 ppm
Number of days exceeding national 0.10 ppm standard	0	0	0
Number of days exceeding State 0.18 ppm standard	0	0	0
PM_{10}			
Maximum 24-hour concentration measured	56.9 µg/m³	46.7 µg/m³	51.3 µg/m³
Number of days exceeding national 150 µg/m³ 24-hour standard	0	0	--
Number of days exceeding State 50 µg/m³ 24-hour standard	1	0	2
State Annual Average	21.0	24.3	--
Does measured average exceed state 20 µg/m³ standard?	Yes	Yes	--
$PM_{2.5}$			
Maximum 24-hour concentration measured	30.8 µg/m³	22.2 µg/m³	22.2 µg/m³
Number of days exceeding national 35 µg/m³ 24-hour standard	0	0	0

Notes: ppm = parts by volume per million of air; µg/m³=micrograms per cubic meter.
CARB, iADAM Air Quality Data Statistics: http://www.arb.ca.gov/adam/topfour/topfourdisplay.php, accessed January 2016.

Sensitive Receptors

As defined in the Ventura County Air Quality Assessment Guidelines (October 2003), sensitive receptors are facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and daycare centers. In addition, recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on human respiratory function. The nearest sensitive receptors to the Project Site include residential uses immediately adjacent to the west and east (less than 10 feet from site), residential uses to the north across Highway 126 (approximately 300 feet from site), and Camino Real Park to the northwest across Highway 126 (approximately 280 feet from the site).

4.3-3 Regulatory Framework

Air quality in the United States is governed by the federal Clean Air Act (CAA). In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). At the federal level, the CAA is administered by the U.S. EPA. In California, the CCAA is administered by the CARB at the state level and by the Air Quality Management and Pollution Control Districts at the regional and local levels. Air quality within the county is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to

improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the county are discussed below.

1. Federal

United States Environmental Protection Agency (U.S. EPA)

The U.S. EPA is responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The U.S. EPA also has jurisdiction over emissions sources outside state waters (outer continental shelf) and establishes various emissions standards for vehicles sold in states other than California. As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP). The SIP is a plan for each state which identifies how that state will attain and/or maintain the primary and secondary National Ambient Air Quality Standards (NAAQS) set forth in section 109 of the CAA. These plans are developed through a public process, formally adopted by the state, and submitted by the Governor's designee to the U.S. EPA. The CAA requires the U.S. EPA to review each plan and any plan revisions and to approve the plan or plan revisions if consistent with the CAA.

2. State of California

California Air Resources Board (CARB)

The CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets California Ambient Air Quality Standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair spray, aerosol paints, and lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. In some cases, the state standards are more restrictive than the federal standards established under the CAA.

Off-road diesel vehicles, which include construction equipment, are also regulated by the CARB for both in-use (existing) and new engines. Four sets of standards implemented by the CARB for new off-road diesel engines, known as Tiers. Tier 1 standards began in 1996. Tiers 2 and 3 were adopted in 2000 and were more stringent than the Tier 1 standards. Tier 2 and Tier 3 standards were completely phased in by 2006 and 2008, respectively. Tier 4 standards became effective in 2011. Tier 4 emission standards will reduce particulate matter and NO_x emissions of late model cars to 90% below current levels. Since off-road vehicles that are used in construction and other related industries can last 30 years or longer, most of those that are in service today are still part of

an older fleet that do not have emission controls. On July 26, 2007, the CARB approved a regulation to reduce emissions from existing (in-use) off-road diesel vehicles that are used in construction and other industries. This regulation became effective on June 15, 2008, and sets an anti-idling limit of five minutes for all off-road vehicles 25 horsepower and up. It also establishes emission rates targets for the off-road vehicles that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. The regulation on the larger fleets started in 2010, while medium and small fleet requirements targeted compliance in 2013 and 2015, respectively.

The U.S. EPA and the CARB use different standards for determining whether the county is in attainment. Federal and state standards are summarized in **Table 4.3-2** below.

Table 4.3-2 Ambient Air Quality Standards and Attainment Status for the VCAPCD

Air Pollutant	Averaging Time	State Standard	Federal Standard	VCAPCD Attainment Status	
				California Standard	Federal Standard
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Revoked	Nonattainment	Nonattainment
	8 Hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)		
Carbon Monoxide (CO)	1 Hour	20.0 ppm (23,000 µg/m^3)	35.0 ppm (40,000 µg/m^3)	Attainment	Attainment
	8 Hour	9.0 ppm (10,000 µg/m^3)	9.0 ppm (10,000 µg/m^3)		
Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	0.10 ppm (188 µg/m^3)	Attainment	Unclassified/ Attainment
	Annual	0.03 ppm (57 µg/m^3)	0.0534 ppm (100 µg/m^3)	Attainment	Unclassified/ Attainment
Lead (Pb)	30 Day Avg.	1.5 µg/m^3	--	Attainment	Unclassified/ Attainment
	Calendar Qtr.	--	1.5 µg/m^3		
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Attainment	Attainment
	24 Hour	0.04 ppm	--		
Particulate Matter 10 (PM_{10})	24 Hour	50.0 µg/m^3	150.0 µg/m^3	Nonattainment	Unclassified
	Annual	20.0 µg/m^3	Revoked		
Particulate Matter 2.5 ($PM_{2.5}$)	24 Hour	--	35.0 µg/m^3	Unclassified/ Attainment	Unclassified/ Attainment
	Annual	µg/m^3	12.0 µg/m^3		

Notes: ppm = parts by volume per million of air; µg/m^3=micrograms per cubic meter

Sources: California Air Resources Board, Ambient Air Quality Standards website: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf (accessed January 2016); and, California Air Resources Board, State Area Designation Maps website: http://www.arb.ca.gov/desig/adm/adm.htm (accessed January 2016).

3. Regional Standards

Southern California Association of Governments (SCAG)

SCAG is a Joint Powers Authority under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG

region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. The agency develops long-range regional transportation plans including sustainable communities strategy and growth forecast components, regional transportation improvement programs, regional housing needs allocations and a portion of the AQMP. SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which was adopted on April 4, 2012, identifies growth forecasts that are used in the development of air quality-related land use and transportation control strategies.

Ventura County Air Pollution Control District (VCAPCD)

The primary objective of the Ventura County Air Quality Management Plan (AQMP) is to provide continuous air pollutant emissions reductions over time, with the goal of attaining the federal and state standards. The VCAPCD's most recent AQMP was adopted in 2007 and establishes a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the Basin, which is in a non-attainment for ozone (O_3) and particulate matter (PM_{10}). The AQMP also addresses the requirements set forth in the state and federal Clean Air Acts.

The VCAPCD is the air pollution control agency for Ventura County and, along with CARB, is charged by state law to protect the people and the environment of Ventura County from the harmful effects of air pollution. To that end, the VCAPCD works directly with SCAG, county transportation commissions, and local governments, and cooperates actively with all state and federal government agencies. The VCAPCD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and provides regulatory enforcement through such measures as educational programs or fines, when necessary.

Although the VCAPCD is responsible for regional air quality planning efforts, VCAPCD does not have the authority to directly regulate the air quality issues associated with plans and new development projects within the county. Instead, the VCAPCD has prepared the Ventura County Air Quality Assessment Guidelines (October 2003) as an advisory document that provides lead agencies, consultants, and project applicants with a framework and uniform methods for preparing air quality evaluations for environmental documents under CEQA. The Guidelines recommend specific criteria and threshold levels for determining whether a proposed project may have a significant adverse air quality impact. The Guidelines also provide mitigation measures that may be useful for mitigating the air quality impacts of proposed projects. It should be noted, however, that these are guidelines only, and their use is not required or mandated by the VCAPCD. The final decision of whether to use these Guidelines rests with the lead agency responsible for approving the project.

4. Local Standards

City of Ventura

The City of Ventura's General Plan, adopted in 2005, provides goals, policies, and actions developed to guide future development in the City through the 2025 planning horizon, with an emphasis on a more intense "Infill First" strategy designed to preserve open space and prevent unsustainable growth. The General Plan establishes the following goals relevant to air quality:

- Our Sustainable Infrastructure – Our goal is to safeguard public health, well-being, and prosperity by providing and maintaining facilities that enable the community to live in balance with natural systems.
  - Policy 5A: Follow an approach that contributes to resource conservation.
    - Action 5.1: Require low flow fixtures, leak repair, and drought tolerant landscaping (native species if possible), plus emerging water conservation techniques, such as reclamation, as they become available.
    - Action 5.5: Provide incentives for new residences and businesses to incorporate recycling and waste diversion practices, pursuant to guidelines provided by the Environmental Services Office.
- Our Healthy and Safe Community – Our goal is to build effective community partnerships that protect and improve the social well-being and security of all our citizens.
  - Policy 7D: Minimize exposure to air pollution and hazardous substances.
    - Action 7.20: Require air pollution point sources to be located at safe distances from sensitive sites such as homes and schools;
    - Action 7.21: Require analysis of individual development projects in accordance with the most current version of the Ventura County Air Pollution Control District Air Quality Assessment Guidelines and, when significant impacts are identified, require implementation of air pollutant mitigation measures determined to be feasible at the time of project approval.
    - Action 7.22: In accordance with Ordinance 93-37, require payment of fees to fund regional transportation demand management (TDM) programs for all projects generating emissions in excess of Ventura County Air Pollution Control District adopted levels.
    - Action 7.23: Require individual contractors to implement the construction mitigation measures included in the most recent version of the Ventura County Air Pollution Control District Air Quality Assessment Guidelines.
    - Action 7.27: Require proponents of projects on or immediately adjacent to lands in industrial, commercial, or agricultural use to perform soil and groundwater contamination assessments in accordance with American

Society for Testing and Materials standards, and if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination).

The City's Air Quality Ordinance (Ordinance 93-37) requires developers of projects that generate emissions exceeding VCAPCD significance thresholds to pay air quality impact fees that are placed in an air quality mitigation fund that is used to offset project emissions in excess of VCAPCD thresholds through implementation of regional air quality programs. The fee is based on a formula developed by the VCAPCD and included in the VCAPCD's Air Quality Assessment Guidelines (October 2003). Funds are used to implement such programs as enhanced public transit service, vanpool programs/subsidies, rideshare assistance, clean fuel, improved pedestrian and bicycle facilities, and park-and-ride facilities. The Project does not exceed operational thresholds; thus, the impact fees are not applicable to the Project.

4.3-4 Thresholds of Significance

In accordance with guidance provided in Appendix G to the CEQA Guidelines, the Project would have a significant impact on air quality if it would cause any of the following to occur.

AQ-1 Would the project conflict with or obstruct implementation of the applicable air quality plan?
AQ-2 Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?
AQ-3 Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors)?
AQ-4 Would the project expose sensitive receptors to substantial pollutant concentrations?
AQ-5 Would the project create objectionable odors affecting a substantial number of people?

4.3-5 Environmental Impacts

1. Methodology

This analysis focuses on the nature and magnitude of the change in the air quality environment due to implementation of the Project. Air pollutant emissions associated with the Project would result from Project operations and from Project-related traffic volumes. Construction activities would also generate air pollutant emissions at the Project Site and on roadways resulting from construction-related traffic. The increase in Project Site emissions generated by these activities and

other secondary sources have been quantitatively estimated and compared to thresholds of significance recommended by the VCAPCD.

Construction Emissions

The regional construction emissions associated with the Project were calculated using the California Emissions Estimator Model (CalEEMod 2013.2.2) recommended by the VCAPCD. CalEEMod was developed in collaboration with the air districts of California as a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. CalEEMod provides several improvements compared to Urban Emissions (URBEMIS) 2007, including but not limited to the latest factors, survey data, and calculation methodologies for criteria pollutants and GHGs.

Construction activities associated with demolition, site preparation, grading, and building construction would generate pollutant emissions. Specifically, these construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. These construction emissions were compared to the thresholds established by the VCAPCD.

Operational Emissions

Operational emissions associated with the Project were also calculated using CalEEMod 2013.2.2 and the information provided in the traffic study prepared for the Project. Operational emissions associated with the Project would be comprised of mobile source emissions, energy demand, and other area source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the Project Site associated with operation of the Project. Area source emissions are generated by natural gas consumption for space and water heating, and landscape maintenance equipment. To determine if a regional air quality impact would occur, the increase in emissions is compared with the VCAPCD's recommended regional thresholds for operational emissions.

2. VCAPCD Thresholds (per Ventura County Air Quality Assessment Guidelines, October 2003)

The VCAPCD reviews and comments on the adequacy and accuracy of environmental documents for projects that may affect air quality in Ventura County. Such documents include Notices of Preparation, Initial Studies, Negative Declarations, Mitigated Negative Declarations (MND), and Environmental Impact Reports (EIR). The VCAPCD recommends that an MND or an EIR be prepared for projects that meet one or more of the significance criteria listed below. It should be noted, as stated previously, that these criteria are guidelines only. The final decision on the significance of air quality impacts, the appropriate environmental document, and mitigation measures, lies with the lead agency for the project.

Criteria Pollutants

- **Ozone** (based on emission levels of reactive organic compounds and oxides of nitrogen) – The following are the reactive organic compounds (ROC) and nitrogen oxides (NO_x) thresholds that the Ventura County Air Pollution Control Board has determined will individually and cumulatively jeopardize attainment of the federal one-hour ozone standard, and thus have a significant adverse impact on air quality in Ventura County.

  (a) Ojai Planning Area
  Reactive Organic Compounds: 5 pounds per day
  Nitrogen Oxides: 5 pounds per day

  (b) Remainder of Ventura County
  Reactive Organic Compounds: 25 pounds per day
  Nitrogen Oxides: 25 pounds per day

  The Project Site is not located in the Ojai Planning Area; thus, the thresholds under subheading (b) for the remainder of Ventura County are applicable to the Project.

- **General** – A project that may cause an exceedance of any ambient air quality standard (state or federal), or may make a substantial contribution to an existing exceedance of an air quality standard will have a significant adverse air quality impact. "Substantial" is defined as making measurably worse an existing exceedance of a state or federal ambient air quality standard. For example, a project that directly or indirectly produces large quantities of carbon monoxide (CO) could cause an exceedance of the state or federal CO standards. Such a determination may require the use of an appropriate air quality model.

- **Cumulative Impacts Based on Project-Specific AQMP Consistency** – A project with emissions of two pounds per day or greater of ROC, or two pounds per day or greater of NO_x that is found to be inconsistent with the AQMP will have a significant cumulative adverse air quality impact. A project with emissions below two pounds per day of ROC, and below two pounds per day of NOx, is not required to assess consistency with the AQMP. Inconsistent projects are usually those that cause the existing population to exceed the population forecasts contained in the most recently adopted AQMP.

- **Cumulative Impacts Based on General Plan AQMP Consistency** – Any General Plan Amendment or revision that would provide directly or indirectly for increased population growth above that forecasted in the most recently adopted AQMP will have a significant cumulative adverse air quality impact.

Fugitive Dust

(a) A project that may be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (see *California Health and Safety Code*, Division 26, §41700) will have a significant adverse air quality impact.

(b) A project for which an appropriate air dispersion modeling analysis shows a possible violation of an ambient particulate standard will have a significant adverse air quality impact.

Toxic Air Contaminants

Impacts from toxic air contaminants (TACs) may be estimated by conducting a health risk assessment (HRA). The HRA procedure involves the use of an air quality model and a protocol approved by the APCD. Following are the recommended significance thresholds:

(a) Lifetime probability of contracting cancer is greater than 10 in one million (as identified in an HRA).

(b) Ground-level concentrations of non-carcinogenic toxic air pollutants would result in a Hazard Index of greater than 1 (as identified in an HRA).

Odors

A qualitative assessment indicating that a project may reasonably be expected to generate odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property (see *California Health and Safety Code*, Division 26, §41700) will have a significant adverse air quality impact.

AQ-1	**Would the project conflict with or obstruct implementation of the applicable air quality plan?**
AQ-2	**Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**
AQ-3	**Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors)?**
AQ-4	**Would the project expose sensitive receptors to substantial pollutant concentrations?**
AQ-5	**Would the project create objectionable odors affecting a substantial number of people?**

Construction Air Quality Impacts

This analysis assumes construction would be undertaken with the following primary construction phases: 1) Demolition/Site Clearing, 2) Grading, and 3) Structural Building, Finishing and Paving. Each primary construction phase has been further detailed below. This analysis assumes construction would begin in 2017 and residential uses could be occupied as early as 2018 for the first buildout phase and as early as 2019 for the second buildout phase. Thus, this analysis assumes that 250 residential units would be built out over an approximate 18-month building construction period. While the buildout phases may take longer in reality, this analysis represents the fastest buildout potential resulting in a conservative worst-case daily air quality impact scenario.

- **Demolition/Site Clearing**. The Project would require the demolition of the existing house and barn (approximately 50 cubic yards or 24 tons of demolition debris), the removal of trees, fences, and other existing debris. This analysis estimates demolition and site clearing would occur for approximately one week and a maximum total of 16 truck trips would be required. This analysis assumes the daily on-site demolition activities would require the following equipment (or generally equivalent mix): three excavators, two rubber tired dozers, and one concrete/industrial saw.

- **Grading and Site Preparation.** After the completion of demolition/site clearing, grading and site preparation activities would occur for approximately 6 months and would involve the cut and fill of land to ensure the proper base and slope for the entire site, including building pads and foundations. At this time, no soil import or export activities are anticipated. This analysis assumes daily grading activities would require the following equipment (or generally equivalent mix): two excavators, one grader, one rubber tired dozer, two scrapers, and two tractors/loaders/backhoes.

- **Structural Building, Finishing and Paving.** As discussed previously, the proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250

dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). For purposes of this analysis, it is estimated that building construction would occur in two phases. The first buildout phase would include the construction of up to 150 residential units over approximately 9 months with occupied units in 2018. At the completion of the first buildout phase, the second buildout phase would include the construction of up to 100 residential units over approximately 9 months with occupied units in 2019. Thus, this analysis assumes 250 residential units would be built out over an approximate 18-month building construction period. While the buildout phases may take longer in reality, this analysis represents the fastest buildout potential resulting in a conservative worst-case daily air quality impact scenario. Upon completion of the building shells, finishing (coatings) and paving of parking areas and streets would follow. This analysis assumes that the maximum daily construction building activities would require the following equipment for each phase (or generally equivalent mix): one crane, three forklifts, one generator set, three tractors/loaders/backhoes, one welder, one air compressor, two pavers, two pieces of paving equipment, and two rollers.

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Construction activities involving grading and site preparation would primarily generate $PM_{2.5}$ and PM_{10} emissions. Mobile sources (such as diesel-fueled equipment on-site and traveling to and from the Project Site) would primarily generate NOx emissions. The application of architectural coatings would primarily result in the release of ROC emissions. The amount of emissions generated on a daily basis would vary, depending on the amount and types of construction activities occurring at the same time. The estimate of regional daily construction emissions has been prepared utilizing the CalEEMod computer model recommended by the VCAPCD. **Table 4.3-3** below identifies daily emissions that are estimated to occur on the peak construction day for each year of construction activity.

Table 4.3-3 Estimated Peak Daily Construction Emissions

Construction Phase and Year	Emissions in Pounds per Day					
	ROC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1 – Year 2017	6.17	69.67	47.58	0.06	6.29	4.60
Phase 1 – Year 2018	25.45	44.19	40.45	0.07	3.78	2.76
Phase 2 – Year 2018	2.96	24.38	21.18	0.04	2.11	1.58
Phase 2 – Year 2019	22.64	38.85	37.65	0.06	3.07	2.32

Note: Emissions reflect the maximum daily total for each phase/year. It is assumed Phase 2 would begin after the completion of Phase 1 and there would be no overlap between the buildout phases. Calculations assume watering twice daily for fugitive dust suppression. CalEEMod data provided in Appendix A to the Air Quality Technical Report.

Consistent with the Ventura County Air Quality Assessment Guidelines (October 2003), construction-related emissions (including portable engines and portable engine-driven equipment subject to the ARB's Statewide Portable Equipment Registration Program, and used for construction operations or repair and maintenance activities) of ROC and NOx are not counted towards the two significance thresholds, since these emissions are temporary. However, construction-related

emissions should be mitigated if estimates of ROC and NOx emissions from the heavy-duty construction equipment anticipated to be used for a particular project exceed the 25 pounds per day threshold for the county areas not located in the Ojai Planning Area. As **Table 4.3-3** illustrates construction emissions could exceed 25 pounds per day of ROC and NOx, mitigation measures to reduce such emissions have been identified at the end of this report.

With respect to fugitive dust, the VCAPCD states a project's construction emissions are considered to cause a significant impact to air quality if fugitive dust emissions are generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. Thus, as stated the Ventura County Air Quality Assessment Guidelines (October 2003), the VCAPCD recommends minimizing fugitive dust, especially during grading and excavation operations, rather than quantifying fugitive dust emissions. Control techniques for fugitive dust generally involve watering, chemical dust control agents for soil stabilization, scheduling of activities, and vehicle speed control. Therefore, such mitigation measures to reduce Project-related dust-generating operations and activities have been identified at the end of this report.

In conclusion, the VCAPCD has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, the VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NOx emissions over 25 pounds per day. As shown above, construction emissions from the proposed Project would exceed 25 pounds per day for ROC and NOx. Therefore, Mitigation Measure **MM AQ-1** is necessary to reduce the construction emissions. With implementation of Mitigation Measure **MM AQ-1** construction related impacts would be less than significant.

Operational Air Quality Impacts

As discussed previously, the proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). For purposes of this analysis, it is estimated that buildout and operations would occur in two phases. The first buildout phase would include the construction of up to 150 residential units with occupied units in 2018. At the completion of the first buildout phase, the second buildout phase would include the construction of up to 100 residential units with occupied units in 2019. Thus, this analysis assumes 250 residential units would be operational (58 single-family detached units and 192 condominiums). While the buildout phases may take longer in reality, this analysis represents the fastest buildout potential resulting in a conservative worst-case daily impact scenario. The Project's operational air quality emissions associated with area sources, energy demand, and mobile sources (motor vehicles) have been calculated with CalEEMod. These results are presented in **Table 4.3-4** below. According to the VCAPCD, a project's operational emissions

are considered to cause a significant impact to air quality if ROC and NOx emissions exceed the 25 pounds per day threshold for the county areas not located in the Ojai Planning Area. As shown in **Table 4.3-4**, the Project would not exceed the thresholds of significance set by the VCAPCD for ROC or NO_X. Therefore, impacts associated with operational air quality emissions would be considered less than significant.

Table 4.3-4 Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase 1 Emissions (150 units in 2018)						
Area Sources	4.69	0.14	12.46	<0.01	0.07	0.07
Energy Demand	0.07	0.57	0.24	<0.01	0.05	0.05
Mobile (Motor Vehicles)	3.21	7.76	32.35	0.08	5.98	1.66
Total Phase 1 Emissions	*7.97*	*8.48*	*45.06*	*0.08*	*6.09*	*1.77*
Phase 2 Emissions (100 units in 2019)						
Area Sources	3.12	0.10	8.29	<0.01	0.05	0.05
Energy Demand	0.04	0.38	0.16	<0.01	0.03	0.03
Mobile (Motor Vehicles)	2.01	4.80	20.07	0.05	3.98	1.10
Total Phase 2 Emissions	*5.17*	*5.27*	*28.53*	*0.06*	*4.05*	*1.18*
Total Emissions (Both Phases - 250 units)	13.14	13.75	73.59	0.14	10.14	2.95

Notes: Assumes all hearth would be natural gas. Data reflects highest emissions from either summer or winter. Columns may not add due to model rounding.
CalEEMod data provided in Appendix A to the Air Quality Technical Report

Criteria Pollutants – General (Carbon Monoxide)

A project that may cause an exceedance of any ambient air quality standard (state or federal), or may make a substantial contribution to an existing exceedance of an air quality standard will have a significant adverse air quality impact. "Substantial" is defined as making measurably worse an existing exceedance of a state or federal ambient air quality standard. For example, a project that directly or indirectly produces large quantities of carbon monoxide (CO) could cause an exceedance of the state or federal CO standards.

As stated in the Ventura County Air Quality Assessment Guidelines (October 2003), a CO hotspot screening analysis using the screening procedure in Caltrans' CO Protocol should be conducted for any project with indirect emissions greater than the applicable ozone project significance thresholds discussed previously that may significantly impact roadway intersections that are currently operating at, or are expected to operate at, Levels of Service E or F. As discussed above, the Project would not exceed the thresholds of significance set by the VCAPCD for ROC or NO_X. In addition, based on a review of the Project's Traffic Study, none of the analyzed intersections operate at LOS E or F under existing or future conditions. Therefore, according to the VCAPCD guidelines, none of the intersections qualified for a CO hotspot screening analysis and these impacts would be less than significant.

TAC Impacts

The Project would not include the operations of any land uses routinely involving the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants. Thus, no appreciable operational-related toxic airborne emissions would result from Project implementation. With respect to construction, the construction activities associated with the Project would be typical of other similar land use development projects in the region, and would be subject to the regulations and laws relating to toxic air pollutants at the regional, state, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. Therefore, impacts associated with the release of toxic air contaminants would be less than significant.

Odor Impacts

The Project does not include any of the land uses identified by the VCAPCD as being associated with odors (such as wastewater treatment facilities, sanitary landfills, transfer stations, composting facilities, asphalt batch plants, painting and coating operations, fiberglass operations, food processing facilities, feed lots/ dairies, petroleum facilities, chemical manufacturing operations and facilities, and rendering plants). Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents as well as asphalt paving. However, the Project would be consistent with all applicable rules and regulations governing construction equipment and processes. As such, the Project would not create objectionable odors affecting a substantial number of people during construction or long-term operation. Therefore, a less than significant impact would occur with respect to the creation of objectionable odors.

AQMP Consistency

The primary objective of the Ventura County Air Quality Management Plan (AQMP) is to provide continuous air pollutant emission reductions over time, with the goal of attaining the federal and state standards. The VCAPCD's most recent AQMP was adopted in 2007 and establishes a comprehensive air pollution control program leading to the attainment of state and federal air quality standards in the Basin, which is in non-attainment for ozone (O_3) and particulate matter (PM_{10}). The AQMP also addresses the requirements set forth in the state and federal Clean Air Acts. As discussed previously, the Project's air quality emissions would be below the VCAPCD significance thresholds and mitigation measures have been identified where appropriate consistent with VCAPCD recommendations.

As stated in the Ventura County Air Quality Assessment Guidelines (October 2003), project consistency with the AQMP can be determined by comparing the actual population growth in the county with the projected growth rates used in the AQMP. The projected growth rate in population is used as an indicator of future emissions from population-related emission categories in the AQMP. These emission estimates are used, in part, to project the date by which Ventura County will attain the federal ozone standard. Therefore, a demonstration of consistency with the

population forecasts used in the most recently adopted AQMP should be used for assessing project consistency with the AQMP.

As discussed in greater detail in Chapter 4.12 – Population and Housing of the Project's Draft EIR, new residential uses associated with the Project would result in approximately 250 more households and 653 more persons within the City than anticipated by the General Plan. However, the Project's population represents 0.56% of SCAG's 2020 forecast and 0.58% of the General Plan 2025 forecast, and the Project's households represent 1.45% of SCAG's 2020 forecast and 1.26% of the General Plan 2025 forecast. Thus, the Project would not exceed the SCAG RTP/SCS population growth forecast for the City of 116,900 residents in 2020 or the City's General Plan forecast of 133,160 households in 2025.

In addition, the 2005 Ventura General Plan contains numerous other goals, policies, and actions supporting the creation of housing opportunities within the City. The 2005 Ventura General Plan also includes various policies that encourage infill development and would be expected to reduce vehicle miles traveled (VMT) and associated air pollutant emissions compared to previous low density development within the City. The Project is considered an infill development, as the site is surrounded on all sides by urban development. Thus, impacts related to population growth would therefore be less than significant.

As such, the Project would not increase population figures over those that have been planned for the area, and would not jeopardize attainment of state and federal ambient air quality standards. Therefore, for these reasons, the proposed Project would not conflict with or obstruct implementation of the applicable AQMP and this impact would be less than significant.

Level of Significance Before Significance

Impacts would be potentially significant.

Mitigation Measures

MM AQ-1	The following control measures provided in the most recent version of the Ventura County Air Quality Assessment Guidelines (October 2003) pursuant to Mitigation Measure AQ-3 of the 2005 General Plan Final EIR would minimize the generation of fugitive dust (PM_{10} and $PM_{2.5}$), ROC, and NO_X during construction activities and shall be implemented during construction: 1. To reduce impacts associated with NOx emissions (a precursor to ozone) the following measures shall be implemented: a. Equipment idling time should be minimized; b. Equipment engines should be maintained in good condition and in proper tune, as per manufacture's specifications; c. During the smog seasons (May through October), the construction period should be lengthened so as to minimize the number of vehicles

and equipment operating at the same time;

d. Alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, should be used if feasible.

2. During clearing, grading, earth moving, or excavation operation, excessive fugitive dust emissions shall be controlled by regular watering, paving construction roads, or other dust preventive measures using the following procedures:

a. All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day, so that water penetrates sufficiently to minimize fugitive dust during grading activities. Reclaimed water should be used if available;

b. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved roadways on-site, should be treated to prevent fugitive dust. Measures may include watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate;

c. Graded and/or excavated inactive areas of the construction site should be monitored at least weekly for dust stabilization. If a portion of the site is inactive for over four days, soil on-site should be stabilized;

d. Signs should be posted limiting on-site traffic to 15 miles per hour;

e. All clearing, grading earth moving, or excavation activities shall cease during period of high winds (i.e., greater than 20 mph averaged over one hour) so as to prevent excessive amounts of dust;

f. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust pursuant to California Vehicle Code §23114;

g. Respiratory protection shall be used by all employees in accordance with California Division of Occupational Safety and Health regulations;

h. Measures to reduce the fungus that causes Valley Fever should include the following:

i. Facemasks should be worn on employees involved in grading or excavation operations during dry period to reduce inhalation of dust.

ii. Employment should be restricted to persons with positive coccidioidin skin tests.

iii. Crews should be hired from local populations where possible, since it is more likely that they have previously been exposed to the fungus and are therefore immune.

iv. Cabs of grading and construction equipment should be air-conditioned.

v. Crews should work upwind from excavation sites.
vi. Construction roads should be paved.
vii. Weed growth should be controlled by mowing instead of discing.
viii. The access way into the Project site should be paved or treated with environmentally-safe dust control agents during rough grading and construction.
ix. The area disturbed by clearing, grading, earth moving, or excavation operations should be minimized so as to prevent excessive amounts of dust.

3. After clearing, grading, earth moving, or excavation operations, and during construction activities, fugitive dust emissions shall be controlled using the following procedures:
   a. All inactive portions of the construction site shall be seeded and watered until grass cover is grown;
   b. All active portions of the construction site shall be sufficiently watered to prevent excessive amounts of dust.
4. At all times, fugitive dust emissions shall be controlled by assuring that streets adjacent to the Project site shall be swept as needed to remove silt, which may be accumulated from construction activities so as to prevent excessive amounts of dust. Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible. Streets must be swept at least once a day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Level of Significance After Mitigation

The VCAPCD has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, the VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NO_x emissions over 25 pounds per day. As shown above, construction emissions from the proposed Project would exceed 25 pounds per day for ROC and NO_x. Therefore, Mitigation Measure **MM AQ-1** is necessary to reduce the construction emissions. With implementation of Mitigation Measure **MM AQ-1** construction related impacts would be less than significant.

The Project's operational air quality emissions would not exceed the established VCAPCD thresholds of significance and the Project would be consistent with the AQMP. Thus, air quality impacts would be less than significant.

4.3-6 Cumulative Impacts

As stated in the Ventura County Air Quality Assessment Guidelines (October 2003), a project with emissions of two pounds per day or greater of ROC, or two pounds per day or greater of NOx that

is found to be inconsistent with the AQMP will have a significant cumulative adverse air quality impact. A project with emissions below two pounds per day of ROC, and below two pounds per day of NO_x, is not required to assess consistency with the AQMP. Inconsistent projects are usually those that cause the existing population to exceed the population forecasts contained in the most recently adopted AQMP.

While the Project would exceed two pounds per day or greater of ROC and two pounds per day or greater of NO_x, the Project would be consistent with the AQMP as discussed previously (see page 4.3-28). It should also be noted, as discussed previously, that the Project's air quality emissions would be below the VCAPCD significance thresholds (25 pounds per day for ROC and NO_x) and mitigation measures have been identified where appropriate consistent with VCAPCD recommendations. As such, cumulative air quality impacts would be less than significant.

Level of Significance Before Mitigation

None

Mitigation Measures Required

No mitigation is required.

Level of Significance After Mitigation

No impact.

4.4 Biological Resources

4.4-1 Introduction

This section identifies plant and animal resources within and adjacent to The Grove Specific Plan area and assesses the potential impacts of the proposed Specific Plan on these biological resources.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different than those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.4-2 Existing Conditions

The Grove Specific Plan Specific Plan area comprises a flat, rectangular parcel located at the western terminus of Thille Street. The current owners purchased the property in 1953/1954 and planted a lemon orchard on the original site of approximately 54 acres. Portions of this site were acquired for the widening of Telephone Road and the construction of the adjacent Santa Paula Freeway (SR-126) in the 1960s. The lemon orchard was in place for approximately 50 years, but declined in productivity and was removed in late 2003. The trees were ground up as wood chips and spread on the site as mulch. Various vegetable crops were raised on the property from approximately 2004 until approximately 2007 when the property was leased to a flower grower. The site is currently in seasonal floral agricultural production.

A limited number of trees exist on-site along the northerly boundary adjacent to SR-126. Mature trees exist off-site immediately adjacent to the easterly boundary. There are no agricultural windrows on-site. A site visit was conducted on September 28, 2015. Photographs were also taken at this time.

4.4-3 Regulatory Framework

The following is a summary of the regulatory context under which biological resources are managed at the federal, state, and local level.

1. Federal

Army Corps of Engineers

Under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, the United States Army Corps of Engineers (USACE) has authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States. Perennial and intermittent creeks and adjacent wetlands are considered waters of the United States and are within the regulatory jurisdiction of the USACE. The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result

in no net loss of wetlands values or acres. In achieving the goals of the Clean Water Act, the Corps seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of waters of the U.S., wetlands may require a permit from the Corps prior to the start of work. Typically, permits issued by the Corps are a condition of a project as mitigation to offset unavoidable impacts on wetlands and other waters of the U.S. in a manner that achieves the goal of no net loss of wetland acres or values.

Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements the Migratory Bird Treaty Act (16 USC Section 703-711), the Bald and Golden Eagle Protection Act (16 United States Code (USC Section 668), Section 10 and the Federal Endangered Species Act (FESA; 16 USC § 153 et seq.). Projects that would result in take of any federally listed threatened or endangered species are required to obtain permits from the USFWS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (incidental take permit) of FESA, depending on the involvement by the federal government in permitting or funding the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species.

Take under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of FESA, however, the USFWS advises project applicants that they could be elevated to listed status at any time.

National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) shares joint authorities with the USFWS under the FESA for administering the incidental take permit program. Generally, the USFWS is responsible for terrestrial and freshwater aquatic species while NMFS is responsible for listed marine mammals, anadromous fish, and other living marine resources. NMFS also permits for incidental taking of listed fish species during other activities such as state-run hatchery operations and commercial or recreational fisheries.

2. State of California

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California Species listed under the California Endangered Species Act (CESA; *California Fish and Game Code* §2050, et seq.) prohibits take of listed threatened or endangered species. Take under CESA is restricted to direct killing of a listed species and does not prohibit indirect harm by way of habitat modification.

California Fish and Game Code §3503, §3503.5, and §3511 describe unlawful take, possession, or needless destruction of birds, nests, and eggs. Fully protected birds (§3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern (CSC) is a category used by CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that afforded by the *Fish and Game Code*. The CSC category is intended by the CDFW for use as a management tool to take these species into special consideration when decisions are made concerning the development of natural lands.

The CDFW also has authority to administer the Native Plant Protection Act (*Fish and Game Code* §1900 et seq.). The Act requires CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the Act, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant.

Perennial and intermittent streams also fall under the jurisdiction of the CDFW. Sections 1601-1603 of the *Fish and Game Code* (Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

The Natural Communities Conservation Planning Act of 1991 was established by the California Legislature, is directed by the Department of Fish and Wildlife, and is being implemented by the state, and public and private partnerships to protect habitat in California. As opposed to the single species interpretation of the Endangered Species Act (ESA), this act aims at protecting many species using a regional approach to habitat preservation. A Natural Communities Conservation Plan (NCCP) identifies and provides for the regional or area wide protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity.

3. Regional

Los Angeles Regional Water Quality Control Board

The protection of water quality in the watercourses of Ventura County is under the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB). The Board establishes requirements prescribing discharge limits and establishes water quality objectives through the Ventura County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit. The Storm Water Quality Urban Impact Mitigation Plan (SQUIMP), which is part of the NPDES Permit, addresses specific storm water pollution requirements for new developments such as the proposed Project. As co-permittee, the City of Ventura is responsible for

assuring that new developments are in compliance with the SQUIMP. The SQUIMP requires that all development projects implement various control techniques (termed best management practices, or BMPs) to minimize the amount of pollutants entering surface waters.

4. City of Ventura

General Plan

The Our Natural Community chapter of the 2005 Ventura General Plan contains the following Policies and Actions to address the conservation of biological resources that apply to the proposed Project.

Policy 1C: Improve protection for native plants and animals.

- Action 1.16: Comply with directives from regulatory authorities to update and enforce stormwater quality and watershed protection measures that limit impacts to aquatic ecosystems and that preserve and restore the beneficial uses of natural watercourses and wetlands in the city.
- Action 1.17: Require development to mitigate its impacts on wildlife through the development review process.
- Action 1.18: Require new development adjacent to rivers, creeks, and barrancas to use native or noninvasive plant species, preferably drought tolerant, for landscaping.
- Action 1.19: Require projects near watercourses, shoreline areas, and other sensitive habitat areas to include surveys for state and/or federally listed sensitive species and provide appropriate buffers and other mitigation necessary to protect habitat for listed species.
- Action 1.22: Adopt development code provisions to protect mature trees, as defined by minimum height, canopy, and/or trunk diameter.
- Action 1.23: Require, where appropriate, the preservation of healthy tree windrows associated with current and former agricultural uses, and incorporate trees into the design of new developments.
- Action 1.24: Require new development to maintain all indigenous tree species or provide adequately sized replacement native trees on a 3:1 basis.

Municipal Code

The City has not adopted a Tree Preservation Ordinance. Municipal Code Chapter 20.150, Street Trees, outlines the regulations pertinent to trees in the public right-of-way.

City of Ventura Urban Forestry Program Tree Maintenance Policies

An urban forest is the public property of all residents, and is managed as a public resource. The Parks Division regulates all planting, pruning and removal of trees in the public easement. This includes parkways (the space between the sidewalk and the curb) where most trees are located. In some neighborhoods, the sidewalk is adjacent to the curb, and the easement is situated in the area

between the house and the sidewalk. Residents must obtain a permit to plant, prune or remove a tree located in a parkway or easement. There is no charge for this permit.

4.4-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to biological resources are contained in the Environmental Checklist contained in Appendix G of the most recent update of the CEQA Statutes and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to biological resources, if any of the following could occur.

Bio-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Bio-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Bio-3 Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Bio-4 Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Bio-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Bio-6 Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Bio-7 Would the project substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal?

Bio-8 Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).

4.4-5 Environmental Impacts

Methodology

To evaluate the biological resources found or potentially occurring within the planning area and adjacent to the planning area that could be indirectly impacted, available literature and data

sources, including the City of Ventura 2005 General Plan[6], aerial photography, and the California Department of Fish and Wildlife Biogeographic Information and Observation System (BIOS) 5 tool[7] were addressed. The BIOS 5 tool provides access to the California Natural Diversity Database (CNDDB) data at the 7.5′ Quadrangle and County level.

Environmental impacts relative to biological resources may be assessed using impact significance criteria from federal, state, and local regulations. Project impacts to flora and fauna may be determined to be significant even if they do not directly affect rare, threatened, or endangered species.

Bio-1	**Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**
Bio-2	**Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**
Bio-3	**Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**
Bio-4	**Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**
Bio-7	**Would the project substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal?**

The Project site has been in agricultural production since the early 1950s and presently is being used for flower agricultural production.

The 2005 Ventura General Plan Final Environmental Impact Report (General Plan EIR) reviewed biological resources in Section 4.4. As shown on General Plan EIR Figure 4.4-1, Habitat Types, the Project site is designated as Agriculture, with the areas surrounding the site designated as Urban. Neither of these habitats is considered a sensitive habitat. Also as shown on General Plan EIR Figure 4.4-2, Sensitive Elements Reported by the California Natural Diversity Database, no special status species (sensitive plants and wildlife) from the CNDDB (December 2004) were documented for the Project site. A review of the CDFW Biogeographic Information and Observation System

6 City of Ventura, 2005 Ventura General Plan Final Environmental Impact Report, August 2005

7 California Department of Fish and Wildlife Biogeographic Information and Observation System (BIOS) 5 tool, accessed August 17, 2015

(BIOS) 5 tool, accessed August 17, 2015, confirmed that no sensitive habitats or sensitive species occur on the Project site.

Implementation of the Project would not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species nor on any riparian or other sensitive natural community. Given that no sensitive species occur on-site, implementation of the Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Also, implementation of the Project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Lastly, implementation of the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act as no wetlands exist on-site.

As noted earlier, a limited number of trees exist on-site along the northerly boundary adjacent to SR-126 and mature trees exist off-site immediately adjacent to the easterly boundary. Construction of the Project has the potential to affect mature trees that could support nests by native bird species. Such an impact would be a potentially significant under CEQA and a violation of state and federal laws pertaining to the protection of native bird species. Implementation of **Mitigation Measure MM Bio-1** would ensure that impacts are mitigated to a less than significant level.

Level of Significance Before Mitigation

Impacts would be potentially significant for native birds. All other impacts would be less than significant.

Mitigation Measures

MM Bio-1	Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 704) and the *California Fish and Game Code* (§3503). If activities associated with construction or grading of previously undeveloped parcels are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly, beginning 30 days prior to initiation of ground disturbing activities, with the last survey conducted no more than three days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days have elapsed between the survey and ground-disturbing activities. Surveys shall include examination of trees, shrubs, and the ground for nesting birds.

Several bird species such as killdeer and night hawks are known to nest on bare ground. Protected bird nests that are found within or adjacent to the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Wildlife. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for raptor species. Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities.

The buffer zone shall remain intact and maintained while the nest is active (i.e. occupied or being constructed by the adult bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.

Level of Significance after Mitigation

Impacts would be less than significant.

Bio-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City has not adopted a tree preservation ordinance. However, the 2005 Ventura General Plan includes the following action pertinent to the Project:

Action 1.24: Require new development to maintain all indigenous tree species or provide adequately sized replacement native trees on a 3:1 basis.

As noted earlier, a limited number of trees exist on-site along the northerly boundary adjacent to SR-126 and mature trees exist off-site immediately adjacent to the easterly boundary. Construction of the Project has the potential to affect these mature trees.

The Grove Specific Plan Section 3.5, Landscape Guidelines includes a number of provisions for trees, both in the public and private realm.

Section 3.5.A, Landscape Standards

C. Sustainability

The location and selection of all new tree planting will adhere to 'green infrastructure' principles by visually expressing the underlying interconnectivity of the neighborhood. Species selection will be in character with local and regional environmental requirements, and be comprised of an appropriate mix of evergreen and deciduous trees.

Trees will be used to define the landscape character of recreation and open space areas, identify entry points, and reinforce neighborhood identity by defining major and minor

thoroughfares vehicles, pedestrians and bicycles. Trees with distinctive character, either in form or foliage color, will be placed at major entry points to the community.

Specific Plan Figure 3.6, Landscape Concept; Figure 3.7, Park, Open Space & Recreation Areas, and Figure 3.8, Street & Alley Trees, illustrate how trees would be incorporated throughout the Project area. Therefore, implementation of the Specific Plan landscape guidelines would ensure compliance with 2005 Ventura General Plan Action 1.24 and ensure that less than significant impacts occur.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Bio-6	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Currently, no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan has been adopted that cover the Project site. In addition, as noted earlier, no sensitive habitats or species exist on-site. Thus, implementation of the Project would result in no impacts to an adopted Habitat Conservation Plan.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact.

4.4-6 Cumulative Impacts

Bio-8	**Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).**

The City of Ventura 2005 General Plan establishes policies to ensure that development adjacent to natural habitat areas is subject to review for standards related to conservation, access, and recreational opportunities along the Ventura River corridor and in natural hillside areas. The Our Natural Community chapter of the 2005 Ventura General Plan does not allow development within the Ventura River or naturally vegetated portions of the City.

Impacts to biological resources tend to be site-specific and are assessed on a site-by-site basis. As noted earlier, the Project site has been used for agricultural production since the early 1950s and no biological habitat exists on-site. The Project site is not adjacent to natural vegetated areas. Thus, implementation of the Specific Plan would not represent an incremental adverse cumulative impact to biological resources and would not be cumulatively considerable. In addition, related projects would be required to conduct analysis, as required, and to implement appropriate mitigation measures. Thus, implementation of the Specific Plan would not contribute to any potential cumulative impacts, and cumulative impacts to biological resources would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.5 Cultural Resources

4.5-1 Introduction

This section addresses the potential direct and indirect impacts of the proposed Project on archaeological and historical resources. This analysis was prepared based on the Archaeological Survey Report prepared by Dudek dated January 2015 (**Appendix 4.5**), the Historical Resources Evaluation Report prepared by Greenwood and Associates dated January 2011 (**Appendix 4.5**), and the additional sources cited in **Section 10, References and Resources Cited**.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different than those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.5-2 Existing Conditions

The proposed Project site is situated on an island of unincorporated land located approximately 3.5 miles southeast of the downtown area of the city of Ventura. The parcel is bound by the SR-126 Santa Paula Freeway to the north, Telephone Road to the south, a mobile home park to the west, and a residential tract development to the east. The property is currently dedicated to the cultivation of flowers for commercial use and contains a small residential compound (single-family home, garage/large equipment shed, and two small, temporary equipment sheds) located on the southwest corner of the property. The property has historically supported various agricultural uses and has gradually been surrounded by residential, commercial, and municipal buildings dating from circa 1920 through the present. Other than residential compound situated on the southeast corner and the mature, ornamental trees growing along the eastern and western proposed Project site boundaries, the proposed Project site consists of level agricultural crop land. The 25.65-acre parcel is considered the Project Area of Potential Effects (APE) in which all permanent areas of ground disturbance, as well as temporary areas of construction activity including Project laydown areas and equipment storage would occur.

An archaeological site records and literature search at the SCCIC, California State University, Fullerton, was conducted on November 19, 2014, by Lindsey Noyes, SCCIC Lead Staff Researcher, to identify all previous cultural resource investigations, recorded archaeological sites and, built architectural resources within the proposed Project APE and a 0.5-mile vicinity. The records search identified all known archaeological sites, historic resources, and previous cultural resource surveys within this distance. The SCCIC records indicate that 10 investigations have been undertaken within 0.5 miles of the Project site (see **Table 4.5-1**). Of those investigations, one report accounts potential for historic site designation with the reported boundary of the studied property partially overlapping the proposed The Grove Project site. The report, An Evaluation of the Impacts to Cultural Resources by the Proposed Development of 147 Acres of Land As Part of Ranch Placerita

East and West (Victoria Avenue-Highway 126), Ventura County, California (VN-00420), describes what the author identified as three historic structures that are not located within the proposed The Grove Project site. Important to note, no archaeological site designation was made for the Project site.

Although the site boundaries explicated in the report VN-00420 do minimally overlap the proposed Project site, they do so by a margin of no more than 200 feet (60 meters) and the alleged historic structures, to validate the property as having possible historical significance, do not occur within said margin or the proposed The Grove Project site. Nine other investigations evaluated areas surrounding the proposed Project site within a 0.5-mile radius including (see **Table 4.5-1** below) one approximately 1,000 feet (305 meters) to the southwest with its northern edge adjacent to Telephone Road and west of US 101, one approximately 1,500 feet (450 meters) to the southeast with its northern margin adjacent to US 101 , one approximately 2,600 feet (800 meters) to the southeast with its southern margin adjacent to the Southern Pacific Railway, one approximately 80 feet (24 meters) north of the northwest corner of the proposed Project site, one approximately 2,600 feet (800 meters) to the southwest, one approximately 80 feet (24 meters) to the southeast with its northern boundary adjacent to Telephone Road and Southern boundary adjacent to US 101, two approximately 2,600 feet (800 meters) due west of the proposed Project site, one approximately 2,500 feet (760 meters) to the northwest of the proposed Project site. The nearest of the investigations not located within the proposed Project area, located adjacent to the eastern boundary of the proposed Project site and extending to the northeast along Telephone Road, did not identify any prehistoric archaeological resources, but did identify "potentially significant historical resources" in the form of a "Foreman's house apparently constructed in the 1920s," a cistern "apparently abandoned before the 1920s or 1930s", and a "1900-1901 homestead."

Table 4.5-1 Previous Investigations within the Project Area of Potential Effects (0.5-mile Radius)

Date	Author	Title (Area)	SCCIC No.
1977	Pence, Robert	Archaeological Assessment of the Donion Plaza Business Park, Ventura County, California	VN-00106
1977	Lopez, Robert	An Archaeological Assessment of the Area of the Proposed Vencom Industrial Park, Ventura County, California	VN-00373
1985	Allen, Mark	An Archaeological Resource Survey and Impact Assessment of a 76 acre Parcel of Property Near San Buenaventura Business Park, Ventura County, California	VN-00454
1997	Maki, Mary K.	Negative Archaeological Survey Report for the Northern Half of the 126 Pedestrian Overcross Project: 07-VEN-126, Pm 0.10, Ea 17490k	VN-01497
2001	McLean, Deborah	Archaeological Assessment for Pacific Bell Mobile Services Telecommunications Facility La 363-19, 1264 Callens Road, City and County of Los Angeles	VN-01606
2001	McKenna, Jeanette	California Environmental Quality Act Compliance/mitigation of Adverse Impacts to the 101 Drive in Theater, Ventura County, California	VN-02180
2009	Fortier, Jana	TEA-21 Rural Roadside Inventory: Native American Consultants and Ethnographic Study for Caltrans District 7, Ventura County	VN-02872

Date	Author	Title (Area)	SCCIC No.
2009	Fortier, Jana	(also LA10578) TEA-21 Native American Consultants and Ethnographic Study for Caltrans District 7, County of Los Angeles	VN-02902
2010	Bonner, Wayne	Cultural Resources Record Search, Site Visit Results, and Direct APE Historic Architectural Assessment for Clearwire Candidate CA-VTA0102 (Ventura Townhouse), 4900 Telegraph Road, Ventura County	VN-02902

1. Prehistory

The local prehistoric chronology is divided into four major periods – Paleoindian, Early Period, Middle Period, and Late Period.

Paleoindian

It is generally accepted that humans entered the New World during the latter part of the Wisconsin glaciation between 40,000 and 20,000 years before present (B.P.). The earliest unquestioned evidence of human occupation in southern Santa Barbara and Ventura counties is dated to between 10,000 to 8,000 B.P. Paleoindian groups during this time focused on hunting Pleistocene megafauna, including mammoth and bison. Plants and smaller animals were undoubtedly part of the Paleoindian diet as well, and when the availability of large game was reduced by climatic shifts near the end of the Pleistocene, the subsistence strategy changed to a greater reliance on these resources.

Early Period

Post-Pleistocene changes in climate and environment are reflected in the local archaeological record by approximately 8,000 B.P., the beginning of the Early Period, as defined by Chester King (1981). The Early Period of the Chumash cultural sphere was originally defined by Rogers, who called it the "Oak Grove" Period. The diagnostic feature of this period is the mano and metate milling stones, which were used to grind hard seeds such as sage for consumption. Toward the end of the Early Period, sea mammal hunting appears to have supplemented subsistence strategies.

Middle Period

The Middle Period (3,350 to 800 B.P.) is characterized by larger and more permanent settlements, related to a generally wetter environment. Materials from Middle Period sites reflect a greater reliance on marine resources and include marine shells, fish remains, and fishhooks. A major shift in vegetable food exploitation occurred, as the mano and metate milling stones were replaced by stone mortars and pestles. This indicates a transition from seed gathering to oak tree acorn gathering and processing, a result of cooler temperatures and more expansive oak woodland habitats. Toward the end of this period, the plank canoe was developed, making ocean fishing and trade with the Channel Islands safer and more efficient. Terrestrial resources continued to be

exploited as evidenced by the presence of contracting-stemmed and corner-notched projectile points from Middle Period sites.

Late Period

The Late Period (800 to 150 B.P. or approximately A.D. 1150 to 1800) was a time of increased social and economic complexity. The increased number of permanent and semi-permanent villages clustered along the coastline of the Santa Barbara Channel south past Ventura and on the Channel Islands, and the diversity of environmental site settings in which sites have been identified, indicates a substantial increase in prehistoric population. Intensification of terrestrial as well as marine resources occurred. Acorns continued to be processed, and land mammals were hunted with the bow and arrow, rather than exclusively by spear. Trade networks, probably controlled by village chiefs, expanded and played an important part in local Chumash culture, reinforcing status differences and encouraging craft specialization. Shell beads, found throughout the Early and Middle Periods, increased in number and variety, related to status and social value.

2. Historic Setting

At the time of initial European contact, a number of Chumash settlements existed within the present limits of the City of Ventura, generally clustered along the Ventura and Santa Clara Rivers. Juan Rodríguez Cabrillo visited the Native American village of Shisholop in 1542 at the foot of what became Figueroa Street. He called the settlement Pueblo de las Canoas in admiration of the many large canoes observed there. In 1602, another Spanish explorer, Sebastian Vizcáino, visited Shisholop. Again, the visitors were greatly impressed with the speed and fine construction of the canoes, as well as the intelligence and communication skills of their makers. During his 1769 trek from San Diego to Monterey, Capt. Gaspar de Portolá also stopped at Shisholop, which he renamed La Asumpta. His party reported that the community was the largest and best organized they had seen in their travels. Population estimates vary widely, but all of them document a precipitous decline after European contact. It has been estimated that the total Chumash population in 1770 was between 10,000 and 22,000. There were 2,788 Chumash registered at the five missions in their territory in 1831. By 1920, there were 74 known Chumash still living.

The 1782 founding of Mission San Buenaventura by Fray Junipero Serra marks the beginning of the Historic Period in Ventura. This was the ninth mission in a series of 21 such spiritual outposts established by the Franciscan order in Alta California. The first Mission structure is believed to have been at the San Miguel Chapel site on the southwest corner of Palm Street and Thompson Boulevard. Construction of San Buenaventura Mission on its present site occurred from 1792 until 1809.

In 1834, the government of Mexico, now independent of Spain, decreed that the California missions be secularized. Mission properties and goods were to be administered by appointed government agents. Political considerations delayed implementation of the decree at Ventura until

1837. The Mission survived secular administration in better condition than many. Although most of the Mission's lands were granted as ranchos, its lands and goods were not utterly looted, as happened to many of the other missions.

In 1843, Governor Micheltorena restored mission administration to the padres, only to have his successor, Pio Pico, launch an effort to lease, and later sell, all remaining mission lands to private individuals in 1845. After the Treaty of Guadalupe Hidalgo in 1848, and the American take-over of California, the United States Lands Commission heard petitions for claims to mission lands and voided many of the transactions concluded under Pico's effort.

The Rancho Period has been romanticized in literature and film as a time of easy wealth and leisure notable for dashing horsemanship and Hispanic hospitality on a grand scale. The reality was the more prosaic work of making a living in the cattle business. Some of the rancheros lost their lands to bad luck or adverse legal rulings; some sold to the small but growing American population.

There was no immediate influx of Americans to Ventura County. Only nine American voters were registered in Ventura in 1850, the majority of the population being of Mexican or Native American origin. The City of Ventura, a small agricultural community, was incorporated in 1864, and Ventura County was separated from Santa Barbara County and became its own entity in 1873. By 1874, the population had grown to approximately 1,000, still predominantly Hispanic and Indian, but including 200 Chinese and immigrants from Europe and South America. Americans did not move to Ventura in significant numbers until the 1870s and early 1880s.

A building boom during the mid-1870s turned the City of Ventura into a thriving town with handsome municipal structures, notably a school, hospital, and library. Retail establishments and hotels sprang up and generated jobs. Traditional American churches and civic clubs proliferated. The population of Ventura County rose from 5,073 in 1880 to 10,071, with 3,869 in the City of Ventura, in 1890.

Development in Ventura during the first and second Land Boom periods (1869-1905) was concentrated within the current downtown area, comprising both residential and commercial building types. Extant properties from this time are overwhelmingly residential, consisting of one- and two-story single-family houses and representing a range of Romantic and Victorian-era architectural styles. Surviving commercial buildings from this period are rare.

The present day central and eastern sections of Ventura, including the vicinity of the current Project area, remained sparsely populated and agricultural in character well into the twentieth century. Amid the orchards, and the corn, flax, and flower fields of the Santa Clara River Valley, the community of Saticoy was established in 1868 on the north bank of the Santa Clara River. Early Saticoy consisted of a schoolhouse, blacksmith shop, and several dwellings, to which a post office was added in 1873. When a branch of the Southern Pacific Railroad was extended through the

Santa Clara River Valley in 1887, Saticoy became a major shipping point for the area's farmers. The town supported several warehouses, a hotel, and numerous other businesses by the turn of the century. To the southwest of Saticoy, the small community of Montalvo arose at the crossing of the South Pacific Railroad's Santa Barbara and Somis branch lines during the real estate boom of the late 1880s. By 1899, it boasted a Methodist church, post office, school, several stores, and "many neat and pretty cottages."

Agriculture remained the Ventura area's economic mainstay through the first decades of the twentieth century. Prior to the 1880s, agriculture was based on feed grains and livestock. Americans introduced crop diversification, first into orchard crops such as fruits and nuts. In the 1890s, sugar beets became an important local crop. By the early 1920s, field crops such as vegetables and feed grasses were being raised and marketed, and poultry and dairy production were in place by the 1930s.

Reflecting the city's increasing complexity and sophistication after the turn of the 20th century, development in Ventura was more diverse. The 1900-1920 period witnessed the construction of many of Ventura's first civic, social, institutional, and industrial buildings. Commercial construction along Main Street continued, replacing older adobe and wooden structures with more permanent masonry buildings, and expanding eastward. Residential development from this period was concentrated in the area immediately to the east of the commercial core. Single-family residences were more modest in size, commonly one-story bungalows, displaying American Colonial Revival and Craftsman architectural styles.

Oil had been discovered in the region in the 1860s and new finds near Ventura Avenue sparked an oilfield boom that was in full swing by 1922. Ventura became a center for oil shipping and the oilfield supply and support industry. The city's face changed markedly during the oil and real estate booms of the 1920s, its population more than doubling from 4,160 in 1920 to 11,500 by the onset of the Great Depression in 1929. New commercial construction in the downtown area saw buildings with a stronger presence on the street, assuming a larger scale and occupying prominent sites within the downtown area. Banks, hotels, theaters, and even churches, begin to reflect a broader range of architectural styles, including those with Mediterranean and Classical influences. Development from this period also responded to the increasing popularity of the private automobile, with the construction of garages, showrooms, and service stations.

Continued single-family residential development and the introduction of multi-story apartment buildings increased densities immediately outside the commercial core. Much of Ventura's present downtown area was built out during this period, causing substantial residential development to locate in other parts of the city. Residential construction continued in the Craftsman style, while many Period Revival styles achieved great popularity here and throughout Southern California, particularly the Spanish Colonial Revival style.

Although the 1929 stock market crash and subsequent depression hit Ventura hard, most of its agricultural base survived and the local government worked to assist the unemployed. Very little development took place during the Great Depression and World War II period (1930-1945). Construction in Ventura virtually halted during the Depression. Available funds were largely devoted to public improvement projects, including parks, roads, and bridges. Construction within the downtown area during this period was extremely limited, consisting mostly of retail shops and office buildings, typically reflecting the Art Deco and Streamline Moderne styles.

Ventura returned to prosperity and development surged during the post-World War II era. Following the war, residential subdivisions and commercial centers were built in previously undeveloped areas of the city. Between 1950 and 2000 the population of Ventura grew from 16,650 to 102,000. The establishment of military bases at Port Hueneme, Oxnard, and Point Mugu provided civilian jobs and the impetus for development of aerospace and electronics industries in the Ventura area. Freeway construction in the early 1960s served to strengthen economic ties with Los Angeles. The City of Ventura remains the county's cultural and economic center.

The Project was taken to the Historic Preservation Committee on August 27, 2012, and there was no requirement for preservation of the existing structure on the property.

3. Site History

The subject parcel was historically part of Rancho Santa Paula y Saticoy, a 17,773-acre tract lying within the Santa Clara River Valley that was granted by Mexican governor Manuel Micheltorena to Manuel Jimeno Casarin in 1840. The parcel is situated along the rancho's southwestern boundary, adjacent to Rancho San Miguel. Casarin had served as Secretary of State for Alta California and was a member of the state Assembly. In addition to Rancho Santa Paula y Saticoy, Casarin was the recipient of three other land grants. He never resided on this rancho, nor did he use it for cattle ranching or agriculture. In 1852, soon after California's entry into the Union, Manuel Jimeno Casarin sold the rancho to a syndicate led by Levi Parsons, Eugene Casserly, J. B. Crocket, and David Mahoney.

The group grazed cattle on the rancho, but apparently did not hold the property for long; by the late 1850s, the rancho had passed into the hands of brothers T. Wallace, Andrew, and Henry More, who also owned the neighboring Rancho Sespe. By 1860, the More brothers were the largest landowner in Santa Barbara County (which then included present day Ventura County). Besides Rancho Santa Paula y Saticoy and Rancho Sespe, the Mores owned Santa Rosa Island, Rancho Lompoc, and Rancho Mission Vieja de la Purisma.

The great drought and floods of the early 1860s forced the More brothers to dissolve their partnership and divide up their lands. Rancho Santa Paula y Saticoy was acquired by George G. Briggs, of Marysville, California, in 1862. Briggs plans to plant the rancho in fruit orchards were thwarted and he ultimately subdivided much of the property into 150-acre farm tracts, which he

put up for sale in 1867. Nathan Blanchard purchased the largest portion of the rancho in 1872 – 2,700 acres on which he founded the community of Santa Paula – but in the vicinity of the current Project area, smaller parcels were typically sold to family farmers.

The farming community of Saticoy was established on the north bank of the Santa Clara River, four miles east of the current Project area in 1868, and by the late 1880s, the small community of Montalvo had grown up along the Southern Pacific tracks a mile to the southeast.

The Project area is first depicted in detail on the 1903 USGS topographic map. Telephone Road, which immediately parallels Copland Drive and the subject property's south boundary, was in place by that date, as was East Main Street/Ventura Boulevard which intersected Telephone nearby to the west. Both were well travelled routes through the Santa Clara River Valley, the former connecting Saticoy to Ventura and the later, Montalvo and Ventura. Another major roadway was Telegraph Road, which ran parallel to Telephone Road north of the Project area. The Project area itself had an unimproved dirt road (Alhambra Avenue) along its western boundary which extended from Telephone Road as far north as the Arundell Barranca, about halfway to Telegraph Road. Along the east side of this road, near the north end of the present Project area, stood a single dwelling.

The Project area is next illustrated on the 1947 USGS map, which was surveyed in 1941. At that time, the surrounding area was completely rural and agricultural with only a few scattered dwellings indicated. On the 1947 map, Telephone Road is designated Route 118, E. Main Street/Ventura Boulevard is US 101, and Telegraph Road is SR-126. Along the western edge of the Project area, the dirt road and dwelling were still present. The Project area is indicated as the only property in the area not to be planted in either orchards or row crops. This was apparently due to the lack of a readily available water supply to support such crops on this parcel, a problem that has limited the agricultural use of the parcel to the present day.

Between the early 1940s and the next USGS mapping in 1967, significant changes occurred in the vicinity of the subject property. The area remained substantially rural, agricultural, and largely undeveloped; however, new highway construction had significantly impacted this parcel and reestablished its boundaries. The post-World War II population explosion in southern California, the growth of Ventura, Los Angeles, and other urban centers, infrastructural improvement initiatives, and the decline of rail transportation, brought a wave of new highway construction in the post war years. Beginning in the late 1950s, the US 101 Ventura Freeway was constructed through the Ventura area. It was completed in 1961. The freeway's alignment generally followed the old Ventura Boulevard/East Main Street surface route, although in the vicinity of the Project area, the alignment was shifted to the northeast, clipping the southwest corner of what had been a rectangular parcel. Several years later SR-126, the Santa Paula Freeway, was constructed parallel to and midway between Telephone and Telegraph Road. This time, the road building removed a

portion of the parcel's northern limits. It was during the early to mid-1960s time period that Copland Drive was constructed, providing direct access to the subject parcel.

Since the 1960s, the acreage surrounding the subject parcel has been steadily subdivided and developed for residential and commercial uses, and incorporated into the City of Ventura. The Project area remains a small pocket of unincorporated land. A mobile home park was established on the parcel directly west of the subject property in the 1970s, and the adjacent tract to the east was developed with single and multi-family/townhouses in the 1980s. On the subject property itself, the earlier dwelling and dirt road were removed sometime after 1941, and the existing residence and equipment shed were present at the southwest corner of the parcel by the early 1950s.

County records indicate that the subject parcel belonged to the California Ranch Company until 1953. In April of that year, the property was sold to John Spoor Broome and his wife, Patricia Broome. Mr. Broome, owner of nearby Rancho Guadalasca, referred to the parcel as the "Dingaling Ranch," alluding to its location on "Telephone" Road.

There is no original building permit on file for either the residence at 4515 Copland Drive, or the associated tractor shed. Indeed, the only county permit of any kind is a plumbing permit from 1970. Records of the County Assessor indicate that the dwelling was constructed circa 1942. Its assessed value increased following a remodeling in 1955.

The dwelling's present occupant, whose family has resided there since the late 1970s, has stated that the house was moved from a more southerly location on the alignment of the US 101 Freeway to its present location prior to freeway construction in the late 1950s. The first occupant of the house in this location was a Broome Ranch foreman, and it was occupied by Broome Ranch employees prior to the current residency. This information could not be corroborated.

The form and details of this house – rigidly rectangular, low gabled roof, steel casement windows – suggest a standardized military or institutional design. There are several military bases and former installations located nearby, and this speculated origin is a possibility. It was common practice in the years following World War II for the military to dispense with surplus equipment and structures by offering them for sale to the public, in whole or in part.

Through their common owner, John S. Broome, the property has ties to the Broome Ranch/Rancho Guadalasca, and there is also a possibility that the structure was built as a ranch tenant house to a standardized design. There are six dwellings nearly identical in construction to the subject structure located on Broome Ranch/Rancho Guadalasca property on Laguna Peak Access Road near Caryl Drive in Oxnard. The differences in the subject structure correspond principally to recent alterations. All of the dwellings display original appearing partial width shed porches on their principal long/eave elevation, whereas the subject structure has a full porch on that elevation – an apparent variation or alteration. The location of the Laguna Peak Access Road

structures – on Broome Ranch and in close proximity to Port Hueneme Naval Construction Battalion Center and Point Mugu Naval Air Missile Test Center (now combined as Naval Base Ventura County/NBVC) – could support either of the two speculated sources. Consultation with staff members and review of photographs and archival materials maintained by both the Seabee Museum at NBVC and the Museum of Ventura County did not identify any records of similar naval base housing dating to the World War II or immediate post war period.

Associated Individuals: John Spoor Broome

The subject property was acquired by John S. Broome and his wife Patricia in 1953. John S. Broome was born into a successful ranching family who had acquired 23,000 acres of Mexican era land grant Rancho Guadalasca in southern Ventura County in 1871. The Broome family has maintained control of a substantial portion of the original rancho acreage through the present day.

John S. Broome served as an Army Air Force pilot during World War II and flew as a commercial pilot with American Airlines for several years. Upon the death of his father in 1946, Broome assumed management of Rancho Guadalasca. Historically, the ranch was known principally for cattle ranching and later, citrus production. However, its agricultural activities through the twentieth century have covered a broad range of production on the Oxnard plain. John Broome also expanded his farming and ranching interests to Kern and Monterey counties. Through his ownership of Rancho Guadalasca and other endeavors, Broome played an influential role in Ventura County.

John S. Broome was involved in numerous non-agricultural ventures locally as well. He was a founder of the Conejo Savings and Loan Association in Thousand Oaks, was appointed to numerous boards and commissions, including the Ventura County Harbor Commission, and the boards of Pepperdine University and the House Ear Institute in Los Angeles. He also served as director of the Southern California Aeronautic Association. Broome was a noted philanthropist who donated $5 million to establish a library at the developing California State University Channel Islands campus in 1999. One of the largest donations in Ventura County history, the library was subsequently named in his honor.

4.5-3 Regulatory Setting

1. Federal

National Register of Historic Places

The National Register of Historic Places (National Register) is the country's master inventory of known historic resources and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

Title 36, Part 60 of the Code of Federal Regulations is a series of regulations that cover the National Register. Specifically, Title 36, Part 60.4 of the *Code of Federal Regulations* specifies the criteria applied to evaluate properties eligible for inclusion in the National Register. There are four criteria under which a structure, site, building, district, or object can be considered eligible for listing on the National Register. These include resources that are one or more of the following:

- **Criterion A:** Are associated with events that have made a significant contribution to the broad patterns of our history; or
- **Criterion B:** Are associated with the lives of persons significant in our past; or
- **Criterion C:** Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- **Criterion D:** Have yielded, or may be likely to yield, information important in prehistory or history. There is also a general stipulation that the resource (structure, site, building, district, and object) be at least 50 years old, although there are exceptions to that rule (see Title 36, Part 50.4 of the *Federal Code of Regulations*, Criteria Considerations a through q). Properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included on the National Register. The eligibility of a cultural resource for nomination to the National Register may be based on any of the above four criteria together with their integrity.

Historical period properties are best evaluated and supported by historical research, whereas Criterion D is typically documented by archaeological investigation. A property need not actually be listed on the National Register to be protected by the National Historic Preservation Act, but must be considered eligible for listing on the National Register. Archaeologists assess sites based on all four criteria, but prehistoric sites are primarily considered under Criterion D. If cultural resources do not meet the above criteria, they are not considered historical properties and are not further included in the Section 106 process.

2. State of California

California Public Resources Code

The California Public Resources Code defines any unauthorized disturbance or removal of a fossil locality or remains on public land as a misdemeanor, and requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources.

California Senate Bill 297

This bill addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to

be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission to resolve disputes regarding the disposition of such remains. It has been incorporated into §15064.5(e) of the California Environmental Quality Act (CEQA) Guidelines.

California Register of Historical Resources

The California State Historical Resources Commission has designed this program for use by state and local agencies, private groups and citizens to identify, evaluate, register, and protect California's historical resources. The California Register is the authoritative guide to the state's significant historical and archaeological resources. The California Register program encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding, and affords certain protections under CEQA.

The criteria for inclusion in the California Register of Historical Resources include any object, building, structure, site, area, place, record, or manuscript that is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources which includes the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
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; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

The California Register automatically includes the following:

- California properties listed or formally determined eligible for listing in the National Register of Historic Places
- California Registered Historical Landmarks from No. 0770 onward
- California Points of Historical Interest that have been evaluated by the Office of Historic Preservation and have been recommended to the State Historical Resources Commission for inclusion in the California Register

Other resources may be nominated for listing in the California Register based on the criteria stated above.

Additionally, a resource must retain historic architectural integrity in terms of location, design, setting, materials, workmanship, feeling, and association. The California Register procedures include language similar to the National Register criteria (discussed above) with regard to integrity.

As with the National Register, the minimum age criterion for the California Register is 50 years. Properties less than 50 years old may be eligible for listing on the California Register "if it can be demonstrated that sufficient time has passed to understand its historical importance." The California Register may also include properties listed in "local registers" of historic properties. A "local register of historic resources" is broadly defined in *California Public Resources Code* §5020.1(k) as "a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution." Local registers of historic properties come in two forms:

1. Surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current; and
2. Landmarks designated under local ordinances or resolutions (*Public Resources Code* §5024.1, §21804.1, §15064.5).

California Environmental Quality Act

Section 21084.1 of the *California Public Resources Code* provides the framework for determining whether a property is a historic resource for CEQA purposes.

A resource is considered historically significant, and therefore a historical resource under CEQA, if it falls into one of the three following categories as defined by §21084.1 of the *California Public Resources Code*:

- "Mandatory historical resources" are resources "listed in, or determined to be eligible for listing in, the California Register of Historical Resources."
- "Presumptive historical resources" are resources "included in a local register of historical resources, as defined in subdivision (k) of Section 5020.1, or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1" of the Public Resources Code, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.
- "Discretionary historical resources" are those resources that are not listed but determined to be eligible under the criteria for the California Register of Historical Resources.

A lead agency must consider a property a historic resource under CEQA if it is listed in, or determined to be eligible for listing in, the California Register. Historical resources included in a local register of historical resources, as defined in subdivision (k) of §5020.1, or deemed significant

pursuant to criteria set forth in subdivision (g) of §5024.1, are presumed to be historically or culturally significant for purposes of CEQA, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant. The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or not identified in an historical resources survey meeting the criteria of subdivision (g) of §5024.1, shall not preclude a lead agency from determining whether the resource may be an historical resource for purposes of CEQA.

3. County of Ventura Historic Designation

Section 1365-5 of the Ventura County Cultural Heritage Ordinance establishes the criteria for designation of Cultural Heritage Sites. The Ordinance establishes three levels of County historic designation, Landmarks, Sites of Merit, and Points of Interest. The criteria formulated for County Landmark listing correspond closely with criteria established for State and National Register eligibility. To be eligible for County Landmark, Site of Merit, or Point of Interest designation, a property must satisfy at least one of the following criteria:

Landmarks

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.

Sites of Merit

1. Sites of historical, architectural, community or aesthetic merit which have not been designated as Landmarks or Points 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.

Points of Interest

1. That it 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.

4. City of Ventura Historic Designation

The City of Ventura's Historic Preservation Regulations are presented in Chapter 24.455 of the City's Municipal Code. The Regulations establish three levels of local historic designation, Landmarks, Points of Interest, and Historic Districts. The criteria formulated for Landmark listing correspond closely with criteria established for State and National Register eligibility, as follows:

Landmark

Any real property such as building, structure, or archaeological excavation, or object that is unique or significant because of its location, design, setting, materials, workmanship or aesthetic feeling, and is associated with:

1. Events that have made a meaningful contribution to the nation, state or community;
2. Lives of persons who made a meaningful contribution to national, state or local history;
3. Reflecting or exemplifying a particular period of the national, state or local history;
4. Embodying the distinctive characteristics of a type, period or method of construction;
5. The work of one or more master builders, designers, artists or architects whose talents influenced their historical period, or work that otherwise possesses high artistic value;
6. Representing a significant and distinguishable entity whose components may lack individual distinction; or
7. Yielding, or likely to yield, information important to national, state or local history or prehistory.

Point of Interest

Any real property or object:

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 of architectural style;
2. That has historic significance, but was altered to the extent that the integrity of the original workmanship, materials or style is substantially compromised;

3. That is the site of a historic event which has no distinguishable characteristics other than that a historic event occurred there and the historic significance is sufficient to justify the establishment of a historic landmark.

4.5-4 Thresholds of Significance

To assist in determining whether a project will have a significant effect on the environment, Appendix G of the CEQA Statute and Guidelines identifies criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions. Specifically, Appendix G (Environmental Checklist Form) lists the following items to be considered when determining whether a project may be deemed to have a significant impact on cultural resources if any of the following would occur.

CR-1	**Would the project cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?**
CR-2	**Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**
CR-3	**Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**
CR-4	**Would the project disturb any human remains, including those interred outside of formal cemeteries?**

There are no known archeological resources within the Project area. Although the potential for encountering human remains is remote, compliance with *California Health and Safety Code* §7050.5 and *California Public Resources Code* §5097.98 would ensure that any unknown human remains discovered during construction activities for subsequent development/ redevelopment are adequately addressed. Therefore, **Threshold CR-3** is not applicable to the Project and will not be analyzed further.

The Project area does not contain any unique geologic features. There are no known paleontological resources within the Project area. However, it is possible that paleontological resources may be uncovered during subsequent development/redevelopment and construction depending on the depth of any possible excavation. Compliance with Standard Condition Planning – 07 which requires that unknown paleontological resources be adequately addressed would ensure that impacts to such resources are less than significant. Therefore, **Threshold CR-4** is not applicable to the Project and will not be analyzed further.

Methodology

Significant effects upon cultural resources are evaluated by determining the location of known resources in regards to the proposed Project's ground disturbing activities that have the potential to remove, relocate, damage, or destroy any cultural resources. Ground disturbing activities which

overlap the known resource area(s) could result in direct impacts, while activities taking place near a known resource could result in indirect impacts.

The referenced CEQA Guidelines §15064.5 defines the term "historical resources" and provides that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." A "substantial adverse change in the significance of an historical resource" is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

With respect to archaeological resources and/or sites, CEQA Guidelines §15064.5(c) provides in relevant part:

(1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subdivision (a).
(2) If a lead agency determines that the archeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code.
(3) If an archaeological site does not meet the criteria defined in subdivision (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2.
(4) If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

Public Resources Code §21083.2(g) defines a "unique archaeological resource" as follows:

> As used in this section "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Section 21083.2(h) defines a "nonunique archeological resource" as follows:

> As used in this section, "non-unique archeological resource" means an archeological artifact, object, or site which does not meet the criteria in subdivision (g). A nonunique archeological

resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects.

Field Methods

The APE incorporates all 25.3 acres of the proposed Project site. An intensive archaeological survey of the proposed The Grove APE was completed on December 5, 2014. All exposed ground surfaces were walked in 3-meter (10-foot) parallel transects when dense ground cover or structural obstructions were not present. The proposed APE is situated on an island of unincorporated land located approximately 3.5 miles southeast of the downtown area of the city of Ventura. The APE is bound by the SR-126 (Santa Paula) Freeway to the north, Telephone Road to the south, a residential tract development to the east, and a mobile home park to the west. The land is currently dedicated to the cultivation of flowers for commercial use and contains a small residential compound (single-family home, garage/large equipment shed, and two small, temporary equipment sheds) located on the southwest corner of the property. The property has historically supported various agricultural uses and has gradually been surrounded by a moderately to dense suburban environment in its immediate vicinity beginning in the 1970s. However, the surrounding community comprised of residential, commercial, and municipal buildings began its development in the 1920s and has continued through the present. Other than the mature, ornamental trees growing along the boundary of the small residential compound situated on the southwest corner and the compound itself, the APE consists solely of level agricultural land free from any large structures or natural features such as outcrops or trees.

The proposed APE consists of agricultural land with bare soil and an excellent ground surface visibility of 80% to 100%. The southwest corner possessing the small residential compound consisting of one house, one garage/large maintenance shed, and two small maintenance sheds is covered with grass, structures, and equipment, rendering the ground surface visibility in these areas poor (less than 10%). In addition, the undeveloped road shoulders along Copland Drive, adjacent to the southern The Grove property line, were surveyed. These undeveloped road shoulders also afforded excellent (90% to 100%) ground surface visibility.

Soils observed in the proposed APE were dark-gray, silty-clay loam extending from the surface to at least 10 inches visible as a result of the tilled condition of the land, generally consistent with the Mocho loam and Sorrento loam designation. No prehistoric or historic cultural materials were identified during the survey. Given the excellent ground surface visibility within the vast majority of the proposed Project site boundaries, these results are considered very reliable.

Historic Resources Field Investigations

Field Methods

A pedestrian reconnaissance of the 4515 Copland Drive/The Grove Project site was completed by Greenwood and Associates architectural historian Dana Slawson, M. Arch., on September 30, 2011.

The reconnaissance examined all buildings, structures, built features, and landscape elements within and surrounding the proposed Project boundaries. The existing features of the subject parcel were photographed, and the architectural details recorded, as were all landscape features. The survey results are reported below.

Historic Resources: 4515 Copland Drive

4515 Copland Drive is a 25.3-acre parcel situated on the north side of Copland Drive between the US 101 and SR-126 Freeways. The parcel is bounded on the west by a trailer park developed in the 1970s, and on the east by a residential tract development dating to the mid-1980s. The parcel is level and presently devoted to commercial flower cultivation. At the southwest corner of the parcel is a small residential compound comprising a single-family dwelling, a "tractor shed," and several small prefabricated storage sheds. The house and tractor shed are the only permanent structures on the property.

- **Residence**. The dwelling is a single-story wood frame mid-20th century vernacular structure that is rectangular in plan, measuring 20×50 feet, covered by a low sloped front-gabled roof. The proportions of the house's regular rectangular form and steel casement windows impart an institutional/ military feeling. It rests on a cast in place concrete foundation and is clad with painted sand-textured stucco. There is a partial width gabled porch on the front (south) façade with a lower roofline that matches the slope of the principal roof. A second, shed roofed, porch spans the full length of the east elevation. The front porch rests on a cast in place concrete base and its roof is supported by square section (4×4 inches) posts. It has a solid railing of v-groove tongue and groove boards. The porch gable is clad with the same material.

4515 Copland Drive, South and East Elevations

4515 Copland Drive, East Elevation

The side porch also has square posts and a tongue and groove deck on a cast in place concrete foundation. Both porches have open ceilings. All of the structures' roof sections display moderately overhanging open eaves with exposed rafter tails and are covered with composition roll roofing.

4515 Copland, Detail of East and North Elevations

The principal entrance is centered in the front elevation and accessed from the front porch. It is a three-panel wooden door with narrow trim. A second entrance at the center of the east elevation has comparable details. There is a single window in the façade to the east of the door. It is a steel two-sash casement window with four horizontal lights per sash and narrow wooden trim, a type commonly used in 1940s-1950s construction. Similar steel double casement windows in two sizes and in irregular placement are located on all but the north elevation, which is windowless. Additional wall openings include rectangular louvered vents located in both gables. There is a three-sided wooden hot water heater enclosure attached to the west elevation.

4515 Copland, West Elevation

Containing five rooms – three bedrooms, kitchen, bath, and living room – the interior of the house displays painted plasterboard walls and ceilings, narrow window and door trim, and slender cove crown moldings and low rectilinear baseboard trim. These are all characteristic of World War II era and later construction. The floors are covered with vinyl sheet flooring in kitchen and bath, and tiles in the other rooms. The interior doors are typically of the wooden hollow-core type. The room configuration, as well as the built-in features such as kitchen counters and cabinets, appear to be original and unaltered.

- **Tractor Shed**. The tractor shed is a one-story, wood framed structure with a side gabled roof and board and batten exterior cladding. Originally used for farm equipment storage, the shed is rectangular in plan, measuring 32′×20′. It rests on a cast in place concrete foundation. The structure is oriented with its long, eave, sides east-west, and there are three equipment bay doors facing northward toward the dwelling and onto a graveled driveway. These two leaf side-swing doors are crafted of vertical tongue and groove boards and secured with strap hinges. They occupy the entire elevation and constitute the only wall openings in the structure. The low sloped gabled roof is covered with corrugated steel panels and has moderately overhanging open eaves with exposed rafter tails. An open sided shed with steel pipe roof supports attached to the west end of the building appears to be the only substantial alteration to the original building.

4515 Copland Drive, Tractor Shed, East and North Elevations

4515 Copland Drive, Tractor Shed, North Elevation

The interior of the tractor shed offers an open clear-span space. The walls are unfinished wood boards with the structural framing left exposed. Framing members are typically 2″×4″ and 2″×6″ lumber with diagonal bracing. The ceiling is open and the "V" trusses supporting the roof are exposed. The shed has a dirt floor.

4.5-5 Environmental Impacts

CR-1 Would the project cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?

4515 Copland Drive

Dating to circa 1942, the residence at 4515 Copland Drive is a very simple example of mid twentieth century Ranch style residential design that displays few stylistic flourishes. The dwelling was reportedly moved to its present location when US 101 (Ventura Freeway) was constructed in the late 1950s. County Assessor's records indicate that the structure was remodeled in 1955, and this date may correspond with its relocation. There are no building permits available for the

structure. Since its relocation, and possibly earlier, the structure is reported to have housed employees of the Broome Ranch. The house retains a high level of design integrity. Discernable alterations to the house are limited to routine maintenance and repair items, such as reroofing and plumbing fixture replacement.

The house at 4515 Copland Drive represents a common builder-designed interpretation of the Ranch style that employs standard construction materials and techniques. The Ranch style became very popular in Ventura and throughout southern California beginning in the late 1930s. This example possesses no characteristics of design that are considered unique or particular to the Ventura area or the Southern California region in general, or that could be considered of high artistic value. For these reasons, and because numerous comparable or superior local and regional examples of this residential style exist – including a group of six identical residences on Laguna Peak Access Road in Camarillo – the structure does not appear eligible for inclusion on the National or California Registers (Criterion A/1) on the basis of its architecture, nor does it meet the criteria for Ventura County or City of Ventura historic designation.

John S. Broome, who owned the property for nearly 55 years and whose employees occupied the dwelling for most of that time, was a major landholder and farmer in Ventura County since the 1940s. Through his farming and other business pursuits, along with his philanthropic activities, Broome made important contributions to the history of Ventura County. Although a significant personality within the community, his association with the subject property is minor. This residence and outbuilding represent an isolated outpost of Broome's farming and ranching activities and are among many tenant dwellings and outbuildings on Broome's extensive holdings. There are many ranch and residential buildings more closely associated with John S. Broome and more central to the daily functioning of his enterprises. Likewise, the 4515 Copland Drive property is not known to be the site of any important historical event, or to be associated with any broad pattern of historical events. For these reasons, the property is not considered eligible for National or California Register listing on the basis of significant historical associations (Criteria B and C/2 and 3). Likewise, it is not eligible for Ventura County Cultural Heritage Site designation or City of Ventura Landmark or Point of Interest designation. As discussed above, the County and City Landmark criteria closely correspond with CRHR eligibility criteria. Therefore, the property is not considered a historical resource under CEQA.

Because it is not eligible for listing in the National Register of Historic Places, California Register of Historical Resources, or as a Ventura County Cultural Heritage Site, or City of Ventura Landmark or Point of Interest, the residence and tractor shed at 4515 Copland Drive are not considered a historical resource under CEQA. Therefore, there will be no direct or indirect impacts to historical resources as a result of the Project and no mitigation measures are required.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

CR-2	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Based on the excellent ground surface visibility within almost the entirety of the proposed Project site boundaries, the intensive archaeological survey results are considered reliable. Due to the absence of any prehistoric or historic remains identified during the survey, the reliable conditions, and the absence of prehistoric cultural materials identified by one other previous investigation adjacent to and overlapping (by 200 feet or 61 meters) along the eastern property boundary of The Grove Project, the potential for prehistoric and/or historic archaeological resources within the proposed Project site is considered low.

As no potentially significant resources as defined by CEQA Guidelines were identified within the proposed The Grove Project site, future development within the proposed Project site would not have the potential to result in a significant impact on cultural resources as defined by CEQA Guidelines §15064.5(c)(4). As a result, no mitigation measures are required.

Mitigation Measures

No mitigation measures are required.

Residual Impacts

Impacts would be less than significant.

CR-3	Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As described above, construction of the proposed Project would require grading of the Project site and excavation for the placement of building foundations. The ground-disturbing activities could potentially disturb subsurface paleontological resources.

The Project site is generally level and does not contain any prominent geologic features or known paleontological resources. The records search and site survey performed for the Project site did not identify any existing paleontological resources within the site. However, the Project site is underlain by older Quaternary alluvium, which is considered sensitive for paleontological resources (as is the Sespe Foundation which is known to underlie nearby sites), including significant vertebrate and invertebrate fossils. Therefore, round-disturbing construction activities could potentially uncover previously unknown paleontological resources. If such resources are disturbed during Project construction, impacts would be potentially significant.

Mitigation Measures

The on-site monitor shall be equipped and permitted to salvage fossils and samples of sediments as they are unearthed. If unearthed paleontological resources determined to be significant by the on-site paleontologist are discovered during Project construction activities, all work should halt within 50 feet of the find until it can be fully evaluated and excavated by a qualified paleontologist.

Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage.

A report of findings, with an appended itemized inventory of specimens, shall be prepared and submitted to the City. The report and inventory, when submitted to the City, shall signify completion of the program to mitigate impacts on paleontological resources.

Residual Impacts

With implementation of Mitigation Measure MM CR-1, impacts would be less than significant.

CR-4	**Would the project disturb any human remains, including those interred outside of formal cemeteries?**

There are no known cemeteries or burial grounds on the Project site. As previously discussed, the site has a history of use by Native Americans; therefore, there is potential for additional archaeological resources, including burial grounds, to exist. Because the potential exists for human remains to be unearthed during earthwork and grading of the Project site, impacts would be potentially significant.

Mitigation Measures

The following mitigation measure shall be implemented.

MM CR-1	If human remains are encountered during excavation and grading activities within the Project site, the contractor shall stop such activities. In the event of accidental discovery or recognition of any human remains there shall be no further excavation or disturbance of the subject site or any nearby areas reasonably suspected to overlie adjacent human remains and the following steps shall be taken: 1. The coroner of the City in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required; and, If the remains are of Native American origin, either of the following steps shall be taken: a. The coroner should contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means

of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains.

b. Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance when any of the following conditions occurs:

1. The Native American Heritage Commission is unable to identify a descendent.
2. The descendant identified fails to make a recommendation.

The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Residual Impacts

With implementation of the above mitigation measure, impacts would be less than significant.

4.5-6 General Plan Consistency

Policy 9 D: Ensure proper treatment of archeological and historic resources.

Action 9.14: Require archaeological assessments for projects proposed in the Coastal Zone and other areas where cultural resources are likely to be located.

Action 9.15: Suspend development activity when archaeological resources are discovered, and require the developer to retain a qualified archaeologist to oversee handling of the resources in coordination with the Ventura County Archaeological Society and local Native American organizations as appropriate.

Action 9.1 6: Pursue funding to preserve historic resources.

Action 9.17: Provide incentives to owners of eligible structures to seek historic land mark status and invest in restoration efforts.

Action 9.18: Require that modifications to historically -designated buildings maintain their character.

Action 9.19: For any project in a historic district or that would affect any potential historic resource or structure more than 40 years old, require an assessment of eligibility for State and federal register and landmark status and appropriate mitigation to protect the resource.

Action 9.20: Seek input from the City's Historic Preservation Commission on any proposed development that may affect any designated or potential landmark.

Action 9.21: Update the inventory of historic properties.

Action 9.22: Create a set of guidelines and/or policies directing staff, private property owners, developers, and the public regarding treatment of historic resources that will be readily available at the counter.

Action 9.23: Complete and maintain historic resource surveys containing all the present and future components of the historic fabric within the built, natural, and cultural environments.

Action 9.24: Create a historic preservation element.

4.5-7 Cumulative Impacts

Impacts upon cultural resources tend to be site-specific and are assessed on a site-by-site basis. As discussed above, the Project site and surrounding area may contain actual or potential cultural resources, although no such resources have been recorded on the Project site. Because the number of cultural resources is finite, limited, and non-renewable, any assessment of cumulative impacts must take into consideration the impacts of the proposed Project on resources within the Project site; the extent to which those impacts degrade the integrity of the regional resource base; and impacts other projects may have on the regional resource base. If these effects, taken together, result in a collective degradation of the resource base, then those impacts are considered cumulatively considerable.

4.5-8 Significant Unavoidable Impacts

There would be no significant and unavoidable impacts associated with implementation of the proposed Project.

4.6 Geology and Soils

4.6-1 Introduction

This section describes the existing geotechnical and soil resources within The Grove site, identifies the regulatory framework with respect to regulations that address geotechnical conditions, and evaluates the significance of the potential changes to geotechnical and soil resources that could result from development of The Grove. This Environmental Impact Report was prepared based upon review of Tentative Tract Map No. 5626 The Grove, Ventura, California. Previous geotechnical studies conducted on the site were performed by Geolabs-Westlake Village, 2005 and an update for the Project prepared in January 2011 also prepared by Geolabs-Westlake Village (**Appendix 4.6**). The findings, conclusions, and recommendations presented in this report are based on data presented by Geolabs-Westlake Village, as well as appropriate engineering and geologic analysis.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different than those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.6-2 Existing Conditions

1. Geotechnical Setting

The site consists of approximately 25.8 acres and is currently being used for agricultural purposes. The subject site is relatively flat with a slope of approximately 2% towards the southwest. The range of elevation across the site is from a high of 177 feet above mean sea level (MSL) to a low of 142 feet.

2. Site Geology

The following earth materials were encountered during the course of our exploration. More detailed descriptions can be found below.

- **Agricultural Soil**: The upper one to four feet of the property appear to have been disturbed by various agricultural activities. These materials consist of dark brown sandy clay, silt, and silty sand with variable rootlets and arc typically moist and soft to medium stiff silts and clays and very loose to loose sands.
- **Alluvium**: The subject property is underlain by several hundred feet of poorly consolidated, inter-layered silt, clay, and minor sands. The upper 50 feet explored by borings indicate that the fine grained silts and clays are the predominant soil type. These materials are generally moist to wet and very soft to very stiff in consistency. Boring B-l in the northwest portion of the site indicated layers of loose to medium dense silty sand at depths of 8 to 12 feet, approximately 25 feet, and 39 to 43 feet. Locations of boring locations are found in **Figure 4.6-1, Boring Keys** below.

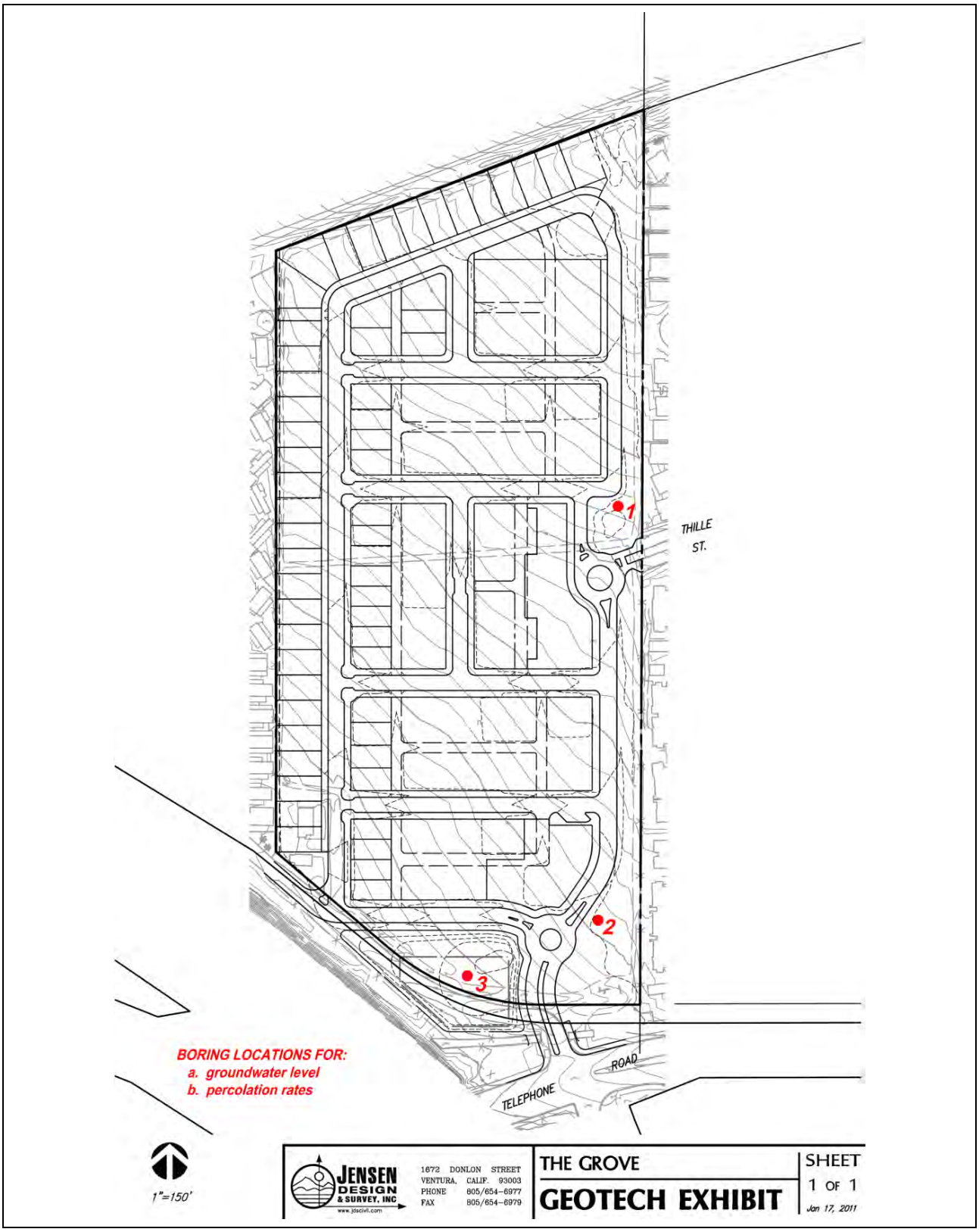

Figure 4.6-1 Boring Keys

3. Groundwater

There is an existing 10-inch-diameter groundwater well on the site, which was drilled in July 2000. In 2001 an 8-inch sleeve was placed inside the existing 10-inch casing. The well on-site has a state well identification number of 02N-22W07P-OI, has a total depth of 580 feet, has a wrapped steel-screened interval from 460 to 580 feet in the confined, discontinuous Fox Canyon Aquifer (San Pedro Formation), and has a current pumping rate of 150 to 170 gallons per minute (gpm). The aquifer is capable of producing 300 to 500 gallons per minute maximum yields, according to historical pump tests conducted on the aforementioned well. The depth to groundwater was measured at 141 feet following the installation of the 8-inch steel liner placed in 2001.

Groundwater was encountered in all six of the borings and ranged from 16.5 feet below the ground surface (ft-bgs) in Boring B-2 to 4 ft-bgs in Boring B-4. These groundwater measurements are attributed to perched groundwater conditions. The high historic water depth for the site is considered 10 feet. The boring map is found in **Figure 4.6-1, Boring Keys**.

4. Expansion

Compaction and Expansion Tests

To determine the compaction characteristics of the on-site materials, compaction tests have been performed in accordance with ASTM D 1 557-00. The maximum dry density is reported in pounds per cubic foot, and the optimum moisture content as a percentage of the maximum dry density. Expansion index tests were performed in accordance with the criteria in UBC 18-2. The results of these tests are included in **Table 4.6-1, Laboratory Test Data** below.

Table 4.6-1 Laboratory Test Data

Sample	Description	Maximum Dry Density (PCF)	Optimum Dry Moisture Content (%)	Expansion Index
B1@5-10'	Silty Sand	123	11	24

Sample	Description	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
B1@10'	Silty Sand	1	43	35	8
B1@15'	Silty	0	26	57	17
B1@25'	Silty Sand	1	39	34	6
B1@30'	Silt	0	12	58	30
B1@35'	Silt	0	39	51	10
B3@20'	Silt	0	14	46	30
B4@25'	Clay	0	11	53	36
B4@40"	Sandy Clay	0	15	54	31
B4@50'	Clay	0	27	51	22

Soil Corrosiveness

A representative sample of the earth materials encountered at the site was tested for resistivity. The test method utilized is in conformity with the procedures outlined in California Test 532/643. Resistivity of soils is inversely proportional to corrosiveness. Thus, the analysis helps in determining whether the soils may have a deleterious effect on underground metallic structures. A generally accepted correlation between resistivity and soil corrosiveness toward metals is provided.

Resistivity (Ohm-Centimeter)	Corrosiveness
< 1,000	severely corrosive
1,000-2,000	corrosive
2,000-10,000	increasingly moderate
> 10,000	increasingly mild

The near surface soils were measured as having an "as-received" resistivity of 110,000 ohm-cm, which is considered increasingly mild corrosive, and a saturated resistivity of 1,100 ohm-cm , which are corrosive soils.

5. Faulting and Seismicity

The California Geological Survey (CGS) defines a fault as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. The CGS defines a fault zone as a zone of related faults that commonly are interconnected and subparallel to each other, but may be branching and divergent.

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface; however, not all earthquakes result in surface rupture. Fault rupture almost always follows pre-existing faults, which are zones of weakness. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements (as compared to fault creep) are more damaging to structures because they are accompanied by shaking.

Faults in Southern California are classified as active, potentially active, or inactive, based on their most recent activity. A fault is considered active if it has demonstrated movement with the Holocene epoch, or approximately in the last 11,000 years. Faults that have demonstrated Quaternary movement (last 1.6 million years), but lack strong evidence of Holocene movement, are classified as potentially active, and faults that have not moved since the beginning of the Quaternary period are deemed inactive.

Under the Alquist-Priolo Earthquake Fault Zoning Act, development near active faults is regulated to mitigate the hazard of surface fault-rupture. The CGS designates Alquist-Priolo Earthquake Fault Zones, which are regulatory zones around active faults. A 50-foot setback from any known trace of any active fault is required for all proposed projects.

The active San Gabriel fault zone is located approximately 4 miles southwest of the Project site, and consists of a northwest-trending zone of imbricate, steeply north-dipping faults. The fault has strong geomorphic expression characterized by displaced geologic units, deflected drainages, strike valleys, notched ridges, subparallel faulting, fracturing, and folding. The zone of faulting ranges in width from a single plane with no more than a few inches of gouge, to a half-mile-wide area of several fault planes, zones of brecciation, and complex, steep-limbed folds.

No known active faults project into or cross the Project site, and the Project site is not located in a State of California Alquist-Priolo Earthquake Fault Zone.

Therefore, the potential for ground rupture is considered to be very low. However, the property is situated within the seismically active Southern California region, and ground shaking is likely to occur due to earthquakes caused by movement along nearby faults.

The methodology in the Uniform Building Code intends to protect and preserve life and limb. It has apparently been successful in that regard. On that basis, minimum structural design should be in compliance with the seismic design provisions of the UBC. Design per the UBC (and hence adoption of the philosophy that life and limb need be protected) is commensurate with the local building ordinance. Being that higher standards of design (i.e., that intend to minimize property damage in the case of a much less likely event) have not been adopted by the governing agency (which is responsible for setting such standards), use of a higher acceleration (than provided by the UBC) is discretionary.

Seismicity

The City of Ventura is located in one of the more seismically active areas of California and is subject to moderate to severe ground shaking. Ground shaking may affect areas hundreds of miles away from the earthquake's epicenter. Historic earthquakes have caused strong ground shaking and damage in many areas surrounding and within the City. The composition of underlying soils in areas located relatively distant from faults can intensify ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill.

Ground shaking is commonly described in terms of peak ground acceleration as a fraction of the acceleration of gravity (g), or by using the Modified Mercalli (MM) Intensity Scale, a common metric for characterizing intensity. The MM Intensity Scale is a more descriptive method involving 12 levels of intensity denoted by Roman numerals. As presented in **Table 4.6-2** below, MM intensities range from level I (shaking that is not felt) to level XII (total damage). MM intensities ranging from IV to X could cause moderate to significant structural damage. However, the degree of structural damage will not be uniform. Not all buildings perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a building all affect its performance.

Table 4.6-2 Modified Mercalli Intensity Scale

Intensity	Description
I	Not felt except by a very few under especially favorable conditions
II	Felt only by a few persons at rest, especially on upper floor of buildings
III	Felt quite noticeable by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck
IV	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight
VI	Felt by all, many frightened. Some heavy furniture moved. A few instances of fallen plaster.
VII	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken
VIII	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
XII	Damage total. Lines of sight and level are distorted. Objects thrown into the air.

Source: US Geology Survey, National Earthquake Information Center website, http://neic.usgs.gov/neis/general/mercalli.html

Potentially active fault systems are expected to produce a wide range of ground shaking intensities. The estimated maximum magnitudes represent characteristic earthquakes on particular faults. While the magnitude is a measure of the energy released in an earthquake, intensity is a measure of the ground shaking effects at a particular location. Shaking intensity can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and characteristics of geologic media. Generally, intensities are highest at the fault and decrease with distance from the fault. However, at any given location, the amount of the resulting shaking motion caused by the sudden movement depends, to a large extent, on local ground conditions (including the degree of water saturation), and may be as severe as 10 miles from the fault or immediately adjacent to it.

Identified faults must be considered in planning and land use activities, and faults identified as active should be considered when deciding on a project's location. No structure should be built astride an active fault. Similarly, utilities that cross such faults must be designed to remain functional even after fault movement.

5. Liquefaction and Related Hazards

Liquefaction is a condition where the soil undergoes continued deformation at a constant low residual stress due to the build-up of high pore water pressures. The possibility of liquefaction occurring at a given site is dependent upon the occurrence of a significant earthquake in the

vicinity; sufficient groundwater to cause high pore pressures; and on the grain size, relative density, and confining pressures of the soil at the site.

The Project site, like other sites in Southern California, is expected to be subjected to significant shaking from earthquakes. The northwest portion of the site is located within a Seismic Hazard Zone for liquefaction hazards.

Blow counts from Boring B-I were compared to CPT I to assess the applicability of typical CPT-SPT correlations for use in liquefaction analyses. The data from CPT I matches well with the findings from Boring B-l. Due to the superior stratigraph obtained from CPT soundings, we have used the CPT soundings for analyses of liquefaction potential. The estimated historic high ground water depth of 10 feet or current groundwater level (whichever is higher) was utilized to evaluate the potential for liquefaction at the site. Based on our analyses, the northwest portion of the site has sand lenses and layers that have a potential to liquefy during a design-level earthquake. The balance of the site does not appear to have a significant potential for liquefaction. These findings appear to correlate with the zoning of the State Seismic Hazard Zone in the west portion of the property.

6. Liquefaction-Induced Hazards

In the liquefied condition, soil may deform with little shear resistance. The amount of soil deformation following liquefaction depends on the looseness of the material, the depth, thickness, and areal extent of the liquefied layers, the ground slope, and the distribution of loads applied by structures. When liquefaction is accompanied by ground displacement or ground failure, it can be destructive. Adverse effects of liquefaction can include ground oscillation, lateral spreads, flow failures, loss of bearing strength, settlement, and increased pressures on retaining walls. The following section provides a brief description of each of these effects.

7. Lateral Spreads

Lateral spreads involve the lateral displacement of large surface blocks of soil due to liquefaction of subsurface soil layers. Lateral spreads generally develop on gentle slopes (most commonly less than 3 degrees) and move toward a free face such as a stream or river channel. Horizontal displacements can range up to several yards. The displaced ground can break up internally causing fissures, scarps, and grabens to form on the surface. Lateral spreads can disrupt foundations, pipelines, and other utilities.

8. Settlement

Settlements (relatively small compared to those that could occur from loss of bearing strength) can occur as pore-water pressures dissipate and consolidate subsequent to liquefaction. These settlements can be damaging, though they tend to be less so than the aforementioned effects from

lateral spreading, flow failures, or bearing failures. Localized liquefaction-induced settlements can also be brought about by the eruption of sand boils.

9. Subsidence

Subsidence is the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence usually occurs as a result of the extraction of subsurface gas, oil, or water or from hydro-compaction; it is not the result of landslide or slope failure. Subsidence typically occurs over a long period of time and can result in structural impacts on developed areas, such as cracked pavement and building foundations, and dislocated wells, pipelines, and water drains. Mitigation of ground subsidence usually requires a regional approach to groundwater conservation and recharge. Such mitigation measures are difficult to implement if the geology of the aquifer and overlying sediment are not well understood. Furthermore, conservation efforts can be quickly offset by rapid growth and attendant heavy water requirements. Because it is not uncommon for several jurisdictions to utilize a continuous groundwater aquifer, mitigation requires regional cooperation among all agencies. No large-scale problems with ground subsidence have been reported in the City's Planning Area. Furthermore, no underground mines or tunnels exist beneath the Project site.

10. Soil Expansion and Erosion

Expansive soils are clay-rich soils which can easily absorb water and swell, or shrink when water is sparse. Excessive swelling and shrinkage cycles can result in distress to improvements and structures. The change in volume exerts stress on buildings and other loads placed on these soils. Expansive soils can be widely dispersed and are found in hillside areas as well as low-lying alluvial basins.

Wind and rain erosion can result in varying amounts of soil erosion which is common in unconsolidated alluvium surficial soils.

4.6-3 Regulatory Setting

1. Federal

Uniform Building Code

The Uniform Building Code (UBC) is published by the International Conference of Building Officials and forms the basis for California's building code, as well as approximately half of the state building codes in the United States. It has been adopted by the California Legislature to address the specific building conditions and structural requirements for California, as well as provide guidance on foundation design and structural engineering for different soil types. The UBC defines and ranks the regions of the United States according to their seismic hazard potential.

There are four types of regions defined by Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest.

United States Department of Agriculture, Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) maps soils and farmland uses to provide comprehensive information necessary for understanding, managing, conserving, and sustaining the nation's limited soil resources. In addition to many other natural resource conservation programs, the NRCS manages the Farmland Protection Program, which provides funds to help purchase development rights to keep productive farmland in agricultural uses. Working through existing programs, United States Department of Agriculture (USDA) joins with state, tribal, and local governments to acquire conservation easements or other interests from landowners.

Earthquake Hazards Reduction Act of 1977

The Earthquake Hazards Reduction Act (EHRA) of 1977 (42 USC § 7701, et seq.) established the National Earthquake Hazards Reduction Program as a long-term earthquake risk reduction program for the United States that focuses on developing effective measures to reduce earthquake hazards; promoting the adoption of earthquake hazard reduction activities by federal, state, and local governments, building standards and model building code organizations, engineers, architects, building owners, etc.; improving the understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering, natural sciences, and social, economic, and decision sciences; and developing and maintaining the Advanced National Seismic System, the George E. Brown Jr. Network for Earthquake Engineering Simulation, and the Global Seismic Network.

Soil and Water Resources Conservation Act

The purpose of the Soil and Water Resources Conservation Act of 1977 is to protect or restore the functions of the soil on a permanent sustainable basis. Protection and restoration activities include prevention of harmful soil changes, rehabilitation of the soil of contaminated sites and of water contaminated by such sites, and precautions against negative soil impacts. If impacts are made on the soil, disruptions of its natural functions and of its function as an archive of natural and cultural history should be avoided, as far as practicable. In addition, the requirements of the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) through the National Pollution Discharge Elimination System (NPDES) permit provide guidance for protection of geologic and soil resources.

2. State of California

California Building Code

Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The *California Building Code* is another name for the body of regulations contained in Title 24, Part

2, of the *California Code of Regulations*, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission which, by law, is responsible for coordinating all building standards. Published by the International Conference of Building Officials, the UBC is a widely adopted model building code in the United States. The California Building Code incorporates by reference the UBC with necessary California amendments. About one-third of the text within the California Building Code has been tailored for California earthquake conditions. Although widely accepted and implemented throughout the United States, local, city, and county jurisdictions can adopt the UBC either in whole or in part.

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Act, originally enacted in 1972 as the Alquist-Priolo Special Studies Zones Act and renamed in 1994, is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Earthquake Fault Zoning Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults (Earthquake Fault Zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to Earthquake Fault Zones.

Under the Alquist-Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are "sufficiently active" and "well-defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for the purposes of the Act as within the last 11,000 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface, using standard professional techniques, criteria, and judgment.

Seismic Hazards Mapping Act

The program and actions mandated by the Seismic Hazards Mapping Act closely resemble those of the Alquist-Priolo Earthquake Fault Zoning Act. The Seismic Hazards Mapping Act of 1990 addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides. The purpose of the Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other hazards caused by earthquakes.

California Department of Transportation

The California Department of Transportation (Caltrans) provides Seismic Design Criteria (SDC), which is an encyclopedia of new and currently practiced seismic design and analysis methodologies for the design of new bridges in California. The SDC adopts a performance-based approach specifying minimum levels of structural system performance, component performance, analysis, and design practices for ordinary standard bridges. The SDC has been developed with

input from the Caltrans Offices of Structure Design, Earthquake Engineering and Design Support, and Materials and Foundations. Memo 20-1 outlines the bridge category and classification, seismic performance criteria, seismic design philosophy and approach, seismic demands and capacities on structural components and seismic design practices that collectively make up Caltrans' seismic design methodology.

Southern California Catastrophic Earthquake Preparedness Plan

The Southern California Catastrophic Earthquake Preparedness Plan, adopted in 2008, examines the initial impacts, inventories resources, provides for the wounded and homeless, and develops a long-term recovery process. The process of Long-Term Regional Recovery (LTRR) provides a mechanism for coordinating federal support to state, tribal, regional, and local governments, nongovernmental organizations (NGOs), and the private sector to enable recovery from long-term consequences of extraordinary disasters. The LTRR process accomplishes this by identifying and facilitating the availability and use of recovery funding sources, and providing technical assistance (such as impact analysis) for recovery and recovery planning support. "Long term" refers to the need to re-establish a healthy, functioning region that will sustain itself over time. Long-term recovery is not debris removal and restoration of utilities, which are considered immediate or short-term recovery actions. The LTRR's three main focus areas are housing, infrastructure (including transportation), and economic development.

3. Local

City of Ventura General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to geological hazards are included in Our Health & Safety.

Policy 7B: Minimize risks from geologic and flood hazards.

Action 7.6: Adopt updated editions of the California Construction Codes and International Codes as published by the State of California and the International Code Council respectively.

Action 7.7: Require project proponents to perform geotechnical evaluations and implement mitigation prior to development of any site:

- with slopes greater than 10% or that otherwise have potential for landsliding,
- along bluffs dunes, beaches, or other coastal features in an Alquist-Priolo earthquake fault zone or within 100 feet of an identified active or potentially active fault,
- in areas mapped as having moderate or high risk of liquefaction, subsidence, or expansive soils, in areas within 100-year flood zones,

in conformance with all Federal Emergency Management Agency regulations.

4.6-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to geotechnical hazards are contained in the City of Ventura Environmental Guidelines and the environmental checklist form contained in Appendix G of the CEQA Guidelines. Impacts related to geotechnical hazards are considered significant if any of the following could occur.

Geo-1 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
- **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**
- **ii) Strong seismic ground shaking?**
- **iii) Seismic-related ground failure, including liquefaction?**
- **iv) Landslides?**

Geo-2 Would the project result in substantial soil erosion or the loss of topsoil?

Geo-3 Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Geo-4 Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Geo-5 Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Geo-6 Would the project change topography or ground surface relief features?

Geo-7 Would the project require earth movement (cut and/or fill) of 10,000 cubic yards or more?

Geo-8 Would the project develop and/or grade on a slope greater than 10 percent natural grade?

Geo-9 Would the project destroy, cover or modify any unique geologic or physical feature?

1. Environmental Effects Found Not To Be Significant

Geo-1	**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:** **(iv) Landslides**
Geo-5	**Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**
Geo-8	**Would the project develop and/or grade on a slope greater than 10 percent natural grade?**

The Project is evaluated for all of the above criteria except **Threshold Geo-1(iv)**, because there are no landslides on the site; for **Threshold Geo-5** because the proposed Project would not require the use of septic tanks for wastewater disposal and Threshold Geo-8 because they no slopes higher than 2% on the site. See **Section 6, Effects Found Not To Be Significant**, for a discussion of this environmental effect, as well as others, that were found not to be significant and are, therefore, not evaluated in detail in this EIR. The remaining thresholds are evaluated below.

4.6-5 Impact Analysis

Geo-2	**Would the project result in substantial soil erosion or the loss of topsoil?**

Construction activity associated with the Project site development may result in wind- and water-driven erosion of soils due to grading activities if soil is stockpiled or exposed during construction. The proposed Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES program requires that the Project's grading operations include adequate provisions for wind and water erosion control during, as well as after, grading operations to reduce soil erosion during construction. The details of erosion control would be incorporated into the Project's Storm Water Pollution Prevention Plan, as specified in **Section 4.9, Hydrology and Water Quality**. Additionally, mitigation identified in **Section 4.3, Air Quality**, would reduce the potential for wind erosion during construction.

Furthermore, a grading plan for the Project would be submitted to the City of Ventura Building and Safety Department and/or the City Geologist for review and approval. As required by the City, the grading plan shall include erosion and sediment control plans. Measures included in this plan may include, but are not limited to, the following.

- Grading and development plans shall be designed in a manner which minimizes the amount of terrain modification;
- The extent and duration of ground disturbing activities during and immediately following periods of rain shall be limited, to avoid the potential for erosion which may be accelerated by rainfall on exposed soils; and

- The amount of water entering and exiting a graded site shall be limited though the placement of interceptor trenches or other erosion control devices.

Erosion and sediment control plans shall be submitted to the City for review and approval prior to the issuance of grading permits.

Level of Significance Before Mitigation

Impacts would be potentially significant prior to mitigation.

Mitigation Measures

MM Geo-1	All mitigation measures recommended in the August 26, 2005 General Plan EIR and the January 4, 2011 GeoLabs Geotechnical Report shall be incorporated into the Project.

Level of Significance after Mitigation

Impacts would be less than significant after mitigation.

Geo-9 Would the project destroy, cover or modify any unique geologic or physical feature?

No unique geologic or physical features would be destroyed, covered or modified with implementation of the proposed Project. Impact under this criterion would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant for seismic shaking.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

All impacts would be less than significant.

Geo-1 Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

As previously discussed, the Project site is not located in an Alquist-Priolo Earthquake Fault Zone, and no known active faults are located within the Project site. Therefore, impacts due to rupture of a known earthquake fault would be less than significant under **Threshold Geo-1(i)**.

ii) Strong seismic ground shaking?
iii) Seismic related ground failure, including liquefaction

Since the Project site is located in Southern California, an area of strong seismic activity, ground shaking on the Project site is anticipated. The intensity of ground shaking generally depends on several factors, including the distance to the earthquake epicenter, the earthquake magnitude, the response characteristics of the underlying materials, and the quality and type of construction. In order to reduce impacts due to ground shaking, building design and construction would adhere to the standards and requirements detailed in the California Building Code (*California Code of Regulations*, Title 24), the City of Ventura Building Code, and the professional engineering standards appropriate for the seismic zone in which the Project site is located. Conformance with these design standards would be enforced through building plan review and approval by the City of Ventura Department of Public Works (Building and Safety Division) prior to the issuance of building permits for any structure or facility on the Project site.

Subsequent to publishing the geotechnical report in 2005, the 2010 California Building Code was adopted, which is now based on the International Building Code (the CBC in place during the preparation of the 2005 geotechnical report was based on the Uniform Building Code). Significant changes to the Cl.3C include methodology for developing seismic ground motion for design. The following section addresses design ground mot ion parameters for the subject property, considering the methodology proposed in the current building code.

Seismic Ground Motion Values

The 2010 CBC addresses seismic design based on response spectra considering an earthquake with a 2% probability of exceedance in 50 years (2475 year return period). Seismic ground motion values were determined using the general procedure within CBC §16 13.5. The maximum considered earthquake and design spectral response accelerations were determined using the Java Ground Motion Parameter Calculator (version 5.0.9a) available on the USGS Earthquake Hazards Program website.

The results indicate an average peak ground acceleration (pga) of 0.60 g for the CBC design-basis earthquake ground motion. This value can be magnitude-weighted for use in the liquefaction analysis. The magnitude weighted pga is considered 0.5 g, which is identical to the pga used in the liquefaction analysis, when considering a magnitude of 7.5.

Level of Significance Before Mitigation

Impacts would be potentially significant for seismic shaking.

Mitigation Measures

Implementation of Mitigation Measure **MM Geo-1** (page 4.6-14) will reduce any impacts for seismic shaking.

Level of Significance After Mitigation

After mitigation impacts would be less than significant.

Geo-3	**Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**
Geo-4	**Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**
Geo-6	**Would the project change topography or ground surface relief features?**
Geo-7	**Would the project require earth movement (cut and/or fill) of 10,000 cubic yards or more?**

Liquefaction

Coarse-grained sedimentary soils and groundwater arc present at the site within the upper fifty feet of the soil profile. Analyses of the subsurface data indicates the layers and lenses of the coarse grained soils have sufficiently low relative densities to be susceptible to liquefaction during an earthquake equivalent to, or larger than, the design level earthquake. These susceptible coarse-grained soils were noted in our soundings CPT I, but were basically absent from CPT4. The liquefiable layers in CPT I appear to have significant thickness, extending from 10 to 13 feet, and 25 to 27 feet.

Liquefaction-Induced Settlement Potential

The potential for liquefaction-induced settlement has been evaluated using the procedures proposed by Tokirnatsu and Seed (1987). The site's soil profiles contain mostly silt, clay and minor sandy soils. The results of these analyses indicate potential seismic settlement during a design level earthquake may be on the order of 3 inches near boring B-I and CPT I and settlement on the order of one-quarter inch near CPT4. This difference is due to the greater amount of sand in the area of the site near boring B-1 and CPTI (see **Figure 4.6-1, Boring Keys**, page 4.6-2).

These calculations attempt to estimate total settlement. Differential settlement due to lateral heterogeneities in the soil profile would obviously be only a fraction of the total, and that would be buffered by the planned fills. The State Seismic Hazard Guidelines recommend the differential settlement be considered to be as much as two-thirds of the total settlement, with a common value of Y. Considering the probability of a design level earthquake, it is our opinion that the potential for differential settlement resulting from seismically induced settlement to exceed estimations is a result of other phenomenon is small.

Lateral Spread, Ground Oscillation

The liquefaction analyses indicate a potential for liquefaction in the upper 30 feet of the soil profile in the northwest area of the site. Therefore, we have further evaluated the potential impacts of

liquefaction to determine the potential for ground surface disturbance from lateral spreading, ground oscillation, and other manifestations such and sand boils which could create local areas of bearing loss. The northwest portion of the site has a potential for lateral spreading. At this time the analysis indicates a potential of 1.5 feet of lateral spreading for the sloping ground case (the applicable condition). This lateral spreading may allow for localized areas of bearing loss during a design-level event in areas of weakened soil such as areas where sand boils or fissures occur. At this time, the area considered susceptible is the area within the State designated Seismic Hazard Zone. The potential for these effects can be significantly reduced if the loose sandy alluvium in the upper section of the soil profile (noted at depths of 10 to 13 feet in CPT l) could be replaced with compacted fill during grading or strengthened by alternative means.

Level of Significance Before Mitigation

Impacts would be potential significant.

Mitigation Measures

Implementation of Mitigation Measure **MM Geo-1** (page 4.6-14) will reduce any impacts for seismic shaking.

Level of Significance After Mitigation

After mitigation impacts would be less than significant.

Geo-6	**Would the project change topography or ground surface relief features?**
Geo-7	**Would the project require earth movement (cut and/or fill) of 10,000 cubic yards or more?**

Topographic changes on the Project site would occur during grading operations to accommodate the proposed Project. The Project would include grading approximately 75,000 cut and 63,000 fill and is depicted on **Figure 4.6-2** below). All grading would concur consistent with the UBC.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Figure 4.6-2 Preliminary Earthwork Map

4.6-6 Cumulative Impacts

Related projects would be subject to varying risks associated with geotechnical hazards. Due to the site-specific nature of geological conditions, geotechnical impacts are typically assessed on a project-by-project basis in accordance with CEQA. Related projects would be subject to mitigation measures similar to those required for a project in addition to the UBC regulations. The UBC regulations would require that structures be constructed to meet minimum seismic safety standards. In most cases cumulative impacts would be reduced to less than significant levels through compliance with existing codes and regulations. Therefore, with the implementation of appropriate mitigation measures and existing regulations cumulative impacts would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.7 Climate Change/Greenhouse Gases

4.7-1 Introduction

This report provides a discussion of global climate change, existing regulations pertaining to global climate change, an inventory of the approximate greenhouse gas (GHG) emissions that would result from the Project, and an analysis of the significance of the impact of these GHGs. The Greenhouse Gas Emissions Technical Report was prepared by Pomeroy Environmental Services, January 2016 (**Appendix 4.7**).

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different than those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.7-2 Existing Conditions

1. Project Location

The City of San Buenaventura is located in Ventura County, California. The Grove Specific Plan area is located in the western portion of the City, specifically at the western terminus of Thille Street, north of Copland Drive. The Project site is bounded on the north by Highway 126 (SR-126), on the east by the Thille Community neighborhood, on the south by Telephone Road and Copland Drive, and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange (see **Figure 4.7-1, Aerial Photograph of the Project Site**). The plan area is approximately 26.51 acres in area and is currently within unincorporated area, but is within the City of Ventura's Sphere of Influence and is designated on the General Plan Map as Medium Density Residential; 9 to 20 dwelling units per acre. The site is currently used for seasonal floral agricultural production.

The proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). The Tentative Map (see **Figure 3-4**, **Vesting Tentative Tract Map No. 5626**, page 3-7) would create individual lots for 32 front-loaded single-family residences, 26 alley-loaded single-family residences, and 4 larger lots that could accommodate up to 192 units in a combination of alley-loaded single-family homes, townhouses, and courtyard or stacked multi-family housing. Additionally, the Project incorporates a linear park/bike path system, and a full pedestrian walkway system designed to reduce vehicular use.

Source: Figure 1.1 (page 3), The Grove Specific Plan No. 9; January 2015.

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Figure 1
Aerial Photograph of the Project Site

Source: Greenhouse Gas Emissions Technical Report, Pomeroy Environmental Services, January 2016

Figure 4.7-1 Aerial Photograph of the Project Site

2. General Terms and Scientific Literature

Earth's natural warming process is known as the "greenhouse effect." This greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass allows solar radiation (sunlight) into Earth's atmosphere, but prevents radiative heat from escaping, thus warming Earth's atmosphere. GHGs keep the average surface temperature of the Earth to approximately 60 degrees Fahrenheit. However, excessive concentrations of GHGs in the atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences.

Scientists studying the particularly rapid rise in global temperatures have determined that human activity has resulted in increased emissions of GHGs, primarily from the burning of fossil fuels (e.g., during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing), deforestation, agricultural activity, and the decomposition of solid waste.

Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect.[8] While the increase in temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change." Global climate change is evidenced in changes to wind patterns, storms, precipitation, and air temperature.

3. GHG Components

GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride.[9] A general description of each GHG discussed in this report is provided in **Table 4.7-1**, **Description of Identified Greenhouse Gases**. CO_2 is the most abundant GHG. Other GHGs are less abundant, but have higher global warming potential (GWP) than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions.

8 Climate Change 101: Understanding and Responding to Global Climate Change, published by the Pew Center on Global Climate Change and the Pew Center on the States.

9 As defined by California Assembly Bill (AB) 32 and Senate Bill (SB) 104.

Table 4.7-1 Description of Identified Greenhouse Gases

Greenhouse Gas	General Description
CO_2	CO_2 is an odorless, colorless GHG, which has both natural and manmade sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing; man made sources of CO_2 are burning coal, oil, natural gas, and wood.
CH_4	CH_4 is a flammable gas and is the main component of natural gas. When one molecule of CH_4 is burned in the presence of oxygen, one molecule of CO_2 and two molecules of water are released. There are no ill health effects from CH_4. A natural source of CH_4 is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH_4, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
N_2O	N_2O is a colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
HFCs	HFCs are synthetic man-made chemicals that are used as a substitute for chlorofluorocarbons (CFCs) for automobile air conditioners and refrigerants. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987.
PFCs	PFCs have stable molecular structures and do not break down though the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above the Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
SF_6	SF_6 is an inorganic, odorless, colorless, non-toxic, and nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Source: Association of Environment Professionals, Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007.

4. Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index based upon radiative properties that is used to estimate the potential future impacts of emissions of different gases upon the climate system in a relative sense. GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. A summary of the atmospheric lifetime and GWP of selected gases is presented at **Table 4.7-2, Atmospheric Lifetimes and Global Warming Potentials**.

Table 4.7-2 Atmospheric Lifetimes and Global Warming Potentials

Pollutant	Lifetime (Years)	Global Warming Potential (20-Year)	Global Warming Potential (100-Year)
Carbon Dioxide	100	1	1
Nitrous Oxide	121	264	265
Nitrogen Trifluoride	500	12,800	16,100
Sulfur Hexafluoride	3,200	17,500	23,500
Perfluorocarbons	3,000-50,000	5,000-8,000	7,000-11,000
Black Carbon	days to weeks	270-6,200	100-1,700
Methane	12	84	28
Hydrofluorocarbons	Uncertain	100-11,000	100-12,000

Source: CARB, First Update to the Climate Change Scoping Plan, May 2014.

5. Projected Impacts of Global Warming in California

The primary effect of rising global concentrations of atmospheric GHG levels is a rise in the average global temperature of approximately 0.2 degrees Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming is likely to occur given the expected rise in global atmospheric GHG concentrations from innumerable sources of GHG emissions worldwide, which would induce further changes in the global climate system during the current century.[10] Adverse impacts from global climate change worldwide and in California include:

- Declining sea ice and mountain snow peak levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in atmospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;[10]
- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets;[11]
- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;[11]
- Declining Sierra Mountains snowpack levels, which account for approximately half of the surface water storage in California, by 70% to as much as 90% over the next 100 years; [12]
- Increasing the number of days conducive to ozone formation (e.g., clear days with intense sun light) by 25% to 85% (depending on the future temperature scenario) in high O_3 areas located in the Southern California area and the San Joaquin Valley by the end of the 21st Century; [12] and
- Increasing the potential for erosion of California's coastlines and seawater intrusion into the Sacramento Delta and associated levee systems due to the rise in sea level.[12]

10 US EPA, Draft Endangerment Finding, 74 Federal Regulations 18886, 18904, April 24, 2009.
11 IPCC, Climate Change, 2007.
12 Cal/EPA, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2006

6. Existing Statewide Greenhouse Gas Emissions

California is the fifteenth largest emitter of GHG on the planet, representing about 2% of the worldwide emissions.[13] **Table 4.7-3** below shows the California GHG emissions inventory for years 2003 to 2013. Statewide GHG emissions slightly decreased in 2009 due to a noticeable drop in on-road transportation, electricity generation, and industrial emissions. In 2012 and 2013, total GHG and per capita emissions increased, albeit only by a single percentage point. This increase was driven primarily by strong economic growth in the state, the unexpected closure of the San Onofre Nuclear Generating Station, and drought conditions that limited in-state hydropower.

Table 4.7-3 California Greenhouse Gas Emissions Inventory

	CO2e Emissions (Million Metric Tons)										
Scoping Plan Category	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Transportation	184	187	189	189	189	178	171	170	168	167	169
Electric Power	113	115	108	105	114	120	101	90	88	95	91
Commercial and Residential	42	43	41	42	42	42	43	44	44	42	44
Industrial	93	94	92	90	87	88	85	89	88	89	93
Recycling and Waste	8	8	8	8	8	8	8	8	8	8	9
Agriculture	37	36	37	38	37	38	36	36	36	38	36
High Global Warming Potential	9	10	10	11	12	13	14	16	17	18	19
Emissions Total	486	493	485	483	489	487	458	453	449	457	459

Source: CARB, California Greenhouse Gas Inventory 2003-2013, April 24, 2015; http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_2000-13_20150831.pdf, accessed January 2016. 2013 data is most recent year available.

4.7-3 Regulatory Framework

1. International

The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC) since it was produced by the United Nations in 1992. The UNFCCC is an international environmental treaty with the objective of "stabilization of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." This is generally understood to be achieved by stabilizing global GHG concentrations between 350 and 400 ppm, in order to limit the global average temperature increases between 2°C and 2.4°C above preindustrial levels. The UNFCCC itself does not set limits on GHG emissions for individual countries or enforcement mechanisms. Instead, the treaty provides for updates, called "protocols," that would identify mandatory emissions limits.

Five years later, the UNFCCC brought nations together again to draft the Kyoto Protocol (1997). The Kyoto Protocol established commitments for industrialized nations to reduce their collective emissions of six GHGs (CO_2, CH_4, N_2O, SF_6, HFCs, and PFCs) to 5.2% below 1990 levels by 2012. The United States is a signatory of the Kyoto Protocol, but Congress has not ratified it and the United States has not bound itself to the Protocol's commitments. The first commitment period of

13 CARB, Climate Change Scoping Plan, December 2008.

the Kyoto Protocol ended in 2012. Governments, including 38 industrialized countries, agreed to a second commitment period of the Kyoto Protocol beginning January 1, 2013 and ending either on December 31, 2017 or December 31, 2020, to be decided by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its seventeenth session.

In Durban (17th session of the Conference of the Parties in Durban, South Africa, December 2011), governments decided to adopt a universal legal agreement on climate change as soon as possible, but not later than 2015. Work was to begin on this immediately under a new group called the Ad Hoc Working Group on the Durban Platform for Enhanced Action. Progress was also made regarding the creation of a Green Climate Fund (GCF) for which a management framework was adopted.

2. Federal

With regard to GHG emissions and global climate change, in 2002, President George W. Bush set a national policy goal of reducing the GHG emissions intensity (tons of GHG emissions per million dollars of gross domestic product) of the nation's economy by 18% by 2012. No binding reductions were associated with the goal. The United States instead opted for a voluntary and incentive-based approach toward GHG emissions reductions, identified as the Climate Change Technology Program (CCTP). CCTP is a multi-agency research and development coordination effort, led by the Secretaries of Energy and Commerce.

The U.S. Supreme Court ruled in *Massachusetts v. Environmental Protection Agency*, 127 S. Ct. 1438 (2007), that CO_2 and other GHGs are pollutants under the federal Clean Air Act (CAA), which the United States Environmental Protection Agency (USEPA) must regulate if it determines they pose an endangerment to public health or welfare. On December 7, 2009, the USEPA Administrator made two distinct findings: 1) the current and projected concentrations of the six key GHGs in the atmosphere (i.e., CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) threaten the public health and welfare of current and future generations; and 2) the combined emissions of these GHGs from motor vehicle engines contribute to GHG pollution, which threatens public health and welfare.

USEPA subsequently published its endangerment finding for GHGs in the Federal Register. The USEPA Administrator determined that six GHGs, taken in combination, endanger both the public health and welfare of current and future generations. Although the endangerment finding discusses the effects of six GHGs, it acknowledges that transportation sources only emit four of the key GHGs: CO_2, CH_4, N_2O, and HFCs. Further, the USEPA Administrator found that the combined emissions of these GHGs from new motor vehicles contribute to air pollution that endangers the public health and welfare under the CAA, Section 202(a).

USEPA requires large emitters of GHG to collect and report data. Fossil fuel and industrial GHG suppliers, motor vehicle and engine manufacturers, and facilities that emit 25,000 metric tons or more of CO_2 equivalent per year to report GHG emissions annually data to USEPA. The Rule is referred to as 40 Code of Federal Regulations (CFR) Part 98-Greenhouse Gas Reporting Program.

Energy Independence and Security Act (EISA)

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the Bush Administration issued an executive order on May 14, 2007, directing USEPA, the United States Departments of Transportation, and the United States Departments of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. On December 19, 2007, the EISA was signed into law, which requires an increased corporate average fuel economy (CAFE) standard of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020.

EISA requires establishment of interim standards (from 2011 to 2020) that will be the maximum feasible average fuel economy for each fleet. On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final environmental impact statement analyzing interim standards for model years 2011 to 2015 passenger cars and light trucks. NHTSA issued a final rule for model year 2011 on March 23, 2009. In addition to setting increased CAFE standards for motor vehicles, the EISA included other provisions: 1) renewable fuel standard (RFS) (Section 202); 2) appliance and lighting efficiency standards (Sections 301–325); and (3) building energy efficiency (Sections 411-441). Additional provisions addressed energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs. On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The federal standards apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles built in model years 2012 through 2016.

In addition, on September 15, 2009, President Obama proposed new fuel efficiency standards for cars and trucks that required fuel economy to increase by 5% annually. In 2016, new cars and trucks will have to achieve an average rating of 35.5 mpg, four years sooner than the law now requires. Alternatively, manufacturers could meet this requirement if their vehicles, on average, emit no more than 250 grams of CO_2 per mile.

Stationary Source Regulations

Under the CAA, once a pollutant is regulated under any part of the Act, (as was the case with GHG emissions after the motor vehicle regulations were finalized in April 2010) major new sources or modifications are subject to the Prevention of Significant Deterioration (PSD) program and to Title V operating permits. In the PSD program, major new or modified stationary sources (such as power plants and manufacturing facilities) are required to implement best available control technologies for pollution abatement.

The Tailoring Rule

On May 13, 2010, USEPA issued the final version of a new rule for GHG emissions, referred to as the Tailoring Rule. The rule states that new or modified sources that already are subject to New

Source Review requirements for other pollutants will be required to also meet these requirements for GHGs if they increase emissions by more than 75,000 tons of CO_2e annually. Then on July 1, 2011, the requirements will apply to new sources that emit at least 100,000 tons of CO_2e annually and to major modifications of existing sources emitting 75,000 tons of CO_2e annually, even if they do not meet the threshold new source review requirements for other pollutants. In July 2012, the requirements will begin applying Title V operating permit requirements to existing sources not currently covered by Title V if they emit 100,000 tons of CO_2e annually. In regulating these GHG emissions, USEPA has developed guidelines for states to use in determining what would satisfy requirements as "best available control technology" as part of new source review of major modifications or new sources.

GHG and Fuel Efficiency Standards for Passenger Cars and Light-Duty Trucks

In April 2010, USEPA and NHTSA finalized GHG standards for new (model year 2012 through 2016) passenger cars, light-duty trucks, and medium-duty passenger vehicles. Under these standards, CO_2 emission limits would decrease from 295 grams per mile (g/mi) in 2012 to 250 g/mi in 2016 for a combined fleet of cars and light trucks. If all of the necessary emission reductions were made from fuel economy improvements, then the standards would correspond to a combined fuel economy of 30.1 miles per gallon (mpg) in 2012 and 35.5 mpg in 2016. The agencies issued a joint Final Rule for a coordinated National Program for model years 2017 to 202 5 light-duty vehicles on August 28, 2012, that would correspond to a combined fuel economy of 36.6 mpg in 2017 and 54.5 mpg in 2025.

GHG and Fuel Efficiency Standards for Medium-and Heavy-Duty Engines and Vehicles

In October 2010, the USEPA and NHTSA announced a program to reduce GHG emissions and to improve fuel efficiency for medium-and heavy-duty vehicles (model years 2014 through 2018). These standards were signed into law on August 9, 2011. The two agencies' complementary standards form a new Heavy-Duty National Program that has the potential to reduce GHG emissions by 270 million metric tons and to reduce oil consumption by 530 million barrels over the life of the affected vehicles.

Additional Stationary Source Rules

As a consequence of the decision in Massachusetts v. Environmental Protection Agency, USEPA entered into a December 2010 judicial settlement ending a long-running lawsuit seeking the inclusion of GHGs under the New Source Performance Standards (NSPS) provisions of the CAA. USEPA committed to promulgating NSPS for GHGs for power plants and refineries. NSPS are technology-based standards for both new and existing sources which apply to specific categories of stationary sources.

3. State of California

Executive Order (E.O.) S-3-05

On June 1, 2005, E.O. S-3-05 set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80% below 1990 levels. The E.O. establishes state GHG emission targets of 1990 levels by 2020 (the same as Assembly Bill 32) and 80% below 1990 levels by 2050. It calls for the Secretary of California Environmental Protection Agency (Cal/EPA) to be responsible for coordination of state agencies and progress reporting. A recent CEC Report concludes, however, that the primary strategies to achieve this target should be major "decarbonization" of electricity supplies and fuels, and major improvements in energy efficiency.

In response to the E.O., the Secretary of the Cal/EPA created the Climate Action Team (CAT). California's CAT originated as a coordinating council organized by the Secretary for Environmental Protection. It included the Secretaries of the Natural Resources Agency, the Department of Food and Agriculture, and the Chairs of the Air Resources Board, Energy Commission, and Public Utilities Commission. The original council was an informal collaboration between the agencies to develop potential mechanisms for reductions in GHG emissions in the state. The council was given formal recognition in E.O. S-3-05 and became the CAT.

The original mandate for the CAT was to develop proposed measures to meet the emission reduction targets set forth in the executive order. The CAT has since expanded and currently has members from 18 state agencies and departments. The CAT also has ten working groups, which coordinate policies among their members. The working groups and their major areas of focus are as follows:

- Agriculture: Focusing on opportunities for agriculture to reduce GHG emissions through efficiency improvements and alternative energy projects, while adapting agricultural systems to climate change
- Biodiversity: Designing policies to protect species and natural habitats from the effects of climate change
- Energy: Reducing GHG emissions through extensive energy efficiency policies and renewable energy generation
- Forestry: Coupling GHG mitigation efforts with climate change adaptation related to forest preservation and resilience, waste to energy programs and forest offset protocols
- Land Use and Infrastructure: Linking land use and infrastructure planning to efforts to reduce GHG from vehicles and adaptation to changing climatic conditions
- Oceans and Coastal: Evaluating the effects sea level rise and changes in coastal storm patterns on human and natural systems in California
- Public Health: Evaluating the effects of GHG mitigation policies on public health and adapting public health systems to cope with changing climatic conditions

- Research: Coordinating research concerning impacts of and responses to climate change in California
- State Government: Evaluating and implementing strategies to reduce GHG emissions resulting from state government operations
- Water: Reducing GHG impacts associated with the state's water systems and exploring strategies to protect water distribution and flood protection infrastructure

Executive Order B-30-15

On April 29, 2015, Governor Edmund G. Brown Jr. issued an Executive Order to establish a California GHG reduction target of 40% below 1990 levels by 2030. This new emission reduction target of 40% below 1990 levels by 2030 is a step toward the ultimate goal of reducing emissions by 80% percent below 1990 levels by 2050. The Executive Order also specifically addresses the need for climate adaptation and directs state government to:

- Incorporate climate change impacts into the state's Five-Year Infrastructure Plan;
- Update the Safeguarding California Plan – the state climate adaption strategy – to identify how climate change will affect California infrastructure and industry and what actions the state can take to reduce the risks posed by climate change;
- Factor climate change into state agencies' planning and investment decisions; and
- Implement measures under existing agency and departmental authority to reduce GHG emissions.

Assembly Bill 32 (AB 32)

In September 2006, the California Global Warming Solutions Act of 2006, also known as AB 32, was signed into law. AB 32 focuses on reducing GHG emissions in California and requires the California Air Resources Board (CARB) to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. The CARB initially determined that the total statewide aggregated GHG 1990 emissions level and 2020 emissions limit was 427 million metric tons of CO_2e. The 2020 target reduction was estimated to be 174 million metric tons of CO_2e.

To achieve the goal, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. Because the intent of AB 32 is to limit 2020 emissions to the equivalent of 1990, it is expected that the regulations would affect many existing sources of GHG emissions and not just new general development projects. Senate Bill 1368, a companion bill to AB 32, requires the California Public Utilities Commission and the CEC to establish GHG emission performance standards for the generation of electricity. These standards will also apply to power that is generated outside of California and imported into the state.

AB 32 charges CARB with the responsibility to monitor and regulate sources of GHG emissions in order to reduce those emissions. On June 1, 2007, CARB adopted three discrete early action measures to reduce GHG emissions. These measures involved complying with a low carbon fuel standard, reducing refrigerant loss from motor vehicle air conditioning maintenance, and increasing methane capture from landfills.[14] On October 25, 2007, CARB tripled the set of previously approved early action measures. The approved measures include improving truck efficiency (i.e., reducing aerodynamic drag), electrifying port equipment, reducing PFCs emissions from the semiconductor industry, reducing propellants in consumer products, promoting proper tire inflation in vehicles, and reducing SF_6 emissions from the non-electricity sector.

The CARB AB 32 Scoping Plan (Scoping Plan) contains the main strategies to achieve the 2020 emissions cap. The Scoping Plan was developed by CARB with input from the CAT and proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce oil dependency, diversify energy sources, and enhance public health while creating new jobs and improving the state economy. The GHG reduction strategies contained in the Scoping Plan include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. Key approaches for reducing GHG emissions to 1990 levels by 2020 include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewable electricity standard of 33%;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout the state, and pursuing policies and incentives to achieve those targets; and
- Adopting and implementing measures to reduce transportation sector emissions.

CARB has adopted the First Update to the Climate Change Scoping Plan.[15] This update identifies the next steps for California's leadership on climate change. The first update to the initial AB 32 Scoping Plan describes progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities for the next several years. It also frames activities and issues facing the state as it develops an integrated framework for achieving both air quality and climate goals in California beyond 2020. Specifically, the update covers a range of topics, including the following:

- An update of the latest scientific findings related to climate change and its impacts, including short-lived climate pollutants.

14 CARB, Proposed Early Action Measures to Mitigate Climate Change in California, April 20, 2007.
15 CARB, First Update to the Climate Change Scoping Plan: Building on the Framework, May 2014.

- A review of progress-to-date, including an update of Scoping Plan measures and other state, federal, and local efforts to reduce GHG emissions in California.
- Potential technologically feasible and cost-effective actions to further reduce GHG emissions by 2020.
- Recommendations for establishing a mid-term emissions limit that aligns with the state's long-term goal of an emissions limit 80% below 1990 levels by 2050.
- Sector-specific discussions covering issues, technologies, needs, and ongoing state activities to significantly reduce emissions throughout California's economy through 2050.
- In December 2007, CARB approved a total statewide GHG 1990 emissions level and 2020 emissions limit of 427 million metric tons of CO_2e. As part of the update, CARB revised the 2020 statewide limit to 431 million metric tons of CO_2e, an approximately 1% increase from the original estimate. The 2020 business-as-usual (BAU) forecast in the update is 509 million metric tons of CO_2e. The state would need to reduce those emissions by 15.3% to meet the 431 million metric tons of CO_2e 2020 limit.

SB 97 and CEQA Guidelines

In August 2007, the Legislature adopted Senate Bill 97 (SB 97), requiring the Office of Planning and Research (OPR) to prepare and transmit new CEQA guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the California Natural Resources Agency by July 1, 2009. Following receipt of these guidelines, the Resources Agency was required to certify and adopt the guidelines prepared by OPR by January 1, 2010.

OPR submitted its proposed guidelines to the Secretary for Natural Resources on April 13, 2009. The Natural Resources Agency then undertook the formal rulemaking process to certify and adopt the amendments as part of the state regulations implementing CEQA. The CEQA Guidelines amendments were adopted on December 30, 2009 and became effective on March 18, 2010.

The CEQA Guideline amendments do not specify a threshold of significance for GHG emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis, but rely on the lead agencies in making their own significance threshold determinations based upon substantial evidence. The CEQA Guidelines amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

Senate Bill (SB) 375

California's Sustainable Communities and Climate Protection Act, also referred to as Senate Bill 375 (SB 375) became effective January 1, 2009. The goal of SB 375 is to help achieve AB 32's GHG emissions reduction goals by aligning the planning processes for regional transportation, housing,

and land use. SB 375 requires CARB to develop regional reduction targets for GHGs, and prompts the creation of regional plans to reduce emissions from vehicle use throughout the state. California's 18 Metropolitan Planning Organizations (MPOs) have been tasked with creating "Sustainable Community Strategies" (SCS) in an effort to reduce the region's vehicle miles traveled (VMT) in order to help meet AB 32 targets through integrated transportation, land use, housing and environmental planning. Pursuant to SB 375, CARB set per-capita GHG emissions reduction targets from passenger vehicles for each of the state's 18 MPOs. For the SCAG region, the targets are set at 8% below 2005 per capita emissions levels by 2020 and 13% below 2005 per capita emissions levels by 2035.

Senate Bill (SB) 743

SB 743, adopted September 27, 2013, encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled that contribute to GHG emissions, as required by AB 32. Key provisions of SB 743 include reforming aesthetics and parking CEQA analysis for urban infill projects and eliminating the measurement of auto delay, including level of service (LOS), as a metric that can be used for measuring traffic impacts in transit priority areas. SB 743 requires the State Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. It also allows OPR to develop alternative metrics outside of transit priority areas.

California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Located in Title 24, Part 6 of the CCR and commonly referred to as "Title 24," these energy efficiency standards were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The goal of Title 24 energy standards is the reduction of energy use. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.[16] On May 31, 2012, the California Energy Commission (CEC) adopted the 2013 Building and Energy Efficiency Standards. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25% (residential) to 30% (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in home and businesses.

California Green Building Code

The California Green Building Code, referred to as CALGreen, is the first statewide green building code. It was developed to provide a consistent, approach for green building within California.

16 CEC, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations.

CALGreen lays out minimum requirements for newly constructed buildings in California, which will reduce greenhouse gas emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20%, to divert 50% of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors.

4. Regional

Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

While Southern California is a leader in reducing emissions, and ambient levels of air pollutants are improving, the SCAG region continues to have the worst air quality in the nation. SCAG completed the RTP/SCS, which includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. Goals and policies included in the RTP/SCS to reduce air pollution consist of adding density in proximity to transit stations, mixed-use development and encouraging active transportation (i.e., non-motorized transportation such as bicycling). SCAG promotes the following policies and actions related to active transportation to help the region confront congestion and mobility issues and consequently improve air quality:

- Implement Transportation Demand Management (TDM) strategies including integrating bicycling through folding bikes on buses programs, triple racks on buses, and dedicated racks on light and heavy rail vehicles;
- Encourage and support local jurisdictions to develop "Active Transportation Plans" for their jurisdiction if they do not already have one;
- Expand Compass Blueprint program to support member cities in the development of bicycle plans;
- Expand the Toolbox Tuesday's program to encourage local jurisdictions to direct enforcement agencies to focus on bicycling and walking safety to reduce multimodal conflicts;
- Support local advocacy groups and bicycle-related businesses to provide bicycle-safety curricula to the general public;
- Encourage children, including those with disabilities, to walk and bicycle to school;
- Encourage local jurisdictions to adopt and implement the proposed SCAG Regional Bikeway Network; and
- Support local jurisdictions to connect all of the cities within the SCAG region via bicycle facilities.

Ventura County Air Pollution Control District (VCAPCD)

The VCAPCD has long participated in the CEQA process by providing project applicants, environmental consultants, and lead agencies with air quality information and analyses needed for

environmental documents required by CEQA. The District also reviews and comments on environmental documents sent to it for that purpose.

At its September 13, 2011 meeting, the Ventura County Air Pollution Control Board requested that District staff report back on possible GHG significance thresholds for evaluating GHG impacts of land use projects in Ventura County under CEQA. The District staff responded with a report titled Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects (November 8, 2011). The report presents a number of options for setting GHG significance thresholds. Since 2008, the CARB and several larger local air districts (South Coast, Bay Area, and San Joaquin) have undertaken efforts to identify and adopt suitable GHG significance thresholds for land use development projects in their respective jurisdictions. Several other California air districts, including VCAPCD, are still looking into this complex matter as part of their CEQA implementing procedures (CEQA Guidelines §15022) or thresholds of significance development (CEQA Guidelines §15064.7). Such thresholds, however, would only be advisory and not regulatory directives. That is because, although California air districts have a vital role in the CEQA review process, and have authority to regulate emissions from indirect or areawide sources (*Health & Safety Code* §40716(a)), they do not have authority over land use projects (*Health & Safety Code* §40716(b)), and have not adopted control measures, rules, or regulations governing GHG emissions from land use projects. While no conclusive threshold of significance has been adopted, the District staff concludes the report stating the District will continue to evaluate and develop suitable interim GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region.

5. Local

City of Ventura

The City of Ventura's General Plan, adopted in 2005, provides goals, policies, and actions developed to guide future development in the City through the 2025 planning horizon, with an emphasis on a more intense "Infill First" strategy designed to preserve open space and prevent unsustainable growth. The General Plan establishes the following goals relevant to GHGs:

- Our Sustainable Infrastructure – Our goal is to safeguard public health, well-being, and prosperity by providing and maintaining facilities that enable the community to live in balance with natural systems.

Policy 5A: Follow an approach that contributes to resource conservation.

Action 5.1: Require low flow fixtures, leak repair, and drought tolerant landscaping (native species if possible), plus emerging water conservation techniques, such as reclamation, as they become available.

Action 5.5: Provide incentives for new residences and businesses to incorporate recycling and waste diversion practices, pursuant to guidelines provided by the Environmental Services Office.

4.7-4 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed Project would have a significant impact if it would:

GHG-1	**Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?**
GHG-2	**Would the Project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

A project's GHG emissions typically are very small in comparison to state or global GHG emissions. In isolation, a Project may have no significant direct impact on climate change. However, the increased accumulation of GHGs from more than one project and many sources in the atmosphere may result in global climate change, which can cause the adverse environmental effects previously discussed. Accordingly, the threshold of significance for GHG emissions determines whether a project's contribution to global climate change is "cumulatively considerable." Many air quality agencies concur that GHG and climate change should be evaluated as a potentially significant cumulative impact, rather than a project-specific and direct impact.

VCAPCD Draft Thresholds

As stated previously, the VCAPCD staff prepared a report titled Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects (November 8, 2011). The report presents a number of options for setting GHG significance thresholds. Since 2008, the CARB and several larger local air districts (South Coast, Bay Area, and San Joaquin) have undertaken efforts to identify and adopt suitable GHG significance thresholds for land use development projects in their respective jurisdictions. Several other California air districts, including VCAPCD, are still looking into this complex matter as part of their CEQA implementing procedures (CEQA Guidelines §15022) or thresholds of significance development (CEQA Guidelines §15064.7). Such thresholds, however, would only be advisory and not regulatory directives. That is because, although California air districts have a vital role in the CEQA review process, and have authority to regulate emissions from indirect or areawide sources (*California Health & Safety Code* §40716(a)), they do not have authority over land use projects (*California Health & Safety Code* §40716(b)), and have not adopted control measures, rules, or regulations governing GHG emissions from land use projects.

Given that Ventura County is adjacent to the South Coast AQMD jurisdiction and is a part of the SCAG region, District staff believes it makes sense to set local GHG emission thresholds of significance for land use development projects at levels consistent with those set by the South Coast AQMD. While no conclusive threshold of significance has been adopted, the District staff will continue to evaluate and develop suitable interim GHG threshold options for Ventura County with preference for GHG threshold consistency with the South Coast AQMD and the SCAG region.

Based on VCAPCD staff recommendation summarized above, this analysis will rely in part on the draft thresholds of the SCAQMD. The SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds in 2008. In December 2008, the SCAQMD adopted an interim 10,000 metric tons CO_2e ($MTCO_2e$) per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. The SCAQMD continues to consider adoption of significance thresholds for non-industrial development projects. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1: Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2: Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan (i.e., a Climate Action Plan) that has gone through public hearings and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3: Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 $MTCO_2e$/year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 $MTCO_2e$/year), commercial projects (1,400 $MTCO_2e$/year), and mixed-use projects (3,000 $MTCO_2e$/year). Under option 2 a single numerical screening threshold of 3,000 $MTCO_2e$/year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4: Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 $MTCO_2e$ per service population for project level analyses and 6.6 $MTCO_2e$ per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5: Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The thresholds identified above are not adopted by the SCAQMD or VCAPCD, nor distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain. However, for the purpose of evaluating the GHG impacts associated with the Project, this analysis utilizes a dual threshold approach. With respect to the Project's generation of GHG emissions, the proposed 3,500 $MTCO_2e$ per year Tier 3 threshold for residential projects will be utilized to illustrate the scope of the Project's increase in GHG emissions. Tier 3 requires that a project's incremental increase in GHG emissions would be below or mitigated to less than

the significance screening level. Proposed projects that do not exceed the thresholds would not be considered to have a cumulatively considerable increase in GHG emissions. This draft threshold has been used for other projects in the South Coast Air Basin, Ventura County, and the City of Ventura (e.g., Olivas Park Drive Extension Project EIR, 2014; and Mar-Y-Cel Project MND, 2015).

In addition, and separate from the quantified draft screening threshold, a project's impact with respect to the generation of GHG emissions would be considered less than significant if it can demonstrate it would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Specifically, these include Executive Orders S-3-05 and B-30-15 (i.e., statewide GHG targets for years 2020, 2030 and 2050), SCAG's RTP/SCS, SB 375, AB 32 and the corresponding Scoping Plan.

4.7-5 Environmental Impacts

1. Methodology

The California Climate Action Registry (CCAR) General Reporting Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.[17]

CARB believes that consideration of so-called indirect emissions provides a more complete picture of the GHG footprint of a facility. Annually reported indirect energy usage aids the conservation awareness of a facility and provides information to CARB to be considered for future strategies.[18] CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the OPR has noted that lead agencies "should make a good-faith effort, based on available information, to calculate, model, or estimate…GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption,

17 Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use a product, material, or service.

18 CARB, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), Planning and Technical Support Division Emission Inventory Branch, October 19, 2007.

water usage and construction activities."[19] Therefore, direct and indirect emissions have been calculated for the Project from these sources.

Construction-Related Emissions

Construction GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod 2013.2.2). For a complete discussion of the construction methodology, please refer to the Air Quality Technical Report prepared for the Project. The mobile source emission methodology for on-road construction emissions, associated with worker commute and delivery of materials, uses a vehicle miles traveled rate calculated by CalEEMod in order to generate values for annual emissions. Emission factors are derived from the EMFAC model using light duty automobile factors for worker commute and heavy duty truck factors for deliveries.

The Association of Environmental Professionals (AEP) has recommended that total construction emissions be amortized and added to operational emissions (AEP 2010). Accordingly, the construction-related GHG emissions have been amortized over a 30-year operational period to be consistent with this guidance.

The most common GHGs emitted in association with the construction of land use developments include CO_2, CH_4 and N_2O. CalEEMod provides these GHGs and translates them into a common currency of carbon dioxide equivalent (CO_2e). In order to obtain the CO_2e, an individual GHG is multiplied by its global warming potential. The GWP designates on a pound for pound basis the potency of the GHG compared to CO_2.

Operational Emissions

Operational GHG emissions were calculated using CalEEMod 2013.2.2. Operational GHG sources include motor vehicles, electricity, natural gas, water usage/wastewater generation, landscaping/maintenance equipment, and solid waste generation and disposal.

Motor vehicle emission calculations associated with operation of the Project use a projection of annual VMT, which is derived from the trips provided in the Project traffic study and the default trip characteristics in CalEEMod. These values account for the daily and seasonal variations in trip frequency and length associated with travel to and from the Project Site and other activities that require a commute.

GHGs are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. Combustion of any type of fuel emits criteria pollutants and GHGs directly into the atmosphere; when this occurs in a building this is a direct emission source associated with that building and CalEEMod calculates all of these pollutants. GHGs are also emitted during the generation of electricity from fossil fuels. When electricity is used, the electricity generation

19 State of California Office of Planning and Research (OPR), Technical Advisory, CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review, June 19, 2008.

typically takes place off-site at a power plant; electricity use generally causes emissions in an indirect manner and therefore GHG emissions have been calculated from electricity generation.

The amount of water used and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. It will often be the case that the water treatment and wastewater treatment occur outside of the project area. In this case, it is still important to quantify the energy and associated GHG emissions attributable to the water use. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both methane and nitrous oxide. Thus, GHG emissions have been calculated from water used and wastewater generated by the Project.

Municipal solid waste (MSW) is the amount of material that is disposed of by land filling, recycling, or composting. CalEEMod calculates the indirect GHG emissions associated with waste that is disposed of at a landfill. The program uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecyle) data for individual land uses. If waste disposal information was not available, waste generation data was used. CalEEMod uses the overall California Waste Stream composition to generate the necessary types of different waste disposed into landfills. CalEEMod quantifies the GHG emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon. CalEEMod also quantifies the CO_2 emissions associated with the combustion of methane, if applicable. Default landfill gas concentrations were used as reported in Section 2.4 of AP-42.[20] The IPCC has a similar method to calculate GHG emissions from MSW in its 2006 Guidelines for National Greenhouse Gas Inventories.

Planting trees will sequester CO_2 and is considered to result in a one-time carbon-stock change. Trees sequester CO_2 while they are actively growing. The amount of CO_2 sequestered depends on the type of tree. CalEEMod uses default annual CO_2 accumulation per tree for specific broad species classes.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, roto-tillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. The emissions associated from landscape equipment use were processed using OFFROAD 2007 and CARB's Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (6/13/2003).

20 See AP-42, Fifth Edition, Compilation of Air Pollutant Emission Factors, prepared by the Office of Air Quality Planning and Standards, U.S. EPA, January 1995.

GHG-1	**Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?**
GHG-2	**Would the Project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

Construction GHG Emissions

This analysis assumes construction would be undertaken with the following primary construction phases: 1) Demolition/Site Clearing, 2) Grading, and 3) Structural Building, Finishing and Paving. Each primary construction phase has been further detailed below. This analysis assumes construction would begin in 2017 and residential uses could be occupied as early as 2018 for the first buildout phase and as early as 2019 for the second buildout phase. Thus, this analysis assumes that 250 residential units would be built out over an approximate 18-month building construction period. While the buildout phases may take longer in reality, this analysis represents the fastest buildout potential resulting in a conservative worst-case GHG impact scenario.

Demolition/Site Clearing

The Project would require the demolition of the existing house and barn (approximately 50 cubic yards or 24 tons of demolition debris), the removal of trees, fences, and other existing debris. This analysis estimates demolition and site clearing would occur for approximately one week and a maximum total of 16 truck trips would be required. This analysis assumes the daily on-site demolition activities would require the following equipment (or generally equivalent mix): three excavators, two rubber tired dozers, and one concrete/industrial saw.

Grading and Site Preparation

After the completion of demolition/site clearing, grading and site preparation activities would occur for approximately 6 months and would involve the cut and fill of land to ensure the proper base and slope for the entire site, including building pads and foundations. At this time, no soil import or export activities are anticipated. This analysis assumes daily grading activities would require the following equipment (or generally equivalent mix): two excavators, one grader, one rubber tired dozer, two scrapers, and two tractors/loaders/backhoes.

Structural Building, Finishing and Paving

As discussed previously, the proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). For purposes of this analysis, it is estimated that building construction would occur in two phases. The first buildout phase would include the construction of up to 150 residential units over approximately 9 months with occupied units in 2018. At the completion of the first buildout phase, the second buildout phase would include the construction of up to 100 residential units over

approximately 9 months with occupied units in 2019. Thus, this analysis assumes 250 residential units would be built out over an approximate 18-month building construction period. While the buildout phases may take longer in reality, this analysis represents the fastest buildout potential resulting in a conservative worst-case GHG impact scenario. Upon completion of the building shells, finishing (coatings) and paving of parking areas and streets would follow. This analysis assumes that the maximum daily construction building activities would require the following equipment for each phase (or generally equivalent mix): one crane, three forklifts, one generator set, three tractors/loaders/backhoes, one welder, one air compressor, two pavers, two pieces of paving equipment, and two rollers.

Emissions of GHGs were calculated using CalEEMod for each phase and each year of construction of the Project and the results of this analysis are presented in **Table 4.7-4** below. The table shows the greatest annual increase in GHG emissions from the Project's construction activities would be 766.29 CO_2e MTY in 2017. The total amount of construction-related GHG emissions is estimated to be approximately 1,465.71 CO_2e MTY, or approximately 48.86 CO_2e MTY amortized over a 30-year period.

Table 4.7-4 Project Construction-Related Greenhouse Gas Emissions

Year	CO_2e Emissions (Metric Tons per Year)
Phase 1 – Year 2017	766.29
Phase 1 – Year 2018	370.31
Phase 1 Total	1,136.60
Phase 2 – Year 2018	95.04
Phase 2 – Year 2019	234.07
Phase 2 Total	329.11
Total Project (Phase 1 & 2 Combined)	1,465.71

CalEEMod data provided in Appendix A to the GHG Technical Report

Operational GHG Emissions

As discussed previously, the proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). For purposes of this analysis, it is estimated that buildout and operations would occur in two phases. The first buildout phase would include the construction of up to 150 residential units with occupied units in 2018. At the completion of the first buildout phase, the second buildout phase would include the construction of up to 100 residential units with occupied units in 2019. Thus, this analysis assumes 250 residential units would be operational (58 single-family detached units and 192 condominiums). While the buildout phases may take longer in reality, this analysis represents the fastest buildout potential resulting in a conservative worst-case impact scenario.

The GHG emissions resulting from operation of the Project, which involves the usage of on-road mobile vehicles, electricity, natural gas, water, landscape equipment, and generation of solid waste

and wastewater have been calculated with CalEEMod. As shown in **Table 4.7-5**, the increase in GHG emissions generated by the Project would be approximately 2,512.98 $MTCO_2e$ (metric tons of CO_2e) per year, which would be under the 3,500 $MTCO_2e$ per year Tier 3 threshold for residential projects.

Table 4.7-5 Project Operational Greenhouse Gas Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year)		
	Project Phase 1	Project Phase 2	Total Project (Phase 1 & 2 Combined)
Area	1.86	1.24	3.10
Energy	325.69	216.69	542.38
Mobile (Motor Vehicles)	1,070.31	693.03	1,763.34
Solid Waste Generation	39.62	26.25	65.87
Water Consumption	53.66	35.77	89.43
Construction Emissions*	37.89	10.97	48.86
Total	1,529.03	983.95	2,512.98

*The total construction GHG emissions were amortized over 30 years and added to the operation of the Project.
CalEEMod data provided in Appendix A to the GHG Technical Report

In addition, and separate from the quantitative analysis above, there is substantial evidence to support that the Project is qualitatively consistent with statewide goals and policies in place for the reduction of greenhouse gas emissions, including Executive Orders S-3-05 and B-30-15 (i.e., statewide GHG targets for years 2020, 2030 and 2050), SCAG's RTP/SCS, SB 375, AB 32 and the corresponding Scoping Plan. Consistent with the spirit and intent of state and local plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gases, the Grove Specific Plan has identified several project objectives and design features that would serve to reduce GHG emissions, including but not limited to the following:

- **Land Use Transportation**: The Grove Specific Plan property is a true infill site, surrounded on all sides by medium to high density residential development and existing urban transportation corridors. The site's location adjacent to Telephone Road offers direct access to Gold Coast Transit Route 6B, a major cross-town route. The site also offers access to the Telephone Road and Thille Street Class II bike lanes, as well as access to the bicycle and pedestrian trail that extends eastward of the site to Victoria Avenue and the Government Center between the Thille neighborhood and SR-126. A paseo/park linkage would be provided from this trail through the Project site down to Telephone Road. There would also be a pad site for a future pedestrian bridge connecting to Camino Real Park. These features are consistent with the 2005 Ventura General Plan policies that encourage infill development, reducing dependency on the automobile, and reducing vehicle miles traveled (VMT) and associated GHG emissions. These features would also be consistent with SB 375, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Through the SB 375 process, regions will work to integrate development patterns and

the transportation network in a way that achieves the reduction of GHG emissions while meeting housing needs and other regional planning objectives. SB 375 reflects the importance of achieving significant additional reductions of greenhouse gas emissions from changed land use patterns and improved transportation to help achieve the goals of AB 32. Specifically, SB 375 requires CARB to develop regional reduction targets for GHGs, and prompts the creation of regional plans to reduce emissions from vehicle use throughout the state. California's 18 MPOs have been tasked with creating Sustainable Community Strategies (SCS) in an effort to reduce the region's VMT in order to help meet AB 32 targets through integrated transportation, land use, housing and environmental planning. Thus, the Project's infill location and access to transit, bicycle lanes and pedestrian trails would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs through integrated transportation, land use, housing and environmental planning.

- **Low-Flow Water Fixtures**: The Project will include low-flow and/or high efficiency water fixtures such as low-flow toilets, urinals, showerheads, faucets, and high-efficiency clothes-washers and dishwashers;
- **Vegetation & Landscape Irrigation Systems**: The Project will include drought-tolerant landscaping and will implement efficient landscape irrigation techniques to reduce water use and its associated GHG emissions;
- **Energy Reduction**: The Project will reduce energy demand through the following building design techniques:
    - Use overhangs, shutters, louvers and shade trees to minimize solar heat gain. Design buildings to allow for the passage of cooling breezes;
    - Reduce the amount of conditioned space by using covered outdoor circulation, porches, and balconies;
    - Use tight, well-insulated wall systems and high-performance glazing;
    - Design buildings to accommodate renewable energy sources as they become cost effective, including solar, wind, and biomass.
    - Include energy efficient appliances and high-efficiency lighting.
    - The Project will be built to meet and exceed the state's 2013 Green Building Standards (CALGreen Code) and as may be amended;
- **Alternative Fuel Vehicles**: The Project's residential uses will be designed to accommodate the charging of electric vehicles, supporting and promoting the use of electric vehicles.

Based on the information provided above, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and these impacts would be less than significant.

Level of Significance Before Mitigation

None

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No impact.

4.7-6 Cumulative Impacts

Although the Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. As stated in recent CEQA case law,[21] the global scope of climate change and the fact that carbon dioxide and other greenhouse gases, once released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are also global rather than local. For many air pollutants, the significance of their environmental impact may depend greatly on where they are emitted; for greenhouse gases, it does not. For individual projects, like the proposed residential development, which are designed to accommodate long-term growth in California's population and economic activity, a certain amount of greenhouse gas emissions is as inevitable as population growth. However, meeting our statewide GHG reduction goals does not preclude all new development. Rather, the Scoping Plan - the state's roadmap for meeting A.B. 32's target - assumes continued growth and depends on increased efficiency and conservation in land use and transportation from all Californians. To the extent a project incorporates efficiency and conservation measures sufficient to contribute its portion of the overall greenhouse gas reductions necessary, one can reasonably argue that the Project's impact is not cumulatively considerable, because it is helping to solve the cumulative problem of greenhouse gas emissions as envisioned by California law.[22]

As discussed above, the Project's total construction and operational GHG emissions would not exceed the 3,500 $MTCO_2e$ per year Tier 3 threshold for residential projects. In addition, and also detailed previously, the Project's objectives and design features would be consistent with local and state-wide goals and policies aimed at reducing the generation of GHGs, including CARB's AB 32 Scoping Plan. Furthermore, and also discussed previously, the Project's infill location and access to transit, bicycle lanes and pedestrian trails would be consistent with local and statewide goals and policies (i.e., RTP/SCS and SB 375) aimed at reducing the generation of GHGs through integrated transportation, land use, housing and environmental planning.

21 Supreme Court of California, Center for Biological Diversity et al. v. California Department of Fish and Wildlife (2015), S217763, 11-13.

22 Addressing the Significance of Greenhouse Gas Emissions, supra, 4 Golden Gate U. Envtl. L.J. at p. 210.

Therefore, based on the discussion above, the Project's generation of GHG emissions would not be considered cumulatively considerable because of the scope of the emissions (i.e., the Project would not exceed the 3,500 $MTCO_2e$ per year Tier 3 threshold for residential projects) and because the Project would not conflict with an applicable plan, policy or regulation for the purposes of reducing the emissions of greenhouse gasses. Therefore, the Project's cumulative impact would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

The Project would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs, including Executive Orders S-3-05 and B-30-15 (i.e., statewide GHG targets for years 2020, 2030 and 2050), SCAG's RTP/SCS, SB 375, AB 32 and the corresponding Scoping Plan. Therefore, the Project's generation of GHG emissions would not make a cumulatively considerable contribution to GHG emissions and climate change, and impacts would be less than significant.

4.8 Hazards and Hazardous Materials

4.8-1 Introduction

This section describes the existing hazardous materials within the City, identifies the regulatory framework with respect to regulations that address hazardous materials, and evaluates the significance of potential hazardous impacts that could result from implementation of The Grove Specific Plan. In addition, to reduce impacts, mitigation measures are included when applicable. This Environmental Impact Report was prepared based upon review of the Phase I Environmental Site Assessment prepared by TRAK Environmental Group, Inc. dated October 31, 2014 (**Appendix 4.8**).

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.8-2 Existing Conditions

1. Hazardous Materials

Section 25501(m) of the *California Health and Safety Code* defines a "hazardous material" as:

> A material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous Materials" include, but are not limited to, hazardous substances, hazardous wastes, and any materials which a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or environment.

"Hazardous waste" is any hazardous material that is abandoned, discarded, or recycled, as defined by §25117 and §25124 of the *California Health and Safety Code*. In addition, hazardous waste may occasionally be generated by actions that change the composition of previously nonhazardous materials. The criteria used to characterize a material as hazardous include ignitability, toxicity, corrosivity, reactivity, radioactivity, or bioactivity.

As will be discussed in more detail below, hazardous materials and wastes are defined and regulated in the United States by federal, state, and local regulations, including those administered by the U.S. Environmental Protection Agency (USEPA), the California Environmental Protection Agency (Cal/EPA), the U.S. Occupational Safety and Health Administration, the U.S. Department of Transportation, the U.S. Nuclear Regulatory Commission, and various other agencies. Hazardous materials include hazardous wastes and in the discussion below (except as noted) hazardous materials refers to both hazardous materials and wastes.

Public health is potentially at risk whenever hazardous materials are, or would be, used and when hazardous wastes are disposed of, including transportation of hazardous materials and wastes. It is necessary to differentiate between the "hazard" of these materials and the acceptability of the "risk" they pose to human health and the environment. A hazard is any situation that has the potential to cause damage to human health and the environment. The California Department of Toxic Substances Control (DTSC) determines the risk to health and public safety by the probability of exposure, in addition to the inherent toxicity of a material.

Factors that can influence the health effects when human beings are exposed to hazardous materials or wastes include: the dose the person is exposed to, the frequency of exposure, the duration of exposure, the exposure pathway (route by which a chemical enters a person's body), and the individual's unique biological susceptibility.

Hazardous Waste Generation and Management

There are four general categories of waste management: source reduction, recycling, treatment, and residuals disposal. All of these activities can occur on-site at the location where they are generated. Recycling, treatment, and disposal can also occur off-site but require additional intermediate support to store and transport the waste.

The generation and handling of hazardous waste in the City is overseen by multiple agencies including: U.S. EPA, the California Department of Toxic Substances Control, the California Department of Resources, Recycling and Recovery (CalRecycle), the Los Angeles County Department of Public Works, Sanitation Districts of Los Angeles County, and the City's fire department. Businesses that generate hazardous waste are either Large-Quantity Generators (e.g., heavy industrial or commercial facilities) or Small-Quantity Generators (e.g., dry cleaners, automotive repair shops). These businesses require an EPA identification number used to monitor and track hazardous waste activities.

Certain land uses can indicate that there is potential for generating hazardous materials or waste, or that existing hazardous materials or waste may be present (for example: industrial uses, gas stations, and dry cleaners). Hazardous materials can also be used and generated during construction activities. Common hazardous materials that are typically present on construction sites include oil, transmission fluids, fuels, solvents, paints, asphalt, and adhesives. A variety of federal, state, and local regulations require best management practices to be implemented to ensure that these wastes are not released into the environment.

Transportation of Hazardous Materials

The transportation of hazardous materials within the State of California is subject to various federal, state, and local regulations. It is illegal to transport explosives or inhalation hazards on any public highway not designated for that purpose, unless the use of the highway is required to permit loading or delivery of such materials (*California Vehicle Code* §31602(b), §32104(a)). The

California Highway Patrol (CHP) designates through routes to be used for the transportation of hazardous materials.

There are several risks associated with the transportation of hazardous materials. Transport of hazardous materials via truck, rail, and other modes involves a degree of risk of accident and release. The use of hazardous materials and the generation of hazardous waste in the construction and maintenance of the transportation system are other avenues for risk or exposure. Past disposal of hazardous materials in a manner that creates residual contamination of soil or water can be a source of risk when such sites are disturbed in the course of construction of transportation projects and development. Each of these avenues is discussed below.

Hazardous materials move through the City by a variety of modes: truck, rail, air, and pipeline. Any given shipment of hazardous materials can involve one or more movements, or trip segments, that can occur by different modes. For instance, a shipment might arrive at a port by ship (out of the City) and be picked up by a truck, with a transfer to rail, and a final delivery by truck again (for a total of four movements). Each movement of hazardous materials implies a degree of risk, depending on the material being moved, the mode of transport, and numerous other factors.

Vehicles transporting hazardous materials through the City use many of the same freeways, arterials, and local streets as other traffic in the region. This creates a risk of accidents and associated release of hazardous materials that could create a risk for drivers and for people living, working, and going to school along these routes. A similar risk exists for use of rail for hazardous materials transport. Rail line maintenance is the responsibility of each private company that owns and operates each line. Rail routes pass through urban areas and near sensitive land uses such as schools, hospitals, and residential areas. Rail shipments through urban areas and on local rail spurs usually travel at slower speeds than in rural areas reducing the possibility of major safety related accidents. In addition, shipping by rail is often safer than shipping by truck, because rail tankers can reduce the number of trucks on the road hauling hazardous materials to one-quarter to one-tenth, thus reducing the chances of trucking related accidents.

Pipelines tend to be protected because they are buried and result in relatively low risk, although they could be affected by seismic or other activity that could cause rupture. According to the USDOT, Hazardous Materials Information System, in 2014, highways accounted for the largest share of hazardous materials incidents, with a total of 15,156 incidents or 88% of total incidents. Air accounted for 8% of total hazardous materials incidents, followed by rail and water transport.[23]

In addition to the CHP-designated routes, the City has designed various roadways as truck routes to provide for the regulated movement of trucks through the City (**Figure 4.8-1, Railroads and Truck Routes in Ventura).**

23 United States, State Department of Transportation Hazardous Materials Information System. 2015. 10 Year Incident Summary Reports.

Source: Ventura County General Plan, Hazards Appendix, June 28, 2011

Figure 4.8-1 Railroads and Truck Routes in Ventura

These transportation routes are used to transport hazardous materials (among other materials/freight) from suppliers to users. Transportation accidents involving hazardous materials could occur on any of the routes, potentially resulting in explosions, physical contact by emergency response personnel, environmental degradation, and exposure to the public via airborne exposure. The roadways identified as truck routes within the plan area include US 101 Northbound, Telephone Road, and US 101 Southbound.

Hazardous Waste Sites

GeoTracker

GeoTracker is the California State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense, Site Cleanup Program) as well as permitted facilities such as operating underground storage tanks (USTs) and land disposal sites.

The Geographic Environmental Information Management System (GEIMS) is a data warehouse that tracks regulatory data about underground fuel tanks, fuel pipelines, and public drinking water supplies using GeoTracker. GeoTracker and GEIMS were developed pursuant to a mandate by the California State Legislature (AB 592, SB 1189) to investigate the feasibility of establishing a statewide GIS for leaking underground fuel tank (LUFT) sites. The GeoTracker database provides lists of several site types including Leaking Underground Storage Tank (LUST) Cleanup Sites,[24] Other Cleanup Sites,[25] Land Disposal Sites,[26] Military Sites,[27] Waste Discharge Report (WDR) Sites, and Permitted Underground Storage Tank (UST) Facilities.[28]

One site has been listed under the Leaking Underground Storage Tank (LUST). One site (Master Plating, 1255 Callens Rd., EDR ID E26, one-quarter to one-half mile WSW) is listed with Priority (LOP/LOW – Minor or no potential water resource impact). In TRAK's opinion, the referenced features are unlikely to pose risk to the subject site, due to agency case status, localized or *de minimus* nature, distance from and/or hydrogeologic position relative to the subject site.

No other data references were listed.

24 A Leaking Underground Storage Tank is any one or combination of leaking tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or completely beneath the surface of the ground.

25 Cleanup sites include spills, leaks, investigations and ongoing cleanups.

26 These sites are landfill sites.

27 Include military underground storage tank sites, military privatized sites, and military cleanup sites (formerly known as DoD non UST).

28 Permitted underground storage tanks are underground storage tanks which have been permitted, designed, installed, and/or modified, can be operating, or eventually closed in compliance with local, state, and federal requirements.

EnviroStor

The DTSC's EnviroStor database is an online search and Geographic Information System (GIS) tool. EnviroStor provides access to detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. EnviroStor allows a search for information on investigation, cleanup, permitting, and/or corrective actions that are planned, being conducted or have been completed under DTSC's oversight. The EnviroStor database provides information on a variety of cleanup sites and permitted hazardous materials sites. The cleanup sites include Federal Superfund (National Priority List)[29], State Response[30], Voluntary Cleanup[31], School Cleanup[32], Corrective Action[33], as well as several others. There are three sites under Evaluation located at 1255 Callens Road and 1301 Callens Road, as shown in **Figure 4.8-2** below.

The California Spills, Leaks, Investigations, and Cleanups (CA SLIC) list, is maintained by Regional Water Quality Control Board, and includes contaminated sites that impact groundwater or have the potential to impact groundwater. Three CA SLIC sites were reported within the ASTM search distance of one-half mile. Of these, two SLIC sites listed have been closed, and one site (Master Plating, 1255 Callens Rd., EDR ID E26, ¼ - ½ mile WSW) is listed with Facility Status (Open – Site Assessment). In TRAK's opinion, the referenced features are unlikely to pose risk to the subject site, due to agency case status, localized or *de minimus* nature, distance from and/or hydrogeologic position relative to the subject site.

No other cleanup sites have been listed.

2. Fire Hazards

A majority of the City is urbanized and developed, allowing for limited open space. The specific plan area is located in an urbanized area in the City with a limited number of vacant lots and is not located in or adjacent to a Very High Fire Hazard Severity Zone (VHFHSZ).

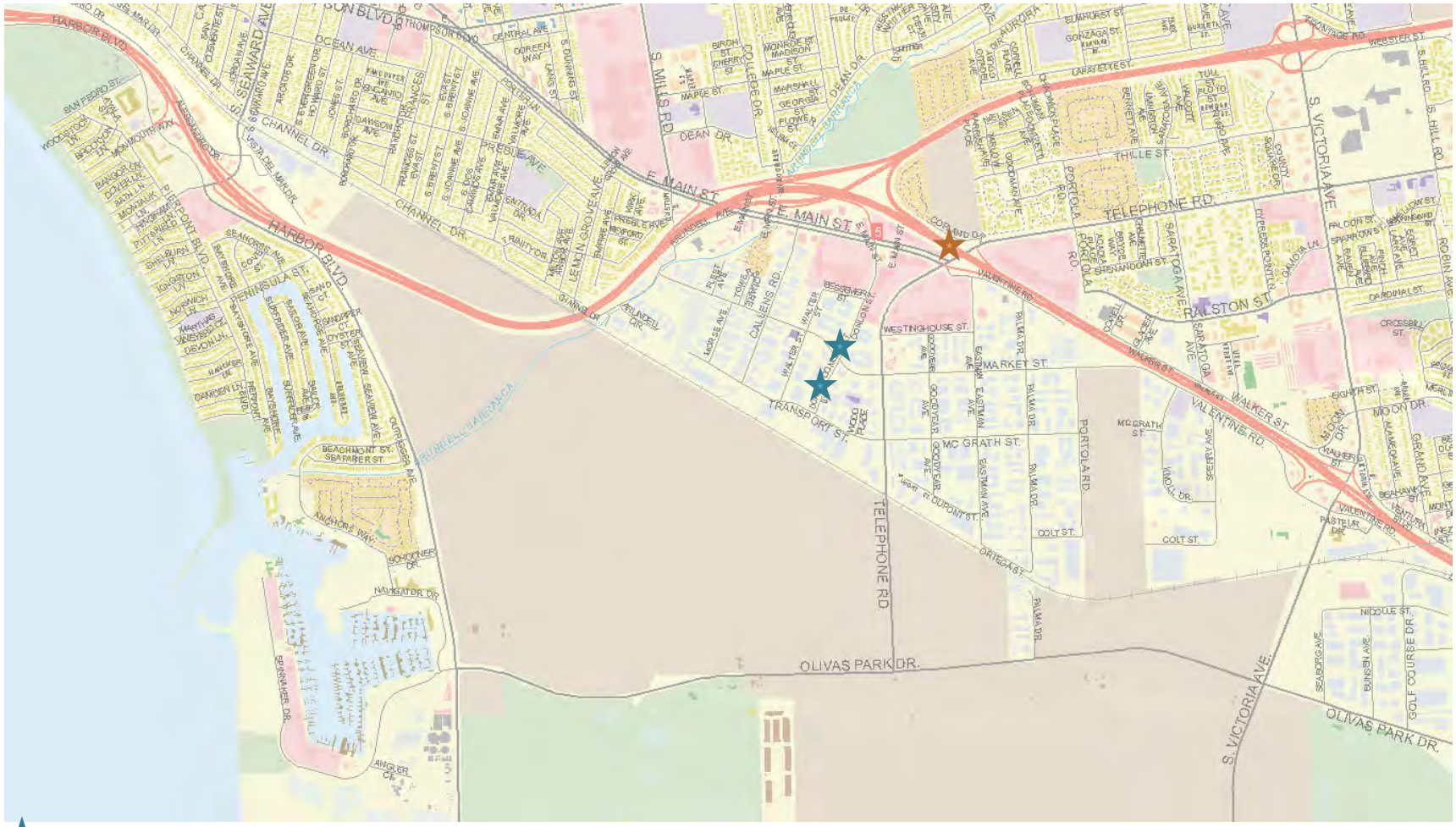
29 A federal superfund site identifies sites where the U.S. EPA proposed, listed, or delisted a site on the National Priorities List (NPL). The list of sites is developed and maintained by U.S. EPA, which typically has primary regulatory oversight for the sites listed on the NPL.

30 A state response site identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

31 A voluntary cleanup site includes sites with either confirmed or unconfirmed releases, and the project proponents have requested that DTSC oversee evaluation, investigation, and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

32 A school cleanup site identifies proposed and existing school sites where remedial activity is ongoing or has been completed under DTSC's oversight.

33 Sites which require investigation or cleanup activities as a result of the Resource Conservation and Recovery Act (RCRA) or state-only hazardous waste facilities (that were required to obtain a permit or have received a hazardous waste facility permit from DTSC or U.S. EPA) are called "corrective action."



Ranch House (asbestos)

Hydrologic spills

Figure 4.8-2 California Spills, Leaks, Investigations and Cleanups (CA SLIC)

3. Landfills

Landfills can have adverse impacts on surrounding properties, the ground, and groundwater below the landfill. The concern from these facilities is related to the kinds of materials disposed of in them, which can consist of non-hazardous waste (Class III), hazardous waste (Class I), or a combination of both (Class II). The California Integrated Waste Management Board (CIWMB) maintains the SWIS database of information regarding active, inactive, and closed landfills, and transfer and composting stations. The database is published annually. SWIS is also known as Solid Waste Fills/Land Fills (SWF/LF). No SWF/LF site was listed within the ASTM search distance of 1 mile.

Asbestos Containing Materials

Asbestos is a common name for a group of naturally occurring fibrous silicate minerals that are made up of strong durable fibers, which vary in size and physical shape. Asbestos is strong, incombustible, and corrosion resistant. Because of its physical properties, asbestos was used in many commercial products in construction and many other industries since before the 1940s and up until the early 1970s. Asbestos is commonly found in various manmade products including insulation, ceiling and floor tiles, roof shingles, cement, and automotive brakes and clutches.

Asbestos fibers are relatively stable in the environment, because asbestos is a mineral. Asbestos fibers do not evaporate into air. Asbestos-Containing Materials (ACMs) are building materials containing more than 1% asbestos (some state and regional regulators impose a 0.10% threshold). ACMs that can be crushed into a powder are termed "friable asbestos." When ACM become friable, there is chance that asbestos fibers can become suspended in air.

It is under these conditions that airborne asbestos fibers represent the most significant risk to human health. Asbestos particles do not migrate through soil. Asbestos fibers do not dissolve in water, but under certain conditions could become waterborne and accumulate in steam beds and sediment. Asbestos is a potential health concern, since long-term, chronic inhalation exposure to high levels of asbestos can cause lung diseases including asbestosis, mesothelioma, and/or lung cancer. Many of the existing structures present within the City were built prior to 1978, when a majority of asbestos containing materials were banned by the U.S. EPA.[34] Further, as asbestos containing materials (ACMs) manufactured before 1978 remained on store shelves, structures constructed immediately after 1978 could contain ACMs. Therefore, the potential for ACMs is considered high. Several federal, state, and local agencies regulate asbestos. Generally, worker exposure is regulated by the federal Occupational Safety and Health Administration (OSHA) and its California state counterpart, Cal/OSHA\.

34 By 1978 the U.S. EPA had banned spray applied surfacing asbestos-containing materials for fireproofing/insulation purposes, the installation of asbestos pipe insulation and block insulation on facility components (such as boilers and hot water tanks), and spray-applied surfacing materials for purposes not already banned.

Lead-Based Paints

Until 1978, when the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead, many homes were treated with paint containing some amount of lead. It is estimated that over 80% of all housing built prior to 1978 contains some lead-based paint (LBP). Similar to the use of ACMs, LBP manufactured prior to 1978 remained on store shelves and was available for purchase after the use of LBP was outlawed. The mere presence of lead in paint may not constitute a material to be considered hazardous. In fact, if in good condition (no flaking or peeling), most intact LBP is not considered to be a hazardous material. In poor condition, LBPs can create a potential health hazard for building occupants, especially children. Many of the existing structures present within the City, including those in the Grove Specific Plan area were not built prior to 1978.

4. Airport Hazards

There are no airports in or adjacent to the City of Ventura.

5. Vapor Encroachment

A vapor encroachment is performed to identify a vapor encroachment screen (VES) on a property with respect to chemicals of concern (COC) that may migrate as vapors onto a property as a result of contaminated soil and groundwater on or near the property. The goal of conducting a VES is to identify a vapor encroachment condition (VEC), which is the presence or likely presence of COC vapors in the subsurface of the target property (TP) caused by the release of vapors from contaminated soil or groundwater either on or near the TP as identified by Tier 1 or Tier 2 procedures.

A Tier 1 screen typically evaluates Phase I ESA-type information for properties within an area of concern (AOC), identified as the distance from TP to a contaminated property with known or suspect COC contamination of soil or groundwater or both; for petroleum hydrocarbon COCs, the AOC search distance is one-tenth mile (for other COCs, one-third mile). The possible conclusion from a Tier 1 screening is: 1) a VEC exists, 2) a VEC likely exists; 3) a VEC cannot be ruled out, or 4) VEC can be ruled out because a VEC does not or is not likely to exist.

A Tier 2 evaluation is indicated if a VEC cannot be ruled out by the Tier 1 screen, and uses numeric screening criteria to existing or newly collected soil, soil gas, and/or groundwater testing results to evaluate whether or not a VEC can be ruled out. The Tier 2 screen has two data collection components: non-invasive and invasive. Non-invasive evaluation is a review of accessible information (regulatory agency files or other available documents) for a contaminated property, to determine the status of remediation, the size of the contaminated plume and its behavior, the specific COC and respective concentrations, and whether the TP is within the critical distance of the contaminated plume. The critical distance represents an estimate of the lineal distance COC vapors volatilized from contaminated groundwater or contaminated soil might migrate in the

vadose zone to the TP. The critical distance is the lineal distance in any direction between the nearest edge of the contaminated plume and the nearest TP boundary, and is equal to 30 feet for dissolved petroleum hydrocarbon COC (100 feet for other COC).

If the plume test identifies that the TP boundary is within the critical distance from the nearest edge of the contaminated plume, then the environmental professional should, through investigation and analysis of data and information compiled as part of the screening evaluation, determine if a VEC exists at the TP. If the plume test identifies the distance between the nearest edge of the contaminated plume and the nearest TP boundary as equal to or greater than the critical distance, then the environmental professional may conclude that migrating vapor from the edge of the groundwater contaminated plume is not likely to reach the subsurface of the TP. The possible conclusion from a Tier 2 screening is: 1) a VEC exists, 2) a VEC likely exists, 3) a VEC cannot be ruled out, or 4) a VEC can be ruled out because a does not or is not likely to exist at the TP.

The Tier 1 evaluation indicates that a vapor encroachment condition (VEC) can be ruled out because a VEC does not or is not likely to exist.

4.8-3 Regulatory Framework

1. Federal

Clean Air Act

The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes the United States Environmental Protection Agency (U.S. EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants. One of the goals of the Act was to set and achieve NAAQS in every state by 1975 in order to address the public health and welfare risks posed by certain widespread air pollutants. The setting of these pollutant standards was coupled with directing the states to develop state implementation plans (SIPs), applicable to appropriate industrial sources in the state, in order to achieve these standards. The Act was amended in 1977 and 1990 primarily to set new goals (dates) for achieving attainment of NAAQS, since many areas of the country had failed to meet the deadlines.

Section 112 of the Clean Air Act addresses emissions of hazardous air pollutants. The 1990 Clean Air Act Amendments revised Section 112 to first require issuance of technology-based standards for major sources and certain area sources. “Major sources” are defined as a stationary source or group of stationary sources that emit or have the potential to emit 10 tons per year or more of a hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants. An “area source” is any stationary source that is not a major source. For major sources, Section 112 requires that U.S. EPA establish emission standards that require the maximum degree of reduction

in emissions of hazardous air pollutants. These emission standards are commonly referred to as "maximum achievable control technology" or "MACT" standards. Eight years after the technology-based MACT standards are issued for a source category; U.S. EPA is required to review those standards to determine whether any residual risk exists for that source category and, if necessary, revise the standards to address such risk. (All impacts related to air quality are addressed in **Section 4.3, Air Quality**.)

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, U.S. EPA has implemented pollution control programs such as setting wastewater standards for industry. Water quality standards for all contaminants in surface waters were also established. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. U.S. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. These impacts are discussed in detail in **Section 4.9, Hydrology and Water Quality**.

Environmental Protection Agency Regulations

The U.S. EPA's mission is to protect human health and the environment. The U.S. EPA takes action to reduce risks associated with exposure to chemicals in commerce, indoor and outdoor environments, and products and food. The U.S. EPA continues to oversee the introduction and use of pesticides, improve their Integrated Risk Information System (IRIS) program, reduce radon risks, identify and address children's health risks in schools and homes, and improve chemical management practices. Oversight of chemical storage and manufacturing in coordination with their interagency partners remains a key focus of the U.S. EPA, as well as efforts to reduce urban air toxics.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund") provides a federal "superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, U.S. EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. U.S. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, U.S. EPA obtains private party cleanup

through orders, consent decrees, and other small party settlements. U.S. EPA also recovers costs from financially viable individuals and companies once a response action has been completed.

The U.S. EPA is authorized to implement the Act in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. This included Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA); this act is discussed in further detail below.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Action (SARA) of 1986 reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities.

Hazardous Material Transportation Act

The Hazardous Materials Transportation Act, as amended, is the basic statute regulating hazardous materials transportation in the United States. The purpose of the law is to provide adequate protection against the risks to life and property inherent in transporting hazardous materials in interstate commerce. This law gives the U.S. Department of Transportation (DOT) and other agencies the authority to issue and enforce rules and regulations governing the safe transportation of hazardous materials.

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act, which is implemented by OSHA, contains provisions with respect to hazardous materials handling. Federal OSHA requirements, as set forth in Title 29 of the *Code of Federal Regulations* (CFR) §1910, et seq., are designed to promote worker safety, worker training, and a worker's right–to-know. In California, OSHA has delegated the authority to administer OSHA regulations to the State of California.

Title 49 of the CFR, which contains the regulations set forth by the Hazardous Materials Transportation Act of 1975, specifies additional requirements and regulations with respect to the transport of hazardous materials. Title 49 of the CFR requires that every employee who transports hazardous materials receive training to recognize and identify hazardous materials and become familiar with hazardous materials requirements. Drivers are also required to be trained in operations of their equipment and commodity specific requirements.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste by "large-quantity generators" (1,000 kilograms per month or more). Under RCRA regulations, hazardous wastes must be tracked from the time of generation to the point of disposal. At a minimum, each generator of hazardous waste must register and obtain a hazardous waste activity identification number. If hazardous wastes are stored for more than 90 days or treated/disposed of at a facility, any treatment, storage, or disposal unit must be permitted under RCRA. Additionally, all hazardous waste transporters are required to be permitted and must have an identification number. RCRA allows individual states to develop their own program for the regulation of hazardous waste as long as it is at least as stringent as RCRA. In California, the U.S. EPA has delegated RCRA enforcement to the State of California.

Department of Transportation Regulations

The Secretary of the Federal Department of Transportation receives the authority to regulate the transportation of hazardous materials from the Hazardous Materials Transportation Act (HMTA), as amended and codified in 49 USC 5101 et seq. The Secretary is authorized to issue regulations to implement the requirements of 49 USC The Pipeline and Hazardous Materials Safety Administration (PHMSA) (formerly the Research and Special Provisions Administration [RSPA]) was delegated the responsibility to write the hazardous materials regulations, which are contained in 49 CFR Parts 100-180.

Under the HMTA the Secretary:

> may authorize any officer, employee, or agent to enter upon inspect, and examine, at reasonable times and in a reasonable manner, the records and properties of persons to the extent such records and properties relate to: (1) the manufacture, fabrication, marking, maintenance, reconditioning, repair, testing, or distribution of packages or containers for use by any "person" in the transportation of hazardous materials in commerce; or (2) the transportation or shipment by any "person" of hazardous materials in "commerce.

Toxic Substances Control Act

Congress enacted the Toxic Substances Control Act (TSCA) of 1976 to give U.S. EPA the ability to track the approximately 75,000 industrial chemicals currently produced or imported into the United States. The U.S. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. The U.S. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Research and Special Programs Administration Regulations

The Research and Special Programs Administration Regulations (RSPA) regulations cover definition and classification of hazardous materials, communication of hazards to workers and the public, packaging, and labeling requirements, operational rules for shippers, and training. They apply to interstate, intrastate, and foreign commerce by air, rail, ships, and motor vehicles, and also cover hazardous waste shipments. The Federal Highway Administration (FHWA) is responsible for highway routing of hazardous materials and highway safety permits. The U.S. Coast Guard regulates bulk transport by vessel. The hazardous material regulations include emergency response provisions, including incident reporting requirements. Reports of major incidents go to the National Response Center, which in turn is linked with CHEMTREC, a service of the chemical manufacturing industry that provides details on most chemicals shipped in the U.S.

Emergency and Community Right to Know Act

The Emergency and Community Right to Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. This law was designated to help local communities protect public health, safety, and the environment from chemical hazards. EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. EPCRA establishes requirements for federal, state, and local governments, tribes and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. To implement EPCRA, Congress required each state to appoint a State Emergency Response Commission (SERC). The SERCs were required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district.

2. State

California Environmental Protection Agency and California Department of Toxic Substances Control Regulations

The California EPA (Cal/EPA) includes the DTSC, whose mission it is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation, and pollution prevention. The DTSC regulates hazardous waste, cleans-up existing contamination, and looks for ways to reduce the hazardous waste produced in California. Approximately 1,000 scientists, engineers, and specialized support staff ensure that companies and individuals handle, transport, store, treat, dispose of, and clean-up hazardous wastes appropriately. Through these measures, DTSC contributes to greater safety for all Californians, and less hazardous waste reaches the environment.

DTSC regulates hazardous waste in California primarily under the authority of RCRA and the California Health and Safety Code. The DTSC regulates hazardous waste, cleans up existing contamination, and researches ways to reduce the hazardous waste produced in California. In addition, the DTSC develops legislation, coordinates with lawmakers, and responds to constituent complaints. The regulations spell out what those who handle hazardous waste must do to comply with the laws.

Statewide, DTSC cleans-up or oversees approximately 220 hazardous substance release sites at any given time and completes an average of 125 cleanups each year. Ensuring compliance through inspection and enforcement is an important part of effectively regulating hazardous waste. DTSC conducts roughly 200 inspections a year. DTSC's Criminal Investigations Branch has the only law enforcement officers in the Cal/EPA. These peace officers, with the powers of arrest, and search and seizure, investigate alleged criminal violations of the Hazardous Waste Control Law. They work closely with district attorneys' offices, the federal Environmental Protection Agency, the Federal Bureau of Investigation, and law enforcement personnel in other states.

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that any business that handles hazardous materials prepare a business plan, which must include:

- details, including floor plans, of the facility and business conducted at the site;
- an inventory of hazardous materials that are handled or stored on-site;
- an emergency response plan; and
- a safety and emergency-response training program for new employees with annual refresher courses.

California Occupational Safety and Health Administration Regulations

The California Occupational Safety and Health Administration Regulations (Cal/OSHA) has set forth work requirements for disturbance of Asbestos-Containing Construction Materials (ACCMs) including removal operations for all types of ACCMs. In addition, the agency has developed standards for general industry and the construction industry hazardous waste operations and emergency response. Cal/OSHA ensures that employers must have controls to reduce and monitor exposure levels of hazardous materials, an informational program describing any exposure during operations and the inspection of drums and containers prior to removal or opening. Decontamination procedures and emergency response plans must be in place before employees begin working in hazardous waste operations.

California Office of Emergency Services Regulations

The California Office of Emergency Services (CAL OES) Hazardous Materials (HazMat) Section under the Fire and Rescue Division coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials

incidents and threats. In response to any hazardous materials emergency, the section staff is called upon to provide state and local emergency managers with emergency coordination and technical assistance.

Accidental Release Prevention Law

The state's Accidental Release Prevention Law provides for consistency with federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the state and federal programs. State and federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agency (CUPA) and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the County as a manager of regulated substances and prepare a risk management plan. A risk management plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The business plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

Hazardous Waste Control Act

The Hazardous Waste Control Act created the state hazardous waste management program, which is similar to but more stringent than the federal Resource Conservation and Recovery Act program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements. These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with DTSC.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) required the administrative consolidation of six hazardous materials and waste programs (Program Elements) under one agency, a CUPA. The Program Elements consolidated under the Unified Program are: Hazardous Waste Generator and On-site Hazardous Waste

Treatment Programs (aka Tiered Permitting); Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC); Hazardous Materials Release Response Plans and Inventory Program (a.k.a. "Hazardous Materials Disclosure" or "Community-Right-To-Know"); California Accidental Release Prevention Program (Cal ARP); UST Program; and Uniform Fire Code Plans and Inventory Requirements. The Unified Program is intended to provide relief to businesses complying with the overlapping and sometimes conflicting requirements of formerly independently managed programs. The Unified Program is implemented at the local government level by CUPAs. Most CUPAs have been established as a function of a local environmental health or fire department. Some CUPAs have contractual agreements with another local agency, a participating agency, which implements one or more Program Elements in coordination with the CUPA.

Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Business Plan Act, requires businesses using hazardous materials to prepare a plan that describes their facilities, inventories, emergency response plans, and training programs. Hazardous materials are defined as unsafe raw or unused materials that are part of a process or manufacturing step. They are not considered hazardous waste. However, health concerns pertaining to the release of hazardous materials are similar to those relating to hazardous waste.

Hazardous Waste Source Reduction and Management Review Act of 1989

This Act requires generators of 12,000 kilograms/year of typical/operational hazardous waste to conduct an evaluation of their waste streams every four years and to select and implement viable source reduction alternatives. This Act does not apply to non-typical hazardous waste (such as asbestos and polychlorinated biphenyls).

California Vehicle Code

The California Vehicle Code (Title 13 of the CCR) establishes regulations for motor carrier transport of hazardous materials. For example, all motor carrier transporters of hazardous materials are required to have a Hazardous Materials Transportation license issued by the California Highway Patrol. In addition, placards identifying that hazardous materials are being transported must be displayed on the vehicle.

California Health and Safety Code

The transport of hazardous waste materials is further governed by the *California Health and Safety Code* Section §25163 and Title 22, Chapter 13, of the CCR. Specifically, §25163 of the *California Health and Safety Code* requires transporters of hazardous waste to hold a valid registration issued by the DTSC in his/her possession while transporting hazardous waste. Additionally, Title 22,

Chapter 13 of the CCR includes a number of requirements, which include, but are not limited to, the following:

- Transporters shall not transport hazardous waste without first receiving an identification number and a registration certificate from DTSC
- Registration as a hazardous waste transporter expires annually, on the last day of the month in which the registration was issued
- To be registered as a hazardous waste transporter, an application must be submitted
- Hazardous waste shall not be accepted for transport without a Uniform Hazardous Waste Manifest that has been properly completed and signed by generator and transporter
- Hazardous waste shall be delivered to authorized facilities only

3. Local

Ventura County Air Quality Management District

The Ventura County Air Quality Management District (VCAQMD) works with the California Air Resources Board (CARB) and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The VCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines. The VCAQMD and regulations related to air quality are discussed in detail in **Section 4.3, Air Quality**.

Los Angeles County Health Care Agency- Environmental Health Care Division

The Certified Unified Program Agency with jurisdiction over the City of Ventura is the City of Ventura Fire Department Health Hazardous Materials Division (HHMD). The HHMD became a CUPA in 1997. The HHMD coordinates the regulation of hazardous materials and hazardous wastes in Los Angeles County through the following programs:

- Aboveground Petroleum Tank
- California Accidental Release Prevention (CalARP)
- Hazardous Waste
- Hazardous Materials (Hazardous Material Handler Permit Requirements)
- Underground Storage Tank

City Fire Agencies within Ventura County have joined in partnership with the CUPA as Participating Agencies (PAs). The CUPA provides its regulated businesses several convenient benefits such as a single point of contact for permitting, billing, and inspections; uniformity and consistency in enforcement of regulations; and a single fee system incorporating all of the applicable fees from the CUPA programs. The HHMD provides detailed guidelines to respond to emergency hazardous materials spills or releases and abandonment.

The Hazardous Material Handler Permit Requirements indicates that businesses that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity, are considered a hazardous materials handler and to report appropriate information (i.e., emergency response and contingency plan and employee training plan) in the California Environmental Reporting System (CERS). Compliance with the Hazardous Materials Handler Permit Requirements would ensure that all hazardous wastes generated by existing and proposed uses are properly handled, recycled, treated, stored, and disposed. This program involves inspection of facilities that generate hazardous waste, evaluation of hazardous waste generating industries, investigation of reports of illegal hazardous waste disposal, and response to emergency hazardous chemical spills. The CalARP program aims to prevent accidental releases of hazardous materials that could cause harm to the public or environment.

4. City of Ventura General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to hazards are included in Chapter 7 of the City's General Plan, Health and Safe Community.

Policy 7D: Minimize exposure to air pollution and hazardous substances.

- Action 7.20: Require air pollution point sources to be located at safe distances from sensitive sites such as homes and schools.
- Action 7.21: Require analysis of individual development projects in accordance with the most current version of the Ventura County Air Pollution Control District Air Quality Assessment Guidelines and, when significant impacts are identified, require implementation of air pollutant mitigation measures determined to be feasible at the time of project approval.
- Action 7.27: Require proponents of projects on or immediately adjacent to lands in industrial, commercial, or agricultural use to perform soil and ground water contamination assessments in accordance with American Society for Testing and Materials standards, and if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination).
- Action 7.28: Educate residents and businesses about how to reduce or eliminate the use of hazardous materials, including by using safer non-toxic equivalents.

4.8-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to hazards and hazardous materials are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of the Grove Specific Plan could result in significant impacts due to the use and/or transportation of hazards and hazardous materials, if any of the following would occur.

Haz-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Haz-2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Haz-3 Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Haz-4 Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Haz-5 For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?

Haz-6 For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Haz-7 Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Haz-8 Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

4.8-5 Environmental Impacts

Environmental Effects Found Not To Be Significant

As to **Thresholds Haz-5**, **Haz-6,** and **Haz-8,** a less than significant impact was determined, and therefore these thresholds are not evaluated in this section. See **Section 6, Effects Found Not To Be Significant**, for a discussion of these environmental effects, as well as others, that were found not to be significant and are, therefore, not evaluated in detail in this EIR. The remaining thresholds are evaluated below.

Haz-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Project-specific, parcel-level future land uses would be limited as the Project is limited to residential units. Development under The Grove Specific Plan would increase density and

population within the specific plan area. Routine transportation of hazardous materials, including through traffic, poses a risk to residents within the City as a result of potential accidents involving trucks, rail, and other modes that are used to transport hazardous materials and wastes and are shared with the public. Future development could result in the construction of residential uses. The proposed land uses do not generally involve the routine use, transport, or disposal of significant amounts of hazardous materials, including hazardous chemical, radioactive, and biohazardous materials.

The operation of land uses that use, create, or dispose of hazardous materials is regulated and monitored by federal, state, and local regulations and policies. Specifically, future development within the City of Ventura would be subject to compliance with the programs administered by nearby agencies (cities of Camarillo, Oxnard, and Ventura County). The owners or operators of businesses that handle or store hazardous materials equal to or above the reportable quantities would be subject to compliance with regulatory agencies. These programs, as well as other federal, state, and local regulations and policies, provide a high level of protection to the public and the environment. Compliance with appropriate regulations and policies would limit the impact from routine use, transport, or disposal of significant amounts of hazardous materials to less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Haz-2 Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction

Development under The Grove Specific Plan has the potential to result in development in areas where there are leaking underground storage tank (LUST) cleanup sites or other types of cleanup actions. The locations of these cleanup sites are detailed above. Construction as part of the future development could increase the potential for contaminated soil and groundwater to affect construction workers or the public. The impact to construction workers or the public would less than potentially significant.

Operation

Businesses that store large quantities of hazardous materials (e.g., fuel storage facilities, chemical warehouses) can be subject to accidents that result from transporting, pumping, pouring, emptying, injecting, spilling, and dumping or disposing of hazardous materials and wastes and that could be released into the environment. The severity of potential effects varies with the activity conducted and the concentration and type of waste involved. However, as discussed above, the land uses proposed as part of The Grove Specific Plan would not significantly increase the amount of hazardous materials used as it is a residential project only. Additionally, federal, state, and local regulations and policies governing the use of hazardous materials strictly regulate the proper handling of such materials and their containers to ensure that accidents involving the release of toxic materials into the environment do not occur. Compliance with appropriate regulations and policies would limit the impact from release of hazardous materials to less than significant.

Level of Significance Before Mitigation

Construction-related impacts would not be potentially significant. Operational impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

All impacts would be less than significant.

Haz-3	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Elmhurst Elementary School is located at the edge of being within the specific plan area. Hazardous materials could be used during construction of commercial/residential uses within the specific plan area, including the use of standard construction materials (e.g., paints, solvents, and fuels), cleaning and other maintenance products (used in the maintenance of pumps, pipes, and equipment), and diesel and other fuels (used in construction and maintenance equipment and vehicles). Large quantity hazardous waste producers or users are not currently operating or anticipated to be constructed within the specific plan area.

Although hazardous materials and waste generated from future development may pose a health risk to nearby schools, disclosure to the HHMD is required for any business that uses, handles, or stores hazardous materials or waste materials equal to or in excess of the basic quantities. Businesses must report information to CERS, in order to assure that businesses have appropriate

procedures and policies in place and employees and contractors have adequate training for responding to a hazardous materials incident at the facility. Additionally, federal, state, and local regulations and policies governing the use of hazardous materials strictly regulate the proper handling of such materials and their containers to ensure that accidents involving the release of toxic materials into the environment do not occur. Compliance with appropriate regulations and policies would limit the impact from release of hazardous materials to less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Haz-4	**Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

As shown in **Figure 4.8-2, California Spills, Leaks, Investigations and Cleanups (CA SLIC)** (page 4.8-7**),** three sites within the specific plan area could have hazardous contaminants**.** These sites have the potential to be developed as part of The Grove Specific Plan. The parcels could be redeveloped with sensitive uses, such as residential or sensitive uses may be developed adjacent to these sites. Construction workers could be at risk during earth moving activities. Residents on or adjacent to the hazardous materials sites could be exposed to hazardous materials. Therefore, the hazardous materials sites have the potential to pose a significant hazard to the public or the environment. The impact to the public and environment from these hazardous materials sites would be potentially significant. Mitigation Measure **MM Haz-1** would be implemented to reduce this impact to less than significant.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

MM Haz-1	The structures on-site were constructed prior to 1981. Based on the age of construction, building materials in on-site structures may contain asbestos containing materials (ACM), and certain building materials are presumed to contain ACM (PACM), unless testing has shown otherwise. As of October 1, 1995, OSHA made building owners responsible for complying with the asbestos construction

	standard, for buildings built in 1981 or earlier. The building owner is responsible for identifying the presence, location and quantity of asbestos containing building materials. The building owner must tell employees, other employers, and tenants in the building of the presence and location of asbestos or presumed asbestos containing materials (PACM). If the building owner intends to demolish or remodel the structure(s), it is suggested that the building owner contact a California Certified Asbestos Consultant for assistance in compliance.
MM Haz-2	The subject parcel has been in agricultural land use for many decades, including citrus orchard (circa 1960s to 2003) and flower cultivation (to present). If future plans for the parcel contemplate possible change in land use, such as to residential uses, it may be warranted to investigate the site's shallow soils for the potential of agricultural chemicals possibly associated with historical farming activities, including organochlorine pesticides (OCP) and arsenic. Soil investigation might include reconnaissance sampling for general evaluation, or more thorough sampling in accordance with guidelines of the *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, California Department of Toxic Substances Control (August 7, 2008).

Level of Significance After Mitigation

With implementation of **Mitigation Measures MM Haz-1** and **MM Haz-2** above, impacts would be less than significant.

Haz-7	**Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?**

The City's Evacuation Map anticipates that the major streets, US 101 (north and southbound, Telephone Road, Telegraph Road, SR-33 and SR-126 and within the City would serve as evacuation routes. Construction activities associated with development under The Grove Specific Plan could reduce the number of lanes or temporarily close certain street segments, including those used for evacuation routes. Construction equipment and vehicles may block or slow traffic. Possible street closures and slower traffic during construction could interfere with emergency response including evacuations. However, construction would be temporary and would affect a limited number of streets or intersections at any one time. Additionally, the City's Police and Fire Departments, which provides guidance for the City's planned response to extraordinary emergency situations associated with natural disasters, terrorism, technological incidents, and nuclear defense operations, would continue to be implemented. However, the impact to the City of Ventura evacuation routes from construction under The Grove Specific Plan would not be potentially significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.8-6 Cumulative Impacts

As discussed above, implementation of The Grove Specific Plan would result in development that has the potential to occur on or adjacent to sites that use hazardous materials or are listed as hazardous, which could place construction workers and residents at-risk. Construction-related hazardous materials impacts would generally be site-specific and limited to the duration of the construction activity, and would continue to be highly regulated under federal, state, and local regulations. Therefore, there would not be a cumulatively considerable contribution to a cumulatively significant impact.

Residential development as part of the cumulative development may be located in proximity or adjacent to facilities that use, store, transport, and dispose hazardous materials, which could increase an individual's exposure to hazardous materials. The cumulative projects that would use, store, transport, and dispose hazardous materials would also be required to comply with hazardous materials laws which are designed to avoid and minimize adverse impacts on public health, safety, and the environment. Each cumulative project has been or would be subject to environmental review and if significant impacts are identified, mitigation measures would be implemented to avoid or reduce the impacts. Therefore, the cumulative impact would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.9 Hydrology and Water Quality

4.9-1 Introduction

This section addresses impacts to The Grove Specific Plan Project (proposed Project) related to hydrology, as well as short-term and long-term impacts to surface water quality. This section is based on the Preliminary Hydrology and Hydraulic Report prepared by Jensen Design and Survey, Inc. dated October 8, 2012 (**Appendix 4.9**), as well as information generated from the City of San Buenaventura (Ventura).

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.9-2 Existing Conditions

1. Physical Setting

Hydrology

The site is approximately 26 acres of agricultural land. Runoff from the site is primarily sheet flow towards the southwest. Runoff from this site is then directed towards Telephone Road Drain. Telephone Road Drain runs parallel to the Project's westerly boundary with US 101. Refer to **Figure 4.9-1, Existing Drainage Patterns**. Off-site runoff from the mobile home park enters the street and it is then directed towards Telephone Road Drain.

The existing site is represented by drainage area **Figure 4.9-1**. Existing peak runoff calculations for the 10-, 50- and 100-year storm events were summarized by the peak runoff for this site.

Table 4.9-1 Existing Peak Runoff

Area (acres)	Q_{10} (cfs)	Q_{50} (cfs)	Q_{100} (cfs)
26	24.3	44.5	56.7

100-Year Flood Plain Analysis

The site is located within Flood Zone X, per FIRM Panel 06111C0765E. Zone Flood X is an area of minimal flooding and has no special requirements for any of the proposed structures.

Dam Inundation

No dams are located within the inundation area of the Project Site.

Figure 4.9-1 Existing Drainage Patterns

Tsunami/Seiche/Mudflow

Tsunamis are large ocean surges that are generated by submarine landslides, volcanic eruptions, or earthquakes. The Westside Planning Area is located outside of a tsunami risk area. The Ventura River has been designated as a tsunami risk area as far north as the City limits. The Westside Community Planning Area is located adjacent and to the east of the Ventura River.

A seiche is a wave, or series of waves, set up in an enclosed or partially enclosed body of water by wind, earthquake, or landslide. Seiches are similar to tsunamis, but the waves are generally smaller and of lower energy. The extent of most seiches is small, usually no more than 10 to 20 feet above water level, and the duration is short, usually only a few minutes. The threat to the City from seiches is considered remote. Only facilities in or very near enclosed bodies of water could be immediately affected.

A debris flow (sometimes called mudflow) is a flowing mixture of water-saturated debris that moves downslope under the force of gravity. When moving, they resemble masses of wet concrete and tend to flow downslope along channels or stream valleys. Debris flows are formed when loose masses of unconsolidated wet debris become unstable. Water may be supplied by rainfall, by melting of snow or ice, or by overflow of a crater lake. Debris-flow hazard decreases gradually down valley from possible source volcanoes but more abruptly with increasing altitude above valley floors. There are no defined landslide morphological features within the Grove Specific Plan Planning Area.

Groundwater

The City provides drinking water, and water for fire protection, to households and businesses in Ventura through a complex system with more than 500 miles of distribution mains, 3 water treatment plants, 22 booster pump stations, 25 treated water reservoirs, and 13 wells. The following distinct sources provide surface and ground water to the City supply system.

1. Casitas Municipal Water District
2. Ventura River
3. Foster Park Area, Surface Water Intake; Upper Ventura Water Groundwater Basin/Subsurface Intake and Wells
4. Mound groundwater basin
5. Oxnard Plain groundwater basin (Fox Canyon Aquifer)
6. Santa Paula groundwater basin

The City also holds a State Water Project entitlement of 10,000 acre-feet per year.

Water Quality

The primary sources of pollution to surface and groundwater resources include storm water runoff from paved areas, which can contain hydrocarbons, sediments, pesticides, herbicides, toxic metals,

and coliform bacteria. Seepage from sewage treatment lagoons can further contribute to degraded water quality in the form of elevated nitrate levels. Improperly placed septic tank leach fields can cause similar types of contamination. Illegal waste dumping can introduce contaminants such as gasoline, pesticides, herbicides and other harmful chemicals. Septic tanks are also a source of pollution to some wells in both alluvial and granitic rocks. Septic tanks discharging into alluvium have a high potential to pollute wells producing from the same deposit because of high permeability and low gradient. In the winter, the rains raise the water table in these areas, which can exacerbate possible contamination. Septic tanks are not proposed for the Project.

Water quality is subject to seasonal variation. Sources of water quality degradation in the region include surface runoff from oil fields, agricultural areas, urban land uses and natural sedimentation. Pollutant loads are expected to correspond to tributary land uses.

4.9-3 Regulatory Framework

1. Federal

Clean Water Act

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The CWA also directs states to establish water quality standards for all "waters of the United States" and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from nonpoint sources. The U.S. Environmental Protection Agency (U.S. EPA) has delegated responsibility for implementation of portions of the CWA to the State Water Resource Control Board (SWRCB) and the RWQCBs, including water quality control planning and control programs, such as the National Pollution Discharge Elimination System (NPDES) program.

The CWA requires states to adopt water quality standards for all surface waters of the United States. The CWA requires the U.S. EPA to publish water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. The CWA requires states to adopt numerical water quality standards for toxic pollutants for which the U.S. EPA has published water quality criteria that reasonably could be expected to interfere with designated uses in a water body. Storm water discharges to waters of the US are regulated under the CWA. The storm water discharges for the Westside Community Planning Project area are collected by the multiple inlets to the storm drain system.

The NPDES permit system was established in the CWA to regulate both point-source discharges (a municipal or industrial discharge at a specific location or pipe) and non-point-source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point-source discharges, each NPDES Phase II permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. For non-point-source discharges, the NPDES program establishes a comprehensive storm water quality program to manage urban storm water and minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of: 1) characterizing receiving water quality, 2) identifying harmful constituents, 3) targeting potential sources of pollutants, and (4) implementing a comprehensive storm water management program.

The VCWPD, the County of Ventura, and the cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Ventura, Santa Paula, Simi Valley, and Thousand Oaks have joined to form the Ventura Countywide Stormwater Quality Management Program and are named as co-permittees under a revised countywide municipal NPDES permit for storm water discharges issued by the State Regional Water Quality Control Board in 2010 (Order R4-2010-0108). The program requires new development/redevelopment to control urban runoff pollution on site during and after construction.

Flood Disaster Protection Act of 1973

Congress acted to reduce the costs of disaster relief by passing the Flood Disaster Protection Act of 1973. The Act's aim was to expand the National Flood Insurance Program (NFIP) by substantially increasing limits of coverage and the total amount of insurance authorized to be outstanding. The act also required known flood-prone communities to participate in the program. Other purposes of the program were to 1) substantially increase the limits of coverage authorized under NFIP; 2) provide for the expeditious identification of, and the dissemination of information concerning, flood-prone areas; 3) require state or local communities, as a condition of future federal financial assistance, to participate in the flood insurance program and to adopt adequate flood plan ordinances with effective enforcement provisions consistent with federal standards to reduce or avoid future flood losses; 4) and require the purchase of flood insurance by property owners who are being assisted by federal programs or by federally supervised, regulated, or insured agencies or institutions in the acquisition or improvement of land or facilities located or to be located in identified areas having special flood hazards.

National Flood Insurance Act

Congress acted to reduce the costs of disaster relief by passing the National Flood Insurance Act of 1968. The intent of this act was to reduce the need for large, publicly funded flood control structures and disaster relief efforts by restricting development in floodplains.

The regulations of the NFIP, which is administered by FEMA, require that communities adopt land use restrictions for the 100-year floodplain in order to qualify for federally subsidized flood insurance. The types of restrictions that communities must adopt are listed in some detail in the regulations. Included is a requirement that residential structures be elevated above the level of the 100-year flood and that other types of structures be flood-proofed. Participation in the flood insurance program is virtually mandatory, since flood insurance (within identified "special flood hazard" areas) is a prerequisite for receiving mortgages or construction loans from federally regulated lending institutions. Disaster assistance is not available to public agencies in hazard areas if they do not participate in the program. FEMA issues FIRMs of communities participating in NFIP. These maps delineate flood hazard zones in each participating community.

2. State of California

California Water Code

All projects resulting in discharges, whether to land or water, are subject to the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) by the RWQCBs. Land- and groundwater-related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash- down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits.

Prior to the issuance of any construction/grading permit—and/or the commencement of any clearing, grading, or excavation—owners of projects with construction activities that require a grading permit must prepare and submit a storm water pollution prevention plan (SWPPP). Landowners are responsible for obtaining and complying with the General Construction NPDES Permit, but may delegate specific duties to developers and contractors by mutual consent. The purpose of the SWPPP is to identify potential pollutant sources that may affect the quality of discharges and to design the use and placement of best management practices (BMPs) to effectively prohibit the entry of pollutants from the construction site into the storm drain system. An SWPPP prepared in compliance with the General Construction NPDES Permit describes the site, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of post-construction storm water management measures and maintenance responsibilities, training of staff, a list of contractors and subcontractors, and non-storm water management controls. Dischargers are also required to inspect construction sites before and after storms to identify storm water discharge from construction activity, and to identify and implement controls where necessary.

Colby-Alquist Flood Control Act

The Colby-Alquist Flood Control Act establishes how local governments are to develop and implement floodplain management plans. Among other things, the Colby-Alquist Flood Control

Act makes a number of separate legislative findings and requires regulation as a condition for state assistance on federally authorized flood control projects.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface water and groundwater), and directs the RWQCB to develop regional basin plans. The California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative.

State Water Quality Control Board

Responsibility for the protection of surface water quality in California rests with the State Water Resources Control Board (SWRCB) and nine RWQCBs. The City of Ventura lies within the jurisdiction of the Los Angeles RWQCB. The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and state water quality statutes and regulations. The RWQCBs develop and implement water quality control plans (basin plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. The Los Angeles RWQCB Basin Plan also provides strategies and implementation plans for the control of point-source and nonpoint-source pollutants, the remediation of pollution, and the monitoring and assessment of a region's waters. The basin plan implements a number of federal and state laws, the most important of which are the state Porter-Cologne Water Quality Control Act and the federal Clean Water Act. The City of Ventura is responsible for ensuring that new developments are in compliance with the goals and policies contained in the Los Angeles RWQCB Basin Plan. The basin plan was prepared to conform to statewide policy set forth by the legislature and the SWRCB. Basin plans consist of designated beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives.

3. County

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures

The 2010 Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures (2010 TGM) provides the following principles of Integrated Water Resource Management (IWRM) and Low Impact Development (LID) to help mitigate the impacts of development.[21]

The 2010 TGM advises to design for the largest hydrologic controls (such as matching post development 100-year flows with pre-project 100-year flows for flood mitigation requirements), according to the appropriate City or County drainage requirements first. Second, the 2010 TGM advises to check if flood mitigation will reduce or satisfy the storm water management

requirements. If it does not, then add more controls as necessary. Flood mitigation may provide the necessary sediment and pollution control, thereby reducing maintenance requirements for the storm water management BMPs. A sequence of hydrologic controls should be considered, such as site design, flood drainage mitigation, and retention BMPs. Bioinfiltration BMPs and treatment control measures can be considered when the use of retention BMPs is technically infeasible. Each of these controls will have an influence on storm water runoff from the new development or redevelopment project.

LID falls under the concept of IWRM. IWRM is a process which promotes the coordinated development and management of water, land, and related resources. IWRM links land use, water supply, wastewater treatment/reclamation, flood control/drainage, water quality, and hydromodification management into a cohesive hydrologic system that recognizes their interdependencies and minimizes their potentially negative effects on the environment. IWRM includes recharging groundwater with reclaimed wastewater to support the water supply. It combines storm water treatment, hydromodification control, and flood control in a single regional infiltration basin that recharges groundwater, incorporates recreation, and provides habitat. IWRM also uses smart growth principles to help reduce the environmental footprint while still accommodating growth.

Similar to source control measures, which prevent pollutant sources from contacting storm water runoff, retention BMPs use techniques to infiltrate, store, use and evaporate runoff on site to mimic pre-development hydrology. The goal of LID is to increase groundwater recharge, enhance water quality, and prevent degradation of downstream natural drainage channels. This goal may be accomplished with creative site planning and incorporation of localized, naturally functioning BMPs into a project. Implementation of retention BMPs will reduce the size of additional hydromodification control measures that may be required for a new development or redevelopment project, and, in many circumstances, may be used to satisfy all storm water management requirements.

In reference to "Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures 2010," new development and redevelopment projects that are subject to conditioning and approval for the design and implementation of "post-construction" storm water management control measure, prior to completion of the projects are as follows:

New Development Projects

1. All development projects equal to 1 acre or greater of disturbed area that adds more than 10,000 square feet of impervious surface area.
2. Industrial parks with 10,000 square feet or more of total altered surface area.
3. Commercial strip malls with 10,000 square feet or more of impervious surface area.
4. Retail gasoline outlets with 5,000 square feet or more of total altered surface area.

5. Restaurants (Standard Industrial Classification (SIC) of 5812) with 5,000 square feet or more of total of total altered surface area.
6. Parking lots with 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces.
7. Streets, roads, highways, and freeway construction 10,000 square feet or more of impervious surface area.
8. Automotive service facilities (SIC of 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) of 5,000 square feet or more of total altered surface area.
9. Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will:
   a. discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
   b. create 2,500 square feet or more of impervious surface area.
10. Single-family hillside homes.

4. City

General Plan

The following hydrology and water quality policies and actions of the Ventura General Plan are applicable to the Westside Community Planning Area.

Policy 1B Increase the area of open space protected from development impacts.

- Action 1.9 Prohibit the placement of material in watercourses other than native plants and required flood control structures, and remove debris periodically.
- Action 1.10 Remove concrete channel structures as funding allows, and where doing so will fit the context of the surrounding area and not create unacceptable flood or erosion potential.

Policy 5A Follow an approach that contributes to resource conservation.

- Action 5.2 Use natural features such as bioswales, wildlife ponds, and wetlands for flood control and water quality treatment when feasible.
- Action 5.16 Require new developments to incorporate stormwater treatment practices that allow percolation to the underlying aquifer and minimize off-site surface runoff utilizing methods such as pervious paving material for parking and other paved areas to facilitate rainwater percolation and retention/detention basins that limit runoff to pre-development levels.
- Action 5.17 Require stormwater treatment measures within new development to reduce the amount of urban pollutant runoff in the Ventura and Santa Clara Rivers and other watercourses.

City of Ventura Municipal Code

Chapter 8.600 - Stormwater Quality Management

The purpose of the Stormwater Quality Management chapter is to ensure the future health, safety, and general welfare of the citizens of the City of Ventura by:

1. Controlling non-stormwater discharges to the storm drain system.
2. Eliminating discharges to the stormwater drain system from spills, dumping, or disposal of materials other than stormwater.
3. Reducing pollutants in stormwater discharges, including those pollutants taken up by stormwater as it flows over urban areas, to the maximum extent practicable.
4. Reducing pollutants in stormwater discharges in order to achieve applicable water quality objectives for surface waters in Ventura County.

The intent of the Stormwater Quality Management chapter is to protect and enhance the water quality of the city's watercourses, water bodies, and wetlands in a manner consistent with the Clean Water Act and California Regional Water Quality Control Board NPDES Permit No. CAS063339, Order No. 94-082, and any amendment, revision, or reissuance thereof.

4.9-4 Thresholds of Significance

Based upon to Appendix G of the CEQA Guidelines under Section IX, Hydrology and Water Quality, the following significance thresholds are used to evaluate Project impacts related to Hydrology and Water Quality.

Hyd 1	**Would the project violate any water quality standards or waste discharge requirements?**
Hyd 2	**Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**
Hyd 3	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?**
Hyd 4	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**
Hyd 5	**Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**
Hyd 6	**Would the project otherwise substantially degrade water quality?**

Hyd 7	**Would the project place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**
Hyd 8	**Would the project place within a 100-year flood plain structures?**
Hyd 9	**Would the project expose people or structures to a significant risk of loss, inquiry or death involving flooding, including flooding as a result of the failure of a levee or dam?**
Hyd 10	**Would the project be subject to inundation by seiche, tsunami, or mudflow?**

Effects Found Not to be Significant

Thresholds Hyd 7, **Hyd 8**, **Hyd 9**, and **Hyd 10** will not be affected as the Project is not located in a floodplain. These thresholds will be discussed in the Effects Found Not to Be Significant. Consequently, these thresholds will not be discussed in this section.

Hyd 1	**Would the project violate any water quality standards or waste discharge requirements?**

Analysis

Urban runoff includes all flows from urban land use into storm water conveyance facilities and receiving waters, both dry weather non-storm water sources (i.e., irrigation waters, etc.) and wet weather storm water runoff.

Storm water runoff naturally contains certain constituents. Urbanization and urban activities typically would increase constituent concentrations that adversely impact water quality. Storm water pollutants consist of sediment, nutrients, bacteria and viruses, oil and grease, metals, organics, pesticides, and trash.

Water quality impacts from urbanization and urban activities are categorized as erosion and sedimentation and discharge of pollutants during construction, and long term impacts from completed development/redevelopment associated with land uses.

Potential Water quality impacts from completed development/redevelopment can include the following:

- Urban activities can potentially generate many pollutants for dry-weather runoffs,
- Increased impervious surfaces (streets, rooftops, parking lots, etc.) could increase downstream erosion and water quality degradation, and
- Urban activities and increased impervious surfaces can increase concentration and total pollutant loads in wet-weather storm runoffs.

The Project Site is currently undeveloped but includes sufficient acreage to provide on-site detention or retention facilities which would still incrementally increase runoff.

New development and/or redevelopment typically results an increased impervious surfaces, which increases the amount of runoff and pollutants entering storm water conveyance systems. These systems transport directly to receiving waters but are not treated, and therefore contribute to water pollution. Storm water runoff over impervious surfaces (i.e., roadways, parking lots, rooftops) increases runoff flow rates and velocities; accumulates pollutants and sediments; and increases nutrients, bacteria, and other pollutant concentrations in receiving waters.

Federal and state programs require BM's to be implemented by developers, property owners, and public agencies engaged in development and redevelopment activities. Site and facility planning and design for storm water quality protection consists of multi-level strategy, which consists of:

- Reducing or eliminating post-project runoff
- Controlling sources of pollutants, and if required
- Treating contaminated runoff prior to discharging into the storm water system or receiving waters

Two controls have been developed to minimize water quality impacts as a result of storm water runoff: source controls and treatment control. Source control is intended to reduce or eliminate pollutants at their source and treatment control utilizes selected treatment mechanism(s) to remove/reduce pollutants from the storm water runoff.

The planning and design phases of development or redevelopment projects may be spread over period of months or even years. Water quality BMPs incorporated into the planning and design phases would be more cost-effective than retrofitting of BMPs.

Compliance with the County's 2010 TGM, would ensure that development under the Grove Specific Plan would not violate any water quality standards or waste discharge requirements.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

None required.

Hyd 2 Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Analysis

Section 4.16-3, Water Supply (beginning on page 4.16-21, concluded that projected surface and groundwater supplies available to Western Ventura area would be approximately 70.01 acre-feet per year (afy) in 2015. The water report discusses the adequacy of the availability of water.

In addition, while new development and/or redevelopment could result in an increase in impervious surfaces, which decreases infiltration and percolation surfaces for groundwater recharge, this development will be required to comply with regulations that will mitigate this potential impact. The current NPDES permit and the 2010 TGM require all development projects to control and/or treat runoff contaminant prior to discharging urban storm runoff into storm drain system as receiving waters, as well as reduce or eliminate post-project runoff. The latter requirement would typically utilize detention basin(s) to detain volume to reduce peak flows, and gradually release the runoff so as not to exceed the existing flow conditions.

Implementation of the proposed Project would result in less than significant impacts to groundwater supplies or groundwater recharge. As discussed above, the Ventura County 2010 TGM would require that new development to contain all runoff water on-site. This would provide additional recharge to the groundwater aquifer.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Hyd 3	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?**
Hyd 4	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**
Hyd 5	**Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Analysis

Proposed development of Tentative Tract 5626 will disturb an approximate area of 26 acres. Runoff from the developed site will be mainly street flow from the north to the south. Runoff for the majority of the developed site will be directed to a system of on-site catch basins. Runoff entering these catch basins will discharge into an on-site storm drain line and eventually into a proposed detention area. Some of the runoff from the site will be directed towards proposed bio-swales located along the easterly boundary of the proposed development. Runoff collected by these bio-swales will discharge into propose inlet structures and allow to enter the on-site storm drain system previously mentioned.

All inlet structures will be sized to capture the flow for the 10-year storm. Runoff exceeding this storm event will be allowed to sheet flow towards the south of the site, where it will be collected by sump type catch basins. Runoff entering the on-site storm drain system will be directed to a designated detention area.

Off-site runoff from approximately 0.6 acre will be allowed to flow directly into the propose detention basin. This runoff corresponds to the area of the proposed park. Off-site runoff from the existing development west of the site will be diverted towards the Telephone Road Drain.

The developed site has been divided into several drainage areas (**Figure 4.9-2, Developed Drainage Areas**). **Table 4.9-2** below summarizes the peak runoff amounts for the developed site.

Table 4.9-2 Developed Peak Runoff

	Area (acres)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)
On-site	26	47.3	68.1	80.1
Off-site	0.6	1.1	1.6	1.8

All inlets located within the bio-swales are 12×12 dome inlets and were preliminary sized to handle the treatment flows only. The proposed catch basins were sized to handle the 10-year storm.

The 100-year storm event values were checked to ensure that all pads can be protected from this event. Street capacity calculations show that the 100-year storm can be contained within the street.

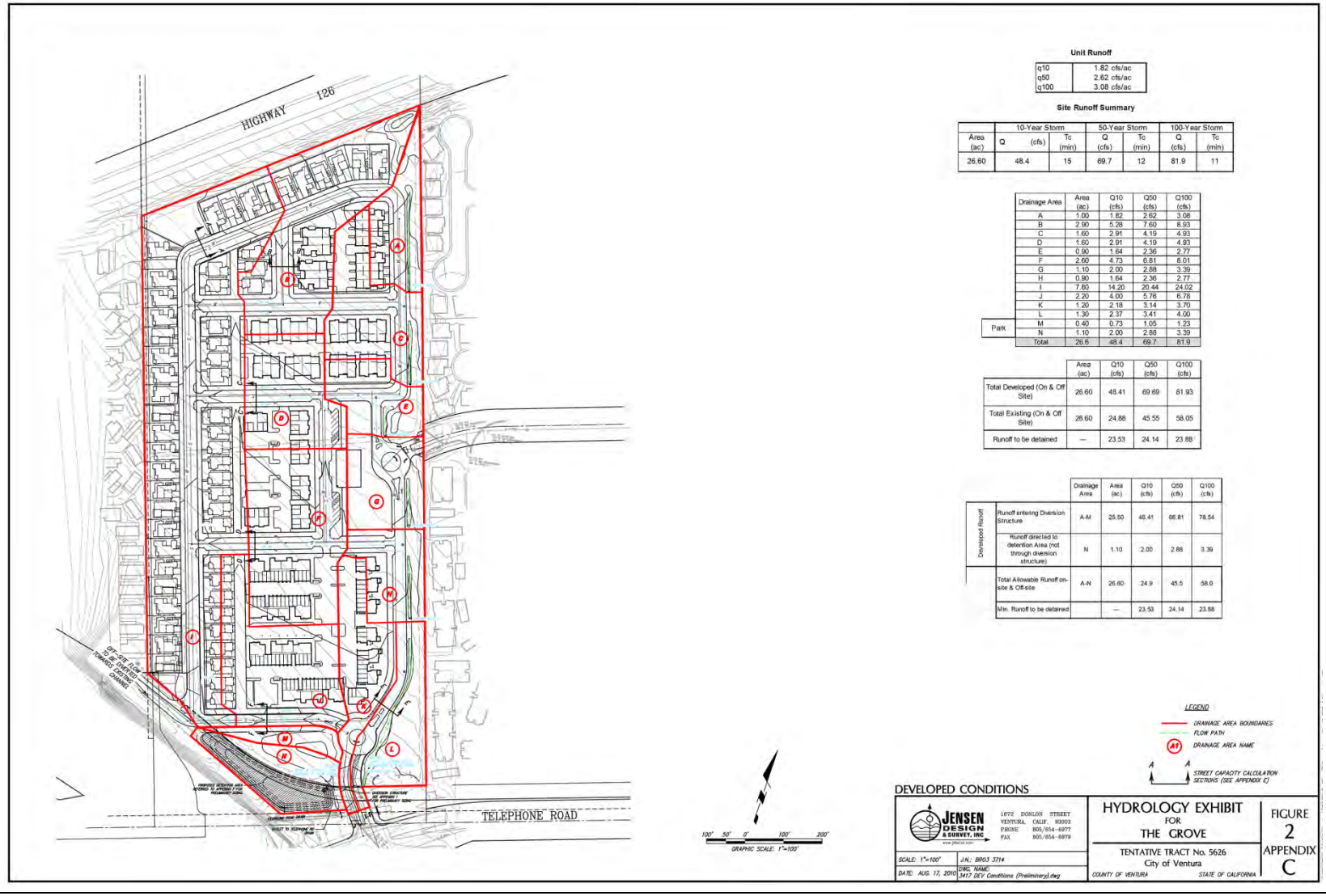


Figure 4.9-2 Developed Drainage Areas

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Hyd 6 Would the project otherwise substantially degrade water quality?

Analysis

To mitigate the increase in runoff produced by the development of this site, a detention area has been identified within the proposed park. This detention basin was preliminary sized to provide "detention only", as treatment for the entire site is proposed by means of pervious pavement, grass strip filters and bioswales as described in the next section of this report.

The basin will be designed as an "Offline" detention basin. This means that all flows less than or equal to the allowable flows will be allowed to pass directly to the storm drain system. Flows exceeding the allowable values will be routed into the basin. Runoff from the site will be directed to a diversion structure located within the park area, refer to **Figure 4.9-2, Developed Drainage Areas** above for location. This structure has been preliminary designed to direct flows in two directions. Storm flows that are less than the allowable flows (based on pre-developed conditions) will be allowed to flow through the diversion structure into a 24-inch storm drain line that will discharge directly into Telephone Road Drain. Storm runoff exceeding the allowable flows will be directed into the proposed detention basin. This detention area will provide the necessary detention for all storm events. Attenuated flows from the detention area will be released into Telephone Road Drain. The total runoff being released from the main on-site storm drain system and the detention area will not exceed the pre-developed runoff amounts for each storm event.

Figure 4.9-2, Developed Drainage Areas shows the proposed footprint area of detention area. Configuration of this detention area will be finalized during final design. The proposed detention area has a total storage volume of approximately 66,400 cubic feet and a maximum ponding elevation of 145 feet. The required storage volumes for each storm event are specified in **Table 4.9-3** below.

Table 4.9-3 Detention Basin Summary

	10-Year Storm (cfs)	50-Year Storm (cfs)	100 Year Storm (cfs)
Allowable runoff on and off site	24.9	45.5	58.1
Developed runoff on-site and off-site	48.4	69.7	81.9
Minimum runoff to be detained	23.5	24.2	23.7
Actual runoff being detained	23.5	37.5	43.3
Required storage volume	39,227	54,700	63,525

Storm Water Treatment Measures

The Tentative Tract Map (TTM 5626) was accepted as complete by the City of Ventura on September 2, 2011, therefore mitigation measures pursuant to MS4 permit No. 09-0057 apply to this Project.

To comply with the NPDES requirements for storm water treatment, some of the site's runoff will be treated by proposed bio-swales filters. These filters will treat the Stormwater Quality Design Flow (SQDF) which is equivalent to 10% of the developed 50-year peak flow. Refer to **Figure 4.9-3, Developed Conditions Treatment Area** for location of these bio-swales and corresponding treatment flows.

Treatment for the majority of the proposed streets and alleys will be provided by means of pervious pavements. These treatment facilities will be designed to treat the Stormwater Quality Design Volume (SQDV). Refer to **Figure 4.9-3, Developed Conditions Treatment Area** for location of the pervious pavement.

Additional treatment for runoff generated for proposed structures will be provided by means of grass strip filters.

All of these treatment measures will be designed based on the methodology described in the Ventura County Technical Guidance Manual. Detail Calculations and description of these treatment measures can be found in Appendix G of the Hydrology and Hydraulic Report (**Appendix 4.9** to this Draft EIR). **Figure 4.9-3, Developed Conditions Treatment Area** shows the preliminary location of the proposed treatment facilities.

The preliminary drainage system for this Project has been designed to meet the requirements of the City of Ventura, using the methods proscribed in the County of Ventura Hydrology Manual. All structures should be protected from the 100-year storm. On-site bio-swales and pervious pavement will provide the necessary storm water treatment. The detention basin will prevent runoff from the site from exceeding the undeveloped runoff amounts and create no significant impact.

Bio-Swale Preliminary Sizing

Designed per Ventura County Technical Guidance Manual Treatment Control Measure T-2

Swale Geometry:
Side Slopes: 3:1
Bottom Width = 3'

Velocity and Depth were calculated by using Flow Master
L = (7 min)(Flow Velocity)*60

Runoff Summary						Swales Summary		
Drainage Area	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)	Qtreatment (cfs)	Velocity (ft/sec)	Depth (in)	L (ft)
A	1.00	1.82	2.62	3.08	0.26	0.4	3.5	168
C	1.60	2.91	4.19	4.93	0.42	0.28	1.9	117.6
E	0.90	1.64	2.36	2.77	0.24	0.19	1	79.8
G	1.10	2.00	2.88	3.39	0.29	0.31	2.3	130.2
H	0.90	1.64	2.36	2.77	0.24	0.19	1	79.8
L	1.30	2.37	3.41	4.00	0.34	0.33	2.6	138.6

Pervious Pavement/Infiltration Trench Preliminary Sizing

Trench/Pavement Geometry:
Width: 6 ft
Depth 3 ft

Runoff Summary						Swales Summary		
Drainage Area	Area (ac)	Q10 (cfs)	Q50 (cfs)	Q100 (cfs)	Low Flows (cfs)	SQDV* (cf)	Available Length (ft)	Available Volume (cf)
B	2.9	5.28	7.60	8.93	0.76	7895.3	475	8550
D	1.6	2.91	4.19	4.93	0.42	4356.0	280	5040
F	2.6	4.73	6.81	8.01	0.68	7078.5	400	7200
I	7.8	14.20	20.44	24.02	2.04	21235.6	1340	24120
J	2.2	4.00	5.76	6.78	0.58	5989.5	350	6300
K	1.2	2.18	3.14	3.70	0.31	3267.0	180	3240
						49821.9		54450.0

* SQDV -- Stormwater Quality Design Volume neede to treat the first 3/4" of runoff

LEGEND
A1 DRAINAGE AREA NAME
DRAINAGE AREA BOUNDARIES
BIO-SWALE AREAS
PERVIOUS PAVEMENT
GRASS STRIP FILTERS

100' 50' 0' 100' 200'
GRAPHIC SCALE: 1"=100'

DEVELOPED CONDITIONS-TREATMENT AREAS

JENSEN DESIGN & SURVEY, INC.
1672 DONLON STREET
VENTURA, CALIF. 93003
PHONE 805/654-6977
FAX 805/654-6979
www.jdsinc.com

SCALE: 1"=100'
DATE: AUG. 17, 2016
JN.: 6903 3714
DWG. NAME: 3714 Treatment Facility Exhibit.dwg

HYDROLOGY EXHIBIT
FOR
THE GROVE
TENTATIVE TRACT No. 5626
City of Ventura
COUNTY OF VENTURA STATE OF CALIFORNIA

FIGURE 3
APPENDIX G

Figure 4.9-3 Developed Conditions Treatment Area

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

No impact.

Cumulative Impacts

The Grove Specific Plan Project will result in the development of undeveloped farmland and, for this reason, will not contribute substantially to erosion and flooding impacts.

Potential increases in sedimentation and concentration of contaminants such as oil, grease, and solvents in surface runoff discharged to local waterways could result from changes in land uses. However, all development on sites of over 1 acre would be subject to NPDES permit requirements pertaining to construction activity, while all development in the City would be subject to various City requirements pertaining to controlling erosion and preserving water quality.

All development would have the potential to result in an increase in impervious surface area, thereby increasing peak storm runoff in the area. The proposed Project may incrementally contribute to this increase. However, the proposed Project includes numerous actions and policies related to sustainable storm water drainage design measures that would increase infiltration in the specific plan area and reduce surface runoff. These design features would be implemented by each development project over time. All development proposals would be required to implement appropriate measures for sustainable storm water management.

Therefore, The Grove Specific Plan Project's contribution to cumulative impacts would not be cumulatively considerable.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation is required.

Residual Impacts

None

4.10 Land Use

4.10-1 Introduction

This section describes the existing land uses in the City, identifies the regulatory framework with respect to regulations that address land use, and evaluate the significance of the potential changes in existing land uses that could result from the implementation of The Grove Specific Plan Project.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different to those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.10-2 Existing Conditions

Project Location

The City of San Buenaventura is located in Ventura County, California. The Grove Specific Plan area is located in the western portion of the City, specifically at the western terminus of Thille Street, north of Copland Drive. The Project site is bounded on the north by Highway 126 (SR-126), on the east by the Thille Community neighborhood, on the south by Telephone Road and Copland Drive and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange.

The plan area is approximately 26.51 acres in size and is currently within unincorporated area, but is within the City of Ventura's Sphere of Influence. The site is presently used for seasonal floral agricultural production.

4.10-3 Regulatory Framework

1. Federal

There are no federal statutes related to land use that would apply to the Project.

2. State of California

Cortese-Knox-Hertzberg Local Government Re-Organization Act of 2000

The Cortese-Knox-Hertzberg Local Government Reorganization Act establishes procedures for local government changes of organization, including city incorporations, annexations to a city or special district, and city and special district consolidations. In approving an annexation, the Local Agency Formation Commission (LAFCO) will consider the following factors:

- Population and population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; and the likelihood of significant growth in the area and in adjacent incorporated and unincorporated areas during the next ten years.

- The need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; and the probable effect of the pro-posed incorporation, formation, annexation, exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas.
- The effect of the proposed action and of alternative actions on adjacent areas, on mutual social and economic interests, and on the local government structure of the county.
- The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, and efficient patterns of urban development, and the policies and priorities set forth in *California Government Code* §56377.
- The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by *California Government Code* §56016.
- The definiteness and certainty of the boundaries of the territory, nonconformance of proposed boundaries with lines of assessment or ownership, creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.
- Consistency with city or county general and specific plans.
- The sphere of influence of any local agency that may be applicable to the proposal being reviewed.
- The comments of any affected local agency.
- The ability of the newly formed or receiving entity to provide the services that are the subject of the application to the area, including the sufficiency of revenues for those services following the proposed boundary change.
- Timely availability of water supplies adequate for projected needs as specified in *California Government Code* §65352.5.
- The extent to which the proposal will affect a city or cities and the county in achieving their respective fair shares of the regional housing needs, as determined by the appropriate council of governments consistent with Housing Element laws.
- Any information or comments from lawmakers.
- Any information relating to existing land use designations.

In addition to the above factors, LAFCO may also consider any resolution raising objections to the action that may be filed by an affected agency; and any other matters which the commission deems material.

Senate Bill 375

SB 375, adopted in 2008, represents the latest in a series of actions at the state level to address California's contributions to global climate change. Building on AB 32, SB 375 seeks to coordinate land use decisions made at the local (city and county) level with regional transportation planning.

By coordinating these efforts, it is envisioned that vehicle congestion and travel can be reduced resulting in a corresponding reduction in emissions. SB 375 directed CARB to set regional targets to reduce emissions; regional plans are required to identify how they will meet these targets.

SB 375 has three major components:

1. Using the regional transportation planning process to achieve reductions in emissions consistent with AB 32's goals.
2. Offering CEQA incentives to encourage projects that are consistent with a regional plan that achieves emissions reductions.
3. Coordinating the Regional Housing Needs Assessment (RHNA) process with the regional transportation process while maintaining local authority over land use decisions.

3. Regional

Southern California Association of Governments

The Grove Specific Plan is not considered a project of region wide significance pursuant to the criteria outlined in SCAG's Intergovernmental Review Procedures Handbook and CEQA Guidelines §15206, as the Project proposes a maximum of 250 units. Therefore, a consistency analysis with the applicable regional planning guidelines and strategies of the Southern California Association of Governments (e.g., 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Toward a Sustainable Future and Compass Growth Vision) is not required.

Ventura Local Agency Formation Commission

A Local Agency Formation Commission's purposes are to: 1) discourage urban sprawl, 2) preserve open space and prime agricultural land, 3) ensure efficient provision of government services, and 4) encourage the orderly formation and development of local agencies, such as cities (*California Government Code* §56301). The Ventura Local Agency Formation Commission (Ventura LAFCo) is responsible for coordinating orderly reorganization to local jurisdictional boundaries, including annexations. The Ventura LAFCo has adopted local policies that it must consider when making decisions on reorganization proposals. Specifically, the policies found in Division 3 of the Commissioner's Handbook, Policies of the Ventura LAFCo, are applicable to the proposed Project. Relevant policies from the Commissioner's Handbook are cited below.

Chapter 2 – Specific Policies

Section 3.2.1 – Annexation of Streets To Cities

Except in extraordinary circumstances, cities shall annex entire roadway sections adjacent to territory proposed to be annexed and shall include complete intersections. City annexations shall reflect logical allocations of existing and proposed roads and rights-of-way. Illogical allocations are divisions of roads in

the middle, short sections of roads situated between the boundaries of other agencies, and other divisions that require a road service provider to duplicate or provide services in an inefficient manner.

Section 3.2.3 – Annexation of Unincorporated Island Areas by Cities

Any approval of a proposal for a change of organization or reorganization will be conditioned to provide that proceedings will not be completed until and unless a subsequent proposal is filed with LAFCo initiating proceedings for the change of organization or reorganization of all unincorporated island areas that meet the provisions of Government Code Section 56375.3, provided all of the following criteria are applicable:

(a) The approved proposal was initiated by resolution of a city that surrounds or substantially surrounds one or more unincorporated island areas that meet the requirements of Section 56375.3.

(b) The territory in the approved proposal consists of one or more areas that are each 40 acres or more in area.

(c) The territory in the approved proposal will not be used exclusively for agriculture or open space purposes after the completion of proceedings.

(d) The territory in the approved proposal is not owned by a public agency or used for public purposes.

Section 3.2.4 – Conformance With Local Plans And Policies

3.2.4.1 Consistency with General and Specific Plans:

(a) In its review of a proposal, LAFCo shall consider consistency with city and/or county general and specific plans.

(b) Unless exceptional circumstances are shown, LAFCo will not approve a proposal unless it is consistent with the applicable general plan and any applicable specific plan. For purposes of this policy, the applicable general plan is as follows:

i. For proposals by a city, the general plan of the city.

ii. For proposals by a district, where the affected territory lies within an adopted sphere of influence of a city, the general plan of the city.

iii. For proposals by a district, where the affected territory lies outside an adopted city sphere of influence, the Ventura County General Plan.

3.2.4.3 – Guidelines for Orderly Development: LAFCo encourages proposals that involve urban development or that result in urban development to include annexation to a city wherever possible. In support of this policy LAFCo has adopted Guidelines for Orderly Development, the policies of which are incorporated by reference.

Chapter 3 – Standards

Section 3.3.1 – General Standards For Annexation To Cities And Districts

3.3.1.1 – Factors Favorable To Approval:

(a) The proposal would eliminate islands, corridors, or other distortion of existing boundaries.

(b) The affected territory is urban in character or urban development is imminent, requiring municipal or urban-type services.

(c) The affected territory can be provided all urban services by the city or district as shown by the city's or district's service plans and the proposal would enhance the efficient provision of urban services.

(d) The proposal is consistent with state law, adopted spheres of influence, applicable general and specific plans, and these policies.

(e) The proposal is for the annexation of city or district owned property, used or to be used for public purposes.

Guidelines for Orderly Development

The Guidelines for Orderly Development have been adopted by the Board of Supervisors, all City Councils within Ventura County, and the Local Agency Formation Commission (LAFCo). The revision of these Guidelines in December 1996 culminated an effort during the year by the County, Cities and LAFCo to improve the clarity of relationships between local agencies with respect to urban development projects by refining the 1969 guidelines and maintaining the consistent theme that urban development should be located within incorporated cities whenever or wherever practical.

General Policies

- Urban development should occur, whenever and wherever practical, within incorporate cities which exist to provide a full range of municipal services and are responsible for urban land use planning.
- The Cities and the County should strive to produce general plans, ordinances and polices which fulfill these Guidelines.

Policies within Spheres of Influence

- Applicants for land use permits or entitlements for urban uses shall be encouraged to apply to the City to achieve their development goals and discouraged from applying to the County.
- The City is primarily responsible for local land use planning and providing municipal services.
- Prior to being developed for urban purposes or to receiving municipal services, land should be annexed to the City.

- Annexation to the City is preferable to the formation of new or expansion of existing County service areas.
- Land uses allowed by the County without annexation should be equal to or more restrictive than land uses allowed by the City.
- Development standards and capital improvement requirements imposed by the County for new or expanding developments should not be less than those imposed by the City.

Ventura County General Plan Land Use and Zoning Maps

General Plan

The General Plan designates the site as Agricultural – Urban Reserve. The Agricultural designation is applied to irrigated lands which are suitable for the cultivation of crops and the raising of livestock.

The Urban Reserve overlay designation is applied to all unincorporated land within a city's adopted Sphere of Influence. Although LAFCO has determined these areas to be appropriate for eventual annexation and urbanization, the Urban designation was not applied to all lands within the LAFCO sphere boundaries because it could result in urban development being permitted without annexation. Accordingly, unincorporated lands within spheres have been designated under this General Plan as Existing Community, Rural, Agricultural or Open Space. Under these designations, therefore, more intense development could not occur on affected lands until they are annexed.

Zoning

The Zoning Map designates the site as Agricultural Exclusive – 40 AC.

Ventura County Non-Coastal Zoning Ordinance Section 8104-1.2 - Agricultural Exclusive (AE) Zone. The purpose of this zone is to preserve and protect commercial agricultural lands as a limited and irreplaceable resource, to preserve and maintain agriculture as a major industry in Ventura County and to protect these areas from the encroachment of nonrelated uses which, by their nature, would have detrimental effects upon the agriculture industry.

4. City of Ventura

General Plan

The City of Ventura's General Plan, adopted in 2005, provides goals, policies, and actions developed to guide future development in the City through the 2025 planning horizon, with an emphasis on a more intense "Infill First" strategy designed to preserve open space and prevent unsustainable growth. The General Plan establishes the following goals in the chapters, which incorporate the elements required under *California Government Code* §65302:

- Our Natural Community – Our goal is to be a model for other communities of environmental responsibility, living in balance with our natural setting of coastline, rivers, and hillside ecosystems.
- Our Prosperous Community – Our goal is to attract and retain enterprises that provide high-value, high-wage jobs; to diversify the local economy; to increase the local tax base; and to anticipate our economic future in order to strengthen our economy and help fund vital public services.
- Our Well Planned and Designed Community – Our goal is to protect our hillsides, farmlands, and open spaces; enhance Ventura's historic and cultural resources; respect our diverse neighborhoods; reinvest in older areas of our community; and make great places by insisting on the highest standards of quality in architecture, landscaping, and urban design.
- Our Accessible Community – Our goal is to provide residents with more transportation choices by strengthening and balancing bicycle, pedestrian, and transit connections in the City and surrounding region.
- Our Sustainable Infrastructure – Our goal is to safeguard public health, well-being, and prosperity by providing and maintaining facilities that enable the community to live in balance with natural systems.
- Our Active Community – Our goal is to add to and enhance our parks and open spaces to provide enriching recreation options for the entire community.
- Our Healthy and Safe Community – Our goal is to build effective community partnerships that protect and improve the social well-being and security of all our citizens.
- Our Educated Community – Our goal is to encourage academic excellence and life-long learning resources to promote a highly educated citizenry.
- Our Creative Community – Our goal is to become a vibrant cultural center by weaving the arts and local heritage into everyday life.
- Our Involved Community – Our goal is to strive to work together as a community to achieve the Ventura Vision through civic engagement, partnerships, and volunteer service.

The Project site is within the City's sphere of influence, and is designated as Neighborhood Medium (9-20 units/acre) on the Current General Plan Designations map. **Figure 4.10-1, General Plan Land Use Map**, shows the existing General Plan land use designations for the Project site and surrounding area.

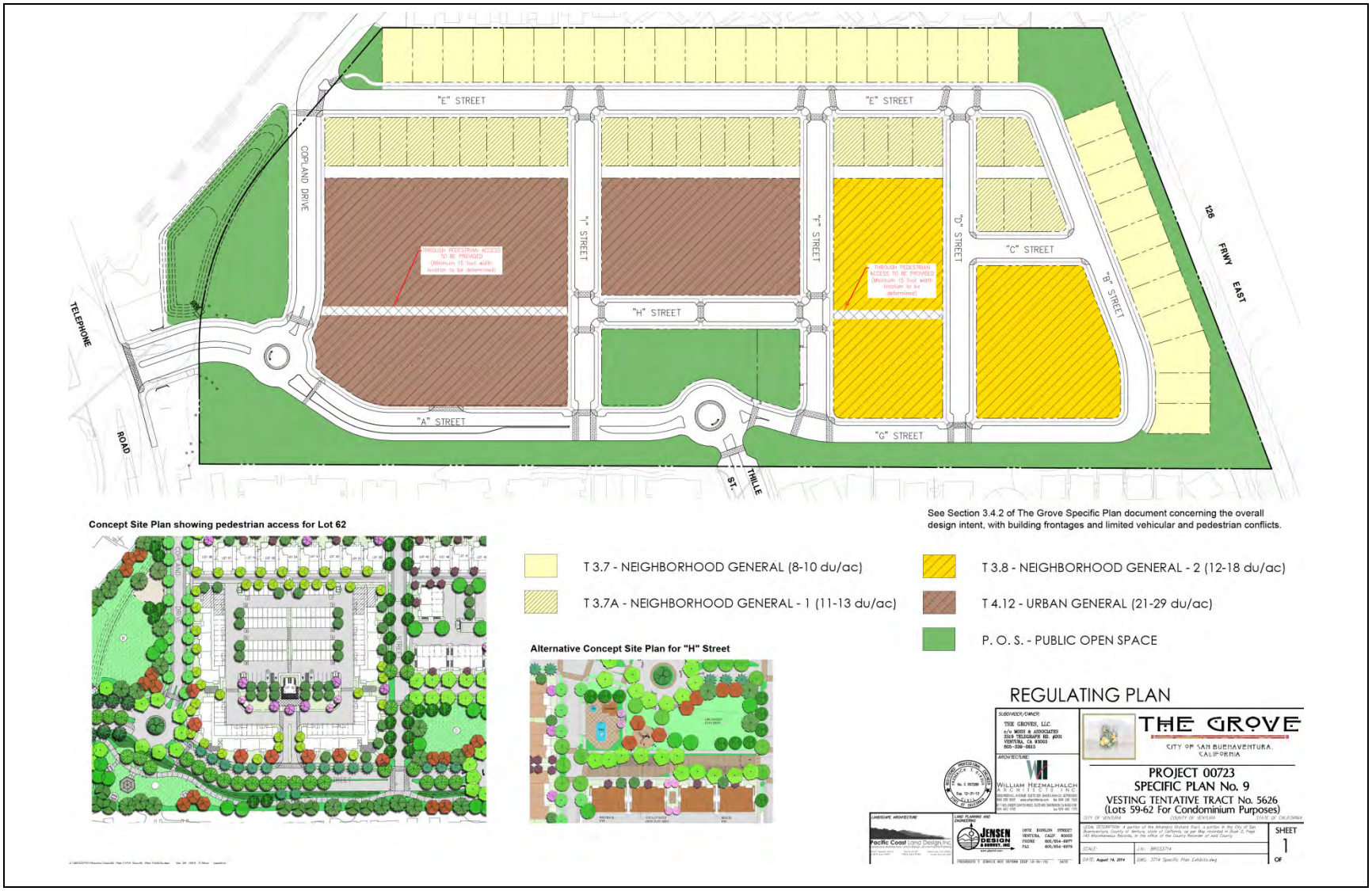


Figure 4.10-1 General Plan Land Use Map

Furthermore, The City of Ventura prepared updated projections of the amount of growth likely to occur within the City through the 2025 planning horizon year of the City's General Plan. The amount of additional development anticipated through 2025 in The Grove Specific Planning Project area is 250 dwelling units, which is greater than the projection in the General Plan, as no additional development was projected for the Project site. Proposed General Plan policies implement most SCAG policies relating to growth. However, growth accommodated under Scenarios 1-6 exceeds SCAG's Regional Comprehensive Plan and Guide and Ventura County AQMP population forecasts. This is largely because regional growth forecasts have not been updated to reflect current conditions in the City. Nevertheless, exceedance of regional forecasts is considered a Class I, unavoidably significant, impact of any of the six scenarios.

Municipal Code Zoning Regulations

Municipal Code Division 24, Zoning Regulations, identifies the use classification system, the land uses permitted and prohibited according to the zoning category of particular parcels, and establishes the development standards and regulations for each zone. The location and boundaries of the various zones are delineated on the City's Zoning District Map.

According to the Zoning District Map, the Project site does not have a City zoning designation.

4.10-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to land use are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to existing land uses if any of the following could occur.

LU-1	**Would the project physically divide an established community?**
LU-2	**Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**
LU-3	**Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?** *(Refer to analysis in Section 4.4, Biological Resources)*

4.10-5 Environmental Impacts

Overview of the Grove Specific Plan Project

The Grove Specific Plan has been prepared to establish the planning concept, regulations, and administrative procedures necessary to achieve compatible, orderly, and efficient development of the 26.51-acre Project site.

Per *California Government Code* §65451, Specific Plans are permitted to regulate development including permitted uses, density, design, building size, and placement. Specific Plans also govern the type and extent of open space, landscaping, roadways, and the provision of infrastructure and utilities. Since the development guidelines established in a Specific Plan focus on the unique needs of a specific area, Specific Plans allow for greater flexibility than is possible with conventional zoning.

The overall purpose and intent of the Specific Plan is to create a policy and zoning document that will establish a planning and regulatory framework designed for the future development and buildout of the property located within the Specific Plan Area. An overview of the various sections of the Specific Plan is provided below.

- **Section 1, Introduction** – This section provides background information about the Specific Plan. Since the Specific Plan will be used by a variety of users (such as property owners, City staff, business owners, residents, and elected and appointed officials), a brief background of the Specific Plan Area and project setting, and function of the specific plan are included.
- **Section 2, Specific Plan Goals and Policies** – This section cites the land use goals and policies for The Grove Specific Plan, along with the relationship of the Specific Plan to the General Plan and other policies and regulations, and identifies the Specific Plan's environmental setting and conservation measures.
- **Section 3, Development Code & Land Use Regulations** – This section of this document is intended to: define and facilitate the orderly development of land within the City of Ventura; compliment the City's existing zoning ordinance; and seamlessly fold into the City's Municipal Code as SUBPART 24G or as determined by Director.
- **Section 4, Infrastructure and Public Services** – The Infrastructure and services plan discusses existing conditions and proposed improvements to local circulation, parking, sewer, water, and storm drain systems that would serve the Specific Plan Area at full buildout. Improvements proposed are triggered by the development discussed in Section 3 of the Specific Plan, Development Code and Land Use Regulations. Public and private utility providers are also identified here.
- **Section 5, Implementation & Administration of Land Use Regulations** – The intent of this section is to provide methods for eventual construction and buildout of the Specific Plan. Implementation techniques, tools, and incentives including efficient entitlement processing standards, phasing, cost estimates, and public and private funding and financing mechanisms are also addressed.

- **Section 6, Definitions** – This section provides definitions are for two categories: 1) Use Classification System, and 2) general terms used throughout the Specific Plan document.
- **Section 7, Appendices** – This section includes the City of Ventura Standard Design for Off-Street Parking, the City of Ventura Inclusionary Housing Program, and Design Review Committee Resolution.

California Government Code (Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457) provides the authority to adopt a Specific Plan by ordinance (as a regulatory plan) or resolution (a policy driven-plan). The Specific Plan will be both a regulatory and policy document adopted by the Ordinance.

As a regulatory plan, the Specific Plan will establish the zoning for the land within the Specific Plan Area. Development plans, site plans, tentative tract maps, and/or parcel maps must be consistent with the Specific Plan and the General Plan. Upon approval of The Grove Specific Plan, which will also be the zoning for the site, future development will be subject to the development standards and development parameters governed by the Specific Plan. In the event The Grove Specific Plan is silent as to a development standard or procedure, the provisions of the City's Municipal Code shall control.

LU-1 Would the project physically divide an established community?

The Project site is bounded by urban development on all sides. The Thille Community, which consists of single-family detached homes and multi-family apartments, is located immediately east of the site. The La Posada mobile home park is located immediately west of the site. The SR-126 Highway is immediately to the north of the site, a commercial development is located south of Telephone Ave and farther to the west by the US 101/SR-126 highway interchange.

The Grove Specific Plan provides new land use designations and development standards to guide future development within the planning area. The Grove Specific Plan would provide additional tools to implement the 2005 General Plan. Future development would result in an intensification of development density within an existing urbanized area, and would not include features, new development, or public improvements that would physically divide the existing Thille Community. The existing development pattern and roadway network would be preserved, and community connectivity would be enhanced by proposed infrastructure improvements. No linear features or large developments inconsistent with existing uses that would potentially divide the Thille Community are proposed under The Grove Specific Plan.

In addition, enhanced bicycle and pedestrian connections would also be provided. These features would enhance the pedestrian, bicycle, and motor vehicle circulation by adding street connections to the existing circulation network in the Thille Community. These roadway improvements would not physically divide the community.

In conclusion, implementation of The Grove Specific Plan would not physically divide an established community and would result in less than significant impact.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

LU-2	**Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

Local Land Use Consistency

City of Ventura General Plan

The Project requests approval of The Grove Specific Plan. The Specific Plan is intended to establish the general type, parameters, and character of the development in order to develop an integrated residential community that is also compatible with the surrounding area. Currently, the site is agricultural production with one on-site manager's residence. Implementation of The Grove Specific Plan would up to 250 new residential units, after removing the on-site residence.

Specific Plan Consistency with General Plan

The General Plan Land Use Designation Map currently designates the Project site as Neighborhood Medium (9-20 dwelling units/acre. The land uses proposed in The Grove Specific Plan are consistent with the General Plan land use designation map.

The following text summarizes key land use goals and policies, standards, and designations established in The Grove Specific Plan.

- **Section 2, Specific Plan Goals and Policies.** The Grove Specific Plan includes the following land use goals to guide development in The Grove Specific Plan Specific Plan area.

  Goal 1: Complete the Thille Community with an attractive residential neighborhood of varied housing types that is compatible with surrounding development.

Goal 2: Create neighborhoods within the Specific Plan area that balance vehicular circulation with bike and pedestrian travel, while improving travel into and through and to the site.

Goal 3: Buildout of The Grove Specific Plan Specific Plan shall respect the natural environment.

Goal 4: Protect residents of The Grove Specific Plan from harmful and nuisance highway noise.

- **Section 2.3.C, Neighborhood Design.** The Grove Specific Plan area will be divided into six separate neighborhood blocks containing a mix of residential housing types. The neighborhood block sizes are pedestrian friendly by design, varying in size from a perimeter walk of 633 feet (2 minutes) to 1,750 feet (6 minutes) with interspersed pedestrian connections throughout. Within the Specific Plan area, 4.79 acres is dedicated to open space, parks and a network of trails interconnecting the Grove neighborhood blocks with one another and adjacent neighborhoods.

  To achieve a desirable community, the following elements have also been incorporated:

  - Alley loaded homes and garages have been provided to create enhanced front door presence along the streets and direct automobiles to the rear of buildings.
  - Garage doors of alley-loaded residences are hidden within private auto courts/alleys to separate pedestrian and vehicular circulation
  - All residents have access to green space within a short distance of their homes.
  - The majority of the architecture incorporates front porches facing the streets and greenbelts.
  - Landscape amenities, in the form of green belts have been purposely created to unite front doors of the units into a common park-like atmosphere.
  - Well planned green belt open space areas link pedestrian walkways, allowing residents and neighbors to traverse the site with ease and safety.
  - Green belt areas and the half-acre Central Park have been created in the spirit of protecting open space within the city as intended in the Residential Growth Management Program.
  - A bicycle path links the site with neighboring commercial areas and the City's bike path system.

- **Section 3, Development Code & Land Use Regulations.** Section 3, Development Code & Land Use Regulations, defines and facilitates the orderly development of land within the City of Ventura; compliment the City's existing zoning ordinance; and seamlessly fold into the City's Municipal Code as SUBPART 24G or as determined by Director.

- **Section 3.2, Development Code & Land Use Regulations.** The land use standards in this Article identify the land use types allowed by the City in each of the zones established by the Regulating Plan and determine the type of City approval required for each land use type. The zones described herein are noted in the Transect vernacular, pursuant to the descriptions noted on Specific Plan Figure 3.3.

- **Section 3.3, The Grove Specific Plan - Regulating Plan and Zones.** The Regulating Plan (Specific Plan Figure 3.1) maps the applicability of the requirements of this Specific Plan, and establishes zones that applied to the Project area by this Specific Plan.

  The Grove Specific Plan Specific Plan is divided into the following zones, which shall be applied to property within the Specific Plan area as shown on The Grove Specific Plan Regulating Plan (Specific Plan Figure 3.1). The Transect zones (T3.7, T3.7A T3.8, and T4.12) and accompanying uses are noted below and are consistent with the City's defined Transect Zones shown in Specific Plan Figure 3.3.

  A. Neighborhood General 1 (T3.7). The T3.7 zone is applied to areas appropriate for a mix of houses and lot sizes, characterized by detached single-family houses on larger lots. Intended net density excluding right-of-way is 8-10 dwelling units per acre with a typical minimum lot size of 50 feet by 90 feet. The T3.7A sub-zone denotes areas for single-family detached homes on smaller lots, with lane/alley access. Intended net density of the T3.7A sub-zone excluding right-of-way is 11-13 dwelling units per acre with a typical minimum lot size of 40 feet by 80 feet.
  B. Neighborhood General 2 (T3.8). The T3.8 zone is applied to areas appropriate for a variety and mix of detached and multi-family houses on a variety of lot sizes and product types. Intended net density excluding right-of-way is 10-18 dwelling units per acre.
  C. Urban General (T4.12). The T4.12 zone is applied to portions of the Specific Plan that are intended for higher density residential uses. Some residential types specified in the T3.8 Zone are permitted in the T4.12 zone. Intended net density excluding right-of-way is 18-21 dwelling units per acre.
  D. Parks and Open Space (POS). The POS zone identifies areas reserved for outdoor recreation, community parks, squares, greenways and other urban open spaces. Allowable structures in this zone are limited to those necessary to support the specific purposes of each individual open space site.

- **Section 3.4, Architectural & Design Guidelines.** The purpose of The Grove Architectural & Design Guidelines is to allow the timeless elements of traditional architectural to influence the look and feel of the neighborhood. The character, articulation, material types, and variation of residential architectural design are a key component in creating a neighborhood identity that is welcoming and pedestrian-

friendly. The standards in these Guidelines provide direction for the design of all homes for the Grove, appurtenances, and site elements within The Grove Specific Plan area. The Guidelines address building types; frontage types; building materials, articulation & application; landscaping; and signs.

- **Section 4.1, Circulation.** Principal access points to The Grove Specific Plan would be the existing western terminus of Thille Street, which would be extended into the Project at the site's eastern boundary, and Copland Drive after it leaves Telephone Road, which would be realigned to enter the site from the south. As illustrated on the Specific Plan Site Plan, Copland Drive would then reconnect to its existing alignment just south of the mobile home park, allowing the street to continue serving the existing mobile home neighborhood as well as The Grove Specific Plan new neighborhoods.

  The circulation pattern within the proposed development would be a modified grid pattern, with connectivity throughout and without dead ends or cul-de-sacs. Private auto courts/alleys are proposed, allowing garages to be sited and accessed from the rear, improving the streetscape and helping to separate pedestrian and vehicular circulation. Copland Drive and Thille Street entries to the site would consist of two lane roads, highlighted by a tandem traffic circle layout of the Thille Street entry point and also near the south entry, where Copland Drive would be realigned.

  Collector streets within The Grove Specific Plan would be designed for 30-32 feet of travelway with seven-foot wide parkways and six-foot wide sidewalks for a total public right of- way of 58 feet. Private alleys would be within 20-foot easements with 12 to 16 feet of travelway, not including landscaping and driveways. On Lots 60 and 62, a pedestrian connection is required to bisect the blocks in order to improve connectivity within the neighborhood. Along the linear park, a solid fence or wall should be incorporated to buffer single-family residences and an open fence for multifamily when fronting the linear park.

The Grove Specific Plan was designed to be consistent with the General Plan, but also to reflect the overarching guidance in the newly updated plan towards providing the "highest standards of quality in architecture, landscaping and urban design." Specific Plan Section 2.3.B articulates how the Specific Plan is consistent with the General Plan. The text from Section 2.3.B is restated below.

- The Project is compliant with the General Plan, which designates the site as "Neighborhood Medium" and anticipates a mixture of detached and attached dwellings and higher building types at approximately 9 to 20 dwelling units per acre. Project density is in compliance with this. Additionally, the Project completes the Circulation Element for this portion of the city by completing the connection of Thille Street to Telephone Road. The linear park is adjacent to the 126 freeway, and a park linkage has been provided down to Telephone Road as well.

- The Project is an infill site, as it is surrounded on all sides by either existing urban uses or highways. The Circulation Element is completed by connecting Thille Street to Telephone Road. The Project has provided for wastewater conveyance and loops the City water system between Telephone Road and Thille Street.
- The linear park and site layout are responsive to the urban environmental setting found at the Project with a combination berm and sound wall provided to mitigate noise emanating from the freeway.
- The Grove Specific Plan is a site with access from only two sides, Thille Street on the east, and Telephone Road on the south. The design is a thoughtfully produced plan to provide vehicular circulation, which discourages speed and traffic to the entire neighborhood, but also provide pedestrian and parkway linkages.

The Grove Specific Plan provides a set of goals and policies intended to implement General Plan policies and facilitate an "Infill First" development strategy. The consistency of the two plans is analyzed in **Table 4.10-1** below.

Table 4.10-1 General Plan Policy Consistency Analysis

Policy	Consistency Analysis
Our Natural Community	
Policy 1D: Expand the use of green practices.	Consistent. The Grove Specific Plan includes a number of policies expand the use of green practices within the planning area and throughout the City. The Specific Plan would support sustainable project designs, incorporate "green street" designs into streetscapes, and require new development to implement low-impact development (LID) techniques.
Our Well Planned and Designed Community	
Policy 3A: Sustain and complement cherished community characteristics.	Consistent. As detailed in the Design Development and Design Standards sections of The Grove Specific Plan's Specific Plan Land Use Plan, the proposed site plan would complement and continue existing, established characteristics of the Thille Community. Two-story apartments would be located adjacent to existing two-story units. Townhouse units are sited and designed to be compatible with the existing single-family units to the east. The proposed single-family detached units would be located alongside the existing mobile home park, thereby limiting the number of units adjacent to the existing mobile home residents. The site plan is designed with residences facing the public streets, a strong streetscape element, 4.79-acres of parks and pedestrian connections such as trails, paths and emergency access ways to off-site areas tying the project neighborhoods together. Finally, proposed Specific Plan Goal 1 and associated policies serve to further General Plan Policy 3A by requiring that The Grove Specific Plan be designed and built as an attractive residential neighborhood of varied housing types that is compatible with surrounding development.
Policy 3A: Sustain and complement cherished community characteristics.	Consistent. The Grove Specific Plan's vision for the community includes "preserving neighborhood heritage" and "supporting and expanding the vibrant arts community" already present in the Thille Community. The plan provides policies supporting the preservation of the Thille Community's local heritage and history.
Policy 3B: Integrate uses in building forms that increase choice and encourage community vitality.	Consistent. The Grove Specific Plan provides a flexible form-based code that encourages mixed-use development. The Development Code and Land Use Regulations sections provide for a wide range of structure types intended to

Policy	Consistency Analysis
	increase development flexibility.
Policy 3C: Maximize use of land in the city before considering expansion.	Consistent. The Grove Specific Plan property is a true infill site, surrounded on all sides by medium- to high density residential development and existing urban transportation corridors. The proposed residential density of approximately 8-10 units per acre is a result of close work with the neighboring community towards a project that would blend well with existing residential uses and densities. The proposed density is generally consistent with the General Plan designation of Neighborhood Medium (T3 Sub-Urban, T4 General Urban and T5 Urban Center), which anticipates a mixture of detached and attached dwellings, which The Grove Specific Plan offers.
Policy 3C: Maximize use of land in the city before considering expansion.	Consistent. The Project would facilitate development within an existing urban area per the 2005 General Plan 'Infill First' strategy. Future development would maximize the development potential of the planning area to preserve open space and prevent unsustainable sprawling of the City.
Policy 3D: Continue to preserve agricultural and other open space lands within the City's Planning Area.	Not Consistent. The Project site is currently in agricultural production, which would cease if The Grove Specific Plan is adopted. Thus, there would be a loss of 26.51 acres of agricultural land within the City's corporate and Sphere of Influence boundaries.
Policy 3E: Ensure the appropriateness of urban form through modified development review.	Consistent. The Grove Specific Plan provides a form-based Development Code that would allow flexibility in future development while preserving the natural and cultural values of the Thille area.
2014-2021 Housing Element	
Goal 1 Maintain and improve the quality of existing housing and residential neighborhoods in Ventura.	Consistent. The Grove Specific Plan would regulate future development in the planning area under policies designed to preserve the character of the Thille Community while improving the quality of development and reducing blight.
Goal 2 Facilitate the provision of a range of housing types to meet the diverse needs of the community.	Consistent. The Grove Specific Plan provides for a number of residential building types that would allow flexibility for future development. The Grove Specific Plan provides policies that support the provision of housing for all income levels. In addition, the Project would contribute towards meeting the City's RHNA allocation with 15% of the units being made affordable in compliance with Municipal Code Section 24R.240.
Goal 3 Provide adequate housing sites through appropriate land use and zoning designations to accommodate the City's share of the regional housing needs.	Consistent. See analysis for Goal 2.
Goal 4 Mitigate or remove any potential governmental constraints to housing production and affordability.	Consistent. See analysis for Goal 2.
Goal 5 Promote equal opportunity for all residents to reside in the housing of their choice.	Consistent. See analysis for Goal 2.
Our Accessible Community	
Policy 4A: Ensure that the transportation system is safe and easily accessible to all travelers.	Consistent. The Grove Specific Plan would expand the existing road network through the extension and relocation of existing streets. The plan would develop enhanced pedestrian and bicycle circulation infrastructure to increase connectivity and accessibility throughout The Grove Specific Plan area.
Policy 4B: Help reduce dependence on the automobile.	Consistent. The Grove Specific Plan's location adjacent to Telephone Road offers direct access to Gold Coast Transit Route 6B, a major cross-town route. The site also offers access to the Telephone Road and Thille Street Class II bike lanes, as well as access to the bicycle and pedestrian trail that extends eastward of the site to Victoria Avenue and the Government Center between the Thille neighborhood and Highway 126. A paseo/park linkage would be

Policy	Consistency Analysis
	provided from this trail through the Project site down to Telephone Road. Streets would be laid out in an interconnected modified grid pattern providing connectivity to other adjacent streets and parks. Finally, the Project completes the Circulation Element for this portion of the city by completing the connection of Thille Street to Telephone Road. Proposed Specific Plan Goal 2 and associated policies would further ensure that pedestrian circulation and alternative transportation circulation take precedence within the development while vehicular circulation and alternative transportation through and to the site is enhanced.
Policy 4C: Increase transit efficiency and options.	Consistent. See analysis for Policy 4B.
Our Sustainable Infrastructure	
Policy 5A: Follow an approach that contributes to resource conservation.	Consistent. Infrastructure and the landscape within The Grove Specific Plan area would be informed by nature and natural systems. This includes the creation of a "green infrastructure" system to clean and convey storm water. As part of storm water management, techniques to be utilized include vegetated swales to convey and infiltrate rainwater and pervious pavements to allow storm water to infiltrate directly into the ground below. In addition, the use of plants adapted to the local climate, soil and hydrology reduces the need for irrigation and fertilizers. Also, water demand would be reduce by choosing plants that need little irrigation and by using water-saving fixtures for homes.
Policy 5B: Improve services in ways that respect and even benefit the environment.	Consistent. The Grove Specific Plan neighborhood would include both flow-based and volumetric water quality treatments. A water quality basin would collect and detain low flows from the storm drain system. Catch basins feeding directly into off-site storm drain facilities would rely on low-maintenance flow-based treatments such as such as continuous deflective separation (CDS) technology, permeable pavement, and bio swales, which remove suspended solids, sediments, trash, debris, oil, grease and floatable materials from storm water flows. Proposed Specific Plan Goal 3 and associated policies provide specific direction for incorporation of these and other water quality protection measures.
Our Active Community	
Policy 6A: Expand the park and trail network to link shoreline, hillside, and watershed areas.	Consistent. The Grove Specific Plan includes a 4.79-acre park and paseo system integrated into the site plan. The linear park adjacent to the 126 freeway would be completed with a proposed paseo/park linkage down to Telephone Road. Proposed Specific Plan Policy 2.3 identifies this Project component as well.
Policy 6C: Provide additional gathering spaces and recreation opportunities.	Consistent. See analysis for Policy 4B. The Grove Specific Plan includes policies intended to provide expanded public spaces that would be available to all residents of and visitors to the planning area.
Our Healthy & Safe Community	
Policy 7B: Minimize risks from geologic and flood hazards.	Consistent. Future development in the Specific Plan area would be required to provide geology studies, when needed, and comply with the City's floodplain ordinance.
Policy 7C: Optimize firefighting and emergency response capabilities.	Consistent. The Grove Specific Plan would provide extensions to the circulation system in the planning area that would improve vehicular circulation and emergency access.
Policy 7D: Minimize exposure to air pollution and hazardous substances.	Consistent. The Grove Specific Plan provides policies to reduce exposure to air pollution and exposure to hazardous substances.
Policy 7E: Minimize the harmful effects of noise.	Consistent. Compliance with the noise performance standards contained in Article IV, Section 88-675 of the Zoning Ordinance would be required as part of The Grove Specific Plan's Regulating Plan. In addition, a combination berm

Policy	Consistency Analysis
	and sound wall is provided to mitigate noise emanating from the freeway. Proposed Specific Plan Goal 4 and associated policies also call for construction materials and techniques to reduce noise impacts to residences proposed nearest the adjacent highways.

Per California state law, the proposed Specific Plan must be consistent with the 2005 Ventura General Plan. As noted earlier, the land use uses proposed in The Grove Specific Plan are consistent with the General Plan land use designation map. In addition, based on the analysis provided in **Table 4.10-1**, The Grove Specific Plan would be consistent with applicable General Plan policies, with the exception of one policy, Policy 3D regarding the preserving of agricultural land. Additional analysis of agricultural resources is included in Section **4.2, Agricultural Resources**.

Local Agency Formation Commission Consistency

Annexation of the Specific Plan Area to the City of Ventura is subject to LAFCo approval, and LAFCo would review the proposed annexation for consistency with LAFCo's Annexation Policies and Procedures.

Guidelines for Orderly Development

The Ventura LAFCo prepared its Guidelines for Orderly Development to guide the process of annexation, determining sphere of influence, and actions taken by Cities beyond their incorporated boundaries. An analysis of policy consistency between The Grove Specific Plan and the Guidelines for Orderly Development is provided in **Table 4.10-2** below.

Table 4.10-2 Guidelines for Orderly Development Consistency Analysis

Policy	Consistency Analysis
General Policies	
Urban development should occur, whenever and wherever practical, within incorporated cities which exist to provide a full range of municipal services and are responsible for urban land use planning.	Consistent. The Grove Specific Plan would increase development intensity in an existing urban area. Future development would maximize the development potential of the planning area. Thus, the Project is consistent with this policy.
The Cities and the County should strive to produce general plans, ordinances and polices which fulfill these Guidelines.	Not Applicable.
Policies within Spheres of Influence	
Applicants for land use permits or entitlements for urban uses shall be encouraged to apply to the City to achieve their development goals and discouraged from applying to the County.	Consistent. The Applicant has submitted applications to the City of Ventura for: Pre-Zone and Amendment to the City's Zoning Ordinance to incorporate The Grove Specific Plan, Approval of the Tentative Tract Map, Certification of the Final Environmental Impact Report, File application to amend the sphere of influence and incorporate the Project site into the City of Ventura, and Design Review of the Project. The Applicant has submitted applications to the Ventura LAFCO for: Approval of an amendment to the City's Sphere of Influence to include The Grove Specific Plan site and Approval of reorganization of Special Districts. Thus, the Project is consistent with this policy.

Policy	Consistency Analysis
The City is primarily responsible for local land use planning and providing municipal services.	Consistent. Refer to response above regarding the City's local land use planning responsibilities for the Project. In addition, the City would provide municipal services once the site is annexed. Refer to the analysis for Public Services in Sections 4.13-1 through 4.13-4 and Utilities and Service Systems in Sections 4.16-1 through 4.16-3 regarding the provisions of public services and utilities. Thus, the Project is consistent with this policy.
Prior to being developed for urban purposes or to receiving municipal services, land should be annexed to the City.	Consistent. The Grove Specific Plan would concentrate development in the City's existing urban core and within the City limit. Thus, the Project is consistent with this policy and is subject to LAFCO approval.
Annexation to the City is preferable to the formation of new or expansion of existing County service areas.	Consistent. The Project is seeking annexation into the City. As noted above, The Grove Specific Plan would concentrate development in the City's existing urban core and within the City limit. Thus, the Project is consistent with this policy and is subject to LAFCO approval.
Land uses allowed by the County without annexation should be equal to or more restrictive than land uses allowed by the City.	Not Applicable.
Development standards and capital improvement requirements imposed by the County for new or expanding developments should not be less than those imposed by the City.	Not Applicable.

Based on the analysis provided in **Table 4.10-2**, The Grove Specific Plan would be consistent with the Guidelines for Orderly Development. Additional analysis of the Project's consistency with Ventura LAFCo policies is included in the following sections: **Section 4.2, Agricultural Resources**; **Section 4.12, Population and Housing**; **Section 4.16-3, Water Supply**, **Section 4.16-2, Wastewater**; **Section 4.13-2, Fire Services**; and **Section 4.13-1, Police Protection**.

In conclusion, implementation of The Grove Specific Plan would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project, and as such, impacts would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.10-6 Cumulative Impacts

Anticipated growth within the City of Ventura is projected in the City's 2005 General Plan and the potential environmental effects of this growth are assessed in the EIR prepared for the 2005 Ventura General Plan.

The City of Ventura prepared updated projections of the amount of growth likely to occur within the City through the 2025 planning horizon year of the City's General Plan. The amount of additional development anticipated through 2025 in The Grove Specific Planning Project area is 250 dwelling units, which is greater than the projection in the General Plan, as no additional development was projected for the Project site. The environmental analysis in this EIR evaluates the potential impacts of this amount of growth within The Grove Specific Plan area through the year 2025. This amount of growth is not substantially above the amount projected in the 2005 General Plan and would occur over time in conformance with the development standards in the proposed The Grove Specific Plan, which was developed to implement the goals and policies in the 2005 General Plan for the Thille Community.

The City of Ventura reviews all proposed projects against development and design guidelines that regulate permitted uses, development density, building heights, site and building design, transportation demand, and neighborhood protection. All proposed projects are evaluated for consistency with land use regulations, development standards, and applicable plans and policies, including those of the 2005 Ventura General Plan, during Project review and the approval process. For these reasons, cumulative land use impacts would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.11 Noise

The Grove Specific Plan Project was analyzed by Rincon Consultants in September 2005 and was updated on March 15, 2011 (**Appendix 4.11**); the last the update was provided on February 29, 2012 (**Appendix 4.11**). All reports were prepared by Rincon Consultants, and the 2011 and 2012 updates focused on changes to the proposed land uses. The update dated February 29, 2012 analyzed the new site plan consisting of 60 single-family dwellings, 50 condominiums, 142 apartments, and up to 4,000 square feet of office mixed use. The site has been revised to delete 4,000 square feet of office mixed use and a maximum proposal of 250 dwelling units.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.11-1 Introduction

The purpose of this section is to evaluate the potential for noise and ground borne vibration impacts resulting from implementation of the proposed Grove Specific Plan Project (the Project). This section includes an evaluation of potential impacts associated with substantial temporary and permanent increases in ambient noise levels in the vicinity of the Project Site; exposure of people in the vicinity of the Project Site to excessive noise or ground borne vibration levels; and whether exposure is in excess of standards established in the City of Ventura's General Plan or Noise Ordinance. Mitigation measures intended to reduce noise and vibration impacts are proposed, where appropriate, to avoid or reduce potentially significant impacts of the Project.

1. Project Location

The City of San Buenaventura is located in Ventura County, California. The Grove Specific Plan area is located in the western portion of the City, specifically at the western terminus of Thille Street, north of Copland Drive. The Project Site is bounded on the north by State Route 126 (SR-126), on the east by the Thille Community neighborhood, on the south by Telephone Road and Copland Drive, and on the west by the La Posada mobile home park, and farther to the west by the US 101/SR-126 highway interchange (see **Figure 4.11-1**, **Aerial Photograph of the Project Site**). The plan area is approximately 26.51 acres in area and is currently within unincorporated area, but is within the City of Ventura's Sphere of Influence and is designated on the General Plan Map as Medium Density Residential; 9 to 20 dwelling units per acre. The site is currently used for seasonal floral agricultural production.

The proposed Project consists of a Specific Plan and a Vesting Tentative Tract Map that would enable the future development of a residential neighborhood ranging between 200 and 250 dwellings on approximately 26.51 acres (a density of 9.43 per units per acre). The Tentative Map (see **Figure 3-4**, **Vesting Tentative Tract Map No. 5626**, page 3-7) would create individual lots for 32 front-loaded single-family residences, 26 alley-loaded single-family residences, and 4 larger lots that could accommodate up to 192 units in a combination of alley-loaded single-family homes, townhouses, and courtyard or stacked multi-family housing.

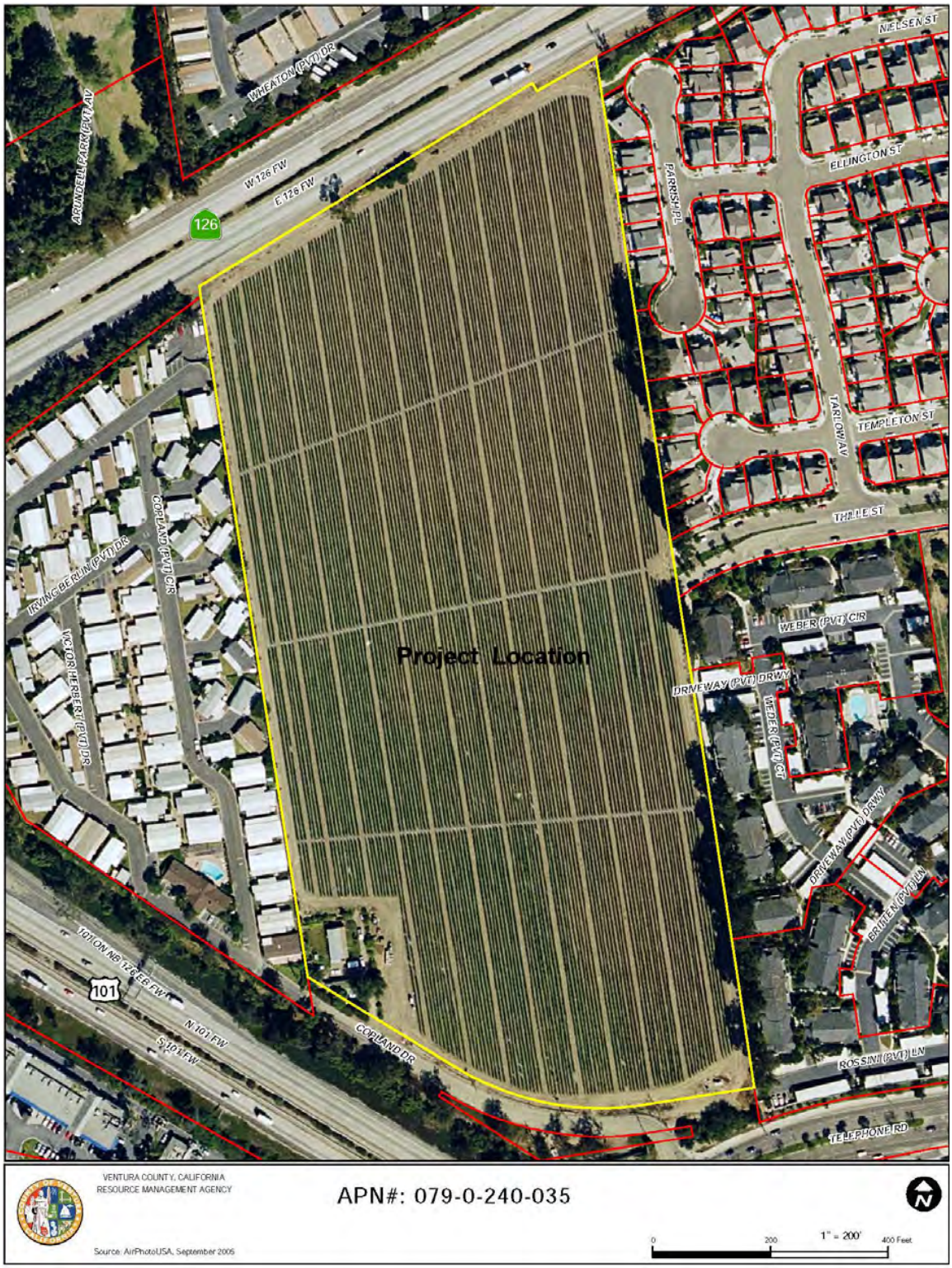


Figure 4.11-1 Aerial Photograph of the Project Site

2. Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (i.e., loudness) and frequency (i.e., pitch). The standard unit of sound amplitude measurement is the decibel (dB). The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted dB scale (dBA) provides this compensation by emphasizing frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound audible at such a level that the sound becomes an undesirable by-product of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or results in adverse health effects. The definition of noise as unwanted sound implies that it has an adverse effect, or causes a substantial annoyance, to people and their environment. However, not every unwanted audible sound interferes with normal activities, causes harm, or has adverse health effects. For unwanted audible sound (i.e., noise) to be considered adverse, it must occur with sufficient frequency and at such a level that these adverse impacts are reasonably likely to occur. Thresholds of significance, set forth below, are established to differentiate between benign, unwanted audible sound and potentially significant and adverse unwanted audible sound.

A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise, such as traffic on a major highway. **Table 4.11-1** below illustrates representative noise levels in the environment.

Several rating scales have been developed to analyze the adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effects of noise on people are largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq}: An L_{eq}, or equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{max}: The maximum instantaneous noise level experienced during a given period of time.
- L_{min}: The minimum instantaneous noise level experienced during a given period of time.

- CNEL: The Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 P.M. to 10:00 P.M. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a constant 60 dBA 24 hour L_{eq} would result in a CNEL of 66.7 dBA.

Table 4.11-1 Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet fly-over at 100 feet	—110—	Rock band
Gas lawnmower at 3 feet	—100—	
	—90—	Food blender at 3 feet
Diesel truck going 50 mph at 50 feet	—80—	Garbage disposal at 3 feet
Noisy urban area during daytime		
Gas lawnmower at 100 feet	—70—	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	—60—	Large business office
Quiet urban area during daytime	—50—	Dishwasher in next room
Quiet urban area during nighttime	—40—	Theater, large conference room (background)
Quiet suburban area during nighttime	—30—	Library
Quiet rural area during nighttime	—20—	Bedroom at night, concert hall (background)
	—10—	Broadcast/recording studio
Lowest threshold of human hearing	—0—	Lowest threshold of human hearing

Source: California Department of Transportation, Technical Noise Supplement, October 1998.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. For residential uses, environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high above 70 dBA. Frequent exposure to noise levels greater than 85 dBA over time can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA.

It is widely accepted that in the community noise environment the average healthy ear can barely perceive CNEL noise level changes of 3 dBA. CNEL changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA CNEL increase is readily noticeable to most people, while the human ear perceives a 10 dBA CNEL increase as a doubling of sound. However, there is no direct correlation between increasing or even doubling noise-generating uses and what is detectable by the human ear as an increase in noise level.

The human ear perceives a 10 dB(A) increase in sound level to be a doubling of sound volume, but doubling the sound energy (i.e., the noise-generating activity) only results in a 3 dB(A) increase in sound. This means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway) would result in a barely perceptible change in sound level to the human ear. Thus,

relatively sizeable increases in baseline noise generation are not necessarily perceived as significant noise increases by the human ear.

Noise levels from a particular source generally decline as distance to the receptor increases. Other factors, such as the weather and reflective barriers, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source (assume a starting point of 50 feet), the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., the area between the source and receptor is normal earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels are also generally reduced by about 1 dBA for each 1,000 feet of distance due to air absorption. Noise levels may also be reduced by intervening structures. Generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm can reduce noise levels by 5 to 10 dBA. The normal noise attenuation within residential structures with open windows is about 17 dBA, while the noise attenuation with closed windows is about 25 dBA. The exterior-to-interior reduction of newer homes and office buildings can be more than 30 dBA, depending on construction materials and methods used.

3. Fundamentals of Environmental Ground-Borne Vibration

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., train operations, motor vehicles, machinery equipment) causing the adjacent ground to move and creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as *ground-borne vibration*. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings, such as the operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings, such as historic buildings. The general human

response to different levels of ground-borne vibration velocity levels is described in **Table 4.11-2** below.

Table 4.11-2 Human Response to Different Levels of Ground-Borne Vibration

Vibration Velocity Level	Human Perception
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

4.11-2 Existing Conditions

Field measurements were conducted March 8, the results of which are presented in **Table 4.11-3** below. These measurements verify that noise levels on the Project Site are similar to the noise measurement results contained in the 2005 noise study.

Table 4.11-3 Field Measurement Data (dBA)

Location	Leq	Lmax	Lmin	Peak	L(10)	L(33)	L(50)	L(90)
Southwestern portion of site, near Copland Drive	67.8	73.3	60	86.5	98.1	69.8	68.4	67.5
Northwestern portion of site	64.0	76.6	58.6	97.6	102.6	65.7	64.4	63.7
Center of site	61.1	67.5	58	87.3	102.6	62.4	61.5	61.1

Traffic noise was generally the main noise source for measurements conducted off-site along access roads to the site. Traffic noise levels at the site were calculated by the methodology described in **Table 4.11-3** above. Noise levels at the periphery of the site nearest the freeways are greater than that considered normally acceptable for residential use, with sound levels near 70 dBA CNEL along SR-126 and 69 dBA CNEL for those units nearest to US 101. Given standard construction materials, it is probable that interior noise levels for those units in each complex with windows facing the freeway would have unacceptably high sound levels (exceed 45 dBA CNEL for interior uses). Sound levels in the center of the site are less than the City's criteria and so are at an acceptable level. Development of the proposed residential structures will further reduce projected sound levels for those proposed residences located in the interior of the site.

1. Existing Modeled Roadway Noise Levels

Existing roadway noise levels were calculated for primary roadway segments located in proximity to the Project Site. The roadway segments selected for analysis are considered to be those that are expected to be most directly impacted by project-related traffic, which, for the purpose of this analysis, includes the roadways that are nearest to the Project Site and had the most project-generated trips. These roadways, when compared to roadways located farther away from the Project Site, would experience the greatest percentage increase in traffic generated by the Project.

2. Traffic Sound Level Modeling

Freeway traffic was modeled using the Federal Highway Administration Traffic Noise Model (TNM, version 2.5) based on data provided by Austin-Foust and Caltrans in its 2004 and 2009 traffic volumes. Please note that the latest truck volume data estimated by Caltrans for SR-126 at this location was 4.9% truck volume based on a Year 2009 count, while their Caltrans' count in 2009 was about 6% truck volume. Based on anecdotal observations, the 4.9% truck volume number is low. Rincon Consultants had previously (2004) conducted brief counts of the freeway volume to determine the apparent truck volume and lane preferences during our analysis of SR-126 traffic noise for the Thille Community. These counts showed a medium- and heavy-duty truck volume of about 7% with a definite lane preference (80%) for trucks in the outside (slow) lanes of the freeway. A slight preference was also noted for automobile travel in the same lanes. Field counts conducted while monitoring at Station 2 for the 2005 noise study indicated truck traffic on the eastbound lanes of over 9%. A truck factor of 7% (3% heavy-duty truck) was also used for SR-126 to model traffic sound levels, consistent with the prior study conducted for the City of San Buenaventura. Truck traffic data from Caltrans (December 2010) was used to determine truck volumes on US 101 of 3.7% medium-duty truck and 2.5% heavy-duty truck.

Because the TNM is sensitive to the actual location of the traffic, an outside lane preference of 80% truck and 60% auto was used for SR-126. In addition, Caltrans traffic data indicated that rather than a typical 50/50 split between eastbound and westbound travel, the split was 54/46 for east/west traffic. Lane preference was also modeled for US 101 with heavy-duty trucks located primarily (70%) on the outside lane and middle lane (30%), and medium duty trucks located in primarily in the two outside lanes also.

The TNM model does not currently calculate CNEL correctly; therefore, this calculation required that three different traffic volumes be run: peak hour volume, average daily traffic volume, and average nighttime volume for existing and future (Year 2025) conditions, for a total of six scenarios. Peak hour volumes were based on the peak hour divided by the average annual daily traffic as reported by Caltrans (2009 traffic volumes) for the freeways, and assumed to be 10% for Telephone Road based on the intersection turning volumes provided by Austin-Foust (2011). The proportionate volumes for daytime and nighttime vehicular travel was assumed to be 85% of the vehicle volume during the 15 daytime hours and 15% during the 9 nighttime hours based on prior studies and Caltrans standard guidelines. Future volumes and Project traffic distribution were taken from the traffic study prepared by Austin-Foust in 2005.

The TNM uses algorithms based on speed to calculate the average sound level produced by the three vehicle types of concern (autos, medium-duty trucks, and heavy-duty trucks). A speed check was conducted by driving the freeways in both directions and noting the speeds of the various vehicle types and their chosen lane of travel. Based on this speed check, the following average speeds were generally used in the analysis: 70 mph for autos, 65 mph for medium-duty trucks, and 60 mph for heavy-duty trucks. For the future year analysis, peak hour congestion is anticipated to

slow speeds on US 101 south of Telephone Road, and average speeds were reduced by 5 mph for the peak hour condition. The results of the modeling indicate that of the three vehicle types, automobiles are the primary generator of traffic noise, followed by heavy-duty trucks.

As part of the previously prepared noise study, the locations of road lanes, existing barriers, and houses were digitized into the TNM model from an aerial photograph of the site and digital data (AutoCAD drawing) of the site base map. The 2011 Project includes a larger park area in the southeastern portion of the site, which creates a greater setback from Telephone Road for the residences located in the southeastern portion of the site. As such, the locations of the residences in the southeastern portion of the site were adjusted accordingly in the TNM model. Otherwise, previous locations of residences and the corresponding labels were not modified. Topographical elevations were also taken from the digital data; however, sufficient modeling of the roadway sources required an extension of the freeway lanes based on the aerial photographs and an estimation of the freeway elevations that were not on the maps based on the USGS topographic map for the Saticoy Quadrangle. It was also assumed that the ground elevation of the future residences would be at the current ground level.

In addition, the height of the freeway overcrossings was determined using an Opti-Logic 600LH laser rangefinder/hypsometer, which uses a pulsed laser rangefinder and vertical angle sensor to determine height. Its range resolution is 1 foot, and height accuracy is ±1.5 feet. Appendix A to the Noise Study (**Appendix 4.11** to this Draft EIR) contains the results of the noise model. Appendix B to the Noise Study (**Appendix 4.11** to this Draft EIR) contains the traffic data for the six scenarios modeled, and Appendix C to the Noise Study (**Appendix 4.11** to this Draft EIR) contains the basic input data files required for all six scenarios for the TNM model (2011 Update).

The noise model was checked for calibration based on the field noise measurements conducted at the site. The existing peak hour condition was compared to the peak hour noise measurements with good agreement (approximately 1 dBA difference) obtained for the three measurement sites. The model under-estimated noise levels at the measurement site along the western property edge, but this may have been due to other sources present at the time of the ambient noise measurement. Given the generally good agreement of the model to field conditions, adjustments were deemed unnecessary.

The field measurements and the TNM model are subject to various errors. Field measurements are essentially a “snapshot” in time and are indicative of the environmental conditions and travel patterns that existed on the days of the measurements, which can vary substantially from day to day and season to season. The noise model is subject to the limitations of the data readily available, including the accuracy of elevations taken from the digital and paper maps as compared to actual field conditions, and the inaccuracies created by digitizing from paper sources. Therefore, the accuracy of the sound levels reported in this study is considered to be in the ±2 dB range.

3. Existing Ground-Borne Vibration Levels

The main sources of ground-borne vibration near the Project Site are heavy-duty vehicular travel (e.g., refuse trucks, delivery trucks, and transit buses) on local roadways. Trucks and buses typically generate ground-borne vibration velocity levels of around 63 VdB at 50 feet, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road. In terms of PPV levels, a heavy-duty vehicle traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 inch per second.

4.11-3 Regulatory Framework

1. Federal Standards

There are no federal noise standards that directly regulate environmental noise related to the construction or operation of the Project. However, the Office of Safety and Health Administration (OSHA) regulations safeguard the hearing of workers exposed to occupational noise.

Vibration

The Federal Transit Administration (FTA) has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by the FTA are shown in **Table 4.11-4** below.

Table 4.11-4 Construction Vibration Damage Criteria

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006.

The FTA has also adopted standards associated with human annoyance for ground-borne vibration impacts for the following three land-use categories: 1) Vibration Category 1 – High Sensitivity, 2) Vibration Category 2 – Residential, and 3) Vibration Category 3 – Institutional. The FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals. Category 3 refers to institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Under conditions where there are an infrequent number of events per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 80 VdB for Category 2 buildings, and 83 VdB for Category 3 buildings. Under conditions where there are an occasional number of events per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 75 VdB for Category 2 buildings, and 78 VdB for Category 3 buildings. Under conditions where a frequent number of events occur per day, the FTA has established thresholds of 65 VdB for Category 1 buildings, 72 VdB for Category 2 buildings, and 75 VdB for Category 3 buildings. No thresholds have been adopted or recommended for commercial or office uses.

Ground-borne vibration can be perceived without instrumentation within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough ground-borne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic – typically heavy trucks – induces perceptible vibration in buildings, such as windows rattling or shaking of small loose items, it is most likely an effect of low-frequency airborne noise or ground characteristics. Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans. **Figure 4.11-2, Typical Levels of Ground-Borne Vibration**, identifies the typical ground-borne vibration levels in inches/second PPV and human response to different levels of vibration.

2. State of California

The California Department of Health Services has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These guidelines for land use and noise exposure compatibility are shown in **Table 4.11-5** below. In addition, §65302(f) of the *California Government Code* requires each county and city in the state to prepare and adopt a comprehensive long-range general plan for its physical development, with §65302(g) requiring a noise element to be included in the general plan. The noise element must: 1) identify and appraise noise problems in the community; 2) recognize Office of Noise Control guidelines; and 3) analyze and quantify current and projected noise levels.

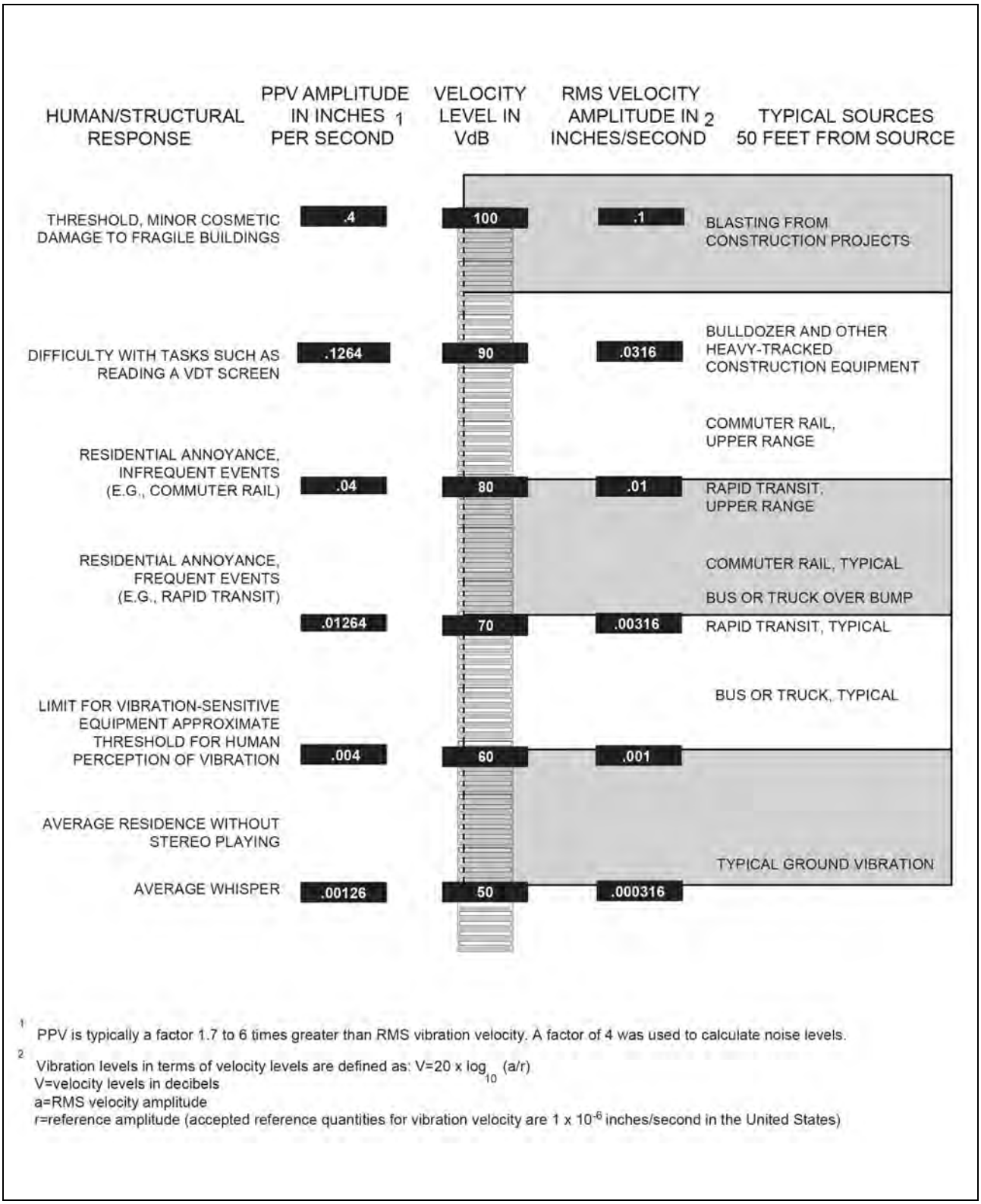


Figure 4.11-2 Typical Levels of Ground-Borne Vibration

Table 4.11-5 Community Noise Exposure (California General Plan Guidelines)

Land Use	Normally Acceptable [a]	Conditionally Acceptable [b]	Normally Unacceptable [c]	Clearly Unacceptable [d]
Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 75
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 75
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 70
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 75
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

a Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

b Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

c Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

d Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Office of Planning and Research, State of California General Plan Guidelines, October 2003 (in coordination with the California Department of Health Services (DHS)).

Vibration

No state vibration standards apply to the proposed Project. Moreover, according to the Caltrans Transportation- and Construction-Induced Vibration Guidance Manual (2004), no official Caltrans standards exist for vibration. However, the manual provides guidelines for assessing vibration damage potential to various types of buildings, ranging from 0.08 to 0.12 inches per second for extremely fragile historic buildings, ruins, and ancient monuments, to 0.50 to 2.0 inches per second for modern industrial and commercial buildings.

3. City of Ventura Standards

The General Plan outlines those Policies and Actions that serve to protect Our Healthy and Safe Community as follows:

Policy 7E: Minimize the harmful effects of noise.

Action 7.32: Require acoustical analyses for new residential developments within the mapped 60 decibel (dBA) CNEL contour, or within any area designated for commercial or industrial use, and require mitigation necessary to ensure that:

- Exterior noise in exterior spaces of new residences and other noise sensitive uses that are used for recreation (such as patios and gardens) does not exceed 65 dBA CNEL, and

- Interior noise in habitable rooms of new residences does not exceed 45 dBA CNEL with all windows closed.

Action 7.33: As funding becomes available, construct sound walls along U.S. 101, SR 126, and SR 33 in areas where existing residences are exposed to exterior noise exceeding 65 dBA CNEL.

Action 7.34: Request that sound levels associated with concerts at the County Fairgrounds be limited to 70 dBA at the eastern edge of that property.

Action 7.35: Request the termination of auto racing at the County fairgrounds.

Action 7.36: Amend the noise ordinance to restrict leaf blowing, amplified music, trash collection, and other activities that generate complaints.

Action 7.37: Use rubberized asphalt or other sound reducing material for paving and re-paving of City streets.

Action 7.38: Update the Noise Ordinance to provide standards for residential projects and residential components of mixed-use projects.

City of Ventura Noise Ordinance

The City Noise Ordinance provides exterior noise standards within the City. The following references are those portions of the Noise Ordinance that may be applicable to the Project.

The City of Ventura Municipal Code has issued standards in regard to noise levels at receiving properties within a City-designated noise zone, as shown in **Table 4.11-6** below. Section 10.650.130 of the Municipal Code prohibits unnecessary, excessive, or annoying noise in the City. The ordinance does not control traffic noise, but applies to all noise sources located on private property including traffic noise. As part of this ordinance, properties within the City are assigned a noise zone based on their corresponding land use. “Noise-sensitive” properties are designated as Noise Zone I; residential properties are designated Noise Zone II; commercial properties are included in Noise Zone III, and industrial/agricultural districts are designated as Noise Zone IV. The Ordinance also limits the amount of noise generated by uses during normal operation that may affect the surrounding areas.

The noise standards shown in **Table 4.11-6** apply to any noise-generating activity that exceeds the applicable level for a cumulative period of more than 30 minutes in any hour. For noise levels that last less than 30 minutes, the following standards apply: maximum noise levels equal to the value of the noise standard plus 5 dB(A) for a cumulative period of no more than 15 minutes in any hour; 10 dB(A) for a cumulative period of no more than 5 minutes in any hour; 15 dB(A) for a cumulative period of no more than 1 minute in any hour; or 20 dB(A) for any period of time. If the ambient sound level exceeds the allowable exterior standard, the ambient levels become the standard. Multifamily residential interior noise standards are 45 dB(A) from 7:00 a.m. to 10:00 p.m. and 40 dB(A) from 10:00 p.m. to 7:00 a.m. Section 10.650.150 designates hours of construction between the hours of 7:00 a.m. and 8:00 p.m.

Table 4.11-6 Exterior Noise Levels

Time Interval	Noise Sensitive Properties (Zone I)	Residential Properties (Zone II)	Commercial Properties (Zone III)	Industrial and Agricultural Properties (Zone IV)
7:00 a.m. – 10:00 p.m.	50 dB(A)	50 dB(A)	60 dB(A)	70 dB(A)
10:00 p.m. – 7:00 a.m.	45 dB(A)	45 dB(A)	55 dB(A)	70 dB(A)

Source: City of Ventura, Designated Noise Zones, Section 10.650.130(B).
Note: dB(A) = decibels
Noise sensitive properties include schools, hospitals, convalescent care, boarding, and rest homes.
Zones 3 and 4 are not applicable to the proposed site.

4.11-4 Thresholds of Significance

Based upon Appendix G of the CEQA Guidelines under Section XII, Noise, the following significance thresholds are used to evaluate Project impacts related to noise.

N-1 Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

N-2 Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

N-3 Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

N-4 Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Based upon Appendix G of the CEQA Guidelines under XII, Noise, a project may have a significant impact if:

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The Project would have no impact related to significance thresholds XII.e and XII.f because the planning area is not in the vicinity of an airport, and detailed analysis in the EIR is not required. These significance thresholds are discussed in **Section 6, Effects Found Not To Be Significant**.

4.11-5 Environmental Impacts

N-1 Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Analysis

As indicated in the February 22, 2012 traffic impact evaluation update prepared by Austin-Foust Associates, Inc., the uses included in the currently proposed site plan would generate an estimated 1,680 daily vehicle trips, which would be incrementally less than the March 2011 noise study.

The newly proposed site plan alters the relative distances between noise sources on SR 126 and the first row of residences south of the freeway. Consequently, the height of the wall needed to reduce the ground level exterior sound levels for interior yards is less than that previously proposed for a sound wall located closer to the freeway. Based upon the revised site plan the noise reduction effects of the new sound wall using the TNM based on the existing peak hour traffic volumes analyzed used in the March 2011 study. Future CNEL was estimated on the location of the currently proposed lot figurations based on the calculated CNELs from the Rincon March 2011 study. **Table 4.11-7** contains the results of the analysis.

Table 4.11-7 Estimated Future Site Noise Exposure

Location	Future Exterior CNEL*	Barrier Height	Barrier Reduction	Mitigated CNEL
Apartment facing Telephone Road	67 dB(A)	None practical	0.0 dB(A)	67 dB(A)
Lot 1 Southernmost lot	71 dB(A)	8' west property line	5.9 dB(A)	65 dB(A)
Lot 11 (middle at west property line)	64 dB(A)	8' west property line	4.6 dB(A)	59 dB(A)
Lot 20	67 dB(A)	8' west property line	6.2 dB(A)	61 dB(A)
Lot 22 (NW corner)	72 dB(A)	8' west property line	8.0 dB(A)	64 dB(A)
Lot 23 second floor	77 dB(A)	None practical	0.0 dB(A)	77 dB(A)
Lot 25	74 dB(A)	10' north property line	9.1 dB(A)	65 dB(A)
Lot 31	74 dB(A)	10' north property line	9.2 dB(A)	65 dB(A)
Lot 31 (second floor)	76 dB(A)	None practical	0.0 dB(A)	76 dB(A)
Lot 32	73 dB(A)	10' north property line	9.9 dB(A)	63 dB(A)
Lot 33	67 dB(A)	10' north property line	1.7 dB(A)	65 dB(A)
Lot 58 (adjacent Copeland Dr.)	70 dB(A)	7' south side of lot	5.6 dB(A)	65 dB(A)

*CNEL rounded to nearest whole number

Acceptable noise levels are found within the middle of the site, but those residences proposed to be located nearest the freeways would be subject to disturbing noise levels. The sound barrier along the north property line previously proposed at 12 feet in height can be reduced to 10 feet in height. However, since the preparation of the Noise Study update, the location of the noise wall has been placed closer to State Route 126, and the ultimate height shall be determined by a final update to the noise analysis. For the purposes of the impact discussion, the wall height could be anticipated to be as high as 12 feet as determined by previous Rincon study. This height would achieve the

needed future noise reduction because of the difference in the location of the barrier relative to an exterior observer within the backyards of the northern units in the site plan. Use of the Barrier Design feature in the TNM also indicated that the barrier extending southward at the edges of Lots 23 and 32 do not contain a measureable effect on sound level reduction and therefore are not needed for sound control. The sound barrier does not provide noise attenuation for second floor interior areas.

The proposed 8-foot-high sound wall along the western property line and extending east to west at Lot 22 is adequate to meet noise reduction needs. Lot 33 is potentially exposed to high sound levels by the "gap" formed by proposed Public Park A1; however, the analysis indicates that the sound walls and the shielding effects of the proposed structures would achieve the 65 CNEL exterior for that lot.

The 8-foot-high sound wall along the west property line would meet the noise reduction needs of Lot 1 at the southwest corner of the site as currently designed. The "garden wall" for Lot 58 should be seven feet in height to provide that the backyard with sufficient noise reduction to meet the future 65 CNEL exterior criteria. The southernmost apartment building is exposed to high sound noise levels from US 101 on its westernmost side. No practical method is available to shield exterior balconies that face to the south.

Level of Significance Before Mitigation

Without mitigation, impacts to noise would be significant.

Mitigation Measures

MM N-1	A sound barrier (solid concrete, masonry wall on berm, or other construction) should be constructed per the September 4, 2014 Concept Site Plan along the northern Project boundary along SR 126 with a height above the existing ground level of at least 10 feet and possibly up to 12 feet. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-2	The sound wall to be built on the west property line adjacent to Lots 1-22 as illustrated in the Conceptual Site Plan (September 4, 2014) shall be at a height above the existing ground of at least 8 feet. The portion of the 8-foot-high wall on Lot 1 shall not extend into the required front yard setback. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-3	A garden wall sound barrier 7 feet in height shall be constructed for Lot 58 located at the southern end of the site. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-4	All unshielded units and the second floor of units facing SR 126, US 101, and Telephone Road shall be constructed to include sufficient noise attenuation to reduce interior noise levels to a CNEL of 45 dBA. This would require, at a minimum. The use of double-

	paned windows on all windows that are exposed to freeway noise. Such windows shall have a minimum of STC of 35. Solid core doors shall be used for those doorways facing the freeway or Telephone Road and they should be insulated in conformance with California Title 24 requirements. The exterior wall facing material shall be stucco, or other surface with an STC rating of at least 45. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-5	All units shall contain forced air ventilation. All duct work for ventilation shall include noise louvers at the exterior outlet and/or ducts shall be directed either opposite to or perpendicular to the nearest road. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.

Level of Significance after Mitigation

All impacts would be significant.

N-2 Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Analysis

Persons residing and working in the areas surrounding the development site could be exposed to the generation of excessive ground-borne vibration or ground-borne noise levels related to construction activities. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Site ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can achieve the audible range and be felt in buildings very close to the site. The primary and most intensive vibration source associated with development of each site would be the use of bulldozers. **Table 4.11-8** below lists vibration source levels for typical construction equipment.

Table 4.11-8 Vibration Source Levels for Construction Equipment

	Approximate VdB			
Equipment	15 feet	25 feet	50 feet	100 feet
Compressor	88	81	72	63
Loaded trucks	92	86	77	68
Jackhammer	86	79	70	61
Small Bulldozer	64	58	49	39
Backhoe	87	80	71	62
Paver	91	84	75	66

Source: Federal Transit Administration, 2006.

The FTA threshold for architectural damage to non-engineered timber and masonry buildings is approximately 94 VdB. As indicated in **Table 4.11-8**, loaded trucks, which would create the

greatest amount of vibration for equipment to be used during construction, are capable of producing approximately 92 VdB at 15 feet. Given that loaded trucks would be used in excess of 15 feet from the nearest sensitive land uses and given the infrequent number of vibration events per day, construction activities would not exceed the FTA ground-borne vibration threshold for the nearest sensitive land uses surrounding each of the sites.

Level of Significance Before Mitigation

Impacts related to the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less than significant with implementation of the policies and actions contained in the General Plan, and no mitigation measures are required. Impacts would be Class III, Not Significant.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

No impacts.

N-3	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Analysis

Implementation of The Grove Specific Plan Project would be consistent with the General Plan Action 7.32 of Policy 7E, as this policy requires project proponents to minimize the harmful effects of noise if new residential developments are located within areas that exceed 60 dB(A) CNEL or within any area designated for commercial or industrial use, would require acoustical analyses and mitigation necessary to ensure that exterior noise does not exceed 65 dB(A) CNEL and interior noise does not exceed 45 dB(A) CNEL with all windows closed. Policy 7.37 of Policy 7E of the General Plan recommends the use of rubberized asphalt or other sound-reducing material for paving and re-paving of City streets.

In addition, any future construction located within the Project site would only be allowed between the hours of 7:00 a.m. and 8:00 p.m.

Roadway noise levels would generally rise as traffic levels increase under any of the General Plan land use scenarios. However, implementation of proposed policies and actions, in combination with the additional action recommended above, would reduce impacts associated with projected development to a less than significant level for any of the six land use scenarios. The City of Ventura has used rubberized asphalt in repaving projects for other major streets in the City.

Level of Significance Before Mitigation

Impacts related to a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project, would be less than significant with implementation of the policies and actions contained in the General Plan, and no mitigation measures are required.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant.

N-4	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Analysis

Construction of the Project could intermittently generate high noise levels. This could affect sensitive receptors near individual construction site. A temporary increase in noise is considered substantial if it would be in conflict with the City Noise Ordinance, which allows noise generating construction activity between the hours of 7:00 a.m. and 8:00 p.m. However, as concluded in the General Plan EIR for buildout construction Citywide, compliance with Noise Ordinance restrictions on construction timing would reduce this impact to less than significant. Impacts specific to The Grove Specific Plan Project area are not expected to be different from the Citywide assessment.

Level of Significance Before Mitigation

Impacts would be less than significant with implementation of the policies and actions contained in the General Plan.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.11-6 Cumulative Impacts

Table 4.11-7 (page 4.11-15) above shows that with mitigation projected impacts are less than significant with anticipated CNEL. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

No impacts.

4.12 Population and Housing

4.12-1 Introduction

This section describes the existing population, housing, and employment within the City, identifies the regulatory framework with respect to regulations that address population and housing, and evaluates the significance of the potential changes in these factors that could result from implementation of The Grove Specific Plan.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.12-2 Existing Conditions

1. Regional Population and Housing Forecasts

Forecasts for population and households for Ventura County by Southern California Association of Governments (SCAG) are shown in **Table 4.12-1** below.

Table 4.12-1 Ventura County: SCAG Population and Housing Forecasts

				Change 2008–2035	
	2008	2020	2035	Total	Percent
Population	813,000	889,000	954,000	141,000	14.8
Households	292,000	318,000	348,000	76,000	21.8

Source: SCAG, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, Growth Forecast Appendix, April 2012

2. Existing Population and Housing

Population data from the 2000 and 2010 Census, an estimate from the California Department of Finance (CDF) for 2015, and forecasts from the Southern California Association of Governments for 2008, 2020, and 2035 are presented in **Table 4.12-2** below.

Table 4.12-2 City of Ventura Population and Housing: Census Data and Forecasts

	US Census				CDF Estimate	SCAG Forecasts				
			Change 2000–2010						Change 2012–2035	
	2000	2010	Total	Percent	2015	2008	2020	2035	Total	Percent
Population	100,916	106,433	5,517	5.2	108,945	105,300	116,900	128,900	23,600	18.3
Households	38,524	40,438	1,914	4.7	41,495	40,300	45,200	50,100	9800	19.6

Sources: US Census Bureau 2014 DP-1, California Department of Finance, 2015
SCAG, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, Growth Forecast Appendix, April 2012

Between 2000 and 2014, the population of the City of Ventura increased from 100,916 residents to 108,945 residents, an increase of 8,029 residents, or approximately 8.0% over a 14-year period.[35] The California Department of Finance (DOF) estimates the City's 2015 population at 109,338 residents.[36] The City's average household size was 2.6 residents in 2014[35] and is estimated at 2.61 residents for 2015.[37]

Between 2000 and 2014, the number of housing units in the City of Ventura increased from 38,524 to 41,495, an increase of 2,971 housing units, or approximately 7.7% over a 14-year period.[38] The DOF estimates the City's 2015 housing supply at 43,569 units.[39]

The 2005 Ventura General Plan forecasts the City's population to be 151,867[40] in 2025, the buildout year for the General Plan.

3. Project Site

The Project site is currently in agricultural production. There is one home on-site that is used as the site manager's residence.

4.12-3 Regulatory Framework

1. State of California

SB 375- The Sustainable Communities and Climate Protection Act of 2008

Senate Bill 375 (SB 375) focuses on aligning transportation, housing, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets established under the California Global Warming Solutions Act, also known as Assembly Bill No. 32 (AB 32). SB 375 requires California Metropolitan Planning Organizations to develop a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP), with the purposes of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions. The SCS must identify the general location of land uses, residential densities, and building intensities within the region; identify areas within the region sufficient to house all the population of the region; identify areas within the region sufficient to house an 8-year projection of the regional housing need; identify a transportation network to service the regional transportation needs; gather and consider the best practically available scientific information regarding resources areas and farmland in the region;

35 Southern California Association of Governments, Profile of the City of San Buenaventura, (May 2015).
36 California Department of Finance, E-1 City/County Population Estimates with Annual Percent Change, January 1, 2014 and 2015 (2015).
37 California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015).
38 Southern California Association of Governments, Profile of the City of San Buenaventura, (2015).
39 California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015).
40 2025 estimate based upon 1.14% annual growth from 2004 to 2025, and assumed 2.57 persons per household remained constant through 2025.

consider the state housing goals; set forth a forecasted development pattern for the region; and allow the regional transportation plan to comply with the federal Clean Air Act (CAA) of 1970 (42 USC § 7401, et seq.). The development pattern in the SCS, when integrated with the transportation network and other transportation measures and policies, must reduce the GHG from automobiles and light duty trucks to achieve the GHG emission reduction targets approved by the California Air Resources Board (ARB). If the SCS does not achieve the GHG emission targets set by ARB, an Alternative Planning Strategy (APS) must be developed to demonstrate how the targets could be achieved.

SB 375 also imposes a number of new requirements on the regional housing needs process. Prior to SB 375, the regional transportation plan and regional housing needs processes were not required to be coordinated. SB 375 now synchronizes the schedules of the Regional Housing Needs Assessment (RHNA) and regional transportation plan processes. The RHNA, which is developed after the regional transportation plan, must also allocate housing units within the region consistent with the development pattern included in the SCS. Previously, the RHNA determination was based on population projections produced by the Department of Finance. SB 375 requires the determination to be based upon population projections by the Department of Finance and regional population forecasts used in preparing the regional transportation plan. If the total regional population forecasted and used in the regional transportation plan is within a range of 3% of the regional population forecast completed by the Department of Finance for the same planning period, then the population forecast developed by the regional agency and used in the regional transportation plan shall be the basis for the determination. If the difference is greater than 3%, then the two agencies shall meet to discuss variances in methodology and seek agreement on a population projection for the region to use as the basis for the RHNA determination. If no agreement is reached, then the basis for the RHNA determination shall be the regional population projection created by the Department of Finance.

Under previous law, the housing element was required to be updated as frequently as needed and no less than every 5 years, and now per SB 375, this period has been lengthened to 8 years and timed so that the housing element period begins no less than 18 months after adoption of the regional transportation plan to encourage closer coordination between the housing and transportation planning. SB 375 also changes the implementation schedule required in each housing element.

California Department of Housing and Community Development

State housing law (*California Government Code* §65580, et seq.) requires local government plans to address the existing and projected housing needs of all economic segments of the community through their housing elements. The housing element is one of seven state-mandated elements that every general plan must contain, and it is required to be updated every eight years and determined legally adequate by the state. The purpose of the housing element is to identify the community's

housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs. In addition, the Housing Element defines the related policies and programs that the community will implement in order to achieve the stated goals and objectives. This would be accomplished through the allocation of regional housing needs consistent with the SCS.

2. Regional

Southern California Association of Governments

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local governments from Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The City of Ventura is a member of the Ventura Council of Governments (VCOG), one of 14 Subregional Organizations in the SCAG Region.

SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth. SCAG adopted its 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which presents the transportation and land use vision for the SCAG region through the year 2035 and provides a long-term investment framework for addressing the region's transportation and related challenges. Growth forecasts contained in the RTP/SCS for Ventura County and the City of Ventura are utilized as the basis of analysis for housing and population forecasts in this section.

Regional Housing Needs Assessment

State law requires that jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the statewide housing need. In cooperation with HCD, local governments and councils of governments (COGs) are charged with making a determination of the existing and projected housing need as a share of the statewide housing need of their city or region.

The RHNA is an assessment process performed periodically as part of Housing Element and General Plan updates at the local level. The RHNA quantifies the housing need by income group within each jurisdiction during specific planning periods. The 5th cycle RHNA Allocation Plan, which covers the planning period from October 2013 to October 2021, was adopted by the Regional Council on October 4, 2012. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

3. City of Ventura

General Plan Housing Element

The City's Housing Element is provided in the City's General Plan. This element sets forth the City's goals and policies with respect to housing and establishes a comprehensive eight-year program strategy for the 2014 to 2021 planning period. The Housing Element identifies strategies and programs that focus on 1) preserving and improving housing and neighborhoods, 2) providing adequate housing sites, 3) assisting in the provision of affordable housing, 4) removing governmental and other constraints to housing investment, and 5) promoting fair and equal housing opportunities.

The following goals and policies from the 2014-2021 Housing Element would apply to the proposed Project:

Goal 2 Facilitate the provision of a range of housing types to meet the diverse needs of the community.

- Policy 2.1 Provide high quality housing for current and future residents at all income levels. Promote housing that is developed under modern sustainable community standards.
- Policy 2.2 Provide expanded housing opportunities for the City's workforce. Promote the City's affordable housing programs with employers in Ventura.
- Policy 2.3 Continue to offer and promote homeownership assistance programs to lower- and moderate-income households to purchase both new and existing housing. Pursue participation in other homeownership programs available in the private market and seek additional funding sources that could assist moderate-income households.
- Policy 2.4 Continue to provide financial and regulatory incentives to non-profits, private housing developers, and public agencies for the construction of housing to meet identified needs.
- Policy 2.5 Support the provision of quality rental housing with three or more bedrooms to accommodate large families, and encourage room additions in the existing housing stock to address household overcrowding.
- Policy 2.7 Facilitate the provision of housing to address Ventura's growing senior population, including design that supports "aging in place," senior housing with supportive services, assisted living facilities, and second units.
- Policy 2.8 Encourage the provision of housing adaptable to the physically disabled through integration of universal design features in new development, and compliance with Title 24 of the California Health and Safety Code.
- Policy 2.11 Continue to implement the inclusionary housing ordinance as a means of integrating affordable units within new residential development: Require affordable units to be provided on or off-site, with allowance for payment of

an in-lieu fee at the discretion of the City; (2) Evaluate the financial impact of inclusionary requirements on development, and assess incentive-based alternative strategies for provision of affordable housing.

Policy 2.13 Encourage the production of housing that meets the needs of all economic segments, including extremely low, lower, moderate, and above moderate-income households, to achieve a balanced community.

Policy 2.14 Promote and facilitate non-traditional housing types and options, including co-housing, assisted living facilities, live-work spaces, transitional housing, emergency shelters, farm employee housing, and artist lofts.

Policy 2.15 Direct City-controlled housing funds towards projects and programs that address the needs of extremely low and lower-income households.

Goal 3 Provide adequate housing sites through appropriate land use and zoning designations to accommodate the City's share of the regional housing needs.

Policy 3.2 Implement smart growth principles by providing incentives for quality infill projects that utilize existing infrastructure such as expediting permit processing.

Policy 3.3 Encourage efficient utilization of the City's limited land resources by encouraging development at the upper end of the permitted Zoning Code/General Plan density.

Goal 4 Mitigate or remove any potential governmental constraints to housing production and affordability.

Policy 4.1 Provide regulatory and/or financial incentives, where appropriate, to offset or reduce the costs of affordable housing development, including density bonuses and flexibility in site development standards.

Policy 4.5 Provide flexibility in development standards to accommodate new models and approaches to providing affordable housing, such as cohousing, live/work units and assisted living facilities.

Goal 5 Promote equal opportunity for all residents to reside in the housing of their choice.

Policy 5.3 Promote housing that meets the special needs of large families, elderly persons, agricultural workers, and the disabled.

2014-2021 Ventura Growth Needs

Through a delegation agreement with SCAG, the Ventura County Council of Governments determined the RHNA growth needs for each of the county's cities plus the unincorporated area. The total housing growth need for the City of Ventura during the 2014-2021 planning period is 3,654 units. This total is distributed by income category as shown in **Table 4.12-3** below.

Table 4.12-3 Ventura's Share of Regional Housing Needs

Income Group	RHNA Allocation	Percent of City's RHNA Allocation
Extremely Low	430	11.7%
Very Low	431	11.7%
Low	591	16.6%
Moderate	673	18.5%
Above Moderate	1,529	41.5%
Total	3,654	100%

Sources: Southern California Association of Governments, 2012;
City of Ventura, 2014-2021 Housing Element, September 16, 2013

Municipal Code

Section 24R.240, Interim Inclusionary Housing Program

The purpose and intent is to:

1. Ensure the development and availability of decent, affordable housing to a broad range of households with varying income levels throughout the City.
2. Promote the City's goal to add affordable housing units to the City's housing stock.
3. Ensure the long-term affordability of units and availability for income-eligible households in years to come.
4. Ensure that the private sector, in addition to public sector, participates in the provision of affordable housing for workers within the City of Ventura.
5. Adopting the affordable inclusionary requirement for each applicable development will ensure that affordable housing will be dispersed throughout the City and throughout each project and not be segregated from market-rate housing.

Projects containing 60 units or more, shall provide and designate 15% of the total number of units as inclusionary units restricted to occupancy by moderate-, low-, or very low-income households inclusionary units.

The inclusionary requirement shall be met by assigning inclusionary units on a rotational basis in the following order, one moderate, then one low, then one very low, until the required number of inclusionary units has been provided. Alternatively, a project of 60 units or more can meet the requirements of this program by providing 10% inclusionary units in the very-low income category, 15% inclusionary units in the low-income category, or 20% inclusionary units in the moderate income category, provided that, this formula is not intended to preclude a project from meeting its inclusionary requirement by providing all required inclusionary units at lower income categories than required by this subsection.

4.12-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to population and housing are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to population and housing, if any of the following could occur.

PH-1 Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

PH-2 Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

PH-3 Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

4.12-5 Environmental Impacts

1. Methodology

For the purposes of the following analysis, substantial population growth is defined as population growth that exceeds adopted population growth forecasts for the City. Regional growth forecasts prepared by SCAG for the adopted 2014-2035 RTP/SCS and the 2005 Ventura General Plan were used to analyze the potential impact of housing and population growth under the proposed Project.

2. The Grove Specific Plan

The Grove Specific Plan would complete the Thille Neighborhood, complementing and enhancing the local community while implementing the Guiding Principles of the General Plan and the Vision Document of the City.

The Grove Specific Plan would permit the following housing types:

- Attached Condominium and Apartment Residences
- Attached Townhouse Residences
- Courtyard Attached Residences
- Single Family Detached Residences

This mix of housing types is one of the Project's key means of creating a diverse and vital neighborhood. The Grove Specific Plan is designed with grid pattern blocks in which these housing types will be distributed, following continued consultation with residents of the existing adjacent neighborhoods as well as City staff and decision makers. The existing planned developments in the neighborhood have established the basic densities and mix of residential types, which this Specific Plan follows. Final site density would be within a range of 200 to 250 dwelling units, a range of density similar to and compatible with the balance of the existing Thille

Community. In addition, the Project would include up to 38 affordable residences, or 15% of the total, complying with the City's Municipal Code Chapter 24R.240 or Appendix 7.2 for the City of Ventura's Inclusionary Housing Program.

PH-1 Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Analysis

The Project would increase the City's existing housing inventory by up to 250 dwelling units, resulting in a potential population growth of 653 persons. **Table 4.12-4** below compares the Project's population and household forecasts with existing conditions in the City. For households and population, the Project represents a 0.74% and 0.56% increase, respectively, over existing conditions.

Table 4.12-4 Project Compared to Existing Conditions

Description	Housing (Dwelling Units)	Population (Persons)
Project		
Residential Uses	250	653*
Total Project	250	653
Existing + Project Conditions		
Existing Conditions (City)	43,569	109,338
Existing / Project Implemented Total	43,819	109,991
Existing / Project Implemented % Change	+0.74%	+0.56%

*Based upon 2.61 persons per household. California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015).

Table 4.12-5 below compares population and household increases forecast for the Project to growth forecasts for the City for 2020 and 2025.

Table 4.12-5 Project Growth and Forecasts

	Existing (2015)	Existing Plus Project	2020 RTP/SCS Forecast	2025 General Plan Forecast
Population	109,338	109,991	116,900	133,160
Households	43,569	43,810	45,200	51,867
Project Percentage of Forecast				
Population		0.56%	0.56%	0.58%
Households		0.74%	1.45%	1.26%

Sources: SCAG, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, Growth Forecast Appendix, April 2012
California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015)

Additional population associated with new residential development within the Specific Plan Area has not been considered in the 2005 Ventura General Plan. New residential uses associated with the Project would result in approximately 250 more households and 653 more persons within the

City than anticipated by the General Plan. However, as shown in **Table 4.12-5**, the Project's population represents 0.56% of SCAG's 2020 forecast and 0.58% of the General Plan 2025 forecast, and the Project's households represent 1.45% of SCAG's 2020 forecast and 1.26% of the General Plan 2025 forecast. Thus, the Project would not exceed the SCAG RTP/SCS population growth forecast for the City of 116,900 residents in 2020 or the City's General Plan forecast of 133,160 households in 2025.

As noted in Table 4.12-3, the City of Ventura's share of regional housing needs (RHNA) is 3,654 units for the 2014-2021 period. Of that total, 1,452 units are in the very low-, low-, and moderate income categories. The Grove Specific Plan would include up to 38 affordable residences, or 15% of the total, complying with the City's Municipal Code Chapter 24R.240 or Appendix 7.2 to the City of Ventura's Inclusionary Housing Program. Thus, the Project would be providing 2.6% of the City's share of very low-, low-, and moderate income housing for the 2014-2021 period.

In addition, the 2005 Ventura General Plan contains numerous other goals, policies, and actions supporting the creation of housing opportunities within the City. The 2005 Ventura General Plan also includes various policies that encourage infill development and would be expected to reduce vehicle miles traveled (VMT) and associated air pollutant emissions compared to previous low density development within the City. The Project is considered an infill development, as the site is surrounded on all sides by urban development. Thus, impacts related to population growth would therefore be less than significant.

A project could induce population growth in an area, either directly (for example, by proposing new residential and employment-generating land uses) or indirectly (for example, through extension of roads or other infrastructure). Construction of the Project would result in the need for short-term construction trade personnel, who may reside in the City or require housing during the construction period. There is sufficient housing stock in the City to accommodate these workers during site construction, thus less than significant impacts would occur. Also, the Project would induce new population growth with the new residential use, which has been analyzed above. As noted above, the Project is considered an infill development, and the population growth from the Project can be accommodated within the growth anticipated in the 2005 Ventura General Plan. The Project proposes a new private roadway network through the Specific Plan Area to support potential development, but it does not involve the extension of roads or other infrastructure into undeveloped areas; refer to Section **4.15, Traffic and Circulation**. Therefore, Project implementation would not induce population growth indirectly through extension of roads or other infrastructure.

Also, as concluded in **Section 4.13, Public Services** and **Section 4.15, Traffic and Circulation**, existing public services and utility/service systems can be readily upgraded and/or extended into the Specific Plan Area to serve the increased population. Project implementation would not require substantial development of unplanned or unforeseen public services and utility/service systems.

Individual development projects would be reviewed on a project-by-project basis to determine if existing services and utilities are sufficient or if new and/or upgraded facilities are necessary to serve the development. The increased demands for public services and utility/service systems would not significantly reduce or impair any existing or future levels of services, either locally or regionally. Further, development within the Specific Plan Area is anticipated to occur over multiple years based on market demand, which would allow for development of necessary services and infrastructure to serve the anticipated growth. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

PH-2	**Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**
PH-3	**Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

Analysis

One site manager residence exists on-site. The Project proposes to discontinue agricultural operations, demolish the site manager residence, and construct up to 250 dwelling units on the 26.51-acre Project site. Thus, there would be a displacement of one on-site housing unit, but not the need to construct replacement housing elsewhere, as there is sufficient housing supply in the City. The Project would displace one resident, but this would not require the construction of replacement housing elsewhere in the City, given the available housing stock in the City. Thus, implementation of the Project would result in less than impacts with respect to resident displacement or the need for replacement housing.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.12-6 Cumulative Impacts

Although the residential development associated with the Project would be greater than anticipated by the 2005 Ventura General Plan, implementation of The Grove Specific Plan would not require substantial development of unplanned or unforeseen public services and utility/service systems. As stated in **Section 3, Project Description**, the proposed Project would construct up to 250 more units. The growth projections of the proposed Project may exceed Project projections. New residential uses associated with the Project would result in approximately 250 more households and 653 more persons within the City than anticipated by the General Plan. However, as shown in **Table 4.12-5, Project Growth and Forecasts** (page 4.12-9), the Project's population represents 0.56% of SCAG's 2020 forecast and 0.58% of the General Plan 2025 forecast, and the Project's households represent 1.45% of SCAG's 2020 forecast and 1.26% of the General Plan 2025 forecast. Thus, the Project would not exceed the SCAG RTP/SCS population growth for the City of 116,900 residents in 2020 or in the City's General Plan forecast of 133,160 households in 2025.

As concluded in **Section 4.13, Public Services** and **Section 4.15, Traffic and Circulation**, existing public services and utility/service systems can be readily upgraded and/or extended into the Specific Plan area to serve the increased population. Development within the Specific Plan area is anticipated to occur over several years based on market demand, which would allow for development of necessary services and infrastructure to serve the anticipated growth. Further, the Project would contribute towards meeting the City's RHNA allocation with 15% of the units being made affordable in compliance with Municipal Code Section 24R.240. Cumulative impacts associated with new residential development within the City would be considered less than significant. Therefore, cumulative impacts related to population growth would be less than significant and the Project's contribution to cumulative impacts would not be cumulatively considerable.

4.13 Public Services

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.13-1 Police Protection

1. Introduction

Ventura Police response to crimes in progress or alarm soundings averages less than 6 minutes, and less than 16 minutes for most other calls. While the local crime rate is slightly higher than the state average, the Ventura Police Department (Department) hopes to better engage the community in policing efforts to lower crime levels. As part of a Strategic Planning Process, the Department has established the following goals:

- Reduce crime and the fear of crime
- Improve the quality of life in neighborhoods
- Enhance community and police partnerships
- Develop personnel
- Continued accountability

2. Existing Conditions

The Department is responsible for providing general law enforcement to the City of Ventura and enforcing the local, state, and federal laws. The Department comprises 127[41] sworn police officers. Officers' duties can include street patrol, traffic enforcement, and responding to emergency calls. The Department operates one station, located at 1425 Dowell Drive, Ventura, and does not have any plans for new facilities or expansion of the existing station, as shown in **Figure 4.13-1, Location of Ventura Police Station**.

The police station can accommodate a projected citywide buildout population of approximately 108,000 residents. Based on the City's population of 108,000[41] residents, the officer-to-resident ratio is 1:850. The Department currently maintains target response times for Priority 1 Calls within 5 minutes and fewer than 16 minutes for most other calls. Officers are deployed throughout the City and do not respond to calls directly from the Police Department.

41 Communication received from Commander Sam Arroyo, Investigations, January 28, 2016.

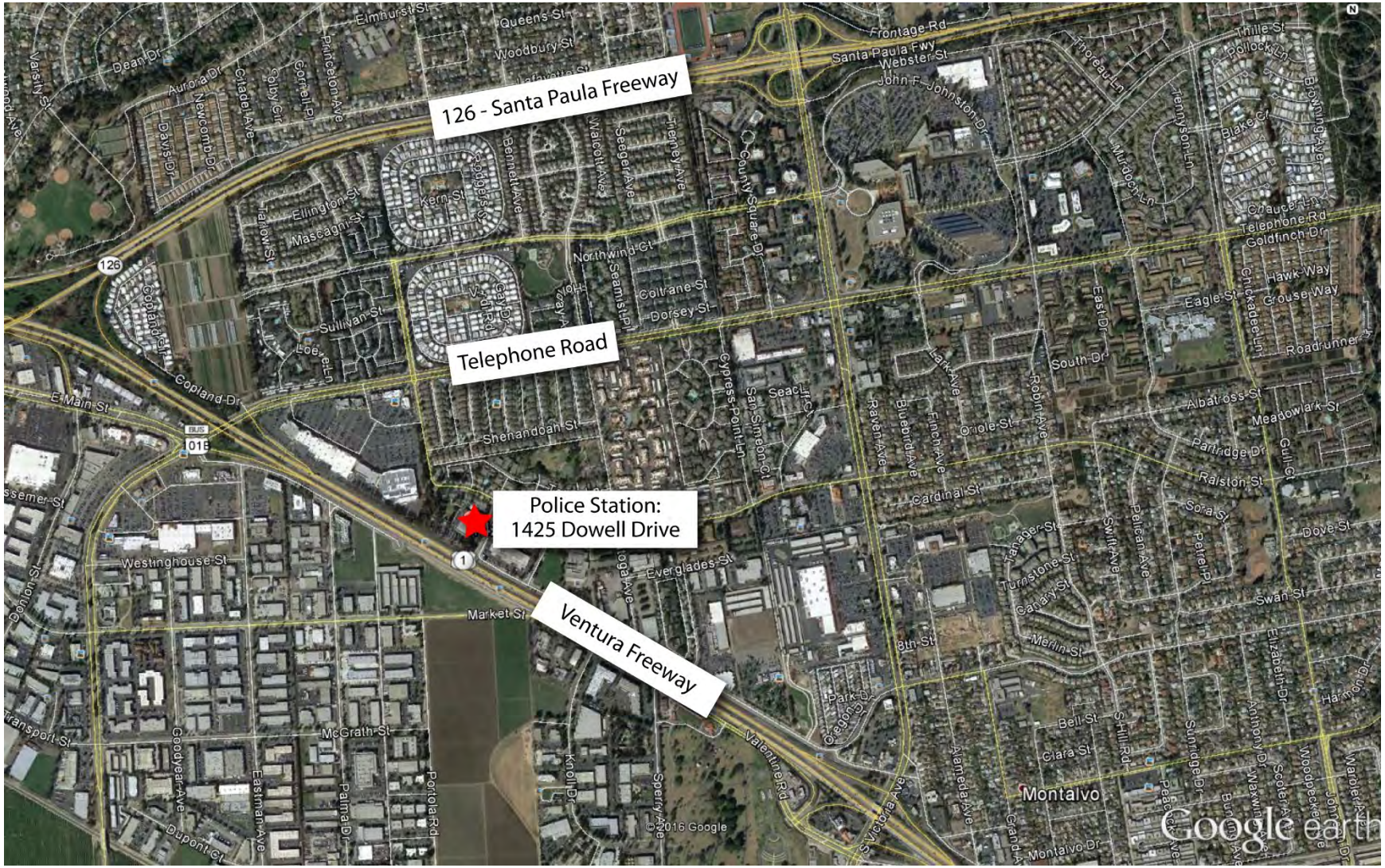


Figure 4.13-1 Location of Ventura Police Station

3. Regulatory Framework

Federal

There are no federal statutes related to police protection services that would apply to the proposed Project area.

State of California

There are no state statutes related to police protection services that would apply to the proposed Project area.

Local

City of Ventura General Plan

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to police services are included in Section 7.0 of the Ventura General Plan, Our Healthy and Safe Community.

Policy 7D: Improve community safety through enhanced police service.

Action 7.15: Increase public access to police services by:

- Increasing police staffing to coincide with increasing population, development, and calls for service
- Increasing community participation by creating a Volunteers in Policing Program, and,
- Require the finding of new services from fees, assessments, or taxes as new developments are developed.

Action 7.16: Provide education about specific safety concerns such as gang, senior-targeting fraud, and property crimes.

Action 7.17: Establish a nexus between police department resources and increased demands associated with new development.

Action 7.18: Continue to operate the Downtown Police storefront.

Action 7.19: Expand Police Department headquarters as necessary to accommodate staff growth.

4. Thresholds of Significance

The following thresholds for determining the significance of impacts related to police services are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of the Project could result in significant adverse impacts to police services, if any of the following could occur.

PS-1 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?
ii) Police protection

5. Environmental Impacts

PS-1 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

Construction

The Ventura Police Department provides police protection and services throughout the City. Implementation of the proposed Project would encourage residential uses at The Grove site. Construction of the proposed Project would normally not require services from the Ventura Police Department, except in the cases of trespass, theft, and/or vandalism. Construction activity could increase traffic in the Project area and conceivably could incrementally increase response times and incrementally increase vehicle accident potential. During construction of the Project the Department would require ample access for emergency vehicles including routine patrol vehicles. With adequate access, response times would not be extended and the ability of officers to provide proactive policing and efficient crime suppression would not be diminished. In addition, as necessary the Project would be required to include standard construction-traffic control procedures such as flagmen and signage. These measures would further reduce any potential impacts to police services during construction activities. Therefore, impacts related to police services during construction of projects would be less than significant.

Operation

The residential portion of the proposed Project would result in 250 more households and 653 more persons in the City. The Ventura Police Department would be responsible to provide police protection services within the specific plan area. Due to the increase in population and retail, service, and office uses with buildout of the specific plan, it is anticipated that the demands for police services would increase above current levels with implementation of the proposed Project.

New development projects are subject to the review and approval by City departments. The Ventura Police Department would review the site plans of all proposed projects with respect to lighting, landscaping, building access and visibility, street circulation, building design, and defensible space. Incorporation of the Department's recommendations would reduce the potential

for police protection impacts. Specific projects may also incorporate security features such as the use of appropriate landscape materials, parking area lighting, and building orientation, which would further reduce the number of calls for police protection services.

Response times could increase within the Project area due to increased vehicle traffic generated from buildout of the Project, adversely affecting the operating condition of the local roadway network. With the Department's current staffing level, the officer to resident ratio is 1:850. Based on the projected potential increase in population of 653 residents, additional police officers would be absorbed over the lifetime of the Project.

Therefore, impacts related to new or expanded police protection facilities are considered less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

Although impacts were found to be less than significant, the following measure is included to further reduce potential impacts.

MM PS-1	New construction within the specific plan area shall be designed to provide for safety measures (e.g., alarm systems, security lighting, other on-site security measures, and crime prevention through environmental design policies) and subject to the review and approval of the City Planning Department and Ventura Police Department.

Level of Significance After Mitigation

Impacts would be less than significant.

6. Cumulative Impacts

As discussed above, buildout of the Project would not result in the need for additional police officers. Cumulative projects outside of the specific plan area would also increase the need for police services and would require additional police staffing. The Ventura Police Department would continue to monitor impacts to police services on a project-by-project basis to ensure adequate police resources are available to serve the specific plan area and other portions of the City.

Similar to projects proposed under the Project, proposed projects located in other areas of the City would be required to submit site designs to the Department and comply with City regulations. Based on the above information, implementation of the Project and other related projects would not result in cumulatively considerable impacts to the Department's service rations, response times, or other performance objectives.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.13-2 Fire Services

1. Introduction

This section analyses the impacts of the Grove Project on fire services in the City of Ventura. Information provided by the Ventura City Fire Department was used to prepare the following analysis.

2. Existing Conditions

Ventura Fire Department

The Ventura City Fire Department (VFD) provides fire protection service in the Project area. VFD currently employs 72 sworn firefighters and operates six fire stations in Ventura, with administrative offices at 1425 Dowell Drive. On average, VFD responds to over 14,000 calls for service annually. In addition to fire suppression, VFD provides medical, hazardous materials, ocean rescue, and urban search and rescues emergency response services. Approximately 75% of all VFD responses are for emergency medical service. The closest fire station is Fire Station 5 located at 4225 East Main Street and houses 1 engine company and 1 truck company. The location of Fire Station 5 is shown in **Figure 4.13-2, Closest Fire Station.** All apparatus have at least one paramedic assigned to them at all times.

Response times to calls for emergency service vary depending on staffing levels, distance from available fire station resources to the location of a given emergency, and the pattern of development within a service area. VFD has a target response time of less than 5 minutes to all emergency incidents. Currently, the Department meets this goal 61% of all Code 3 fire and medical calls, VFD has a reciprocal agreement with the Ventura County Fire Protection District (VCFPD), which specifies that the fire resource closest to an emergency is the first to respond, in order to ensure that residents receive the fastest response possible in emergency situations.

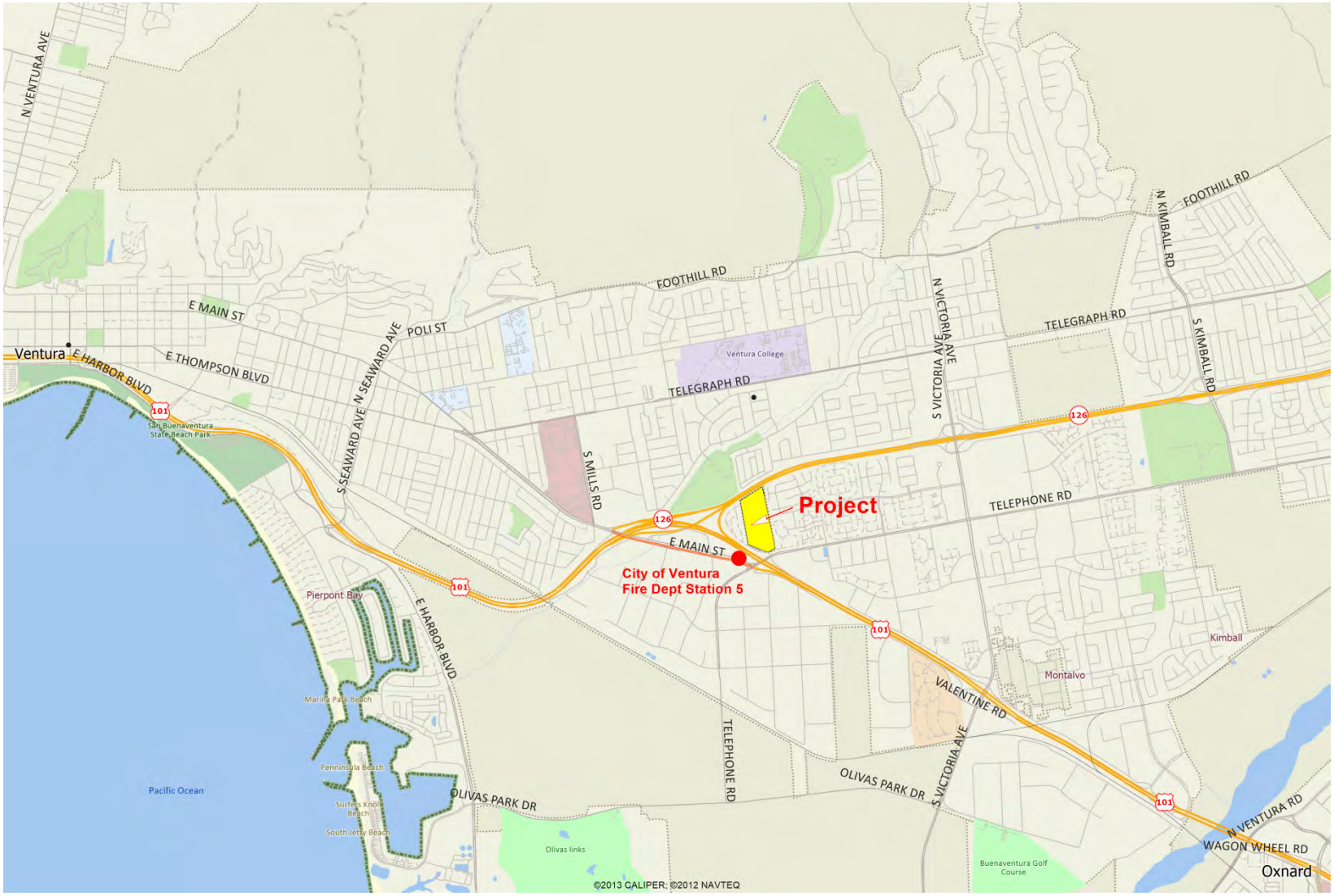


Figure 4.13-2 Closest Fire Station

VFD participates in mutual and automatic aid agreements for fire, medical, hazardous materials, and USAR incidents. These agreements are with Ventura County Fire Protection District, Oxnard Fire Department, Santa Paula Fire Department, Fillmore Fire Department and Navy Base Ventura County Fire Department.

The flow rate of a water supply available for fighting fires is also used by the VFD to evaluate the provision of fire services. The availability of water for fire flow is discussed in **Section 4.16, Utilities and Service Systems.**

3. Regulatory Framework

General Plan

Our Healthy and Safe and Community chapter is one of 10 chapters of the City's 2005 General Plan. This chapter sets forth the City's goals and policies with respect to public safety.

The following policy and actions from the 2005 General Plan apply to the proposed Project:

Policy 7C Optimize firefighting and emergency response capabilities.

Action 7.12 Refer development plans to the Fire Department to assure adequacy of structural fire protection, access for firefighting, water supply, and vegetation clearance.

Action 7.13 Resolve extended response time problems by:

- adding a fire station at the Pierpont/Harbor area,
- relocating Fire Station #4 to the Community Park site,
- increasing firefighting and support staff resources,
- reviewing and conditioning annexations and development applications, and
- require the funding of new services from fees, assessments, or taxes as new subdivisions are developed.

VFD's goal is to meet National Fire Protection Association 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operation to the Public by Career Fire Departments.

4. Thresholds of Significance

Based upon Appendix G of the CEQA Guidelines under Section XIV, Public Services, the following significance threshold is used to evaluate Project impacts related to fire protection services.

PS-2	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?**

Based upon Appendix G of the CEQA Guidelines, under Section VIII, Hazards and Hazardous Materials, adoption and/or implementation of the Project could result in significant adverse impacts to future protection services, if the following could occur.

PS-3	**Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The proposed Project does not border on any land areas that are considered to be in the area of wildfires. Therefore, no further discussion of this topic is required.

5. Environmental Impacts

As discussed in **Section 4.12, Population and Housing**, The Grove Specific Plan Project would allow for the development of the Project area. New housing constructed would result in an estimated increase in population of 653 residents. This increase in residents and retail and office uses would not result in increased demand for fire protection services within the Project area.

The National Fire Protection Association Section 1710 contains the minimum requirements relating to the organization and deployment of the fire suppression operations, emergency medical operations, and special operations to the public by substantially all career departments.

The NFPA Section 1710 is deficient per NFPA 1710 per the following:

5.2.4.1 Initial Arriving Company.

5.2.4.1.1 The fire department's fire suppression resources shall be deployed to provide for the arrival of an engine company within a 240-second travel time to 90 percent of the incidents as established in Chapter 4.

5.2.4.2.2 Personnel assigned to the initial arriving company shall have the capability to implement an initial rapid intervention crew (IRIC).

5.2.4.2 Initial Full Alarm Assignment Capability.

5.2.4.2.1 The fire department shall have the capability to deploy an initial full alarm assignment within a 480-second travel lime to 90 percent of the incidents as established in Chapter 4.

5.2.4.2.2 The initial full alarm assignment to a structure fire in a typical 2000 ft^2 (186 m^2), two-story single-family dwelling without basement and with no exposures shall provide for the following:

1. Establishment of incident command outside of the hazard area for the overall coordination and direction of the initial full alarm assignment with a minimum of one individual dedicated to this task
2. Establishment of an uninterrupted water supply of a minimum of 400 gpm (1520 L/min) for 30 minutes with supply line(s) maintained by an operator
3. Establishment of an effective water flow application rate of 300 gpm (1140 L/min) from two handlines, each of which has a minimum flow rate of 100 gpm (380 L/min) with each handline operated by a minimum of two individuals to effectively and safely maintain the line
4. Provision of one support person for each attack and backup line deployed to provide hydrant hookup and to assist in laying of hose lines, utility control, and forcible entry
5. Provision of at least one victim search and rescue team with each such team consisting of a minimum of two individuals
6. Provision of at least one team, consisting of a minimum of two individuals, to raise ground ladders and perform ventilation
7. If an aerial device is used in operations, one person to function as an aerial operator and maintain primary control of the aerial device at all times!
8. Establishment of an IRIC consisting of a minimum of two properly equipped and trained individuals.

VFD does not currently have a staffing standard. VFD has a target response tome of less than 5 minutes to all emergency incidents. Currently, the Department meets this 61% goal of all Code 3 fire and medical calls. The geographic area served by VFD would not increase as a result of implementation of The Grove Specific Plan Project. However, increased development intensity within the planning area could potentially affect VFD's ability to maintain existing response times due to increased calls for service. The provision of additional resources, including staffing, at existing VFD stations would help maintain or improve current response times.

Mitigation fees requires new development to pay their fair share to fund additional public safety facilities and services for fire. Fire mitigation fees for new residential developments are currently $823 per single unit and $640 per every multi-family unit.

VFD reviews building permits and the proper installation of fire sprinkler, fire alarm, and fire suppression systems. Fire inspectors conduct inspections during different phases of construction projects to ensure that current codes and standards are followed. Implementation of the actions provided in The Grove Specific Plan and the General Plan would support VFD efforts to provide adequate fire protection services in the Project area and impacts would be less than significant.

No specific development projects are proposed or analyzed at the project level in this program EIR at this time. Project-level review will be required for individual projects proposed within The Grove Planning area, such as new subdivisions. The VFD reviews building permits and the proper installation of fire sprinkler, fire alarm, and fire suppression systems. Fire inspectors conduct inspections during different phases of construction projects to ensure that current codes and standards are followed. Implementation of the actions provided in The Grove Specific Plan, and the General Plan would support VFD efforts to provide adequate fire protection services in the Project area and impacts would be less than significant.

The proposed Project is an infill project and would not substantially increase or impact the VFD's ability to maintain existing response times due to increased calls for service.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Impacts would be less than significant.

Cumulative Impacts

Growth forecast to occur within the City of Ventura under the City's 2025 general plan would cause increased demand for fire protection services. The City's General Plan includes policies and actions to ensure that fire facilities are expanded as needed to accommodate firefighter staffing needs. No specific development projects are proposed at this time or analyzed at the project level in this program EIR. Project-level review will be required for individual projects proposed within the Planning area and within other areas of the City. New development proposals within the City would also be reviewed and would be required to adhere to the policy and actions provided in the General Plan and/or community plan within which they are located, which would support VFD efforts to provide adequate fire protection services in the Project area. In the event that the construction of new fire protection facilities is necessary, any future facilities would require environmental review under CEQA.

The proposed Project would exceed the General Plan projections by 250 residential dwelling units, resulting in 653 residents more than were projected to reside in the City in 2025. The additional 653 residents and would not be a substantial increase, and the cumulative impact would be less than

significant. The Project's contribution to cumulative impacts would not be cumulatively considerable.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.13-3 School Services

1. Introduction

This section analyzes the impacts of the Project on public educational services in the City of Ventura. Information provided by the Ventura Unified School District was used to prepare the following analysis.

2. Existing Conditions

Ventura Unified School District

The Ventura Unified School District (VUSD) operates public schools serving the planning area. School attendance is determined by geographic boundaries. Students within the planning area would attend Elmhurst, Anacapa, and Ventura. The locations of these schools are shown in **Figure 4.13-3** below. However, parents of students living within VUSD boundaries may choose to enroll students at any VUSD school, based on available capacity. **Table 4.13-1** below provides student enrollment at the schools serving the planning area.

Table 4.13-1 Ventura Unified School District School Enrollment and Capacities School

School	2015-2016 Enrollment	Design Capacity	Total Capacity
Elmhurst	513	540	618
Anacapa	855	1,002	1,206
Ventura High School	2,204	2,389	2,899

New development within the VUSD service area would generate new students who would need to be accommodated in VUSD schools. VUSD forecasts the student generation for all new residential development at the following rates:

- 0.247 elementary school student per residential unit
- 0.1045 middle school student per residential unit
- 0.1223 high school student per residential unit

Figure 4.13-3 Ventura Unified School District School Locations

3. Regulatory Framework

State of California

The California Department of Education (CDE) has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the state passed Assembly Bill (AB) 2926 in 1986.1 AB 2926 allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. These development fees are deemed to be "full and complete school facilities mitigation," for impacts caused by new development. The legislation also recognized the need for fees to be adjusted periodically to keep pace with inflation. The legislation indicated that the State Allocation Board will set the maximum fees according to the adjustment for inflation in the Statewide index for school construction.

California State Allocation Board

The State Allocation Board authorizes school districts to collect developer fees to mitigate the impact of new development on school costs. Levels of developer fee contribution are determined by the State Allocation Board and increase annually. Current state statutes dictate that school districts have the authority to levy statutory or Level I fees on new development at rates of $2.14 per square foot of new residential development and $0.34 per square foot for commercial and industrial development. Because these Level I fees often do not generate sufficient funding for new schools, districts may use Level II fees to generate one-half the cost of providing new school facilities. Use of Level II fees assumes that the state will provide the other half of the cost of new schools through the issuance of general obligation bonds.

In the event that the state does not have funding available, participating districts have the option to temporarily increase the fees to Level III fees on new residential development to try to meet their needs if the district meets certain conditions, such as having 20% of the district's classrooms classified as relocatable.

General Plan

The Our Educated Community chapter is one of 10 chapters of the City's 2005 General Plan. This chapter sets forth the City's goals and policies with respect to education. The following policy and action from the General Plan Education Element would apply to the proposed Project:

Policy 8B Increase the availability and diversity of learning resources.

Action 8.8 Work with the Ventura Unified School District to ensure that school facilities can be provided to serve new development.

4. Thresholds of Significance

Based upon Appendix G of the CEQA Guidelines under Section XIV, Public Services, the following significance threshold is used to evaluate Project impacts related to schools.

PS-4 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public schools?

5. Impacts Analysis

Methodology

This section was prepared based upon communication with the VUSD. Student generation rates provided by VUSD are used to forecast the student population that would be generated by the proposed Project.

Analysis

New residential development forecast to occur under The Grove would add an estimated 250 new residential units. Based on VUSD student generation rates, **Table 4.13-2** below shows the number of new students that would be generated by development forecast to occur under The Grove Project.

Table 4.13-2 Project Student Generation

School	Student Generation Rate	Units	Project Student Generation
Elmhurst	0.247	250	62.0
Anacapa	0.1045	250	26.13
Ventura	0.1223	250	30.6

As shown in **Table 4.13-2**, existing VUSD elementary schools serving the planning area have capacity. Middle and high school students generated by the Project could be accommodated at existing schools. The additional elementary students generated by new residential development would not require additional school capacity in order to serve Project residents. However, this assumption is based on the assumption that no new schools would be developed and all 250 residential units would be developed at one time. In reality, these residential units are projected to be added gradually if the Project is approved. In addition, as discussed below, the VUSD monitors growth trends and capacity at its schools and makes adjustments as necessary.

VUSD collects fees for new development within its service area. As discussed previously, payment of these fees is considered full and complete mitigation for impacts to school services. Therefore,

with payment of these fees and implementation of the policies provided in the City's 2005 General Plan, impacts to schools would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

6. Cumulative Impacts

Growth within the City of Ventura through the City's 2025 General Plan horizon year would cause increased demand for public school services. The City's General Plan includes policies and actions to ensure that school facilities are expanded by VUSD to accommodate growth as needed. No specific development projects are proposed or analyzed at the project level in this program EIR at this time. New development proposals within the City would also be reviewed and would be required to adhere to the policy and actions provided in the General Plan and/or community plan within which they are located, which would support VUSD efforts to provide adequate school facilities to serve residents in the City of Ventura.

Additional population associated with new residential development within the Specific Plan Area has not been considered in the 2005 Ventura General Plan. New residential uses associated with the Project would result in approximately 250 more households and 653 more persons within the City than anticipated by the General Plan. However, as shown in **Table 4.12-5, Project Growth and Forecasts** (page 4.12-9), the Project's population represents 0.56% of SCAG's 2020 forecast and 0.58% of the General Plan 2025 forecast, and the Project's households represent 1.45% of SCAG's 2020 forecast and 1.26% of the General Plan 2025 forecast. Thus, the Project would not exceed the SCAG RTP/SCS population growth forecast for the City of 116,900 residents in 2020 or the City's General Plan forecast of 133,160 households in 2025.

As noted in **Table 4.12-3** (page 4.12-7), the City of Ventura's share of regional housing needs (RHNA) is 3,65 and the cumulative impact would be less than significant with the payment of school impact fees. Cumulative impacts would therefore be less than significant and the Project's contribution to cumulative impacts would not be cumulatively considerable.

4.13-4 Libraries

1. Introduction

This section analyzes the impacts of The Grove Specific Plan Project on library services in the City of Ventura. Information provided by the Ventura County Library System was used to prepare the following analysis.

2. Existing Conditions

Ventura County Library System

The Ventura County Library System (VCLS) is currently organized as a special district county library. Property tax revenue supplies the majority of the income for the VCLS. In addition, a portion of the City's general fund is contributed to the County Library Services Agency and is used to finance improvements to library facilities and services. The Ventura County Library system (VCLS) has 11 libraries. The Foster Library located is in downtown Ventura, and the Saticoy Library is located at 1292 Los Angeles Avenue.

Two public libraries are located in Ventura and are a part of the VCLS: EP Foster Library, which is located in the downtown area, and the Avenue Library. The HP Wright Library, which is located in the City, was closed in November 2009 due to budgetary constraints. The two current libraries would serve the brunt of any new development within the region. A non-circulating research library collection of historical documents and related materials is housed at the Museum of Ventura County. The locations of libraries serving the Project site are shown in **Table 4.13-3, Existing Ventura County Library System Resources**.

The current holdings of the two circulating libraries that serve the City, including books, periodicals, and audio and video recordings, are summarized in **Table 4.13-3** below.

Table 4.13-3 Existing Ventura County Library System Resources

Library	Volumes	Facility Size (square feet)
EP Foster	182,017	33,000
Saticoy*	9,161	4,700
Total	191,178	37,700

Estimate from the Saticoy Library, Derek Stalcup, Librarian, March 7, 2016

There are no currently adopted City or VCLS standards for library services. In lieu of an adopted standard, the City of Ventura's 2005 General Plan EIR used a standard of 2 volumes and 1 square foot of library space per capita as a basis of analysis.

Based on the City's estimated 2016 population of 108,817 residents, libraries within the City currently provide approximately 191,198 volumes and 0.38 square feet of library space per capita.

Figure 4.13-4 Locations of Libraries in Ventura

3. Regulatory Framework

General Plan

The Our Educated Community chapter of the City's 2005 General Plan sets forth the City's goals and policies with respect to education, including library services. The following policy and actions from the General Plan would apply to the proposed Project:

Policy 8C: Reshape public libraries as 21st Century learning centers.

- Action 8.9: Complete a new analysis of community needs, rethinking the role of public libraries in light of the ongoing advances in information technology and the changing ways that individuals and families seek out information and life-long learning opportunities.
- Action 8.10: Reassess the formal and informal relationships between our current three branch public libraries and school libraries – including the new Ventura College Learning Resource Center – as well as joint use of facilities for a broader range of compatible public, cultural, and educational uses.
- Action 8.11: Develop a Master Plan for facilities, programs, and partnerships to create an accessible, robust, and vibrant library for the 21st Century system, taking into consideration that circulation of books is no longer the dominant function but will continue to be an important part of a linked network of learning centers.
- Action 8.12: Develop formal partnerships, funding, capital strategies, and joint use agreements to implement the new libraries Master Plan.

4. Thresholds of Significance

Based upon Appendix G of the CEQA Guidelines under Section XIV, Public Services, the following significance threshold is used to evaluate Project impacts related to libraries.

PS-5	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public libraries?**

5. Environmental Impacts

Methodology

While there are no adopted standards for library service, for the purposes of analysis uses the standard provided in the 2005 General Plan EIR of 2 volumes and 1 square foot of library space per capita is used.

Analysis

There are no adopted standards for library service in the City of Ventura or VCLS. For purposes of analysis, the standard provided in the 2005 General Plan EIR of 2 volumes and 1 square foot of library space per capita is used.

As discussed in **Section 4.12, Population and Housing** development forecast would add approximately 653 residents to the City's population. Based on the standard of 2 volumes and 1 square foot of library space per capita, this would create the need for 1,306 additional volumes and 653 square feet of library space to serve residents in the planning area. Resources in the City fall short of this standard, providing approximately 192,504 volumes and 38,353 square foot of library space per capita.

Library services are funded primarily by property tax increments collected by the state, supplemented by City general fund revenues; and impacts would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

6. Cumulative Impacts

The City's 2005 General Plan EIR identified the need for new library resources and facilities to serve the City at General Plan buildout. Based on growth forecasts for General Plan horizon year, an additional 24,741 volumes and 78,153 square feet of library space would be needed. Furthermore, since the publication of the 2005 General Plan EIR, the HP Wright Library was closed, reducing the resources and facilities available. However, the General Plan and specific plans within the City all contain policies and actions to provide adequate library services as the City builds out.

This amount is not substantial, the cumulative impact would be less than significant, and the Project's contribution to cumulative impacts would not be cumulatively considerable.

Therefore, cumulative impacts would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.14 Parks and Recreation

4.14-1 Introduction

This section analyzes the impacts of The Grove Planning Project on parks and recreation services in the City of Ventura.

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.14-2 Existing Conditions

1. Physical Setting

The City of Ventura parks system includes more than 800 acres of parkland and facilities serving various interests, including sailing, surfing, tennis, league sports, skateboard parks, playgrounds, and picnic areas. Specifically, three parks would serve the proposed Project. These parks are Camino Real Park and Tennis Center, Marion Cannon Park, and Thille Park. A description of these parks is provided below.

Camino Real Park and Tennis Center is located due north from the Project site, across SR-126 at Dean Drive and Varsity Street. The park contains an off-leash dog park, playground/tot lots, tennis courts, basketball courts, softball fields, barbeques, picnic tables, restrooms and rentable facilities.

Marion Cannon Park is located to the south of site at Saratoga Avenue between Ralston and Shenandoah. The park contains a playground/tot lot, basketball court, picnic tables and restrooms.

Lastly, Thille Park is located directly east of the site. The park contained a playground, basketball courts, picnic tables, restrooms, rentable BBQ area and public art.

These parks and recreation facilities are shown on **Figure 4.14-1, The Grove Nearby Parks and Amenities**.

As identified in the City's General Plan, the City's overall goal is 10 acres per 1,000 residents has created far more park area than would be possible under the basic State level of 3 acres per 1,000. Under the General Plan there are a number of methods to get there without have a development build either Community of Citywide parks. Under the General Plan on page 6-2, there is a requirement for projects not currently within the City Limits to include Neighborhood Parks to serve the added population.

The Community Park and City-Wide park acreage to population ratio categories are not applied to individual development for the purposes of satisfying the obligation to provide park amenities. The impact of development on these larger scale park types is typically covered by fees.

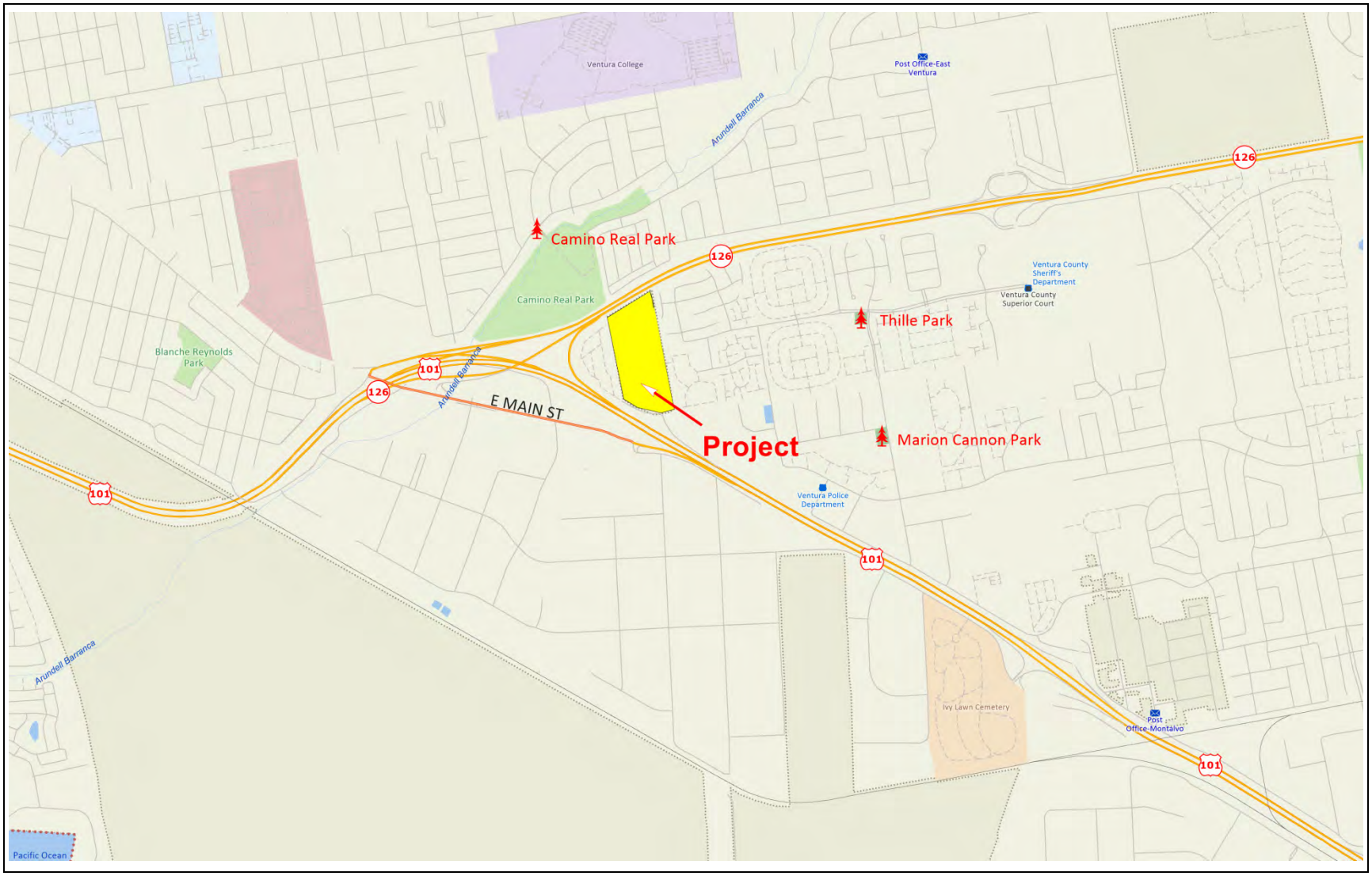


Figure 4.14-1 The Grove Nearby Parks and Amenities

2. Local and Regional Parks

City of Ventura Parks

The public park and open space system in Ventura includes neighborhood, community, citywide, and linear parks. As shown in **Table 4.14-1** below, the City oversees nearly 600 acres of developed park facilities, plus the linear park network, which provides important connections among watersheds for both people and wildlife.

Table 4.14-1 City Park Facilities

	Park Size				
Park	Neighborhood Parks (acres)	Community Parks (acres)	Citywide Parks (acres)	Special Use Facilities (acres)	Total (acres)
Albinger Archaeological Museum				0.9	0.9
Arroyo Verde Park	2.0	23.0	104.3		129.3
Barranca Vista Park	8.7				8.7
Blanche Reynolds Park	3.4				3.4
Camino Real Park			38.2		38.2
Cemetery Memorial Park	7.1				7.1
Chumash Park	6.1				6.1
Downtown Mini-Park	0.4				0.4
Eastwood Park				0.7	0.7
Fritz Huntsinger Youth Sports Complex	4.3	14.0			18.3
Grant Park			107.3		107.3
Harry A. Lyon Park			10.7		10.7
Hobert Park	7.1				7.1
Juanamaria Park	5.0				5.0
Junipero Serra Park	2.7				2.7
Linear Park Network				46.0	46.0
Marina Park			15.3		15.3
Marion Cannon Park	5.0				5.0
Mission Park	1.5				1.5
Ocean Avenue Park	1.3				1.3
Olivas Adobe Historical Park				22.5	22.5
Ortega Adobe Historic Residence				0.3	0.3
Plaza Park	3.7				3.7
Promenade Park	1.0				1.0
Seaside Wilderness Park [1, 2]				24.0	24.0
Surfers Point at Seaside Park [1]				3.4	3.4
Ventura Community Park		100.0			100.0
Westpark	1.5	5.8			7.3
Total	60.8	142.7	275.8	97.8	577.1

Sources: City of Ventura, 2004. Note: several parks serve functions in more than one category.
1 Acreage varies with ocean high levels.
2 Acreage varies with fluctuations in Ventura River level.

Neighborhood Parks

Typically fewer than 8 acres each, these smaller parks primarily serve specific residential areas in the community. The 18 neighborhood parks in Ventura cover about 73 total acres. Any future development outside the current city limits will have to provide new neighborhood parks to serve the added population. Neighborhood parks have a 2 acres per 1,000 population requirement.

Community Parks

Community parks are at least 10 to 40 acres in size and are located to serve several neighborhoods of approximately 20,000 people within a 2-mile radius. This park can include both passive and active areas, and may contain features such as gymnasiums, multi-purpose rooms, classrooms, and offices for recreation staff. Other facilities often found at community parks might include sports fields and courts, amphitheaters, group picnic areas, and off-street parking. Large special events, such as festivals and concerts, might also be held in community parks.

Citywide Parks

These parks feature recreational opportunities that draw a wide range of age and interest groups from throughout the city. They offer a variety of attractive amenities, such as large open spaces, unique natural resources, interpretive centers, cultural amenities, group picnic areas, sports facilities, and equestrian, bicycling, and hiking trails. The Ventura Community Park also serves some citywide park functions and attracts visitors from outside the city with its high-quality playing fields and aquatic center.

Linear Parks

Ventura's linear park network intersperses trails and picnic areas among a mostly undeveloped web of barranca and riverbanks that provide valuable wildlife habitat and migration corridors. The linear parks also merge with a number of neighborhood and community parks, complementing developed recreation areas with natural riparian qualities. Extending trails through the linear park network can create additional opportunities for low-impact contact with nature, and in some cases even provide pleasant non- automobile commuting options.

As with most parks in the city, resources for linear park system improvements typically come through conditions placed on adjacent development. City regulations establish standards for park width, landscaping, fencing, lighting, and tree rows that apply specifically along barrancas, freeways, rivers, the shoreline, harbor, hillsides, and utility rights-of-way.

4.14-3 Regulatory Framework

1. Quimby Act

Originally passed in 1975, the Quimby Act (*California Government Code* §66477) allows cities and counties to pass ordinances requiring that developers set aside land, donate conservation

easements, or pay fees for park improvements. This Act allows local agencies to establish ordinances requiring developers of residential subdivisions to provide impact fees for land and/or recreational facilities. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. In 1982, the Act was substantially amended, further defining acceptable uses of or restrictions on Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be closely tied to a Project's impacts. The Quimby Act requires that every city provide a minimum of 3 acres of parkland per 1,000 residents.

The General Plan exceeds the Quimby Act minimum and requires 10 acres of parkland per 1,000 residents be provided. This is the highest standard allowed under the Quimby Act. The Quimby Act and General Plan standards have been incorporated into the City's *Municipal Code*.

2. City of Ventura

General Plan

Applicable goals, objectives, and policies from the General Plan Our Active Community are listed below.

Policy 6A: Expand the park and trail network to link shoreline, hillside, and watershed areas.

- Action 6.1: Develop new neighborhood parks, pocket parks, and community gardens as feasible and appropriate to meet citizen needs, and require them in new development.
- Action 6.2: Require higher density development to provide pocket parks, tot lots, seating plazas, and other aesthetic green spaces.
- Action 6.3: Work with the County to plan and develop trails that link the City with surrounding open space and natural areas, and require development projects to include trails when appropriate.
- Action 6.4: Request Flood Control District approval of public access along unchannelized watercourses for hiking.
- Action 6.5: Seek landowner permission to allow public access on properties adjacent to open space where needed to connect trails.
- Action 6.6: Update plans for and complete the linear park system as resources allow.
- Action 6.7: Work with the County of Ventura to initiate efforts to create public trails in the hillsides.
- Action 6.9: Require dedication of land identified as part of the City's Linear Park System in conjunction with new development.
- Action 6.10: Evaluate and incorporate, as feasible, linear park segments in the General Bikeway Plan.
- Action 6.11: Update standards for citywide public parks and open space to include an expanded menu of shared park types, and identify locations and

potential funding sources for acquiring new facilities in existing neighborhoods.

Park Standards

Ventura has three park fees, which are the following:

1. The Parks and Recreational Facilities tax finances the planning, acquisition, improvement and expansion of public parks, playgrounds and other recreational facilities. This fee is only applicable to residential projects and the fee is based on the number of bedrooms.
2. The Service Area Park mitigation fee used to finance the acquisition, improvement and expansion of community park (minimum size of 20 acres) provides opportunities and facilities to a broader segment of the population.
3. The Quimby fee for projects with more than 50 units will be based on the appraised value of the land with credit for park amenities provided. The formula for calculating the fee is (number of dwelling units x average household size of 2.55 persons per dwelling × park acreage standard of 4.78 acres per 1,000) acres rounded to 2 decimal places multiplied by the appraised price per acre.

4.14-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related to parks and recreation are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Project could result in significant adverse impacts to parks and recreation, if any of the following could occur.

Rec-1	**Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**
Rec-2	**Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

4.14-5 Environmental Impacts

Rec-1	**Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**
Rec-2	**Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

Project Amenities

The plan area includes up to 4.67 acres of park area, which includes a linear park, public and pocket parks, a passive park, an active play area, a dog park, and an open space area reserved for a potential future pedestrian and bike bridge connection to El Camino Real Park to the north of and over SR-126. Lastly, a recreation facility including a pool, spa and facility room is proposed located east of the Thille Community Neighborhood.

The Parks, Recreation and Open Space areas are highlighted in **Figure 4.14-2**. An enlargement of the Linear Park and Recreation Center is depicted in **Figure 4.14-3**.

The pocket park (c) and the private recreation area (E) will not be dedicated to the City, whereas the linear park and other parks will be city owned. The Linear Park (which is netted out) does not count towards meeting General Plan Policy 6A, which we apply the neighborhood park area requirement of 2 acres per 1,000 population. Consequently, the Project would be required to provide for 3.27 acres of parkland.

Nonetheless, the Project would be subject to the Park and Recreational Facilities tax (based upon the number of bedrooms). Whether the subject property's parklands would offset Quimby Fees for parks and recreation will be determined by the City Council.

No additional parkland would be required for the Project site.

Less than Significant Before Mitigation

Impacts would be less than significant

Mitigation Measures

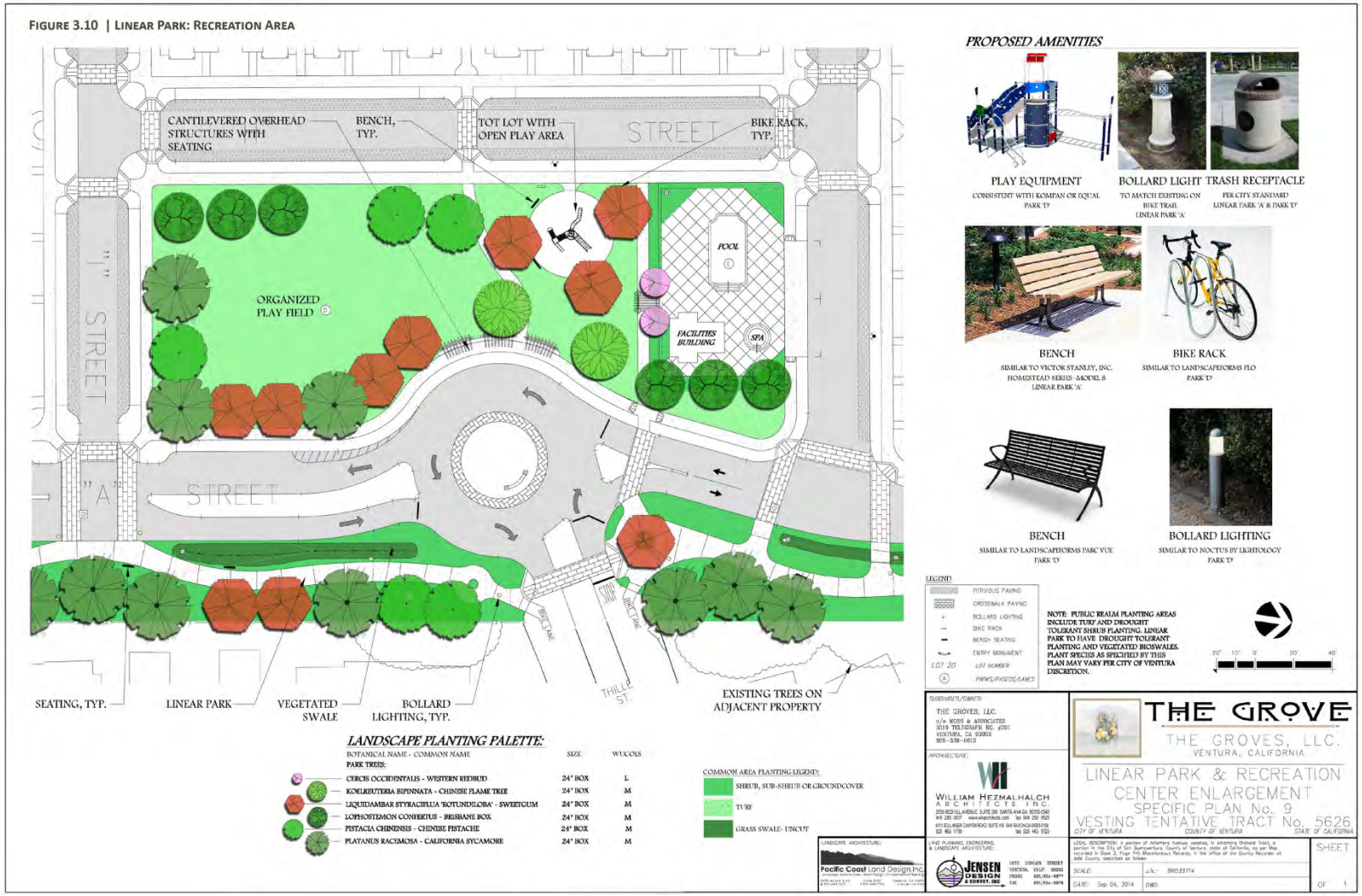
No mitigation measures are required.

Less of Significance after Mitigation

Impacts would be less than significant.

Source: Figure 3.7, page 55, The Grove Specific Plan, June 5, 2014

Figure 4.14-2 Parks, Recreation and Open Space Areas



Source: Figure 3.10, page 61, The Grove Specific Plan, June 5, 2014

Figure 4.14-3 Linear Park and Recreation Center

4.14-6 Cumulative Impacts

The City of Ventura's park dedication requirements for new subdivisions are applicable to the Project and related projects in the City that include residential development. Per the Quimby Act, the City requires that land be dedicated, or equivalent fees be paid, for neighborhood and community park or recreational purposes at the rate of three acres per 1,000 persons residing within the Project.

The cumulative growth in population and related parkland needs have been planned for in the General Plan. Cumulative projects would either satisfy their parkland demand through the dedication of land or the payment of fees. The actual park dedication calculations and credit determinations would be based on the subdivision maps submitted for each residential development among the cumulative projects. Given compliance with park dedication requirements and/or fees, as applicable, cumulative parks and recreation impacts would be less than significant.

Less than Significant Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Less of Significance after Mitigation

Impacts would be less than significant.

4.15 Traffic and Circulation

4.15-1 Introduction

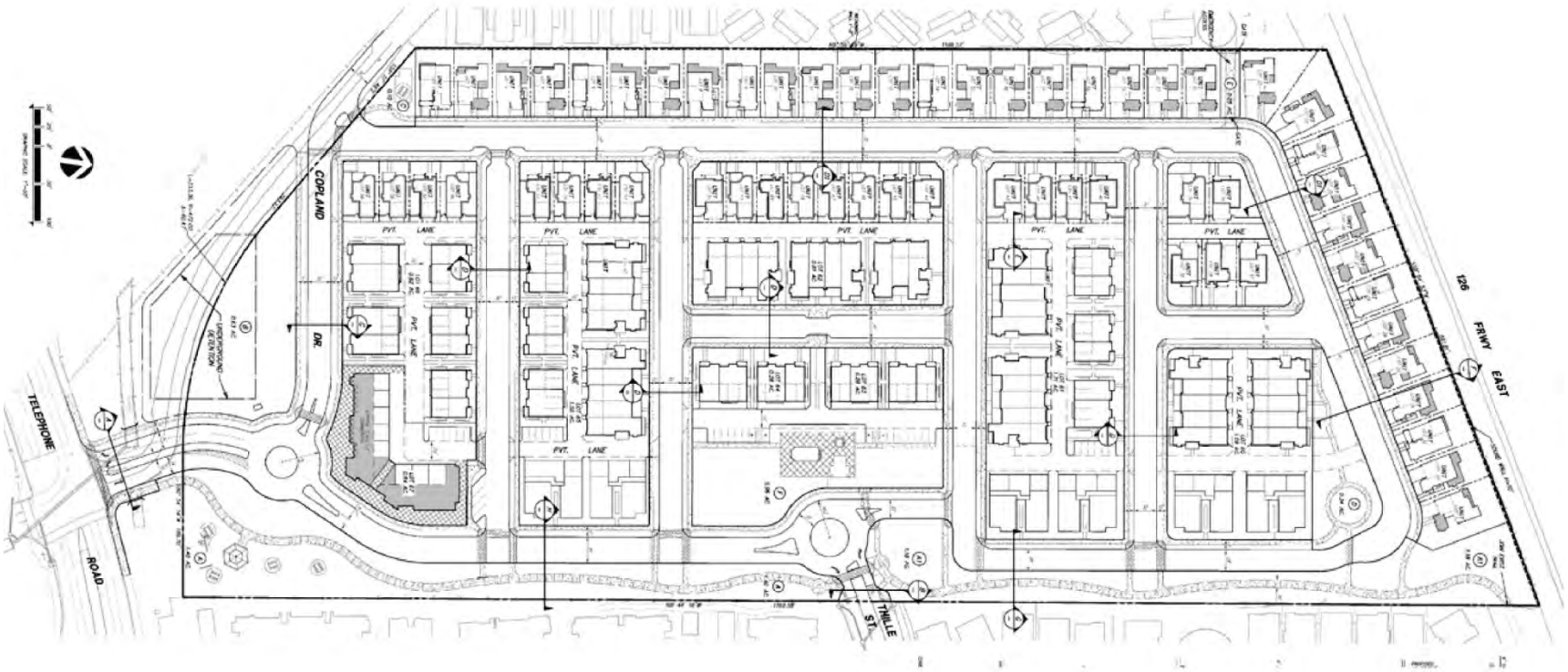
The purpose of the study is to determine the amount of traffic generated by the proposed Project and to analyze the impacts of the Project on the surrounding roadway system for incorporation into an Environmental Impact Report (EIR) for the City's review and approval. This section is based on the Traffic Study prepared by Austin-Foust Associates, Inc. dated March 4, 2011; an update to the Traffic Study prepared by Austin-Foust Associates, Inc. dated February 22, 2012; and a Memorandum from Stantec dated June 30, 2014 with attached "Land Use and Trip Generation Summary" and "2014 Traffic Count Data" (**Appendix 4.15**), and the Traffic Study for the Grove Project, October 30, 2015 as well as information generated from the City of San Buenaventura (Ventura).

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.15-2 Existing Conditions

The Project site is located on the north side of Telephone Road east of the US 101 Freeway and south of SR-126. The site currently encompasses 25.65 acres for agricultural uses. The site is adjacent to an 84-unit mobile home park on the west. Sole access for the existing land uses is provided by Copland Drive. Copland Drive is a local two-lane street that terminates at the mobile home park entrance to the north. The southern terminus of Copland Drive is the US 101 northbound off-ramp and Telephone Road signalized intersection. US 101 is a multi-lane freeway that serves as a major arterial and is the principal inter-city route through the City. Telephone Road is an east-west arterial street that provides a primary connection to US 101 from the eastern portion of the City.

The proposed Project will develop the agricultural land into 58 single-family dwellings and 192 condominium units. Proposed access to the site utilizes the existing signalized entrance on Telephone Road at Copland Drive/US 101 northbound off-ramp. A second access point will be provided by a new connection to Thille Street. **Figure 4.15-1** illustrates the proposed site plan. Thille Street currently terminates just east of the proposed Project site. Thille Street is a two-lane residential street with storage lanes provided for turning vehicles. Heading east on Thille Street, a raised landscaped median is constructed along with markings designating on-street parking and bicycle lanes.



Source: Figure 2, Traffic Study for The Grove Project, Stantec Consulting Services, October 30, 2015

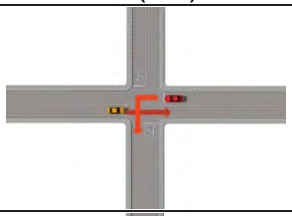
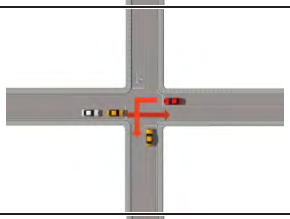
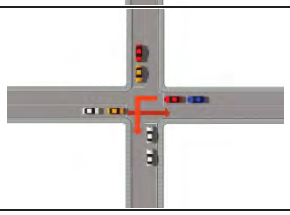
Figure 4.15-1 Proposed Site Plan

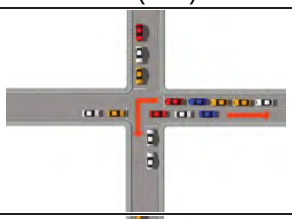
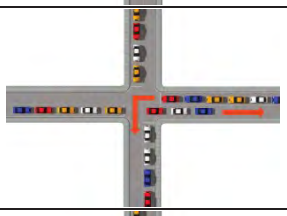
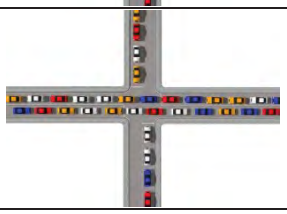
2. Performance Criterion

Procedures and criteria based on the intersection capacity utilization (ICU) methodology are used by the City of Ventura. The City of Ventura uses Level of Service (LOS) D as the desirable standard (ICU is equal to .90 or less) for a majority of the intersections. Freeway ramp intersections are allowed to reach LOS E (ICU is equal to 1.00 or less). The threshold of significance for Project impacts is an increase of more than .01 in the ICU value as a result of the Project when the With Project conditions ICU value is more than .90 (or more than 1.00 for freeway access intersections). **Table 4.15-1** illustrates the intersection LOS ranges for ICU values.

The study intersections were also analyzed using the Highway Capacity Manual (HCM) delay methodology. Synchro software was used to report LOS. In determining the operational characteristics of the study intersections with existing or future traffic volumes, LOS A through LOS F are applied, with LOS A indicating very good operation and LOS F indicating poor operation. The City of Ventura considers LOS E acceptable at freeway interchange intersections. At all other principal intersections within the City, LOS D is the peak hour design objective. Within surrounding City and County agencies, thresholds of significant impact to intersections are often set. Many agencies declare an adverse impact if the average delay in the No Project condition is at LOS E or LOS F and increases by five or more seconds as a result of the Project. Two of the study intersections are under Caltrans jurisdiction. Caltrans endeavors to maintain a target LOS at the transition between LOS C and D. If an existing state facility is operating at less than the target LOS, the existing measure of effectiveness should be maintained.

Table 4.15-1 Intersection Level of Service Ranges (ICU)

Level of Service (LOS)		Intersection Capacity Utilization (ICU)
A		0.00 – 0.60
B		0.61 – 0.70
C		0.71 – 0.80

Level of Service (LOS)		Intersection Capacity
D		0.81 – 0.90
E		0.91 – 1.00
F		Above 1.00

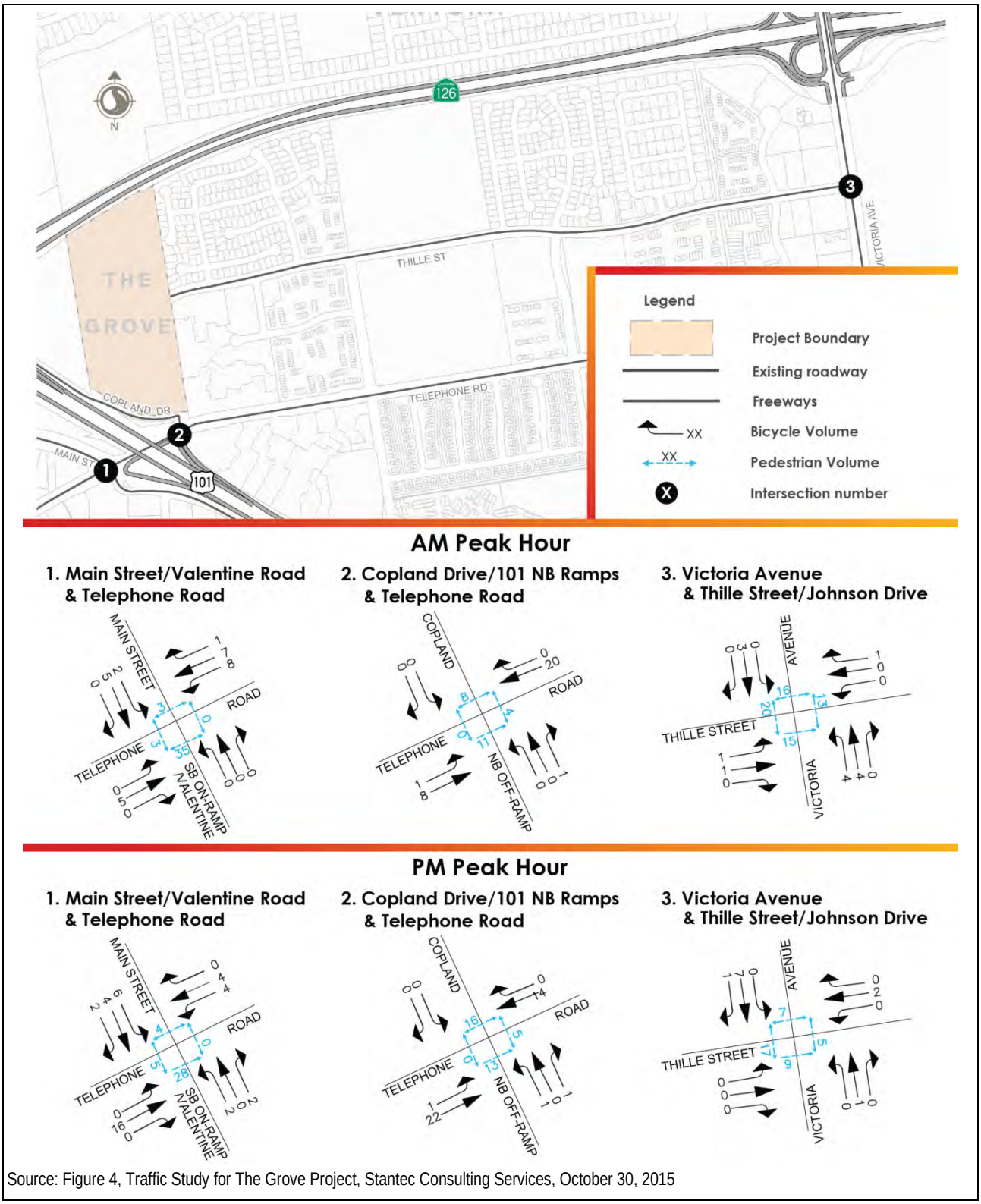
Source: Highway Capacity Manual 2010, Transportation Research Board, National Research Council

3. Existing Traffic Conditions

Three signalized intersections and three roadway segments surrounding the Project site were selected and approved by the City to be included in the traffic analysis. Existing peak hour intersection turning movement count volumes (including pedestrian and bicycle counts) and average daily traffic (ADT) volumes for these locations were collected in September 2015.

Appendix A to the Traffic Study contains the volume data acquired. The pedestrian and bicycle counts are shown in **Figure 4.15-2**. Existing transit routes were surveyed in the Project area and are mapped in **Figure 4.15-3** (page 4.15-6).

The results of the existing analysis for the study intersections are summarized in **Table 4.15-2** (ICU worksheets are included in Appendix B to the Traffic Study). The ICU values are also provided in the table. As illustrated, the study intersections currently operate at an acceptable LOS D or better during the AM and PM peak hours.



Source: Figure 4, Traffic Study for The Grove Project, Stantec Consulting Services, October 30, 2015

Figure 4.15-2 Existing (Year 2015) Peak Hour Pedestrian and Bicycle Volumes

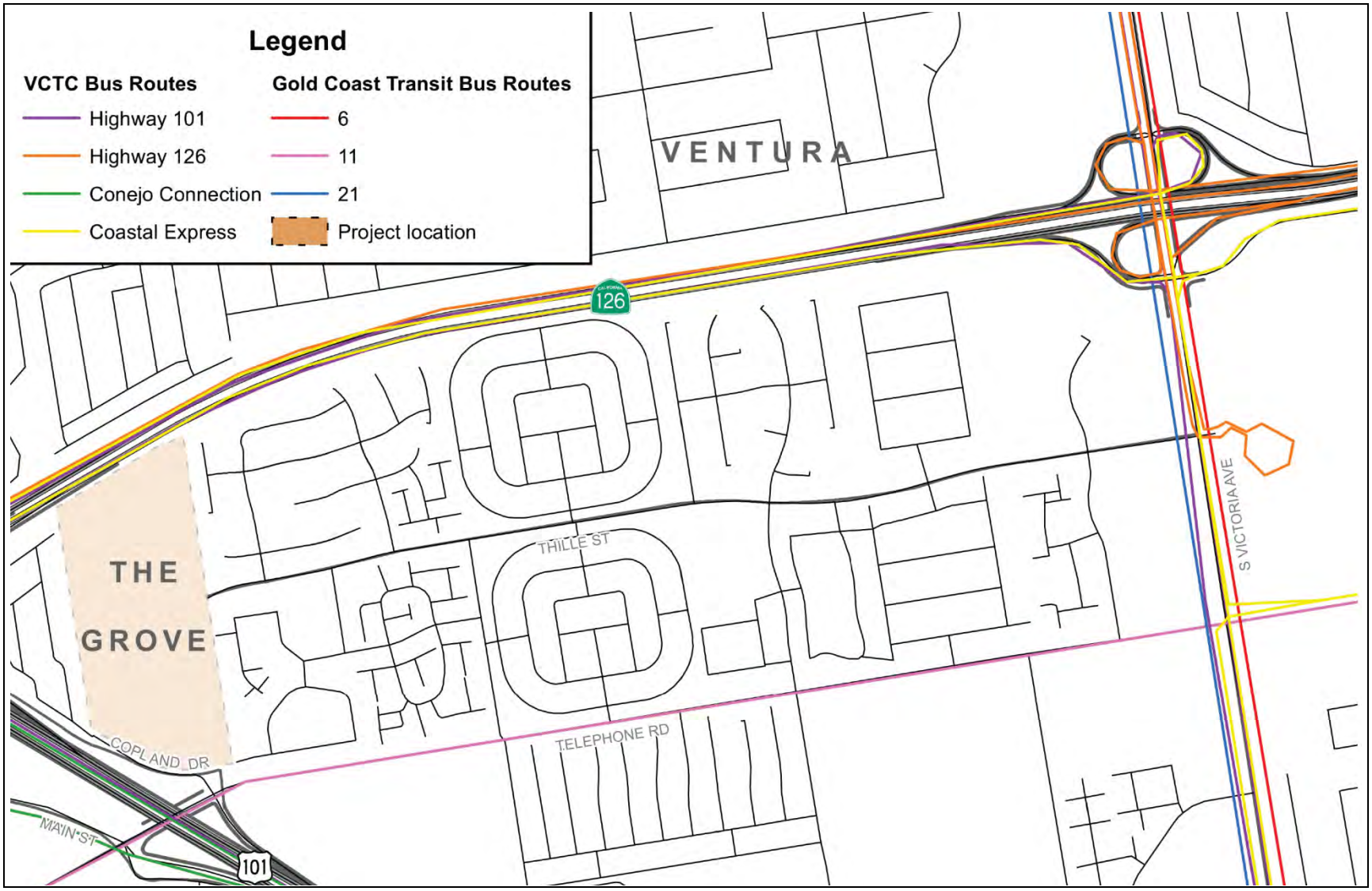


Figure 4.15-3 Existing Transit Routes

Table 4.15-2 Existing (Year 2015) Level of Service Conditions

Intersection	Existing Level of Service	
	AM Peak Hour ICU	PM Peak Hour ICU
1. Main/US-101 SB/ Valentine & Telephone	.55/A	.66/B
2. Copland/US-101 NB & Telephone	.48/A	.42/A
3. Victoria & Thille St	.49/A	.54/A

Level of Service ranges:

LOS	ICU
A	.00-.60
B	.61-.70
C	.71-.80
D	.81-.90
E	.91-1.00
F	above 1.00

4. Transit

Gold Coast Transit serves the cities of Ventura, Oxnard, Ojai, and Port Hueneme. Route 11 serves the Project site. Route 11 serves Pacific View Mall, Telephone Road, and Wells Center. On September 19, 2013 a representative from Gold Coast Transit met with the Project representative and determined that there would be no impacts from the Project and no need to adjust any Gold Coast Transit bus routes. Please see **Figure 4.15-4, Gold Coast Transit Bus Routes**.

4.15-3 Regulatory Framework

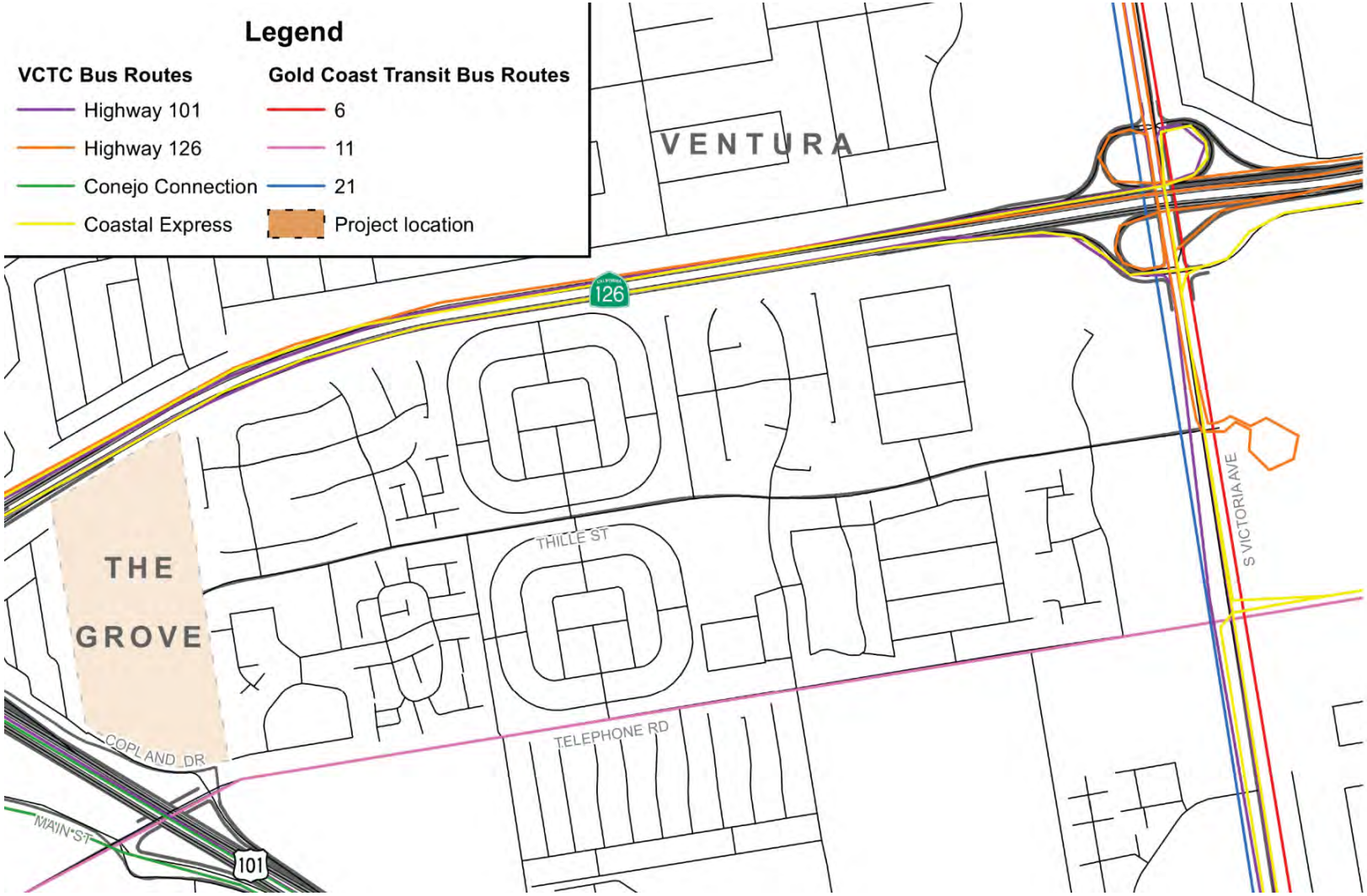
1. Federal

Transportation Security Administration

The Transportation Security Administration (TSA) is a component of the Department of Homeland Security (DHS) and is responsible for security of the nation's transportation systems. With state, local, and regional partners, the TSA oversees security for highways, railroads, buses, mass transit systems, and ports. A vast majority of its resources are dedicated to aviation security and especially screening passengers and baggage.

National Incident Management System/Standardized Emergency Management System

The National Incident Management System/Standardized Emergency Management System (NIMS) is a tool for states, counties, and local jurisdictions to respond to catastrophic events through better communication and coordination. NIMS provides a consistent nationwide template to enable federal, state, local, and tribal governments and private sector and non-governmental organizations to work together effectively and efficiently to prepare for, prevent, respond to, and recover from domestic incidents, regardless of cause, size, or complexity, including acts of catastrophic terrorism.



Source: Figure 5, Traffic Study for The Grove Project, Stantec Consulting Services, October 30, 2015

Figure 4.15-4 Gold Coast Transit Bus Routes

California has a similar management system called the Standard Emergency Management System (SEMS), which is mandated under *California Government Code* §8607(a). State of California Executive Order S205 requires the state to integrate, to the extent appropriate, the NIMS, into the state's SEMS.

2. State of California

California Environmental Quality Act

The California Environmental Quality Act (CEQA) defines a significant impact on the environment as a substantial, or potentially substantial, adverse change in the physical conditions within the area affected by the Project. Traffic is a required impact assessment category under CEQA. CEQA documents generally evaluate land use in terms of compatibility with the existing land uses and consistency with local general plans and other local land use controls (e.g., zoning, specific plans).

Regional Transportation Plan/Sustainability Communities Strategy

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range transportation and land use plan that is developed and updated by SCAG every 4 years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that Project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

The SCS integrates land use and transportation strategies that will achieve Air Resources Board (ARB) emissions reduction targets in compliance with the Senate Bill 375 regulations.

Senate Bill 375

Sen. Bill No. 375 (Stats. 2008, ch. 728) (SB 375) requires metropolitan planning organizations (MPOs) to prepare a SCS that demonstrates how the region will meet its greenhouse gas (GHG) reduction targets through integrated land use, housing and transportation planning. Specifically, the SCS must identify a transportation network that is integrated with the forecasted development pattern for the plan area and will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the California Air Resources Board. The targets for SCAG are a 9% reduction in per capita transportation by 2020 and 16% by 2035.

Senate Bill 743

SB 743 was enacted in 2013 (SB 743) and will become effective in July 2014. It will limit the use of level of service (LOS) as a criterion for impact identification under CEQA. Key SB 743 language includes the following:

> (b)(1) The Office of Planning and Research shall prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed

> revisions to the guidelines adopted pursuant to Section 21083 establishing criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, the office shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated. The office may also establish criteria for models used to analyze transportation impacts to ensure the models are accurate, reliable, and consistent with the intent of this section.
>
> Upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any.

As indicated in section (b)(1), Office of Planning and Research (OPR) is required to prepare revisions to the CEQA Guidelines establishing new significance criteria within transit priority areas. In section (2), the statute states that upon certification of those guidelines, LOS may no longer be used except if specifically identified in the guidelines. OPR has indicated that maintaining LOS would not "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" as required by the statute.

California Department of Transportation (Caltrans)

Caltrans, in conjunction with the California Highway Patrol (CHP), develops, maintains, and operates the State Highway System within Los Angeles County. The County lies within District 7, which includes Los Angeles and Ventura counties.

California Emergency Management Agency

The California Emergency Management Agency (EMA) is responsible for assuring the state's readiness to respond to and recover from natural, human-made, and war-caused emergencies, and for assisting local governments in their emergency preparedness, response, and recovery efforts. The EMA serves as the central contact point in the state for any emergency or imminent disaster. It coordinates the notification of appropriate state administering agencies that may be required to respond, as well as the emergency activities of all state agencies in the event of an emergency. In doing so, the EMA does not focus on security specifically, but rather more broadly on addressing all potential incidents that could affect the state, such as earthquakes, fires, floods, and terrorist attacks. Furthermore, EMA coordinates with federal agencies, such as the DHS and FEMA, as well as other state and local agencies such as the CHP. California's vision, mission, and principles for

emergency management, as well as goals and objectives are located in its publication "Strategic Plan 2010–2015 – Keeping California Safe."

3. City of Ventura General Plan

Policy 4A: Ensure that the transportation system is safe and easily accessible to all travelers.

- Action 4.1: Direct city transportation investment to efforts that improve user safety and keep the circulation system structurally sound and adequately maintained. First priority for capital funding will go to our pavement management program to return Ventura streets to excellent condition.
- Action 4.2: Develop a prioritized list of projects needed to improve safety for all travel modes and provide needed connections and multiple route options.
- Action 4.3: Provide transportation services that meet the special mobility needs of the community including youth, elderly, and disabled persons.
- Action 4.4: Combine education with enforcement to instill safe and courteous use of the shared public roadway.
- Action 4.5: Utilize existing roadways to meet mobility needs, and only consider additional travel lanes when other alternatives are not feasible.
- Action 4.6: Require new development to be designed with interconnected transportation modes and routes to complete a grid network.
- Action 4.10 Modify traffic signal timing to ensure safety and minimize delay for all users.

Policy 4B: Help reduce dependence on the automobile.

- Action 4.14: Provide development incentives to encourage projects that reduce automobile trips.
- Action 4.15: Encourage the placement of facilities that house or serve elderly, disabled, or socioeconomically disadvantaged persons in areas with existing public transportation services and pedestrian and bicycle amenities.
- Action 4.16: Install roadway, transit, and alternative transportation improvements along existing or planned multi-modal corridors, including primary bike and transit routes, and at land use intensity nodes.
- Action 4.17: Prepare and periodically update a Mobility Plan that integrates a variety of travel alternatives to minimize reliance on any single mode.
- Action 4.18: Promote the development and use of recreational trails as transportation routes to connect housing with services, entertainment, and employment.
- Action 4.19 Adopt new development code provisions that establish vehicle trip reduction requirements for all development.
- Action 4.20: Develop a transportation demand management program to shift travel behavior toward alternative modes and services.

Action 4.21: Require new development to provide pedestrian and bicycle access and facilities as appropriate, including connected paths along the shoreline and watercourses.

Action 4.22: Update the General Bikeway Plan as needed to encourage bicycle use as a viable transportation alternative to the automobile and include the bikeway plan as part of a new Mobility Plan.

Action 4.23: Upgrade and add bicycle lanes when conducting roadway maintenance as feasible.

Action 4.24: Require sidewalks wide enough to encourage walking that include ramps and other features needed to ensure access for mobility-impaired persons.

Action 4.27: Extend stubbed-end streets through future developments, where appropriate, to provide necessary circulation within a developing area and for adequate internal circulation within and between neighborhoods. Require new developments in the North Avenue area, where applicable, to extend Norway Drive and Floral Drive to connect to Canada Larga Road; and connect the existing segments of Floral Drive. Designate the extension of Cedar Street between Warner Street and south of Franklin Lane and the linking of the Cameron Street segments in the Westside community as high priority projects.

4.15-4 Thresholds of Significance

The following thresholds for determining the significance of impacts related traffic and circulation are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove could result in significant adverse impacts to the existing transportation network if any of the following could occur.

T-1	**Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**
T-2	**Would the project conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?**
T-3	**Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**
T-4	**Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**
T-5	**Would the project result in inadequate emergency access?**

T-6 Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

4.15-5 Environmental Impacts

1. Methodology

Three signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) method of analysis traffic study guidelines; specifically, the ICU method was used to determine volume-to-capacity (v/c) ratios and corresponding levels of service at the signalized study intersections as **Table 4.15-3** below summarizes level of service criteria.

Table 4.15-3 Level of Service Definitions for Signalized Intersections

Level of Service	Intersection Capacity Utilization	Definition
A	0.000-0.599	Excellent - Very low delay. At signalized intersections, no vehicle waits longer than one red light and no approach phase is fully used.
B	0.600-0.699	Very Good - An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.700-0.799	Good - At signalized intersections, occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.800-0.899	Fair - Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.900-0.999	Poor - Represents the largest number of vehicles an intersection approach can accommodate; may be long vehicle queues waiting through several signal cycles.
F	≥ 1.000	Failure - Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980.

The letter scale ranges from A to F, with LOS A representing free flow conditions and LOS F representing congested conditions. Volume-to-capacity is the ratio of demand flow rate to capacity for a traffic facility. The significance of potential impacts of Project-generated traffic is determined using the traffic impact criteria. These criteria assess the impact to an intersection based on the ratio between traffic volumes and intersection capacity (v/c ratio). An intersection operating at full capacity would have a v/c ratio of 1; an intersection operating at half its capacity would have a v/c ratio of 0.5.

Trip Generation and Distribution

The number of new trips that is expected to be generated by the Project was estimated based on trip generation rates published in the Institute of Transportation Engineers (ITE) "Trip Generation Manual, 9th Edition". Trip generation factors for the 58 single-family dwellings were based on values for Single Family Detached (ITE Category 210). Trip generation factors for the 192

condominium dwellings were based on values for Condos (ITE Category 230). The existing peak hour agriculture trips are negligible and did not have any effect on this study. **Table 4.15-4** shows the trip rates for the land use types and trips generated as a result of the Project.

Table 4.15-4 Land Use and Trip Generation for The Grove Project

Land Use Type	Units	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Trip Rates								
1. Single-family Detached	DU	0.19	0.56	0.75	0.65	0.36	1.01	9.57
2. Condos	DU	0.07	0.37	0.44	0.36	0.18	0.54	5.86
Proposed Project Trips								
1. Single-family Detached	58 DU	11	32	43	38	21	59	555
2. Condos	192 DU	13	71	84	69	35	104	1,125
Total		24	103	127	107	56	163	1,680

A total of 1,680 trips per day will be distributed to the surrounding roadway network. Of these trips, 127 will occur during the AM peak hour, and 163 will occur during the PM peak hour.

Trip distribution percentages outlined in the Project's 2011 traffic study were used in the current analysis. The distribution of Project trips was determined and approved by the City. Approximately 55% of Project traffic is oriented toward US 101, 10% is oriented toward SR-126, and 35% is oriented toward the local arterials.

2. Environmental Effects Found Not To Be Significant

As to **Threshold T-3**, a less than significant impact was determined; therefore, this threshold is not evaluated in this section. See **Section 6, Effects Found Not To Be Significant**, for a discussion of this environmental effect, as well as others, that were found not to be significant and are, therefore, not evaluated in detail in this EIR. The remaining thresholds are evaluated below.

3. Construction Impacts

Buildout of the Specific Plan would be gradual and occur over an approximately 18-year period. During construction of the proposed Projects construction workers would arrive at and depart from the Project site during off-leak hours, minimizing trips during the AM and PM peak traffic periods. Haul truck routes would be approved by the Ventura Department of Public Works Department prior to the construction of individual projects. As such, construction related trips associated with buildout of the specific plan would not result in a significant impact.

4. Operational Impacts

Studied Intersections

Based on the mixed-use trip generation model described above, buildout of the specific plan would generate 16,314 daily trip ends (approximately 1,050 inbound trips and 997 outbound trips) during

a typical weekday. Based on the Traffic Analysis Study's trip generation forecast, which was approved by the Ventura Department of Public Works, buildout of the specific plan would add up to 1,025 trips (522 inbound trips and 503 outbound trips) during the AM peak hour and 1,022 trips (528 inbound trips and 494 outbound trips) during the PM peak hour.

Existing Plus Project Conditions

Peak hour Project trips were added to the existing intersection volumes presented earlier. The Existing-Plus Project ICU values are summarized in **Table 4.15-5** based on the peak hour turning movement volumes.

Table 4.15-5 Existing Plus Project Level of Service Conditions

	Existing		Existing Plus Project	
Intersection	AM Peak Hour ICU	PM Peak Hour ICU	AM Peak Hour ICU	PM Peak Hour ICU
1. Main/US-101 SB/ Valentine & Telephone	.55/A	.66/B	.56/A	.66/B
2. Copland/US-101 NB & Telephone	.48/A	.42/A	.54/A	.45/A
3. Victoria & Thille St	.49/A	.54/A	.49/A	.55/A

Level of Service ranges:

LOS	ICU
A	.00-.60
B	.61-.70
C	.71-.80
D	.81-.90
E	.91-1.00
F	above 1.00

As shown in **Table 4.15-5**, the addition of Project-generated traffic has no significant impact on the operation of any study intersections under existing conditions. The study intersections will continue to operate as LOS D or better during the AM and PM peak hours.

T-2 Would the project conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?

Under Ventura County's CMP Traffic Impact Analysis criteria, a project impact is considered to be significant if the proposed Project increases traffic demand on a CMP facility (e.g., a freeway or intersection) by 2% of capacity (V/C > 0.02), causing or worsening LOS F (V/C > 1.00). Under this criterion, a proposed Project would not have a regionally significant impact if the analyzed facility is operating at LOS E or better after the addition of Project traffic, regardless of the increase in V/C ratio caused by the proposed Project. However, if the facility is operating at LOS F with Project traffic and the incremental change in the V/C ratio caused by the proposed Project is 0.02 or greater, the Project would be considered to have a significant impact.

A project's projected number of transit trips assumes an average vehicle ridership (AVR) factor of 1.4 persons in order to estimate the number of person trips to and from the Project area. The CMP threshold is 9% of person trips to transit commercial developments with 0.25-miles of a designated County CMP transit facility.

CMP Intersection

The County's CMP Traffic Impact Assessment guidelines require that intersection monitoring locations must be examined if the Project would add 50 or more trips during either the AM or PM weekday peak hours. The closest intersection monitoring location is Main/US 101 SB/Valentine and Telephone. This intersection is located within the specific plan area and is one of the 3 study intersections examined in the traffic analysis report. Based on the Project trip distribution and trip generation, existing counts would not increase the CMP thresholds. Thus, impacts to the CMP intersection location would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

T-4	Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Implementation of the Specific Plan would not result in the construction and/or operation of hazardous design features (e.g., sharp curves and/or dangerous intersections) or the interaction of incompatible uses. However, the Specific Plan's goals and policies do encourage pedestrian linkages, the implementation of bicycle facilities, and the reconfiguration of roadways. Thus, it is imperative that facilities designed for non-automobile modes include enhanced safety features to minimize conflicts between transit riders, bicyclists, pedestrians, and motor vehicles. The Specific Plan incorporates street improvement standards that would provide a defined and often separated space for pedestrians, motorists, and bicyclists.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

T-5	Would the project result in inadequate emergency access?

Construction

As discussed in **Section 4.8, Hazards and Hazardous Materials**, construction activities associated with buildout of the Specific Plan could reduce the number of vehicle lanes or temporarily close certain street segments, usually accessible to emergency vehicles, including those used for evacuation routes. Further, construction equipment and vehicles may block or slow traffic. Possible street closures and slower traffic during construction could interfere with emergency response, including evacuations. However, construction would be temporary and would affect a limited number of streets or intersections at any one time. Additionally, the City's Standardized Emergency Management System (SEMS) Multi- Hazard Emergency Functional Plan (MHEFP), which provides guidance for the City's planned response to extraordinary emergency situations associated with natural disasters, terrorism, technological incidents, and nuclear defense operations, would continue to be implemented. Existing mitigation measure requires project applicants/developers to prepare a Traffic Control Plan for implementation during the construction phase, as deemed necessary by the City Traffic Engineer, which would ensure that the Ventura Police Department is aware of temporary roadway closures due to construction activities and alternative travel.

Operation

Operational activities associated with buildout of the Specific Plan are not anticipated to have any impacts on an established emergency response plan. Individual projects would be subject to compliance with Ventura emergency requirements. Further, the proposed Project would connect to Thille Avenue and Telephone allowing emergency vehicles to easily access various project sites.

Before future projects are approved by the City, they would undergo further environmental and technical analysis that would include evaluation of impacts by emergency and public services. Compliance with the Ventura County Fire Code and the Ventura Fire Department regulations regarding access for emergency and public safety vehicles would be required in the design of individual projects. Thus, impacts related to emergency access would be less than significant.

Level of Significance Before Mitigation

Construction-related impacts would not be potentially significant. Operational impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

All impacts would be less than significant.

T-6 Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The Specific Plan is consistent with the City's General Plan and Development Code. While the Specific Plan supersedes the Development Code within the specific plan area, its goals and principles provide for a more precise implementation of the City's existing, including providing district-specific development standards and design guidelines that support and encourage and increase safe, direct, and convenient pedestrian access, establish a potential by the City of Ventura to construct an overpass for safe access for pedestrians and bicyclists.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.15-6 Cumulative Conditions

Year 2025 General Plan Traffic Conditions

Project impacts under buildout conditions were analyzed to determine the Project's consistency with the City's General Plan. This would represent the buildout of the area, assumed to be Year 2025. The City utilizes a travel demand model as a tool to analyze various future scenarios.

Traffic model assignments for the AM and PM peak hours were completed for With Project and Without Project scenarios. As shown in **Table 4.15-6**, the ICU values for AM and PM peak hour scenarios are less than .90. The With Project conditions result in acceptable LOS D or better.

Table 4.15-6 2025 General Plan Level of Service Conditions

	2025 General Plan No Project		2025 General Plan With Project	
Intersection	AM Peak Hour ICU	PM Peak Hour ICU	AM Peak Hour ICU	PM Peak Hour ICU

Intersection	2025 General Plan No Project		2025 General Plan With Project	
	AM Peak Hour ICU	PM Peak Hour ICU	AM Peak Hour ICU	PM Peak Hour ICU
1. Main/US-101 SB/ Valentine & Telephone	.61/B	.86/D	.61/B	.87/D
2. Copland/US-101 NB & Telephone	.53/A	.67/B	.56/A	.67/B
3. Victoria & Thille St	.52/A	.60/A	.53/A	.60/A

Level of Service ranges:

LOS	ICU
A	.00-.60
B	.61-.70
C	.71-.80
D	.81-.90
E	.91-1.00
F.	above 1.00

The study intersections will operate at the same LOS for both scenarios during the AM and PM peak hours. The Copland Drive/US 101 northbound ramp and Telephone Road intersection continues to operate at acceptable LOS C with the proposed Project, and the Project has no significant impact. In addition, the intersection of Main Street/Valentine Road/US 101 southbound ramp and Telephone Road will operate at LOS D during the PM peak hour and the Project has no significant impact on this location.

The ADT volumes without the Project and with the Project were also compared. The ADT impacts from TAZ 74 are summarized in **Table 4.15-7** below. The Project shows no increase in the Year 2025 ADT along Telephone Road just east of Copland Drive/US 101 Off Ramp or along Thille Street just west of Portola Road.

Table 4.15-7 Average Daily Traffic Volumes for The Grove Project

	Telephone Rd e/o Copland Dr/US-101 NB Off Ramp	Thille St w/o Portola Rd	Copland Dr n/o Telephone Rd
Existing (2015)	31,100	2,150	450
Project-Generated Daily Trips	250	170	1,510
Existing-Plus-Project	31,350	2,320	1,960
2025 Model ADT without Project	33,000	2,000	n/a*
2025 Model ADT with Project	33,000	2,000	n/a*

*Note: Copland Drive north of Telephone Road is not in the City's traffic model.

The proposed Project consists of residential uses, including 58 single-family dwellings and 192 multi-family units. The Project will generate 127 AM peak hour trips, 163 PM peak hour trips, and 1,680 daily trips. The Project peak hour trips were distributed to the surrounding roadway network and added to existing and Year 2025 traffic. The Project has no significant impact on the study intersections during the peak hours or the ADT under existing or 2025 conditions, and as a result, no mitigation is required.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.16 Utilities and Service Systems

A Development Agreement (DA) has been submitted. The DA does not require or obligate the permittee or the City to pursue any physical changes to the environment different from those of the proposed Project and, therefore has no potential to cause additional environmental impacts.

4.16-1 Solid Waste

1. Introduction

This section describes the existing solid waste facilities used by the City, identifies the regulatory framework with respect to regulations that address solid waste, and evaluates the significance of the potential changes in these factors that could result from implementation of The Grove Specific Plan Project.

2. Existing Conditions

Existing Solid Waste Generation, Collection, and Disposal in the City of Ventura

The City of Ventura is served primarily by two Class III (nonhazardous) landfills:

1. Toland Road Landfill
2. Simi Valley Landfill

These landfills are located near the City. The City exports a majority of its wastes to the Toland Road Landfill and the remainder of its wastes, if needed, to the Simi Valley Landfill.

The City's target rate per capita is 5.9 pounds per person per day (ppd). The Environmental Sustainability Division in the City Public Works Department manages collection and disposal of solid waste. The City also operates programs for residential and commercial recycling, household hazardous waste, and electronic waste collection.

The City has a franchise agreement with Harrison Industries for residential and commercial solid waste removal. This arrangement includes curbside collection, with three residential disposal options (trash, recyclables, and yard waste). After collection, waste is sorted at the Gold Coast Recycling Facility. Material that cannot be recycled is sent to landfills. The majority of Ventura's non-recycled waste (88%) goes to Toland Road Landfill, while approximately 11% is sent to the Simi Valley Landfill. The remaining approximately 1% is shipped to either Azusa Land Reclamation Company, Inc., Chiquita Canyon Sanitary Landfill, or Nu-Way Live Oak Landfill.

Table 4.16-1 below summarizes the permitted daily and total capacities of the primary landfills that serve the City.

Table 4.16-1 Ventura County Landfill Characteristics

Landfill	Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)	Permitted Daily Disposal (tons per day)	Average Daily Disposal (tons per day)	Estimated Closure Date
Toland Road	30,000,000	21,983,000	1,500	1,300	5/31/2027
Simi Valley	43,500,000	20,575,377	3,000	2,000	1/31/2027

Source: CalRecycle Active Landfill Profiles http://www.calrecycle.ca.gov/profiles/facility/Landfill/Default.asp.(2016)

As shown in **Table 4.16-1**, the Toland Road and Simi Valley Landfills have available permitted solid waste disposal capacity through 2027.

3. Regulatory Framework

State of California

The California Waste Management Act (AB 939), passed by the State of California, mandates the amount of solid waste entering existing landfills and the re-use of solid waste through recycling efforts.[42] AB 939 requires every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) in its Solid Waste Management Plan that identifies how each jurisdiction will meet the mandatory state waste diversion goals of 25% by the year 1995 and 50% by the year 2000. The purpose of AB 939 is to "reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible." In 2006, the most recent year for which information is available, the City diverted 70% of its solid waste from landfills as part of its compliance with the requirements of AB 939.

The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and environment. AB 939 established the following waste management prioritization.

- Source Reduction
- Recycling
- Energy Recovery
- Landfilling
- Household Hazardous Waste Management

42 California Integrated Waste Management Board, California Integrated Management Act, AB 939.

City of Ventura

The City has implemented numerous waste reduction programs. These include concrete/asphalt recycling, green waste and wood recycling, grass-cycling, and composting street sweeping debris. The City also composts and mulches all curbside yard waste, which is applied to local agriculture fields, reducing water and fertilizer use. The City operates a Household Hazardous Waste Collection Program to collect hazardous and electronic waste from Ventura households and businesses, and provides household battery recycling containers for public use at various City facilities.

As of January 1, 2011, the new California Green Building Standards Code (*California Code of Regulations*, Title 24, Part II) went into effect. In compliance with this new Code, the City now requires all construction projects to file and implement a Construction and Demolition Waste Management Plan (WMP).

General Plan

The Our Sustainable Infrastructure chapter of the City's 2005 General Plan sets forth following goals and policies from the General Plan that would apply to the proposed Project:

Policy 5A: Follow an approach that contributes to resource conservation.

- Action 5.5: Provide incentives for new residences and businesses to incorporate recycling and waste diversion practices, pursuant to guidelines provided by the Environmental Services Office.

Policy 5B: Improve services in ways that respect and even benefit the environment.

- Action 5.8: Locate new development in or close to developed areas with adequate public services, where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.
- Action 5.10: Utilize existing waste source reduction requirements, and continue to expand and improve composting and recycling options.

Policy 1D Expand the use of green practices.

- Action 1.25 Purchase and use recycled materials and alternative and renewable

Adequate landfill capacity could potentially be available for the next 15-17 years. However, the Simi Valley Landfill is a less desirable alternative to Toland Road because of its long distance from Ventura. In addition, that landfill is currently projected to close by 2022. This would reduce available capacity to 100 tons per day. Though the projected 84-ton increase for the City is within this amount, the cumulative increase in solid waste sent by Ventura and other cities in the region is anticipated to exceed 100 tons given that waste generated in Ventura makes up only about 25-30% of the total waste currently going to Toland Road Landfill. In addition, the Toland Road Landfill is projected to close by 2027. Consequently, a new or expanded solid waste disposal facility is expected to be needed over the next 20 years to accommodate waste generated in Ventura. Impacts relating to solid waste disposal are considered a Class I significant.

4. Thresholds of Significance

Based upon Appendix G of the CEQA Guidelines under Section XVII, Utilities and Service Systems, the following significance thresholds are used to evaluate Project impacts related to Solid Waste.

Util-1 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Util-2 Would the project comply with federal, state, and local statutes and regulations related to solid waste?

5. Environmental Impacts

Methodology

Solid waste generation was estimated using factors from the 2005 General Plan Final EIR.

Analysis, Mitigation Measures, and Residual Impacts

Util-1 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Table 4.16-2 below provides estimates of the solid waste that would be generated and disposed at area landfills.

Table 4.16-2 Projected Solid Waste Generation – The Grove

Estimated 2025 Population Increase	Generation Rate (tons per day)	Solid Waste Generation (tons per day)	Diversion Rate	Landfill Disposal (tons per day)
653	0.006 per capita	3.9	70%	1.17

Source: Impact Sciences, Inc. 2011

This quantity represents the Project's solid waste generation under a worst-case scenario without any recycling activities in place.

However, under the City Model Ordinance, the Project would be required to provide adequate areas for collecting and loading recyclable materials in concert with countywide efforts and programs to reduce the volume of solid waste entering landfills. While the Project would generate approximately 0.00117 tons per day, it can also be assumed that the Project would meet the current recycling goals of the community and in actuality, only generate approximately 0.0039 tons per day due to state mandate to divert at least 50% of potential waste disposal.

Two potential landfills that would serve the site (Toland Road Landfill, Simi Valley Landfill) have approximately 30,000,000 and 43,500,000 cubic yards of capacity remaining, respectively. The Project represents 0.0019% of the total remaining capacity and 0.005% of the daily capacity of the two potential landfills that would serve the Project.

E.J. Harrison & Sons (trash hauler for the City of Ventura) is required to serve all customers within the jurisdiction pursuant to their franchise agreements. However, due to the urban design elements of the Project, the development cannot be served with the standard services described in the agreements. A standard collection vehicle cannot safely or legally traverse the streets with the bulb-out and round-about configurations. Special service rates will need to be developed and approved by the City of Ventura to provide service for this Project. Additionally, special service vehicles will be required due to the compact street figurations. Site design elements shall consider space for container storage and collection adequate to provide appropriate service levels for the various land uses. Consequently, impacts would be significant prior to mitigation.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

MM Util-1	Special service rates will need to be developed and approved by the City of Ventura to provide service for this Project. Special service vehicles will be required due to the compact street figurations.
MM Util-2	Site design elements shall consider space for container storage and collection adequate to provide appropriate service levels for the various land uses. The space allocation guidelines discussed in Table 4.16-2 to The Grove Specific Plan EIR should be used to design container storage areas to provide adequate service levels. Components to consider include but are not limited to, horizontal and vertical clearances, enclosure functionality and protection elements, collection vehicle circulation, accessibility, pedestrian circulation, construction materials, roofing, fire sprinklers, and other utilities.
MM Util-3	There is no protection provided for vehicles making right-turn movements off Telephone Road. Vehicles tend to move fast through the intersection trying to catch the next light, which is only 240 feet to the west. The Project applicant shall work with the City of Ventura to accommodate right-hand turn movements off Telephone Road.

Level of Significance After Mitigation

Impacts would be less than significant.

Util-2	**Would the project comply with federal, state, and local statutes and regulations related to solid waste?**

AB 939 requires that California cities establish programs to divert 50% of all solid waste from landfills. As discussed above, the City of Ventura has established residential and commercial waste diversion programs, and diverted 70% of its solid waste in 2012, the most recent year for which

information is available. New housing constructed through the Project's horizon year of 2025 would result in an estimated increase in population of 653 residents. As shown in **Table 4.16-2**, future development within the planning area is expected to divert 70% of its solid waste, or approximately 0.00195 tons per day, from disposal in landfills through compliance with City programs for reducing solid waste disposal. Furthermore, The Grove provides policies that would support City efforts regarding solid waste diversion. Development within The Grove Planning Area would comply with all actions provided in the General Plan, and the City's programs and policies, and the impact would be less than significant.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

6. Cumulative Impacts

Growth within the City of Ventura through the City's 2025 General Plan horizon year would cause increased demand for solid waste disposal. The City's 2005 General Plan includes policies and actions to ensure that solid waste diversion efforts are made as the City builds out. New development proposals within the City would also be reviewed and would be required to adhere to the policy and actions provided in the General Plan and/or community plan within which they are located, as well as other applicable City programs, which would support City efforts to divert solid waste and ensure the availability of adequate landfill capacity.

Additional population associated with new residential development within the Specific Plan Area has not been considered in the 2005 Ventura General Plan. New residential uses associated with the Project would result in approximately 250 more households and 653 more persons within the City than anticipated by the General Plan. However, as shown in **Table 4.12-5, Project Growth and Forecasts** (page 4.12-9), the Project's population represents 0.56% of SCAG's 2020 forecast and 0.58% of the General Plan 2025 forecast, and the Project's households represent 1.45% of SCAG's 2020 forecast and 1.26% of the General Plan 2025 forecast. Thus, the Project would not exceed the SCAG RTP/SCS population growth forecast for the City of 116,900 residents in 2020 or the City's General Plan forecast of 133,160 households in 2025.

The proposed Project would exceed the General Plan projections by 250 residential dwelling units, resulting in 385 residents more than were projected to reside in the City in 2025. With participation in City programs to reduce solid waste disposal, these residents would be expected to generate

approximately 0.00195 tons per day of solid waste disposed in landfills. The additional 385 residents and 0.00195 tons per day would not be a substantial increase and the cumulative impact would be less than significant. Cumulative impacts would therefore be less than cumulatively considerable.

Level of Significance Before Mitigation

Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

4.16-2 Wastewater

1. Introduction

This section evaluates the ability of the City's existing collection system to accommodate a planned development near Telephone Road and the US 101 Freeway commonly known as The Grove Specific Plan Project. Kennedy/Jenks previously worked with the City on the Wastewater System Master Plan (Master Plan) in 2010. Per the City's 2005 General Plan each proposed Project is required to conduct a sewer collection system analysis to determine if downstream facilities are adequate to handle the proposed development. Therefore, a sewer study was prepared for the proposed Project. The goal of this sewer study was to determine what effect the additional sewer flow from the proposed Project will have on the City's existing collection system. This section is based on the Sewer Infrastructure Review prepared by Kennedy/Jenks Consultants dated July 20, 2015, and the letter dated July 31, 2013 prepared by Jensen Design & Survey, Inc., with an attached Broom Sewer Study prepared by DownStream Services, Inc. dated July 11, 2013 (**Appendix 4.16**), as well as information generated from the City of San Buenaventura (Ventura).

2. Existing Conditions

The City's wastewater system provides safe and healthy wastewater collection and treatment for nearly 10 million gallons per day of flow generated by a population of over 113,000 within the City and two satellite areas adjacent to the City. The City operates and maintains approximately 300 miles of collection system piping, 11 sewage lift stations, a tertiary treatment plant, a reclaimed water system, and a state- certified water quality laboratory. The Los Angeles Regional Water Quality Control Board (Los Angeles RWQCB) monitors regulatory compliance and discharge permit limitations that impact the wastewater system.

The Ventura Water Reclamation Facility (VWRF), located in the harbor area, treats most of the wastewater for the City. This plant was originally designed with a capacity of 14 million gallons per day (mgd) and provides tertiary treatment, effluent filtration, and chlorination/dechlorination. Average annual flows to the VWRF currently total about 9.5 mgd. The VWRF is currently permitted for 14 mgd and has a secondary treatment capacity of 1 to 12 mgd. Studies are currently underway to evaluate the treatment plan effluent discharge to the estuary. Discharge restrictions mandated by the National Pollutant Discharge Elimination System (NPDES) permit may alter the treatment plant capacity.

Project Area

Wastewater from the Project will connect to the City's sewer collection system in Telephone Road on the north side of US 101. The connection will be to an existing 8-inch sewer in Copland Drive that connects to a 10-inch sewer in Telephone Road. Once in Telephone Road, the wastewater flows west along Main Street, then south along US 101, and then farther south through a right-of-way to the Ventura Water Reclamation Facility.

3. Regulatory Framework

Federal

Clean Water Act

The federal Clean Water Act (CWA) Section 401 regulates the discharges of pollutants into "waters of the US" from any point or non-point source.[43] Individual permits are issued for certain defined sources of discharge, while non-point source runoff from construction sites and urban development is regulated under a series of general permits. Construction that disturbs 1 acre or more is regulated under the NPDES storm water program. In the State of California, the program is administered by the local RWQCB.

State of California

The SWRCB and the RWQCBs are the state agencies with primary responsibility for the coordination and control of water quality.

State Water Resources Control Board

In 2006 the State Water Resources Control Board (SWRCB) enacted Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR). Any public agency that owns or operates a sewer system more than 1 mile in length that conveys treated or partially treated water to a publicly owned treatment facility works to comply with the WDR to reduce sanitary sewer overflows. Compliance with the WDR includes reporting such overflows to the

43 33 Code of Federal Regulations 404

SWRCB and the development of a sewer system management plan, which describes how each agency operates, maintains, and evaluates its collection system.

Regional Water Quality Control Board

In the Porter-Cologne Water Quality Control Act[44] (Porter-Cologne), the California State Legislature declared that the "state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation." Porter-Cologne grants the boards authority to implement and enforce water quality laws, regulations, policies, and plans to protect the state's groundwater and surface waters.

The proposed Project is located within the Los Angeles RWQCB, which sets requirements for sewage disposal from land developments. The requirements provide an explanation of the principal statutory authority and administrative procedures under which the RWQCB will fulfill its responsibilities to protect against pollution, nuisance, contamination, unreasonable degradation of water quality, and violation of water quality objectives, as each may occur from the disposal of sewage from land developments.

City

General Plan

The following General Plan policies and actions are applicable to The Grove Specific Plan Project.

Policy 5B: Improve services in ways that respect and even benefit the environment.

- Action 5.6: Require project proponents to conduct sewer collection system analyses to determine if downstream facilities are adequate to handle the proposed development.
- Action 5.12: Apply new technologies to increase the efficiency of the wastewater treatment system.

Municipal Code

Chapter 22 of the City of Ventura Municipal Code provides regulations for sewer service, including sewer connection permits and fees, including fees for new connections to the sewer system. Such fees are established by City Council resolution.

Wastewater System Master Plan

Building on the shared vision for a well-planned community, the City has developed a Wastewater Master Plan to identify current and estimated future wastewater infrastructure needs for the collection and treatment of its wastewater. The 2010 Wastewater Master Plan addresses the City's infrastructure needs to support the existing community and the anticipated revitalization and

44 State Water Resources Control Board, "Porter Cologne Water Quality Control Act" California Water Code, Division 7. Water Quality, effective January 1, 2008

redevelopment efforts. The 2010 Master Plan is based on pending projects January 2007 (near term) and ultimate (build out) on all vacant parcels and redevelopment of parcels per the General Plan allowances.

4. Thresholds of Significance

Based upon Appendix G of the CEQA Guidelines under Section XVII, Utilities and Service Systems, the following significance thresholds are used to evaluate Project impacts related to wastewater.

Util-3	**Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**
Util-4	**Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**
Util-5	**Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**
Util-6	**Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**
Util-7	**Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

5. Environmental Impacts

Methodology

The Grove was listed in the 2010 Master Plan as a near-term project, with an expected 208 dwelling units and a total expected flow of 40,352 gallons per day (gpd), or 28.02 gallons per minute (gpm). The current plan calls for 59 single-family residences and 191 apartments, for a total of 250 dwelling units. In accordance with the Master Plan's criteria of 194 gallons per day per dwelling unit for estimating wastewater flows for "near-term" developments, the estimated flow from the 250 units is 48,500 gpd, or 33.68 gpm. No adjustment to the flows was made for any retail space or parks/trails, because there is no retail space indicated in the current development plan. The flow of 33.68 gpm is used for the Near-Term and Ultimate scenarios.

The flow monitoring that was conducted by Downstream Services, Inc. was provided by the City and used to recalibrate the model in the area upstream of the Project and in the separate subcatchment. The results from the more upstream flow monitoring location, labeled as FM-02 in the flow monitoring report, indicate an average flow of 52 gpm and a peak dry weather flow of 91 gpm. The Master Plan model showed an average flow of 87 gpm in pipe P-853, which corresponds to flow monitoring location FM-02, and a peak dry weather flow of 185 gpm.

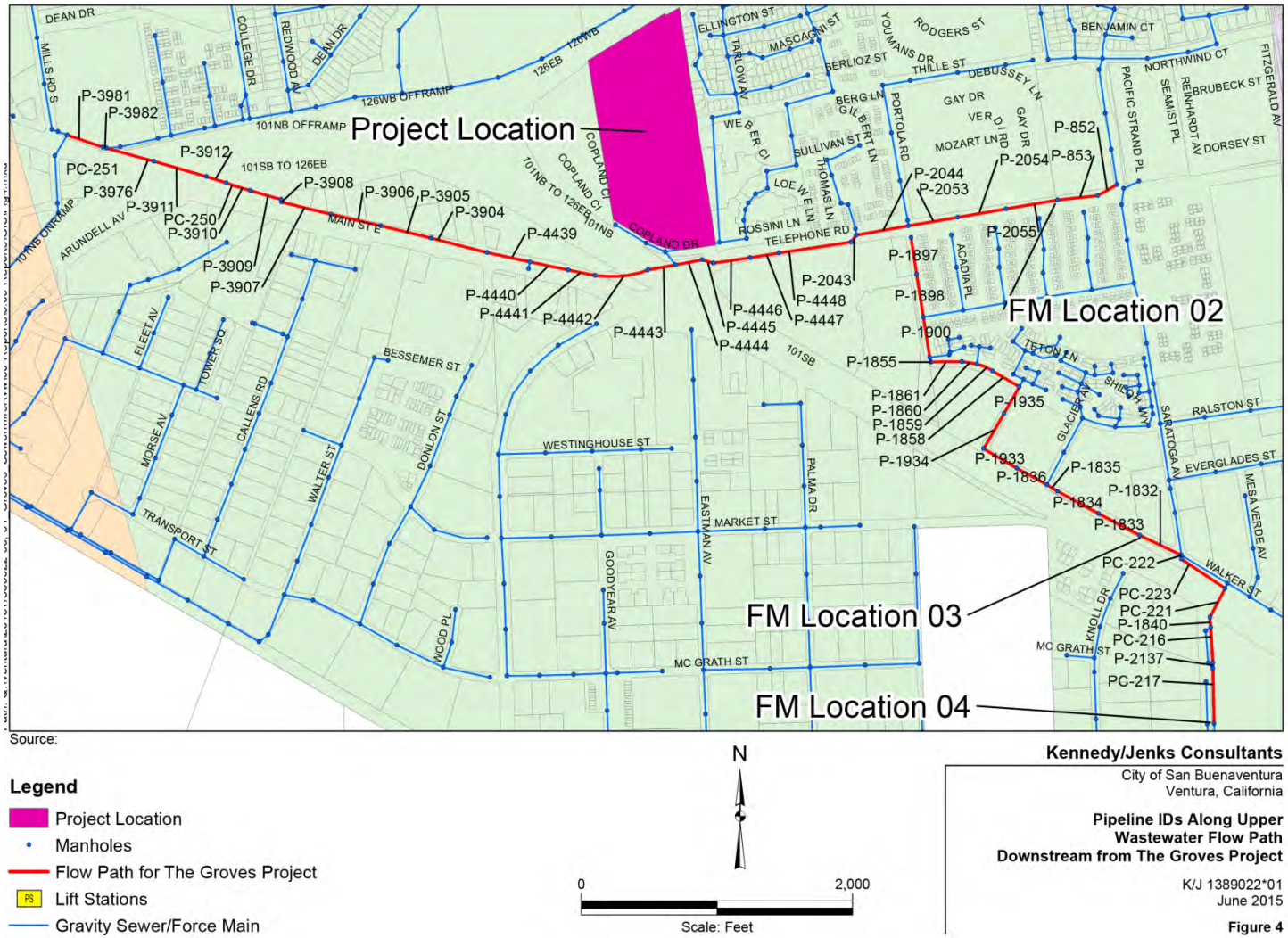
Therefore, the average day loads at all 47 manholes upstream from pipe P-853 were scaled down equally to a total average day load of 42 gpm, so that with the peaking equation in the Master Plan model, the peak dry weather flow in the model in pipe P-853 is 91 gpm, equal to what was measured during the flow monitoring. These same adjustments were made to the Near-Term and Ultimate scenarios in the model. The locations of pipe P-853 and flow monitoring location FM-02 are shown on **Figure 4.16-1, Wastewater Flow Path Downstream from The Grove Project**.

The results from the second flow monitoring location, in the separate subcatchment, labeled as FM-03 in the flow monitoring report, indicate an average flow of 83 gpm and a peak flow of 146 gpm. The Master Plan model showed an average flow of 32 gpm in pipe P-1834, which corresponds to flow monitoring location FM-03, and a peak dry weather flow of 69 gpm. After the recalibration of the upstream area, an additional adjustment was made to the loads at all 88 manholes upstream from pipe P-1834. The flows at these manholes were scaled up equally to a total average day load of 68 gpm, so that with the peaking equation in the Master Plan model, the peak dry weather flow in the model in pipe P-1834 is 146 gpm, equal to what was measured during the flow monitoring. These same adjustments were made to the Near-Term and Ultimate scenarios in the model. The locations of pipe P-1834 and flow monitoring location FM-03 are shown on **Figure 4.16-2, Redirection of Flow**.

The results from the third, most downstream flow monitoring location, labeled as FM-04 in the flow monitoring report, indicate an average flow of 324 gpm and a peak flow of 569 gpm. The Master Plan model showed an average flow of 119 gpm in pipe P-2136, which corresponds to flow monitoring location FM-04, and a peak dry weather flow of 405 gpm. After the recalibration of the upstream area, an additional adjustment was made to the loads at all 174 manholes upstream from pipe P-2136 and downstream from pipe P-1834. The flows at these manholes were scaled up equally so that a total average day flow of 191 gpm passed through pipe P- 2136, so that with the peaking equation in the Master Plan model, the peak dry weather flow in the model in pipe P-2136 is 569 gpm, equal to the peak flow that was measured during the flow monitoring. These same adjustments were made to the Near-Term and Ultimate scenarios in the model. The locations of pipe PC-82 and flow monitoring location MH05777 are shown on **Figure 4.16-1**.

Note that while the flow monitoring report included results for a fourth location, referred to as FM-01, the City indicated that these results were not to be used for this analysis.

The initial hydraulic analysis involved analyzing a proposed diversion of flows on Telephone Road at Portola Road, approximately 1,500 feet upstream from the Project. This diversion would direct flow from an upstream sewer that leads to the sewer where the Project connects, into a separate subcatchment. The idea is to redirect flow from the sewer to which the Project will connect in order to make capacity available to accommodate the flows from the Project.



Source:

Legend

- Project Location
- Manholes
- Flow Path for The Groves Project
- Lift Stations
- Gravity Sewer/Force Main

N

0 2,000

Scale: Feet

Kennedy/Jenks Consultants

City of San Buenaventura
Ventura, California

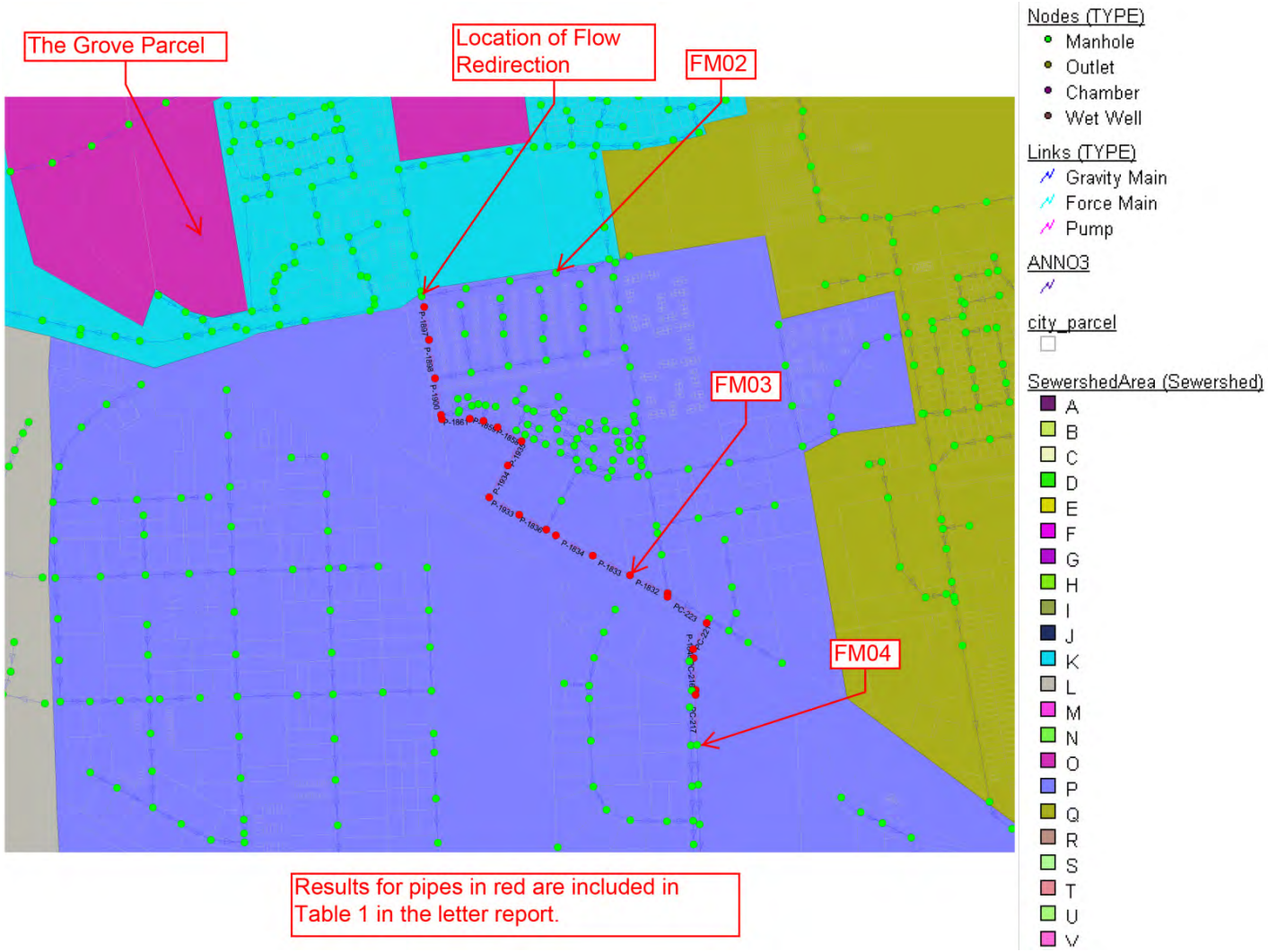
Pipeline IDs Along Upper Wastewater Flow Path Downstream from The Groves Project

K/J 1389022*01
June 2015

Figure 4

Source: Figure 4 – Sewer Infrastructure Review prepared by Kennedy/Jenks Consultants, dated July 20, 2015

Figure 4.16-1 Wastewater Flow Path Downstream from The Grove Project



Source: Figure 1 – Sewer Infrastructure Review prepared by Kennedy/Jenks Consultants, dated July 20, 2015

Figure 4.16-2 Redirection of Flow

However, for this to be possible, the effect of the redirected flows on the separate subcatchment must be analyzed after the model was recalibrated using the recent flow monitoring data. The locations chosen for the flow monitoring appear to have been chosen to support analysis of this proposed diversion. An initial hydraulic analysis was performed to investigate the effect of the proposed diversion on the collection system just downstream from the proposed diversion.

The final hydraulic analysis consisted of increasing the flow contribution from the parcel where The Groves Project is proposed from 28.02 gpm to 33.68 gpm. The model was evaluated using wet weather flow conditions for Existing, Near-Term and Ultimate flow scenarios with the additional flow. This final analysis did not include the proposed diversion mentioned in the paragraph above since the City indicated that the final analysis performed should consist of analyzing the system as it is currently configured.

Evaluation Criteria

The Peak Wet Weather Flow (PWWF) scenario was analyzed based on the design criteria outlined in Section 2.4 of the Master Plan. For the basis of evaluating system deficiencies, the flow d/D ratios defining a deficient pipe are as follows per the Master Plan:

- For pipes 15 inches and smaller, the allowable d/D is 66% for existing system flows and 50% when receiving additional flows from near-term and ultimate developments.
- For pipes greater than 15 inches, the allowable d/D is 75%.
- For pipes passing under a freeway, the allowable d/D is 50%.

The initial hydraulic analysis involved testing the model under existing conditions to determine the effect of the proposed redirection of flows at the intersection on Telephone Road at Portola Road. The sewers between this point and the location of FM-04 were analyzed to determine the effect of the additional flow from Telephone Road. **Figure 4.16-2, Redirection of Flow** (page 4.16-13) profiles these sewer lines, one for the existing recalibrated system, and one for the system with the proposed redirection of flows incorporated. The profile that includes the redirected flows shows greater flows, and a small amount of surcharging. **Table 4.16-3** below summarizes the depth to diameter ratios and the flows for the sewers shown in the profile for each scenario.

Table 4.16-3 Model Results Based on Flow Redirection

ID	Diameter (in)	Existing Total Peak Wet Weather Flow (gpm)	Existing d/D	Redirected Total Peak Wet Weather Flow (gpm)	Redirected d/D
P-1897	8	11	0.11	386	0.72
P-1898	8	24	0.16	392	0.73
P-1858	10	271	0.65	576	1.00
P-1859	10	271	0.34	576	0.51
P-1860	10	271	0.43	576	0.68
P-1900	10	271	0.40	576	0.62
P-1861	10	271	0.36	576	0.56
P-1855	10	271	0.36	576	0.56
P-1935	12	285	0.40	588	0.61
P-1934	12	304	0.40	604	0.60
P-1836	12	317	0.43	615	0.65
P-1933	12	317	0.43	615	0.64
P-1834	12	380	0.48	671	0.69
P-1835	12	380	0.48	671	0.70
P-1833	12	380	0.53	671	0.81
P-1832	15	380	0.44	671	0.62
P-2137	15	816	0.67	941	0.75
PC-216	15	705	0.38	806	0.41
PC-222	12	1062	0.43	1218	0.46
PC-223	18	1136	0.49	1308	0.53
PC-221	15	1427	0.40	1635	0.43
P-1840	15	1431	0.65	1639	0.72
PC-217	15	1431	0.61	1639	0.66

The depth-to-diameter values in **Table 4.16-3** that do not meet the evaluation criteria are colored in blue. As can be seen, the additional flow introduced into these sewer pipelines due to the proposed redirection causes several pipes to exceed the d/D criteria for existing peak wet weather flow conditions.

The final hydraulic analysis included evaluating the system without the proposed redirection of flow but with the updated flow estimate from the Project using the recalibrated model. The analysis indicated that the system downstream from the Project shows basically the same Master Plan deficiencies as it did before the flow estimate and model were updated. The Master Plan indicates that projects E16, E35 and E25 are existing system improvement needs based on the Master Plan which shows the deficiencies in the area downstream of the Project.

Table 4.16-4 shows results from the model that was updated with the revised flows for the Project and the recalibration effort. Results are shown both with and without the flows from the Project under peak wet weather flows for Existing and Ultimate conditions. The pipes that are included in Table 2 are indicated in Figure 4. The d/D ratios in blue are equal to or greater than 0.67. The d/D ratios shown in green are between from 0.5 to 0.67. The deficiencies are similar to what is shown in Master Plan Figure 5-4c.

Table 4.16-5 shows results from the same model, but for dry weather scenarios. There were no impacts from the Various Dry Weather Flow Conditions.

Deficiencies exist in the existing and proposed scenarios for wastewater. Without mitigation there would be a significant impact.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

MM Util-4	The subdivider/developer shall enter into a reimbursement agreement with the City to design and construct the replacement of the existing public sewer main and associated improvements, including but not limited to manholes, cleanouts and laterals, as described below: • Replace 1,910 linear feet of existing 10" with 15" pipe. Pipe segments: P-3904, P-4443, P-4441, P-4442, P-4440 and P-4439. • Replace 2,190 linear feet of existing 12" with 15" pipe. Pipe segments: P-3905, P-3906, P-3907, P-3908, P-3909, P-3910, P-3912, P-3911 and PC-250. • Replace 740 linear feet of existing 15" with 18" pipe. Pipe segment: P-3976, P-3982, P-3981 and PC-251. The subdivider/developer shall construct the proposed public mains prior to issuance of a Certificate of Occupancy. The reimbursement agreement shall explain the details of how the subdivider/developer shall be reimbursed by the City for designing and constructing the public sewers in Main Street as described above.

Level of Significance after Mitigation

After mitigation, impacts would be less than significant.

Table 4.16-4 Model Results Near The Grove for Various Wet Weather Flow Conditions

Pipe ID From Sewer Model	Ex Pipe Dia (in.)	*Calibrated Existing (PWWF) Flow Conditions Without Project (gpm)	*Calibrated Existing (PWWF) Flow Conditions Without Project (d/D)	*Calibrated Existing (PWWF) Flow Conditions With Project (gpm)	*Calibrated Existing (PWWF) Flow Conditions With Project (Model d/D)	Project Contribution to Existing (PWWF) Flow Conditions Pipe Deficiency (%)	Ultimate (PWWF) Flow Conditions Without Project (gpm)	Ultimate (PWWF) Flow Conditions Without Project (Model d/D)	Ultimate (PWWF) Flow Conditions With Project (gpm)	Ultimate (PWWF) Flow Conditions With Project (Model d/D)	Project Contribution to Ultimate (PWWF) Flow Conditions Pipe Deficiency (%)	Ultimate Conditions Proposed Pipe Diameter (in)
P-852	8	253	0.50	253	0.50	0.00%	442	0.72	442	0.72	0.00%	10
P-853	8	255	0.54	255	0.54	0.00%	443	1.00	443	1.00	0.00%	12
P-2055	8	287	0.49	287	0.49	0.00%	473	0.67	473	0.67	0.00%	10
P-2054	8	290	0.48	290	0.48	0.00%	475	0.65	475	0.65	0.00%	10
P-2053	8	292	0.47	292	0.47	0.00%	477	0.64	477	0.64	0.00%	10
P-2044	8	382	0.63	382	0.63	0.00%	576	1.00	576	1.00	0.00%	12
P-2043	10	512	0.49	512	0.49	0.00%	720	0.61	720	0.61	0.00%	12
P-4448	10	563	0.63	563	0.63	0.00%	771	1.00	771	1.00	0.00%	15
P-4447	10	563	0.37	563	0.37	0.00%	771	0.44	771	0.44	0.00%	
P-4446	10	563	0.62	563	0.62	0.00%	771	0.78	771	0.78	0.00%	15
P-4445	10	563	0.63	563	0.63	0.00%	771	0.82	771	0.82	0.00%	15
P-4444	10	563	0.55	563	0.55	0.00%	771	0.68	771	0.68	0.00%	12
P-4443	10	880	0.71	909	0.73	3.25%	1,277	1.00	1,301	1.00	1.84%	15
P-4442	10	880	0.73	909	0.75	3.25%	1,277	1.00	1,301	1.00	1.84%	15
P-4441	10	972	1.00	1,001	1.00	2.89%	1,352	1.00	1,376	1.00	1.74%	18
P-4440	10	972	0.76	1,001	0.78	2.89%	1,355	1.00	1,379	1.00	1.74%	15
P-4439	10	986	0.80	1,015	1.00	2.84%	1,367	1.00	1,391	1.00	1.72%	15
P-3904	10	991	1.00	1,020	1.00	2.82%	1,372	1.00	1,396	1.00	1.72%	18
P-3905	12	1,011	0.58	1,040	0.59	2.76%	1,392	0.72	1,416	0.73	1.69%	15
P-3906	12	1,027	1.00	1,056	1.00	2.70%	1,407	1.00	1,431	1.00	1.68%	18
P-3907	12	1,045	0.77	1,073	0.79	2.65%	1,421	1.00	1,445	1.00	1.66%	18
P-3908	12	1,045	0.36	1,074	0.36	2.65%	1,422	0.42	1,446	0.43	1.66%	
P-3909	12	1,045	0.60	1,074	0.61	2.65%	1,422	0.74	1,446	0.75	1.66%	18
P-3910	12	1,045	0.61	1,074	0.62	2.65%	1,422	0.76	1,446	0.78	1.66%	18
PC-250	12	1,045	0.67	1,074	0.69	2.65%	1,422	1.00	1,446	1.00	1.66%	18
P-3912	12	1,045	0.65	1,074	0.66	2.65%	1,422	1.00	1,446	1.00	1.66%	18
P-3911	12	1,045	0.73	1,074	0.75	2.65%	1,422	1.00	1,446	1.00	1.66%	18
P-3976	15	1,045	0.55	1,074	0.56	2.65%	1,422	0.68	1,446	0.69	1.66%	18
PC-251	15	1,045	0.43	1,074	0.44	2.65%	1,422	0.52	1,446	0.52	1.66%	18
P-3982	15	2,627	0.56	2,651	0.56	0.90%	3,300	0.65	3,324	0.65	0.72%	18
P-3981	15	2,627	0.66	2,651	0.67	0.90%	3,300	0.80	3,324	0.80	0.72%	18

Table 4.16-5 Model Results Near The Groves for Various Dry Weather Flow Conditions

Pipe ID From Sewer Model	Existing Pipe Diameter (in.)	*Calibrated Existing (PDWF) Flow Conditions Without Project (gpm)	*Calibrated Existing (PDWF) Flow Conditions Without Project (d/D)	*Calibrated Existing (PDWF) Flow Conditions With Project (gpm)	*Calibrated Existing (PDWF) Flow Conditions With Project (Model d/D)	Project Contribution to Existing (PDWF) Flow Conditions Pipe Deficiency (%)	Ultimate (PDWF) Flow Conditions Without Project (gpm)	Ultimate (PDWF) Flow Conditions Without Project (Model d/D)	Ultimate (PDWF) Flow Conditions With Project (gpm)	Ultimate (PDWF) Flow Conditions With Project (Model d/D)	Project Contribution to Ultimate (PDWF) Flow Conditions Pipe Deficiency (%)
P-852	8	90	0.18	90	0.29	0.00%	174	0.40	174	0.40	0.00%
P-853	8	91	0.20	91	0.31	0.00%	175	0.44	175	0.44	0.00%
P-2055	8	104	0.17	104	0.28	0.00%	189	0.39	189	0.39	0.00%
P-2054	8	106	0.17	106	0.28	0.00%	190	0.38	190	0.38	0.00%
P-2053	8	107	0.16	107	0.27	0.00%	191	0.37	191	0.37	0.00%
P-2044	8	147	0.28	147	0.36	0.00%	239	0.47	239	0.47	0.00%
P-2043	10	208	0.20	208	0.30	0.00%	312	0.37	312	0.37	0.00%
P-4448	10	233	0.30	233	0.38	0.00%	338	0.46	338	0.46	0.00%
P-4447	10	233	0.12	233	0.24	0.00%	338	0.29	338	0.29	0.00%
P-4446	10	233	0.29	233	0.37	0.00%	338	0.45	338	0.45	0.00%
P-4445	10	233	0.30	233	0.38	0.00%	338	0.46	338	0.46	0.00%
P-4444	10	233	0.24	233	0.33	0.00%	338	0.41	338	0.41	0.00%
P-4443	10	396	0.38	412	0.44	3.86%	618	0.56	634	0.57	2.42%
P-4442	10	396	0.40	412	0.45	3.86%	618	0.57	634	0.58	2.42%
P-4441	10	446	0.48	461	0.50	3.43%	667	0.63	682	0.64	2.25%
P-4440	10	446	0.43	461	0.47	3.43%	668	0.58	684	0.59	2.25%
P-4439	10	453	0.45	469	0.48	3.37%	676	0.60	692	0.61	2.22%
P-3904	10	456	0.48	472	0.50	3.35%	679	0.63	694	0.64	2.21%
P-3905	12	467	0.29	483	0.38	3.27%	692	0.46	708	0.47	2.17%
P-3906	12	476	0.61	492	0.58	3.21%	701	0.74	717	0.75	2.14%
P-3907	12	486	0.44	501	0.47	3.15%	711	0.58	726	0.59	2.12%
P-3908	12	486	0.13	502	0.25	3.15%	711	0.29	727	0.30	2.11%
P-3909	12	486	0.31	502	0.39	3.15%	711	0.47	727	0.48	2.11%
P-3910	12	486	0.32	502	0.39	3.15%	711	0.48	727	0.49	2.11%
PC-250	12	486	0.37	502	0.43	3.15%	711	0.52	727	0.53	2.11%
P-3912	12	486	0.35	502	0.42	3.15%	711	0.51	727	0.52	2.11%
P-3911	12	486	0.41	502	0.45	3.15%	711	0.56	727	0.57	2.11%
P-3976	15	486	0.27	502	0.36	3.15%	711	0.44	727	0.45	2.11%
PC-251	15	486	0.18	502	0.29	3.15%	711	0.35	727	0.36	2.11%
P-3982	15	1484	0.34	1,499	0.40	1.02%	1915	0.46	1931	0.46	0.80%
P-3981	15	1484	0.44	1,499	0.47	1.02%	1915	0.54	1931	0.54	0.80%

Util-5 Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Analysis

The VWRF is a tertiary treatment plant with a permitted 14 mgd capacity (the secondary treatment capacity limits the plant capacity to 12 mgd) and treats the wastewater generated in the planning area. The planning area's existing wastewater flows are projected at 12,000 gpd as shown in **Table 4.16-6** below.

Table 4.16-6 Proposed Project Wastewater Calculations

Land Use	Water Demand[1] (gallons per day)	Demand Factor	Water Return to Sewer Ratio[2]	Wastewater Flow (gallons per day)
Residential	250	14,750	0.80	48,500
Project Total				48,500
			Existing Plus Project Total	48,500

1 The water demand was calculated in Table 4.15.1 above.
2 The water return to sewer ratio for a given land use category is defined as the percentage of water demand that is returned to the sanitary sewer system for that land use category.
Source: City of Ventura, Wastewater System Master Plan, 2010, Table 2-3.

The estimated flow from the 250 units is 48,500 gpd, or 33.68 gpm. This conservative analysis indicates the wastewater flow generated by the proposed Project would remain below the currently permitted treatment capacity of 14 mgd. Therefore, the proposed Project would not exceed the anticipated treatment capacity of the VWRF.

Additionally, future water conservation measures implemented by this new development, as well as ongoing measures by existing customers, could reduce per capita water use inside the home, thus generating less sewage and providing adequate wastewater capacity. With the application of The Grove Specific Plan, and applicable General Plan policies, impacts would be less than significant regarding the treatment capacity requirements of the VWRF. The treatment plant flows are closely monitored as the City's NPDES permit for the plant requires the City to complete a report once the 30-day (monthly) average daily dry weather flow equals or exceeds 75% of the plants design capacity.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No mitigation required.

Residual Impacts

No mitigation required.

6. Cumulative Impacts

The VWRF is a permitted tertiary treatment plant with a current permitted 14 mgd capacity and treats the wastewater generated in the planning area. The City's 2010 Wastewater System Master Plan projects that development under the City's 2005 General Plan would result in 13 mgd of average annual dry weather flow. The City's existing flows total 9.5 mgd. This leaves approximately 3.5 mgd of potential excess wastewater capacity. The City's 2010 Wastewater System Master Plan utilizes the General Plan land use projections to determine ultimate built out wastewater flow demand and subsequently, any existing, near-term, or future deficiencies in the system. Therefore, the majority of the projected growth within the Project area has already been accounted for in the City's Wastewater System Master Plan.

The Project area is mostly built out. All new development projects would connect to the existing wastewater system that transports wastewater effluent to the VWRF. Additional population associated with new residential development within the Specific Plan Area has not been considered in the 2005 Ventura General Plan. New residential uses associated with the Project would result in approximately 250 more households and 653 more persons within the City than anticipated by the General Plan. However, as shown in **Table 4.12-5, Project Growth and Forecasts** (page 4.12-9), the Project's population represents 0.56% of SCAG's 2020 forecast and 0.58% of the General Plan 2025 forecast, and the Project's households represent 1.45% of SCAG's 2020 forecast and 1.26% of the General Plan 2025 forecast. Thus, the Project would not exceed the SCAG RTP/SCS population growth forecast for the City of 116,900 residents in 2020 or the City's General Plan forecast of 133,160 households in 2025. These increases are not substantial, and cumulative impacts would be less than significant.

Level of Significance Before Significance

Less than significant

Mitigation Measures

No mitigation is required.

Residual Impacts

No mitigation required.

4.16-3 Water Supply

1. Introduction

The Groves, LLC (developer) is proposing to construct a new residential development in the City of San Buenaventura (City, or Ventura) referred to as The Grove Specific Plan (Project, or The Grove). The Project site is located north of Telephone Road, east of US 101, and south of State Route 126 (SR-126), and will consist of 59 single-family homes, up to 191 townhouse/apartment units,a 1,000-square-foot clubhouse, and 4.92 acres of parks/trails constructed on a 25.37-acre parcel. The Project is being developed on a property that has an existing water well that is not part of the City's water system that serves current agricultural business. The Project is proposed to be served from the City's domestic water distribution system and is expected to generate additional water usage, which will have an impact on the City's water system. The purpose of this analysis is to quantify the expected addition of water demand for the Project and utilize the City's existing hydraulic model to determine if the City's existing distribution system can accommodate the proposed Project while meeting the requirements of the water system criteria established in the City's 2011 Water Master Plan (WMP).

This section is based on the Draft Water System Hydraulic Evaluation and Supply Requirements for The Grove Specific Plan prepared by RBF Consulting dated July 11, 2013; and the Water System Hydraulic Evaluation and Supply Requirements for The Grove Specific Plan prepared by Michael Baker International dated June 16, 2015 and updated August 4, 2015 (**Appendix 4.16**), as well as information generated from the City of San Buenaventura (Ventura).

2. Existing Conditions

The City provides drinking water, and water for fire protection, to households and businesses in Ventura through a complex system with more than 500 miles of distribution mains, 3 water treatment plants, 22 booster pump stations, 25 treated water reservoirs, and 13 wells. Five distinct sources provide surface and ground water to the City supply system.

- Casitas Municipal Water District
- Ventura River
- Foster Park Area, Surface Water Intake; Upper Ventura Water Groundwater Basin/Subsurface Intake and Wells
- Mound groundwater basin
- Oxnard Plain groundwater basin (Fox Canyon Aquifer)
- Santa Paula groundwater basin.

The City also holds a State Water Project entitlement of 10,000 acre-feet per year.

As part of the City's 2011 WMP, Michael Baker International (formerly RBF Consulting) prepared a calibrated hydraulic model for the City's domestic water distribution system. The existing water demands were allocated to the model based on the water consumption data. The Project parcel

was vacant at the time of the preparation of the 2011 WMP. According to the developer, records indicate that State Well No. 02122W07P01S serves the existing use, and the past 10-year well production average has been 59.36 acre-feet per year for the on-site irrigation. It is noted that the existing on-site well was redeveloped in March 2015 and pump tests indicate the well can produce a flowrate of 220 gallons per minute (gpm). The well is currently equipped with a 25 hp submersible pump designed to operate at a flowrate of 150 gpm. For the purpose of this analysis, any new water demand introduced as part of the Project will be treated as a direct addition to the City's existing water demands. The proposed Project will be served from the City's 330 Pressure Zone.

In addition, the City maintains a database of projects, known as "Planning Projects" that are in various phases of the planning process. The database includes all projects from those that are in construction to those that are in the conceptual phase, which includes The Grove, identified as Project "PROJ-00723". All Planning Projects as identified by the City as of December 31, 2012 have been incorporated into this hydraulic model analysis.

Demand Estimates

The expected addition of water demand for the Project will be a result of the construction of 59 single-family homes, up to 191 townhouse/apartment units, a 1,000 square foot clubhouse, and 4.92 acres of parks/trails. The demand estimates for the Project were calculated using the water demand factors from the Comprehensive Water Resources Report (CWRR).

Water demand factors allow for the estimation of water demands for new developments based the land use type, area, and number of dwelling units (DU). Water demand factors also account for water loss and are generally considered to be conservative. These factors, taken directly from the CWRR, are listed in **Table 4.16-7** below. It should be noted that these factors correspond to average day demand.

Table 4.16-7 Water Demand Factors

Water Demand Factor Classification	Water Demand Factor (gallons per day)
Residential	
Residential (0-8 du/ac)	370 per dwelling unit
Residential (9-20 du/ac)	250 per dwelling unit
Residential (21+ du/ac)	250 per dwelling unit
Non-Residential	
Commercial/Retail/Industrial/Hotel	265 per thousand square feet
Public/Institutional	
Hospital/Assisted Living	545 per bed
Park/Landscape/Irrigation	2,000 per acre

Source: Table 3-3 of the Comprehensive Water Resources Report, prepared by Michael Baker International (formerly RBF Consulting)

The residential portion of the Project demands consist of the single-family use and townhouse/ apartment use, which were classified in the "Residential (9-20 du/ac)" and Residential (21+ du/ac) land use categories respectively, both with water demand planning factors of 250 gallons per day per dwelling unit (gpd/du). Multiplying the water demand planning factors by the total number of dwelling units results in a total residential average day demand of 43.40 gpm, or 70.01 acre-feet per year (AFY). This calculation is illustrated in **Table 4.16-8**.

Table 4.16-8 Estimated Average Day Residential Water Demand

Area (Acres)	Unit Type	No. Units	Density (DU/ac)	Water Demand Factor Classification	Demand Factor (gpd/DU)	Avg Day Demand (gpd)	Avg Day Demand (gpm)	Avg Day Demand (AFY)
5.44	Single-family	59	10.8	Residential (9-20 du/ac)	250	14,750	10.24	16.52
7.80	Townhouse/Apartment	191	24.5	Residential (21+ du/ac)	250	47,750	33.16	53.49
					Totals	62,500	43.40	70.01

The non-residential portion of the Project demands consists of the clubhouse, which was classified in the Commercial/Retail/Industrial/Hotel land use category, and the parks/trails, which were classified in the Parks/Landscape/Irrigation land use category, with water demand planning factors of 265 gallons per day per thousand square feet (gpd/ksf) and 2,000 gallons per day per acre (gpd/ac), respectively. Multiplying the water demand planning factors by the total clubhouse and parks/trails area results in a total non-residential average day demand of 7.02 gpm, or 11.32 acre-feet per year. This calculation is illustrated in **Table 4.16-9** below.

Table 4.16-9 Estimated Average Day Non-Residential Water Demand

Land Use Type	Water Demand Factor Classification	Quantity Unit	Demand Factor	Avg Day Demand (gpd)	Avg Day Demand (gpm)	Avg Day Demand (AFY)
Clubhouse	Commercial/ Retail/ Industrial/Hotel	1,000 SF	265 gpd/ksf	265	0.18	0.30
Parks/Trails	Park/Landscape/ Irrigation	4.92 acres	2,000 gpd/ac	9,840	6.83	11.02
			Totals	10,105	7.02	11.32

Water demand peaking factors were then applied to the total average day demand of 50.42 gpm to translate this value to a maximum day demand and peak hour demand, which are considered the critical demand conditions for this hydraulic analysis. Maximum day demand represents the highest demand day of the year, while the peak hour demand represents the hour of highest demand during a maximum day demand based on the demand diurnal patterns, which represent demand variations throughout the day. Based on the peaking factors from the 2011 WMP of 1.52 for maximum day demand and 3.97 for peak hour demand, demand totals of 76.64 gpm and 200.17 gpm have been calculated for maximum day and peak hour demand, respectively. It should be noted that the peak hour condition is simulated in the hydraulic model over an extended period simulation (EPS) during a maximum day, and may not match the calculated peak hour values exactly. It should also be noted that the peak demand period for the entire City system, 330 Zone,

or The Grove, may not correspond to the same time during the day. See **Table 4.16-10** below for a summary of the separate demand conditions.

Table 4.16-10 Demand Summary Based on Water Demand Planning Factors

Demand Condition	Peaking Factor	Demand (gpm)	Demand (AFY)
Average day	N/A	50.42	81.33
Maximum day	1.52 x Average Day	76.64	N/A
Peak hour	3.97 x Average Day	200.17	N/A

Adapted Table III-2 from the City of San Buenaventura Water Master Plan, March 2011, prepared by Michael Baker International (formerly RBF Consulting)
Note: Actual demand under EPS simulation may vary slightly due to diurnal patterns.

Fire Flow Requirements

The City's domestic water distribution system must be capable of providing the maximum day demand plus the required fire flow for The Grove. Since all residential units will have a fire sprinkler system, the required fire flow would be a combination of flow for the sprinkler system and flow at the adjacent hydrant(s); however, since the required fire sprinkler demands were unknown at the time of the evaluation, the required fire flow utilized for the purpose of this analysis assumes a non-sprinklered building. The information of the largest structure, which is one of the apartment complexes, is listed in **Table 4.16-11** below.

Table 4.16-11 Building Information

Construction Type	Type V-B
Largest individual total building floor area (ft^2)	36,000
Sprinklered?	Yes*

*Since sprinkler demands are unknown at this time, the building is assumed to not be sprinklered for the purposes of this analysis.

With a building construction of Type V-B and fire flow calculation area of 36,000 square feet, Appendix B of the 2010 California Fire Code (CFC) requires a flow of 5,000 gpm with duration of 4 hours at a residual pressure of 20 psi. The fire flow requirements are summarized in **Table 4.16-12** below. It should be noted that the provision of an approved fire sprinkler system may allow for a reduction in total fire flow required.

Table 4.16-12 Fire Flow Requirements

Hydrant flow*	5,000 gpm
Duration	4 hours
Residual pressure	20 psi

Per Appendix B of the 2010 California Fire Code [2] for a non-sprinklered building

It should be noted that fire sprinkler system pressure requirements for the on-site private system were not included as part of this analysis. Reported pressure results correspond to the City's system pressures upstream of any meters and/or backflow prevention devices.

3. Regulatory Framework

Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) ensures the quality of drinking water. The law requires actions to protect drinking water and its sources (rivers, lakes, reservoirs, springs, and groundwater wells) and applies to public water systems serving 25 or more people. It authorizes the US EPA to set national health-based standards for drinking water to protect against naturally occurring and manmade contaminants. In addition, it oversees the states, municipalities, and water suppliers that implement the standards.

US EPA standards are developed as a Maximum Contaminant Level (MCL) for each chemical or microbe. The MCL is the concentration that is not anticipated to produce adverse health effects after a lifetime of exposure, based upon toxicity data and risk assessment principles. US EPA's goal in setting MCLs is to assure that even small violations for a period of time do not pose significant risk to the public's health over the long run. National Primary Drinking Water Regulations ("NPDWRs" or "primary standards") are legally enforceable standards that limit the levels of contaminants in drinking water supplied by public water systems.

Secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. US EPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

U.S. Environmental Protection Agency

The US EPA is the federal agency responsible for water quality management and administration of the CWA. In California, the US EPA has delegated most of the administration of the CWA to the State Water Resources Control Board (SWRCB). Much of the responsibility for implementation of the SWRCB's policies is delegated to the Regional Water Quality Control Board (RWQCB).

U.S. Bureau of Reclamation

The U.S. Bureau of Reclamation (USBR) operates the Colorado River project, an extensive network of dams, canals, and related facilities. The USBR serves as Watermaster, overseeing contentious water rights issues and running drought protection programs.

State of California

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) administers water rights, water pollution control, and water quality functions throughout the state, while the RWQCBs conduct planning, permitting, and enforcement activities.

Sustainable Groundwater Management Act

In September 2014, Governor Brown signed the Sustainable Groundwater Management Act (SGMA), which includes Assembly Bill (AB) 1739, Senate Bill (SB) 1168, and SB 1319.[45] A primary component of the SGMA requires local agencies to adopt groundwater management plans that are tailored to the resources and needs of their communities. Under the SGMA, the DWR will be responsible for implementing new and expanded responsibilities including: 1) developing regulations to revise groundwater basin boundaries; 2) adopting regulations for evaluating and implementing Groundwater Sustainability Plans (GSPs) and coordination agreements; 3) identifying basins subject to critical conditions of overdraft; 4) identifying water available for groundwater replenishment; and 5) publishing best management practices for the sustainable management of groundwater.[46] To ensure that the DWR is meeting the requirements of the SGMA, the DWR released a Draft Groundwater Sustainability Program Strategic Plan (Strategic Plan) in March 2015. This Strategic Plan aims to document the DWR strategy in helping to implement groundwater sustainability; share information with those who have interests in or management responsibilities for groundwater; and describe the structure through which DWR implements specific actions in coordination with stakeholders and partners.[47]

California Department of Water Resources

The California Department of Water Resources (DWR) is responsible for the planning, construction, and operation of SWP facilities, including the California Aqueduct, and sets conditions on use of SWP facilities. In addition, DWR is responsible for statewide water planning, evaluating urban water management plans, overseeing dam safety and flood control, and transfer of certain water rights permits (e.g., pre-1914).

California Department of Public Health

The California Department of Public Health (DPH) implements the SDWA. In addition, it oversees the operational permitting and regulatory oversight of public water systems. DPH requires public water systems to perform routine monitoring for regulated contaminants that may be present in

45 Department of Water Resources, Groundwater Information Center, http://www.water.ca.gov/groundwater/groundwater_management/legislation.cfm, accessed April 1, 2015
46 Department of Water Resources, Sustainable Groundwater Management Website, http://www.water.ca.gov/groundwater/sgm/index.cfm, Accessed April 1, 2015
47 Department of Water Resources, Groundwater Sustainability Program, 2015 Draft Strategic Plan

their drinking water supply. To meet water quality standards and comply with regulations, a water system with a contaminant exceeding an MCL must notify the public and remove the source from service or initiate a process and schedule to install treatment for removing the contaminant. Health violations occur when the contaminant amount exceeds the safety standard (MCL) or when water is not treated properly. In California, compliance is usually determined at the wellhead or the surface water intake. Monitoring violations involve failure to conduct or to report in a timely fashion the results of required monitoring.

In addition, DPH conducts water source assessments, oversees water recycling projects, permits water treatment devices, certifies water system employees, promotes water system security, and administers grants under the state Revolving Fund and state bonds for water system improvements.

California Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) is responsible for oversight of hazardous substances and remediation of contaminated sites, including in some cases water sources.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act ("Porter-Cologne" or "the Act") established the SWRCB and divided the state into nine regional basins, each with an RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the state's surface and groundwater supplies.

The Act authorizes the SWRCB to draft state policies regarding water quality in accordance with CWA Section 303. In addition, the Porter-Cologne Act authorizes the State Water Board to issue Water Discharge Requirement (WDRs) for projects that would discharge to state waters. Porter-Cologne requires that the State Water Board or the RWQCB adopt water quality control plans, otherwise referred to as basin plans, for the protection of water quality. A basin plan must:

- Identify beneficial uses of water to be protected;
- Establish water quality objectives for the reasonable protection of the beneficial uses; and
- Establish a program of implementation for achieving the water quality objectives.

Basin plans also provide the technical basis for determining WDRs, taking enforcement actions, and evaluating clean water grant proposals. Basin plans are updated and reviewed every three years in accordance with Article 3 of Porter-Cologne and CWA Section 303(c).

Groundwater Management Act

The Groundwater Management Act of 1992 (Water Code §10750 et seq.), also known as AB 3030 (Stats. 1992, ch. 947), provides guidelines for local agencies to acquire authority over the management of groundwater resources in basins recognized by DWR. Its intent is to promote the voluntary development of groundwater management plans and provide criteria for the plans in order to ensure sustainable groundwater supplies for the future. It stipulates the technical components of a groundwater management plan as well as procedures for such a plan's adoption, including passage of a formal resolution of intent to adopt a groundwater management plan, and holding a public hearing on the proposed plan. AB 3030 also allows agencies to adopt rules and regulations to implement an adopted plan, and empowers agencies to raise funds to pay for the facilities needed to manage the basin, such as extraction wells, conveyance infrastructure, recharge facilities, and testing and treatment facilities. Senate Bill (SB) 1938 (Stats. 2002, ch. 603) also requires basin management objectives and other additions to be included in local groundwater management plans to comply with *California Water Code* (Water Code §10750–§10756).

California Administrative Code Title 20 and Title 25

Title 20 (Sections 1604 and 1606) and Title 24 (Sections 2-5307 and 2-5352) of the *California Administrative Code* establishes efficiency standards (i.e., maximum flow rates) for all new showerheads, lavatory faucets, and sink faucets. These regulations also prohibit the sale of fixtures that do not comply with the current regulations; prohibit the installation of fixtures unless the manufacturer has certified compliance with the flow rate standards; and address pipe insulation requirements that can reduce water used before hot water reaches fixtures. Other applicable state water conservation laws include the Health and Safety Codes.

Senate Bills 610 and 221

Senate Bill (SB) 610 and SB 221 were adopted in 2001. The bills require lead agencies to obtain an assessment from the local water supplier to determine the sufficiency of the water supply for a proposed development. SB 610 applies at the time an EIR is prepared; SB 221 applies at the time a Tentative Tract Map or other related Project actions are approved.

Additionally, water agencies must coordinate with land use planning agencies in the development of their Urban Water Management Plans (UWMPs), which include projections of future water demand and water supply availability during normal and dry periods. Water agencies and land use planning agencies within the Region are working together to ensure adequate management and planning for water supplies to meet the needs of growing communities.

Senate Bill X7-7

Senate Bill 7 of Special Extended Session 7 (SB X7-7) was signed into law in November 2009; it calls for progress towards a 20% reduction in per capita water use statewide by 2020. As a result, the

legislation now mandates each urban water retail supplier to develop and report a water use target in the retailer's 2010 UWMP. The legislation further requires that retailers report an interim 2015 water use target, their baseline daily per capita use and 2020 compliance daily per capita use, along with the basis for determining those estimates. SB X7-7 provides four possible methods for an urban retail water supplier to use to calculate its water use target. DWR has also developed methodologies for calculating base daily per capita water use, baseline commercial, industrial and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use and landscape area water use. Agencies not in compliance with SB X7-7 will be ineligible for state loan and grant funding.

SB X7-7 also contains requirements for agricultural water suppliers. All agricultural water suppliers, either publicly or privately owned which irrigate 10,000 or more acres are required by SB X7-7 to implement critical Efficient Water Management Practices (EWMPs) and additional EWMPs if locally cost effective and technically feasible. Affected agricultural water suppliers must implement EWMPs by July 31, 2012.

Critical EWMPs include:

- Each agricultural water supplier is to measure the volume of water delivered to customers with sufficient accuracy to comply with standards set by DWR.
- Each agricultural water supplier is to develop a pricing structure for water customers, based at least in part on the volume of water delivered.

SB X7-7 also created the Agricultural Water Management Planning Act, which requires affected agricultural water suppliers to adopt Agricultural Water Management Plans (AWMPs). These plans facilitate management and conservation of water suppliers, and also guide and document the implementation of EWMPs. The plans are mandatory for many suppliers and are required to be completed and adopted for affected agricultural water suppliers by December 31, 2012.

Assembly Bill 1881

Assembly Bill (AB) 1881 built upon many past legislative acts related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted many landscape efficiency recommendations of the California Urban Water Conservation Council (CUWCC) for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required DWR, no later than January 1, 2009 to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent no later than January 1, 2010. DWR has completed the update of the Model Local Water Efficiency Landscape Ordinance. The law also requires the Energy Commission to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

The Model Local Water Efficient Landscape limits the water budget for new landscapes (or rehabilitated landscapes), greater than 2,500 square feet, to 70% of the local reference evapotranspiration (ET). The model ordinance lays out the procedures for evaluating potential landscape water use during the land development process. In addition, the ordinance contains requirements for planting as well as the design and maintenance of irrigation systems, all with the intent of limiting outdoor water use and avoiding irrigation runoff.

Assembly Bill 1420

AB 1420, passed in 2007 and in effect as of January 2009, changes the funding eligibility requirements of Section 10631 of the Water Code (Urban Water Management Planning Act). For any urban water supplier to be eligible for grant or loan funding administered by DWR, the SWRCB, or the Bay-Delta Authority (such as Propositions 50 and 84), the supplier must show implementation of the 14 water use efficiency demand management measures/best management practices (DMMs/BMPs) listed and described in the UWMP Act and the CUWCC Memorandum of Understanding, or show the schedule by which the supplier will begin implementing the DMMs/BMPs. Any supplier not implementing the measures based on cost-effectiveness must submit proof showing why the measures are not cost-effective.

Assembly Bill 2882

This bill was passed in 2008 and encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. Prior to AB 2882, state law authorized water agencies to promote conservation using rate structures; however, some agencies were concerned that such rate structures may be inconsistent with other parts of state law. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

California Public Resources Code

As defined in *California Public Resources Code* §10910, a city or county determines whether the projected water demand associated with a project was included as a part of the most recently adopted urban water management plan. If the water demand associated with the Project was not accounted for in the most recently adopted urban water management plan, the water supply assessment for the Project must include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry and multiple dry water years during a 20-year projection would meet the projected water demand associated with the Project, in addition to the water systems' existing and planned future uses. A water supply assessment was prepared for the Project and can be found in **Appendix 4.16.**

California Water Plan

The California Water Plan provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The plan, updated every five years, presents basic data and information on California's water resources including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the state's water needs.

State Water Project

The SWP is a water storage and delivery system of reservoirs, aqueducts, power plants, and pumping plants. Its main purpose it to store water and distribute it to 29 urban and agricultural water suppliers including Southern California.[48] The organization permits MWD 1,911,500 afy, "Table A," until December 31, 2035. The "Table A Amount" is the maximum amount of water to which a SWP Contractor has a contract right to request delivery each year of the highest priority available under the SWP Contractor's water supply contract, is specified in Table A of the contract. The Table A Amount is not equivalent to actual deliveries of water in any given year, and the water actually available for delivery in any given year may be an amount *less* than the SWP Contractor's Table A Amount. Depending upon hydrologic conditions, the amount of water in storage, the operational constraints, requirements imposed by regulatory agencies to meet environmental water needs, the amount of water requested by other SWP Contractors, climatic conditions, and other factors, the Table A amount may vary. As of March 2015 the DWR allocation of SWP water deliveries is 20% of the MWD's full Table A amount (1,911,500 afy).[49]

Urban Water Management Plan

Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. Every urban water supplier that either provides over 3,000 acre-feet of water annually or serves more than 3,000 or more connections is required to assess the reliability of its water sources over a 20-year planning horizon considering normal, dry, and multiple dry years. This assessment is to be included in its UWMP, which are to be prepared every five years and submitted to DWR. DWR then reviews the submitted plans to make sure they have completed the requirements identified in the UWMP Act (Division 6 Part 2.6 of the Water Code §10610–10656).

48 Department of Water Resources, http://www.water.ca.gov/swp/

49 Department of Water Resources, SWPAO Water Deliveries, March 2, 2015 notice, http://www.water.ca.gov/swpao/docs/notices/15-03.pdf, Accessed April 1, 2015

State Water Resources Board Recycled Water Policy

In 2013, the State Water Resources Board adopted its recycled water policy and adopted the following goals for the state:

- Increase the use of recycled water over 2002 levels by at least 1 million afy by 2020 and by at least 2 million afy by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 afy by 2020 and by at least 1 million afy by 2030.
- Increase the amount of water conserved in urban and industrial uses by comparison to 2007 by at least 20% by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The purpose of this policy is to increase the use of recycled water from municipal wastewater sources that meets the definition in *Water Code* §13050(n), in a manner that implements state and federal water quality laws. The State Water Resources Board expects to develop additional policies to encourage the use of storm water, encourage water conservation, encourage the conjunctive use of surface and groundwater, and improve the use of local water supplies.

Local

The City's General Plan is primarily a policy document that sets goals concerning the community and gives direction to growth and development. In addition, it outlines the programs that were developed to accomplish the goals and policies of the General Plan. City policies pertaining to wastewater are included in Our Sustainable Infrastructure of the City's General Plan.

Policy 5A: Follow an approach that contributes to resource conservation.

- Action 5.1: Require low flow fixtures, leak repair, and drought tolerant landscaping (native species if possible), plus emerging water conservation techniques, such as reclamation, as they become available.
- Action 5.2: Use natural features such as bioswales, wildlife ponds, and wetlands for flood control and water quality treatment when feasible.
- Action 5.3: Demonstrate low water use techniques at community gardens and city-owned facilities.
- Action 5.4: Update the Urban Water Management plan as necessary in compliance with the State 1983 Urban Water Management Planning Act.
- Action 5.5: Provide incentives for new residences and businesses to incorporate recycling and waste diversion practices, pursuant to guidelines provided by the Environmental Services Office.

Policy 5B: Improve services in ways that respect and even benefit the environment.

- Action 5.7: Require project proponents to conduct evaluations of the existing water distribution system, pump station, and storage requirements in order to determine if there are any system deficiencies or needed improvements for the proposed development.

Action 5.8: Locate new development in or close to developed areas with adequate public services, where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Action 5.9: Update development fee and assessment district requirements as appropriate to cover the true costs associated with development.

Action 5.11: Increase emergency water supply capacity through cooperative tie-ins with neighboring suppliers.

4. Thresholds of Significance

The following thresholds for determining the significance of impacts related to water resources are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to water resources, if any of the following could occur.

Util-8 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Util-9 Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Hydraulic Model Evaluation

The City's existing hydraulic model was used for this hydraulic model evaluation, which examines the impacts to the City's system that would be caused by the additional demand from The Grove Project. The City's existing system has been evaluated under maximum day demand 24-hour duration extended period simulations (EPS), which simulates a variation in demand up to the peak hour demand (PHD), and has also been evaluated under a fire flow scenario occurring over the peak hour demand. The criteria used for this evaluation are per the City's 2011 WMP, except as otherwise noted, and are summarized herein. The evaluation criteria, evaluation procedure, and hydraulic model results are discussed in the following sections.

Table 4.16-13 Pressure, Velocity, and Peaking Factor Criteria

Recommended Service Pressures (psi)	
Minimum	40
Maximum	150
Fire Flow	20
Notes: 1. Service pressures above 80 psi require a pressure regulator as stated in the Uniform Plumbing Code. 2. Services pressures above 150 psi require special approval and either individual pressure regulators or a regulating station on the main line.	
Pipeline Velocity Criteria (fps)	
Peak Hour Demand*	10
Maximum Day Demand plus Fire Flow	15
Minimum	1
*With a maximum friction loss of 10 ft/1,000 ft.	

Water Demand Peaking Factors	
Demand Condition	Peaking Factor
Maximum Day	1.52 x average day
Peak Hour*	3.97 x average day

*Actual peak hour factors for individual nodes are per the assigned diurnal in the hydraulic model.

Storage Criteria

In October 2014, the City of Ventura amended the water tank/reservoir storage criteria of the 2008 Engineering Standards and 2011 Water Master Plan to adopt the following:

- Operational Storage: Maximum Daily Demand for 7 hrs (24-hr continuous pumping) Maximum Daily Demand for 21.3 hrs (9-hr off-peak pumping)
- Emergency Storage: Maximum Daily Demand for 8 hrs
- Fire Storage: Largest fire flow requirement in pressure zone for the specified duration

Hydraulic Model Analysis

The Project is located at the northern end of the 330 Zone, which serves the southern- central areas of the City's distribution system. The current water supply sources for the 330 Zone include the following:

- 330 Booster Pump Station
- Golf Course Booster Pump Station
- Petit PRV (Emergency)
- Telegraph and Mills Upper PRV (Emergency)

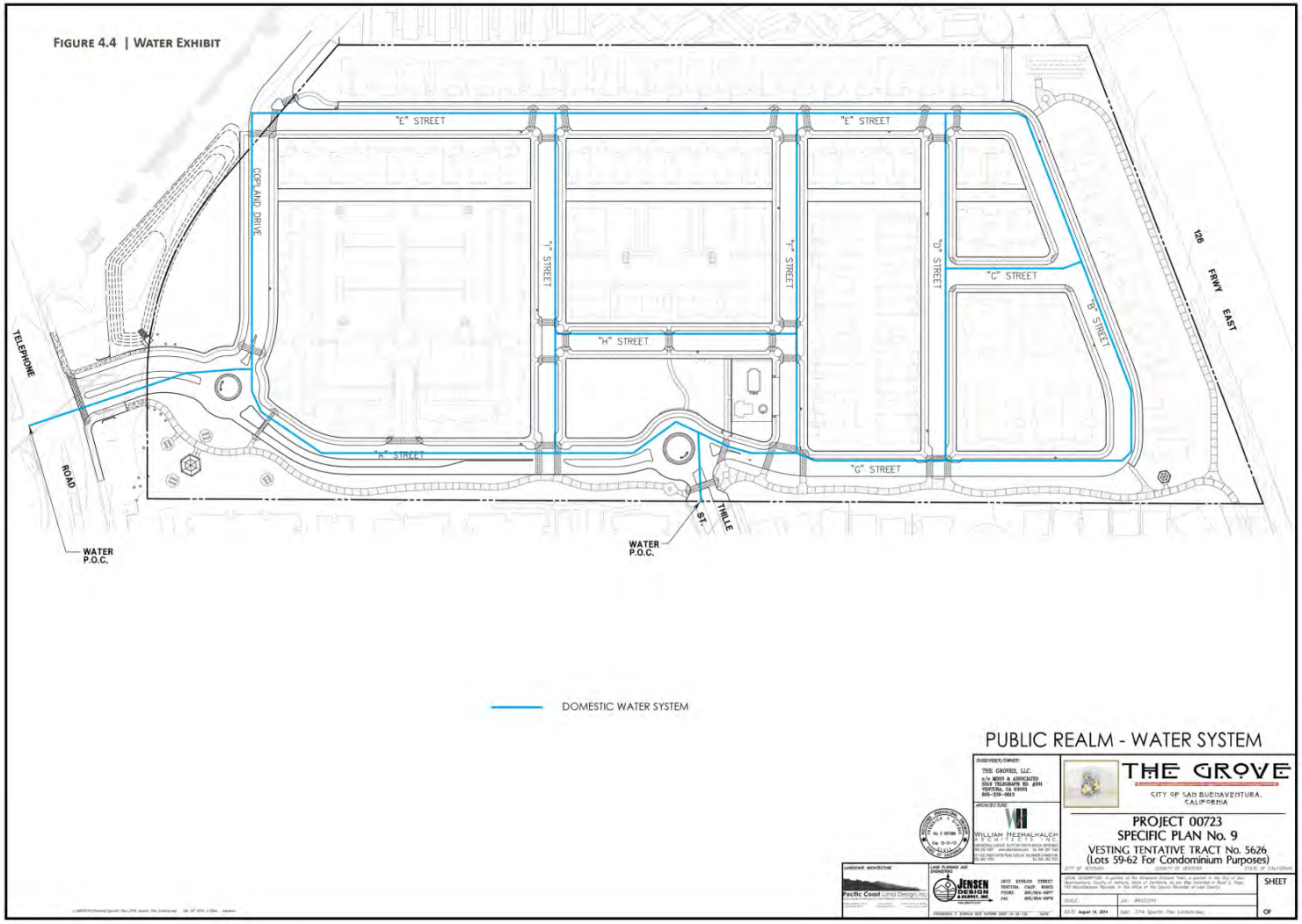
Supply is taken from the 330 Zone by the following facilities:

- Mariano Booster Pump Station
- Bailey Booster Pump Station
- Main and Mills PRV (Emergency)
- Palma PRV

Storage for the 330 Zone is provided by the following water storage tanks:

- Bailey Reservoir

The Project water utility plan (see **Figure 4.16-3**) indicates that the Project will receive water service from two connection points: one to the existing 12-inch waterline in Thille Street, and one to the existing 12-inch waterline in Telephone Road. In order to make these connections, it will be necessary to extend the existing City waterlines to the Project parcel. This was accomplished in the model by adding three junctions (J2342, J2340, and J2338) and three pipes (L6473, L6469, and L6471). The model junctions J2342 and J2340 were used to simulate the proposed Project demand.



Source: Figure 4.4 – Water Exhibit; The Grove Specific Plan, City of San Buenaventura, June 5, 2014

Figure 4.16-3 Water Utility Plan

The demand variation at these junctions is based on the "PATN33" diurnal pattern, which is used throughout the model. This diurnal pattern is based on actual meter data from a master meter for a large residential apartment complex performed as part of the 2011 WMP. This diurnal pattern has two peaks, one occurring in the morning at 7:00 a.m. and a second peak later in the evening at 7:00 p.m., and is expected to be an accurate representation of demand fluctuations for The Grove. For the purpose of the fire flow analysis, the required fire flow was split equally between junctions J2342 and J2340.

The City's existing hydraulic model has been used to run an EPS under maximum day demand, which includes peak hour demand, under existing conditions to establish a baseline set of system pressures and internal pipeline velocities for the 330 Zone. These baseline results have been compared to the post-Project results to determine the sensitivity of the City's system to changes in demand at the location of the Project. Subsequent EPS simulations were run under maximum day demand with The Grove and maximum day demand with The Grove plus the required fire flow of 5,000 gpm for a duration of 4 hours from 6:00 a.m. to 10:00 a.m. with the system wide peak hour demand occurring at 7:00 a.m. An additional set of scenarios have been evaluated that includes all Planning Projects to determine if any deficiencies will be ultimately created at buildout of the currently identified Planning Projects (as of December 31, 2012). A summary of the model scenarios is listed in **Table 4.16-14**.

Table 4.16-14 Model Scenario Summary

Scenario No.	Description
1	Existing MDD
2	Existing MDD + The Grove MDD
3	Existing MDD + The Grove MDD + Fire Flow @ The Grove
4	Existing MDD + All Planning Projects (12/31/12) MDD
5	Existing MDD + All Planning Projects MDD + Fire Flow @ The Grove

MDD = Maximum Day Demand

Based on the hydraulic model results, all pressures were found to be acceptable within the immediate Project area under all of the evaluated scenarios. Pressures below the minimum criteria were identified among a series of eleven junctions located at the north-central area of the 330 Zone at the pressure zone boundary at Walcott Avenue and near the intersection of Telephone Road and Johnson Drive. The addition of the Project demands did not create any new pressure deficiencies, although existing deficiencies were slightly worsened. These junctions are located at relatively high elevations for the 330 Zone, which is evident from their static pressures that range from approximately 38 to 48 psi. Five of these junctions were identified as already being deficient under existing conditions; however, the remaining six will eventually become deficient after all Planning Projects are built. Under the fire flow scenario, all 330 Zone service pressures remained above the required 20 psi. Overall, the additional Project decreased 330 Zone pressures a maximum of 0.6 psi

and decreased local pressures by a max of 1.1 psi. With all Planning Projects in place, the local pressures decreased a maximum of approximately 2.4 psi.

Based on the hydraulic model results, all pipeline internal velocities were found to be acceptable within the immediate Project area under all of the evaluated scenarios, with a maximum velocity of approximately 8 feet per second under fire flow conditions. The Grove is served off of a 12-inch looped system within the 330 Zone. Overall the additional demand had a minor impact on pipe velocities, increasing by a maximum of 0.4 feet per second, and did not create any new deficiencies, although existing deficiencies were slightly worsened. With all Planning Projects in place, the velocities increase by a maximum of approximately 1.7 feet per second. All six pipes that were identified as deficient are located at the suction sides of the Mariano Booster Pump Station and Bailey Pump Station. Velocities at or directly adjacent to pump stations are typically higher than normal system velocities, and are not expected to be a concern.

The additional demand of the Project will require a nominal increase in operational and emergency reservoir storage equal to 68,975 gallons for 24-hour continuous pumping, or 134,731 gallons for 9-hour off-peak pumping. A summary of the storage requirements is provided in **Table 4.16-15** below.

Table 4.16-15 Storage Requirements

Max Day Demand (gpm)	Max Day Demand (gpd)	Operational Storage			Emergency Storage (gpd)	Total Storage Required		
		Max Day Demand for 7 hrs[1] (gpd)		Max Day Demand for 21.3 hrs[2] (gpd)		Max Day Demand for 7 hrs[1] (gpd)		Max Day Demand for 21.3 hrs[2] (gpd)
76.64	110,360	32,188	OR	97,944	36,787	68,975	OR	134,731

[1] 24-hour continuous pumping.
[2] 9-hour off-peak pumping.

Known Hydraulic Issues in the 330 Zone

The hydraulic calculations and analyses performed as part of the 2011 WMP had previously identified the eleven low pressure junctions that were identified as deficient under this analysis. Potential solutions were evaluated for these areas in the 2011 WMP; however, it was determined that shifting the zone boundary between the 330 and 430 Zones was not practical due to the limited nature of the deficiencies. No recommendations were made regarding these locations in the 2011 WMP.

The 330 Zone reservoir storage was determined to be deficient by 4.11 MG in the existing condition in the 2011 WMP. It was also determined that pump capacity is not available to utilize excess storage of the 210 Zone. It was recommended to proceed with two Capital Improvement Projects to develop two new groundwater wells with back-up power to mitigate the 330 Zone reservoir storage deficiency.

Additional Hydraulic Considerations

This hydraulic evaluation examines the impacts of The Grove specifically on the City's domestic water distribution system; however, the on-site system (anything including or downstream of a meter and/or backflow prevention device, if provided) has been specifically excluded from this evaluation. It should be understood that the pressures reported in this analysis be taken as the pressure in the City's system at ground elevation. Additional headlosses through backflow prevention devices (typically around 10 pounds per square inch (psi), although this value will vary based on the make, size, and flow of the backflow preventer) and on-site piping must be taken into account by others. The water pressure will also decrease for each building story at an amount of roughly 5.2 psi per story (assuming 12 feet per floor). Michael Baker International does not assume responsibility for any private on-site piping.

Hydraulic Evaluation Conclusion and Recommendations

The proposed Project consists of 59 single-family homes, up to 191 townhouse/apartment units, a 1,000 square foot clubhouse, and 4.92 acres of parks/trails, which is expected to produce an average day demand of 50.42 gpm, maximum day demand of 76.64 gpm, and peak hour demand of 200.17 gpm. While the Project was evaluated with a fire flow of 5,000 gpm for a non- sprinklered building since the fire sprinkler system demand was not available, it is understood that all residential units will be equipped with fire sprinkler systems, which may allow for a reduction in fire flow required. Ultimately, the fire flow requirement is subject to the approval of the local fire authority.

Hydraulic model results indicated that the City's existing domestic water distribution system has available capacity to support the increased water demand of The Grove and is able to meet the required fire flow without introducing any new pressure or pipeline velocity deficiencies under current conditions. There are a few locations within the 330 Zone where the minimum pressure is not met; however, those deficiencies existed prior to the proposed Project, although these deficiencies are expected to slightly worsen. Under the build out of all Planning Projects, six additional junctions will become deficient. These deficient junctions represent two separate locations at the north-central area of the 330 Zone at the pressure zone boundary at Walcott Avenue and near the intersection of Telephone Road and Johnson Drive.

The hydraulic model results for the 330 Zone as a result of the addition of the proposed Project are as follows:

- Local pressures will decrease by a maximum of approximately 1.1 psi during maximum day demand, with all local pressures remaining above 53 psi.
- At Planning Project build out, local pressures are expected to decrease approximately 2.4 psi, with all local pressures remaining above 51 psi.
- Under maximum day demand plus fire flow conditions, all local pressures remained above 36 psi.

- At Planning Project build out under maximum day demand plus fire flow condition, all local pressures remained above 33 psi.
- The current deficient pressures in the 330 Zone will decrease by a maximum of approximately 0.6 psi, although they are expected to ultimately decrease by a maximum of approximately 3.7 psi under maximum day demand at Planning Project build out.
- Local pipeline velocities will increase by a maximum of approximately 0.4 feet per second under maximum day demand conditions.
- At Planning Project build out, local pipeline velocities are expected to increase by a maximum of approximately 0.7 feet per second.
- Local pipeline velocities remain under 7.5 feet per second during a fire flow condition.
- The additional demand of the Project will require an increase in reservoir storage in the 330 Zone of 68,975 gallons (for 24-hour continuous pumping) or 134,731 gallons (for 9-hour off-peak pumping); however, current CIP projects for two new wells will help to mitigate this deficiency.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

MM Util-5	The additional demand of the Project will require an increase in reservoir storage in the 330 Zone of 68,975 gallons (for 24-hour continuous pumping) or 134,731 gallons (for 9- hour off-peak pumping).

Level of Significance after Mitigation

After mitigation, impacts would be less than significant.

5. Cumulative Impacts

The California Urban Water Management Planning Act (Act) requires most water utilities to develop and update an UWMP every 5 years to identify short-term and long-term water demand management measures to meet growing water demands during normal, dry, and multiple-dry years. The Act requires urban water suppliers to assess water supply reliability that compares total projected water use with the expected water supply over the next 20 years in 5-year increments.

Future related projects would be subject to the water code requirements and the public resources code. If necessary, a water supply analysis would be completed on a project-by-project basis.[50] Sufficient water supply is the total water supply available during normal, single-dry, and multiple-

50 Projects that meet or exceed at least one of the development thresholds identified in Senate Bill 610, including the commonly referred to "500-dwelling unit" threshold must complete a water supply assessment for the project.

dry years within a 20-year projection that would meet the projected demand of the project being proposed, in addition to existing and planned future uses.

The Urban Water Management Plan (UWMP) is required by the California State Water Code. The UWMP is a long-term planning tool that provides water purveyors and their customers a broad perspective on water supply issues over a 20- to 25-year period. The UWMP is a management tool, providing the framework for action but not functioning as a detailed project development plan.

In 2013 the City Council directed Ventura Water and the Community Development Department to work together to develop a short term balance of water supply and demand, the result of this collaboration is the annual Comprehensive Water Resource Report (CWRR). The CWRR specifically focuses on water demand of approved (entitled) projects only. The CWRR focuses on a short timeframe and on near-term demand changes. The CWRR estimates demands from approved projects whereas the UWNP estimates demands from population projections.

The current (normal year) available water supply for the City per the most recent (2015) CWRR is 19,600 Acre-feet per year (AFY). Drought condition water supply for 2015 is estimated to range from a low of 14,888 AFY to a high of 16,888 AFY. With the current drought conditions the estimated drought water supply is very close to current water demand in the city.

The 2015 CWRR includes information on tightening water supply restrictions. The report also includes estimated total future water demands based on existing water demands (17,167 AF baseline demand) plus estimated demands for approved development projects (1,128 AF). The total future water demand (18,298 AF) estimates do not account for any other recently initiated or pending projects.

The 2015 CWRR indicates that "the spread between the current water demand and the current water supply is very tight, and in some conditions the supply could be less than the demand." This presents challenges for the City moving forward in its ability to allocate water supply to development projects that will generate additional water demands

The estimated water demand for this project is 81.33 AFY.

Level of Significance Before Mitigation

Impacts would be potentially significant.

Mitigation Measures

Based on these findings, the proposed development project will be reevaluated at the time building permits are issued and building permits will be issued contingent upon an adequate water supply available for this Project.

An adequate water supply for the proposed Project shall include the following four requirements.

MM Util-6	The property shall relinquish any water rights associated with the property to the City.

For additional water supply required to meet the estimated water demand of the proposed Project (81.33 AF) in addition to the water rights relinquished to the City the following will be required:

MM Util-7	The development shall utilize best management practice (BMP) low water use standards.
MM Util-8	The City of San Buenaventura is considering a Water Resource Net Zero Policy to apply to future development. Because adequate water rights may not be available to offset the projected water demand of 81.33 AFY, if the City Council adopts a Water Resource Net Zero Policy that applies to the proposed Project, then the Applicant/Developer shall be subject to compliance with the Water Resource Net Zero Policy, which would include implementation of conservation offsets and/or payment of a Water Resource Net Zero Fee. If no Water Resource Net Zero Policy is in place when building permits are issued, the applicant shall acquire and secure water rights that are acceptable and deemed transferable to the City.
MM Util-9	In addition, if prior to the issuance of building permits the City declares a Stage 4 Water Shortage Event or any higher Water Shortage Event per the City's adopted Water Shortage Event Contingency Plan, the Applicant/ Developer shall acquire and secure water rights that are acceptable and deemed transferable to the City to offset the Project's water demand of 81.33 AFY.

Level of Significance After Mitigation

After mitigation, impacts would be less than significant.

5. Alternatives

5.1 Introduction

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) describe a range of reasonable alternatives to a proposed Project, or its location, that could feasibly avoid or lessen any significant environmental impacts identified while substantially attaining the basic objectives of the Project. Comparative analysis of these impacts is required. This section describes potential alternatives to the proposed Project and evaluates them, as required by CEQA. Key provisions of the CEQA Guidelines[51] pertaining to this alternatives analysis are summarized below:

- The discussion of alternatives is to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The No Project Alternative is required to be evaluated along with its impact. The No Project analysis is required to discuss the existing conditions at the time the Notice of Preparation is published. Additionally, the analysis shall discuss what would be reasonably expected to occur in the near future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- The range of alternatives required in an EIR is governed by a "rule of reason." Therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives should be limited to those that would avoid or substantially lessen any of the significant effects of the project.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in an EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably determined and whose implementation is remote and speculative.

The range of feasible alternatives is selected and discussed in a manner that fosters meaningful public participation and informed decision-making. Among the factors that may be taken into account when considering the feasibility of alternatives are environmental impacts; site suitability; economic viability; availability of infrastructure; general plan consistency; regulatory limitations; and jurisdictional boundaries.[52]

51 *California Code of Regulations*, Title 14, Division 6, Chapter 3, California Environmental Quality Act Guidelines, §15126.6.

52 *California Code of Regulations*, Title 14, Division 6, Chapter 3, California Environmental Quality Act Guidelines, §15126.6(f)(1).

5.2 Project Objectives

The Grove Specific Plan contains Goals, Policies, and Actions to guide development within the Project area. There are seven goals in The Grove Specific Plan included to implement the City's General Plan within the Project site.

The following are the City's Project objectives for The Grove Specific Plan:

- Complete the Thille Community with an attractive residential neighborhood pursuant to the requirements of the City of Ventura Comprehensive Plan; and requirements for efficiently providing municipal services.
- Create neighborhoods within the Specific Plan area that balance vehicular circulation with bike and pedestrian travel, while improving public access into and throughout the site.
- Buildout of The Grove Specific Plan Specific Plan shall respect the natural environment. Protect residents of The Grove Specific Plan from harmful and nuisance highway noise.
- Ensure that proposed development and land use conserve energy and natural resources.
- Provide for compatibility with existing residential uses in the area through effective and appropriate urban and architectural design.
- Complete the public recreational component of the City Comprehensive Plan by finishing the linear bike pathway system in the Thille Community.
- Provide additional public parkland, including the provision of accommodating a future bike and pedestrian connection over the 126 freeway to Camino Real Park.

5.3 Selection of Alternatives

An EIR is required to briefly describe the rationale for selection and rejection of alternatives considered. The lead agency may make an initial determination as to which alternatives are feasible – and therefore merit in-depth consideration – and which are infeasible. As identified in **Section 4, Environmental Impact Analysis**, of this Draft EIR, after implementation of required mitigation measures, no significant and unavoidable impacts would result from implementation of the proposed Project.

The Grove Specific Plan Project is proposed to implement the 2005 Ventura General Plan. As called for by the CEQA Guidelines, the achievement of Project objectives must be balanced by the ability of a Project alternative to reduce the significant impacts of a project. In some instances, while the Project may result in impacts at levels determined to be less than significant after mitigation, an alternative may reduce such less than significant impacts even further.

The following alternatives to The Grove Specific Plan as proposed have been identified to evaluate varying levels of implementation of the 2005 General Plan policy direction for The Grove Specific Plan infill Project. Each alternative presents a variation on the degree of land use regulation that

would be applied to the infill project. The three alternatives to the proposed Project selected for consideration in this Draft EIR are:

1. No Project Alternative – Existing General Plan and Zoning
2. No Project/High Density Alternative
3. Mixed Use Alternative

CEQA Guidelines §15126.6(c) states: "The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination."

5.4 Considered But Rejected Alternatives

5.4-1 Alternative 1: The No Project/General Plan Alternative

Alternative 1 would not allow an increased number of dwelling units under the General Plan. The General Plan designates the site as Agricultural – Urban Reserve. The Agricultural designation is applied to irrigated lands which are suitable for the cultivation of crops and the raising of livestock.

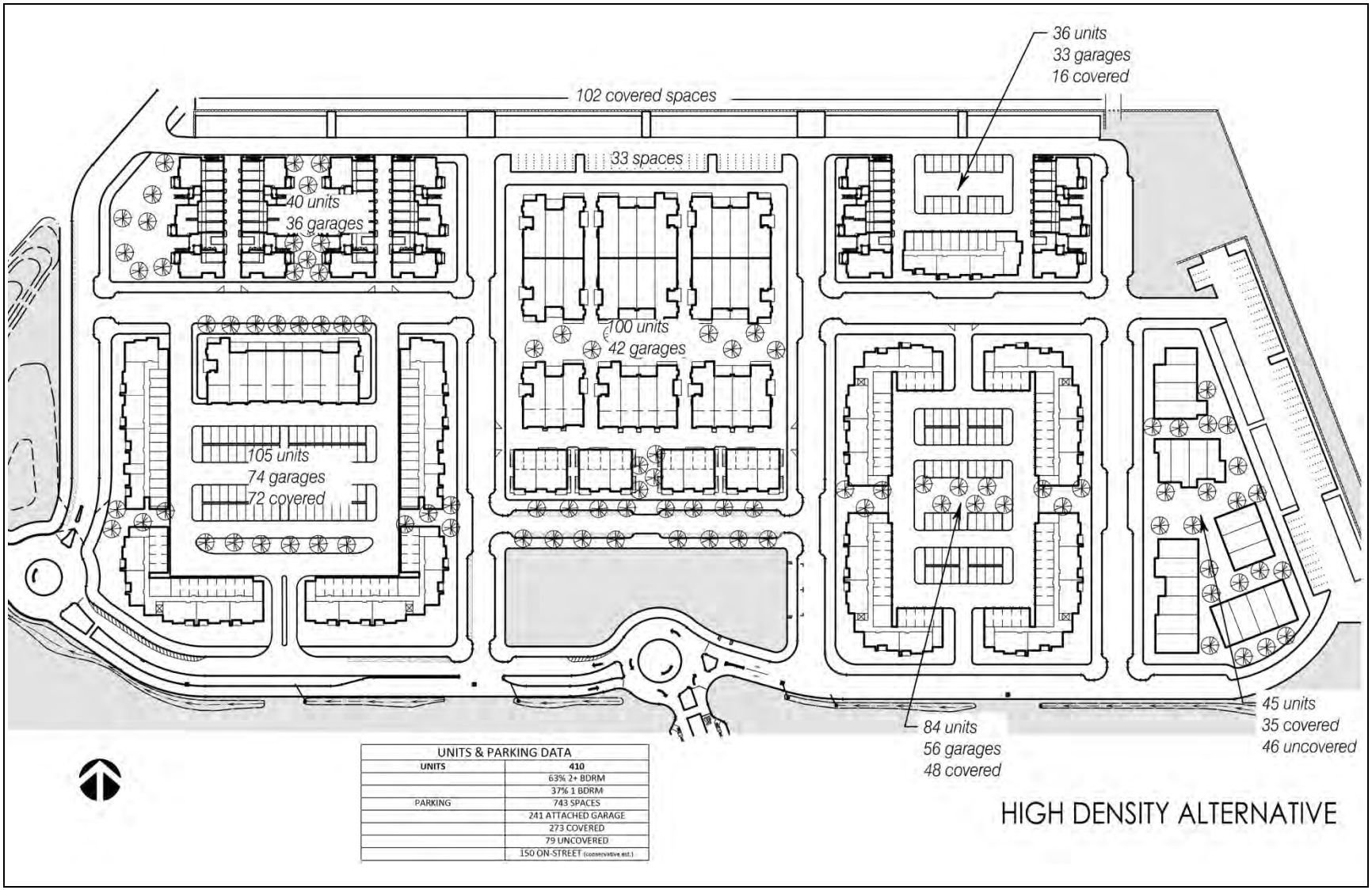
The Urban Reserve overlay designation is applied to all unincorporated land within a city's adopted Sphere of Influence. Although LAFCO has determined these areas to be appropriate for eventual annexation and urbanization, the Urban designation was not applied to all lands within the LAFCO sphere boundaries because it could result in urban development being permitted without annexation. Accordingly, unincorporated lands within spheres have been designated under this General Plan as Existing Community, Rural, Agricultural or Open Space. Under these designations, therefore, more intense development could not occur on affected lands until they are annexed.

For this reason, the No Project Alternative is unfeasible.

5.4-2 Alternative 2: High Density-Maximum Allowed by the General Plan

1. Description of Alternative

The maximum allowed by the Residential Medium Density Designation is 20 units per acre. This would equate to 530 units allowed on the Project site. No single-family homes would be proposed. The primary difference between the proposed Project and Alternative 2 would be the increase in overall density. No recreational play space would be provided. The High Density Site Plan is illustrated on **Figure 5-1, High Density Site Plan**.



UNITS & PARKING DATA	
UNITS	410
	63% 2+ BDRM
	37% 1 BDRM
PARKING	743 SPACES
	241 ATTACHED GARAGE
	273 COVERED
	79 UNCOVERED
	150 ON-STREET (conservative est.)

Figure 5-1 High Density Site Plan

Aesthetics

Alternative 2 would create a much denser project than the one proposed. Elevations would need to increase by at least 2 to 4 stories to accommodate the increased density. In addition, no single-family dwellings would be proposed. As designed now, the Project maintains a buffer of single-family dwellings at the perimeter of the property increased with density towards the middle of the project. Alternative 2 would create a dense perspective that is not shared with the proposed Project. Alternative 2 would create greater impacts when compared with the proposed Project.

Agricultural and Forest Resources

Similar to the proposed Project, agricultural uses would be removed from the site and replaced with residential uses. Both the proposed Project and Alternative 2, would create the same significant and unavoidable impact with regard to converting Prime Farmland to non-agricultural use. Therefore, impacts to Agricultural and Forest Resources are similar when compared to the proposed Project.

Air Quality

The number of units would double under Alternative 2. Therefore, we can easily anticipate that air quality criteria pollutants would at least double over those estimated by the proposed Project. Some criterion standards may be violated under this standard. Therefore, the significance of impacts would be greater than the proposed Project.

Biological Resources

The proposed Project would not adversely impact any special status species, or any riparian habitat. Like the proposed Project, no wetland habitat would be impacted, nor would any significant tree preservation policies be violated. Therefore, Alternative 2 would have similar impacts when compared to the proposed Project.

Cultural Resources

Similar to the proposed Project, there were no findings of significance to any historical or architectural resources. There were no unique paleontological resources on this site. All of the site would be graded for the site plan – similar to the proposed Project. Lastly, no human cremains or cemeteries were found on the site. Therefore, all impacts associated with cultural resources would be similar to the proposed Project.

Geology and Soils

The development footprint, site preparation, and grading under this alternative would be similar to the proposed Project. As with the proposed Project, potential impacts to the soil within the Project site and groundwater beneath the Project site are considered potentially significant and require further mitigation. Construction workers and future residents of the proposed Project or

Alternative 2 would still be subjected to these potential hazards unless mitigated. Consequently, potential hazards and hazardous materials impacts associated with Alternative 2 would be similar to those of the proposed Project.

Greenhouse Gas Emissions

Under Alternative 2, greenhouse gas emissions would be more than double the impacts when compared to the proposed Project, although it would not be expected that greenhouse gas emissions would cause a significant impact on the environment or conflict with a plan or policy. Consequently, impacts with Alternative 2 would be greater than the proposed Project.

Hazard and Hazardous Materials

Similar to the proposed Project, Alternative 2 would grade the entire site. As a result, there is the potential of asbestos and pesticides impacting the site. Like the proposed Project, the potential of asbestos and pesticides is a concern and would remain similar in impacts to Alternative 2.

Hydrology and Water Quality

Similar to the proposed Project, Alternative 2 would not violate any water quality standards. Development of Alternative 2 would reduce the amount of groundwater supplies when compared to the proposed Project given the intensity of development. Existing drainage patterns would be changed when compared to the proposed Project. Nonetheless, Alternative 2, like the proposed Project, would not substantially impact 100-year flood hazard areas or place people or bodies within a pathway for flooding. Therefore, impacts to hydrology and water quality would be greater with Alternative 2.

Land Use and Planning

Alternative 2 would not physically divide an established community. Although Alternative 2 would be consistent with the density of the proposed Project, it would not be in step with the density of adjacent communities. Alternative 2 would increase the heights of buildings to at least 4 to 6 stories, which would tower over the mobile home park as well as propose a barrier to the Thille property. While Alternative 2 may be in concert with zoning, it would create an incompatible density to nearby communities and would create greater impacts to land use and planning.

Noise

As discussed above, Alternative 2 would more than double impacts to noise when compared to the proposed Project. Development of the Project site, under either Alternative 2 or the proposed Project, would require clearing and grading of the ground surface, installation of infrastructure, and construction of the proposed improvements. These activities typically involve the temporary use of heavy equipment, smaller equipment, and motor vehicles, all of which generate steady

static and episodic noise. Although vehicle-related noise is identified as greater than the proposed Project, implementation of Alternative 2 would generate a substantially greater amount of vehicle traffic as compared with the proposed Project. Overall, with recommended mitigation, greater impacts to noise would result for Alternative 2.

Population and Housing

Alternative 2 would more than double impacts to population when compared to the proposed Project. The proposed Project would increase the City's existing housing inventory by up to 250 dwelling units, resulting in a potential population growth of 653 persons. Alternative 2 would increase the number of units from 250 to 530 units and an increase of 1,383 people. Consequently, Alternative 2 would increase impacts to population and housing.

Public Services

Alternative 2 would create greater stresses on fire and police protection. Schools and parkland could be impacted. While public services can be mitigated, the number of schools and the number acres of parkland would be impacted, given the intensity of development and less area that could be dedicated to parkland. Therefore, Alternative 2 would create greater impacts to public services impacts when compared to the proposed Project.

Recreation

Alternative 2 would create greater impacts on recreation when compared to the proposed Project. Given the intensity of development, less area could be dedicated to parkland. Therefore, Alternative 2 would create greater impacts to recreation when compared to the proposed Project.

Transportation/Traffic

Alternative 2 would more than double the population when compared to the proposed Project. Consequently, we can correlate 3,360 trips with implementation of Alternative 2 and 1,680 trips with the proposed Project. Traffic patterns could change with implementation of Alternative 2. It is expected that traffic will require modification to accommodate circulation. Alternative 2 would create greater impacts to transportation and traffic when compared to the proposed Project.

Utilities and Service Systems

Utilities would have to be resized to accommodate Alternative 2. Wastewater and storm drains would need to be funded to accommodate the increase in density and units in Alternative 2. Therefore, impacts to utilities and service systems would be greater under Alternative 2.

2. Conclusion on Environmental Analyses

A summary comparison of impacts associated with the Project alternatives is provided in **Table 5-1, Comparison of Alternatives' Consistency with Project Objectives Matrix** (page 5-11). Alternative 2 is considered not environmentally superior when compared with the proposed Project.

3. Analysis of Project Objectives

Alternative 2 does not satisfy all of the Project objectives, which are set forth in this EIR at **Section 3, Project Description**. Project objectives not fully met or impeded by Alternative 2 are identified in **Table 5-2, Summary Comparison of Alternatives** (page 5-13).

5.4-3 Alternative 3: Mixed Use Alternative

1. Description of Alternative

Alternative 3 would create a slightly higher density to the site when compared to the proposed Project. This Alternative would construct 220 units, 20 live/work units, and 8,000 square feet of office uses. The site configuration would be similar to the proposed Project.

Aesthetics

Alternative 3 would create a similar density to the proposed Project. Housing units would be all multi-family with 8,000 square feet of commercial office. In addition, no single-family dwellings would be proposed. Alternative 3 would create similar impacts to aesthetics when compared with the proposed Project.

Agricultural and Forest Resources

Similar to the proposed Project, agricultural uses would be removed from the site and replaced with residential uses. Both the proposed Project and Alternative 3 would create a significant and unavoidable impact with regard to converting Prime Farmland to non-agricultural use. Therefore, impacts to agricultural and forest resources are similar when compared to the proposed Project.

Air Quality

The number of units would increase under Alternative 3. The proposed Project estimated 1,680 trips, and Alternative 3 estimates 2,053 trips. Some criterion standards may be violated under this standard. Therefore, the significance of impacts with Alternative 3 would be greater than the proposed Project.

Biological Resources

The proposed Project would not adversely impact any special status species or any riparian habitat. Like the proposed Project, no wetland habitat would be impacted, nor would any

significant tree preservation policies be violated. Therefore, Alternative 3 would have similar impacts when compared to the proposed Project.

Cultural Resources

Similar to the proposed Project, there were no findings of significance to any historical or architectural resources. There were no unique paleontological resources on this site. All of the site would be graded for the site plan – similar to the proposed Project. Lastly, no human cremains or cemeteries were found on the site. Therefore, all impacts associated with cultural resources and Alternative 3 are similar to the proposed Project.

Geology and Soils

The development footprint, site preparation, and grading under this alternative would be similar to the proposed Project. As with the proposed Project, potential impacts to the soil within the Project site and groundwater beneath the Project site are considered potentially significant and require further mitigation. Construction workers and future residents of either the proposed Project or Alternative 3 would still be subjected to these potential hazards unless mitigated. Consequently, potential hazards and hazardous materials impacts associated with Alternative 3 would be similar to those of the proposed Project.

Greenhouse Gas Emissions

Under Alternative 3, impacts to greenhouse gas emissions would increase when compared to the proposed Project, although it would not be expected that greenhouse gas emissions would cause significant impacts on the environment or conflict with a plan or policy. Consequently, impacts to greenhouse gas emissions with Alternative 3 would be greater than the proposed Project.

Hazard and Hazardous Materials

Similar to the proposed Project, Alternative 3 would grade the entire site. As a result, there is the potential of asbestos and pesticides impacting the site. Like the proposed Project, the potential of asbestos and pesticides is a concern and would remain similar in impacts to Alternative 3.

Hydrology and Water Quality

Similar to the proposed Project, Alternative 3 would not violate any water quality standards. Development of Alternative 3 would slightly reduce the amount of groundwater supplies when compared the proposed Project given the intensity of development. Existing drainage patterns would be changed, but not substantially, when compared to the proposed Project. Nonetheless, Alternative 3, like the proposed Project, would not substantially impact 100-year flood hazard areas or place people or bodies within a pathway for flooding. Therefore, impacts to hydrology and water quality would be similar with Alternative 2.

Land Use and Planning

Alternative 3 would not physically divide an established community. Alternative 3 would be consistent with the density of the Project. Alternative 3 would not overbuild the Project site. While Alternative 3 may be in concert with zoning, it would complement the design of the proposed Project to Alternative 3.

Noise

As discussed above, Alternative 3 would create more impacts to noise when compared to the proposed Project. Development of the Project site, under either Alternative 3 or the proposed Project, would require clearing and grading of the ground surface, installation of infrastructure, and construction of the proposed improvements. These activities typically involve the temporary use of heavy equipment, smaller equipment, and motor vehicles, all of which generate steady static noise and episodic noise. Although vehicle-related noise is identified as greater than the proposed Project, implementation of Alternative 3 would generate a greater amount of vehicle traffic as compared with the proposed Project. Overall, greater impacts to noise would result for Alternative 3.

Population and Housing

Alternative 3 would increase the population when compared to the proposed Project. The proposed Project would increase the City's existing housing inventory by up to 250 dwelling units, resulting in a potential population growth of 653 persons. Alternative 3 would increase the number of units from 60 single-family dwellings, 60 apartments, 100 condominiums, and 20 live/work. This results in an increase of 626 people. Consequently, Alternative 3 would have similar impacts to population and housing.

Public Services

Alternative 3 would create similar stresses on fire and police protection. Schools and parkland would have similar impacts. Public services would create similar impacts when compared to the proposed Project. Therefore, Alternative 3 would create similar impacts when compared to the proposed Project.

Recreation

Alternative 3 would create similar impacts on recreation when compared to the proposed Project. Given the intensity of development, similar area could be dedicated to parkland. Therefore, Alternative 3 would create similar impacts to recreation impacts when compared to the proposed Project.

Transportation/Traffic

Alternative 3 would create 2,053 trips when compared to the 1,680 generated by the proposed Project. Therefore, 373 additional trips would be estimated with Alternative 3. Traffic patterns could change with implementation of Alternative 2. It is not expected that traffic will require modification

to accommodate circulation. Alternative 3 would greater impacts to traffic and transportation when compared to the proposed Project.

Utilities and Service Systems

Utilities would have similar impacts with Alternative 2. Wastewater and storm drains would need to be funded – similar to that of the proposed Project. Therefore, impacts would be similar to the proposed Project under Alternative 3.

2. Analysis of Project Objectives

While Alternative 3 generally is considered environmentally superior to the proposed Project, Alternative 2 does not satisfy all of the Project objectives, which are set forth in this EIR at **Section 3, Project Description**. Project objectives not fully met or impeded by Alternative 2 are identified in **Table 5-1** below.

5.5 Comparative Analysis of Project Objectives

As part of the Project alternatives analysis, consistency with Project objectives must be evaluated. **Table 5-1** below lists the City Project objectives for The Grove Specific Plan Project (also stated in **Section 2, Executive Summary**) and indicates whether each Project alternative meets, partially meets, or fails to meet Project objectives.

Table 5-1 Comparison of Alternatives' Consistency with Project Objectives Matrix

Project Objective	Alternative 1 No Project	Alternative 2 Residential No Project/High Density	Alternative 3 Expanded Park Mixed Use Alternative
Complete the Thille Community with an attractive residential neighborhood pursuant to the requirements of the City of Ventura Comprehensive Plan; and requirements for efficiently providing municipal services.	F	F	M
Create neighborhoods within the Specific Plan area that balance vehicular circulation with bike and pedestrian travel, while improving public access into and throughout the site.	F	F	M
Buildout of The Grove Specific Plan Specific Plan shall respect the natural environment. Protect residents of The Grove Specific Plan from harmful and nuisance highway noise.	F	F	P
Ensure that proposed development and land use conserve energy and natural resources.	F	F	M
Provide for compatibility with existing residential uses in the area through effective and appropriate urban and architectural design.	F	F	M
Complete the recreational component of the City Comprehensive Plan by finishing the linear bike pathway system in the Thille Community.	F	F	M

Project Objective	Alternative 1 No Project	Alternative 2 Residential No Project/High Density	Alternative 3 Expanded Park Mixed Use Alternative
Provide additional public parkland, including the provision of accommodating a future bike and pedestrian connection over the 126 freeway to Camino Real Park	F	F	M

KEY (Level of Consistency with Project Objectives):
M = Alternative Meets Project Objective; P = Alternative Partially Meets Project Objective; F = Alternative Fails to Meet Project Objective

5.6 Off-Site Alternatives

Alternative sites of generally the same size in the central area of the City of Ventura do not exist. Consistent with General Plan intent, the proposed Project involves development of an infill parcel. There are no potential alternative Project sites in the local vicinity that are similar in acreage or provide similar characteristics. There are no potential alternative sites that could serve primary Project objectives. For the reasons cited above, no alternative sites were analyzed for this Project.

5.7 Environmentally Superior Alternative

The CEQA Guidelines require that the discussion of Project alternatives focus on those alternatives that can feasibly attain the basic objectives of the Project while avoiding or reducing the significant impacts of the Project as proposed. **Table 5-2** below provides a summary of alternatives discussed in this section in relation to environmental impacts and the ability to meet Project objectives.

- **Alternative 1: No Project Alternative**. Alternative 1 would reduce the number and extent of environmental impacts associated with the proposed Project. However, this alternative would not meet the basic Project objectives, which call for creating a vision and land use plan for an infill site that would result in an attractive community.
- **Alternative 2: High Density-Maximum Allowed by the General Plan.** The maximum allowed by the Residential Medium Density Designation is 20 units per acre. This would equate to 530 units allowed on the Project site. No single homes would be proposed. The primary difference between the proposed Project and Alternative 2 would be the increase in overall density. No recreational play space would be provided.
- **Alternative 3: Mixed Use Alternative**. This Alternative would create a slightly higher density to the site when compared to the proposed Project. This Alternative would construct 220 units, 20 live/work units, and 8,000 square feet of office uses. The site configuration would be similar to the proposed Project and would be considered the Environmental Superior Alternative.

Table 5-2 Summary Comparison of Alternatives

Environmental Issue	Alternative 1: No Project – Development Under Existing General Plan and Zoning	Alternative 2: No Project-High Density	Alternative 3: Mixed Use Alternative
Aesthetics	Greater	Greater	Similar
Agricultural	Similar	Similar	Similar
Air Quality	Greater	Greater	Greater
Biological Resources	Greater	Similar	Similar
Cultural (Historic) Resources	Greater	Similar	Similar
Geology and Soils	Greater	Similar	Similar
Greenhouse Gas Emissions	Greater	Greater	Greater
Hazards and Hazardous Materials	Greater	Similar	Similar
Hydrology and Water Quality	Greater	Similar	Similar
Land Use and Planning	Greater	Similar	Similar
Noise	Greater	Greater	Greater
Population and Housing	Greater	Greater	Similar
Public Services – Fire	Greater	Greater	Similar
Public Services – Police	Greater	Greater	Similar
Public Services --Schools	Greater	Greater	Similar
Public Services –Parks and Recreation	Greater	Greater	Similar
Public Services – Libraries	Greater	Greater	Similar
Public Services – Solid Waste	Greater	Greater	Similar
Transportation and Circulation	Greater	Greater	Greater
Utilities – Water	Greater	Greater	Similar
Utilities – Wastewater	Greater	Greater	Similar

The CEQA Guidelines require that an environmentally superior alternative be identified from the alternatives considered in an EIR. If the No Project alternative is environmentally superior to the Project as proposed, an environmentally superior alternative is to be identified from the other alternatives considered. An alternative is environmentally superior when it would avoid or substantially lessen a significant impact that would result from the proposed Project. Alternative 3, Mixed Use Alternative, would be considered the environmentally superior alternative.

In this case, Alternative 1, No Project, Existing General Plan and Zoning, is not environmentally superior to the proposed Project, because none of the basic objectives of the proposed Project would be met and none of the beneficial impacts would be realized. Alternative 2, High Density, is also not environmentally superior because of the increased impacts that would be realized.

Alternative 2, High Density Alternative, is not environmentally superior to the proposed Project because none of the basic objectives of the proposed Project would be met and none of the beneficial impacts would be realized. Additionally, impact areas would be considered greater than those of the proposed Project.

Alternative 3, Mixed Use Alternative is considered to be environmentally superior when compared with the other alternatives. This alternative is superior in that it would apply the goals of the

Project. The amount of additional development in the residential neighborhoods would be generally lower with this alternative. This lower intensity of development would result in a reduction in some impacts that would result from new development. The Mixed Use Alternative would not meet the basic Project objectives as fully as the proposed Project.

6. Effects Found Not To Be Significant

Section 15128, Effects Not Found To Be Significant, of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and are, therefore, not discussed in detail in the EIR.

The City of Ventura completed a preliminary review, as described in §15060 of the CEQA Guidelines, of the proposed Grove Specific Plan Project and determined an EIR should be prepared for this Project. A Notice of Preparation (NOP) of this EIR was then prepared and circulated for public review to gather input from other public agencies and the public to determine the environmental topics to be evaluated in this EIR. The City also considered the policies and actions in the City's 2005 General Plan and the information and analysis in the General Plan.

Based on this information, potential effects related to the topics discussed below were determined to either be less than significant, or potentially significant, but capable of being mitigated to a less than significant level with the implementation of policies and actions.

6.1 Aesthetics

According to Appendix G of the CEQA Guidelines under Section I, Aesthetics, adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to visual resources if any of the following could occur.

Aes-1	**Would the project have a substantial adverse effect on a scenic vista?**
Aes-2	**Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**
Aes-3	**Would the project substantially degrade the existing visual character or quality of the site and its surroundings?**
Aes-4	**Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

Discussion

Aes-1 Would the project have a substantial adverse effect on a scenic vista?

The General Plan does not have any scenic vistas in the City. Future development associated with buildout of the Specific Plan would not result in the obstruction of any public scenic vistas. The low scale of the future developments would not result in continuous obstructed views of the hillsides. Impacts would be less than significant.

Aes-2 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Specific Plan Figure 3.6, Conceptual Landscape Plan; Figure 3.7, Overall Park & Open Space Plan, and Figure 3.8, Street & Alley Trees, illustrate how trees would be incorporated throughout the Project area. Therefore, implementation of the Specific Plan landscape guidelines would ensure compliance with 2005 Ventura General Plan Action 1.24 and ensure that less than significant impacts occur.

Aes-3 Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Buildout of the specific plan area is anticipated to occur over a 3- to 4-year period (2017 to 2019). During that time, construction activities associated with future projects would result in short-term visual impacts including the presence of equipment and material storage, as well as grading and earth-moving activities. While the construction truck trips would result in a change in the visual character surrounding the neighborhood, these activities would be temporary and end once the construction activities are complete. Although this impact could be adverse, it would be short-term, and thus impacts would be less than significant.

Each district's standards and guidelines are designed to reinforce the individual district's desired development pattern, character, and image. These tools would help achieve the Specific Plan's overall vision and ensure that future projects are compatible with the surrounding neighborhood character. Therefore, buildout of the Specific Plan would not substantially degrade the existing visual character or quality of the specific plan area, and impacts would be less than significant.

Aes-4 Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

As discussed previously, development standards, including height restrictions, have been established for each district (see Specific Plan Section 3 –Development Code & Land Use Regulations). Future projects located in the Urban General District would be permitted to be 40 feet tall (the greatest building height allowed within the specific plan area), while building heights in the remaining districts would be 50 feet or less. The height limit would be comparable to the neighboring Thille Community. Thus, under buildout of the Specific Plan, impacts from light, glare, and shadow would be less than significant.

6.2 Agriculture and Forestry Resources

According to Appendix G of the CEQA Guidelines under Section II, Agriculture and Forestry Resources, adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to agriculture and forestry resources if any of the following could occur.

Ag-1	**Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**
Ag-2	**Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**
Ag-3	**Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**
Ag-4	**Would the project result in the loss of forest land or conversion of forest land to non-forest use?**
Ag-5	**Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

Discussion

Ag-1	**Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**
Ag-2	**Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The Grove Specific Planning Project area is characterized by features typical of an urban landscape and includes residential, industrial, and retail-commercial uses. Farmland, agricultural land, or related operations are found only on the Project Site. No Williamson Act land is associated with the Project. No impact to Williamson Act properties would result from implementation of the Grove Specific Plan Planning Project.

Ag-3	**Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**
Ag-4	**Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

The Grove Specific Plan Project area is characterized by features typical of an urban landscape and includes residential, industrial, and retail-commercial uses. No forestland or related operations are found in the boundaries of the Planning Area. Implementation of the Grove Specific Plan Project would not involve changes that could result in conversion of forestland because there are no forestlands or use within the Planning Area. No impact to forest resources would result from implementation of the Grove Specific Plan Planning Project.

Ag-5	**Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

Refer to discussion under **Thresholds Ag-3**, **Ag-4**, and **Ag-5** above. No impact would occur with the implementation of the Grove Specific Plan Planning Project.

6.3 Air Quality

According to Appendix G of the CEQA Guidelines under Section III, Air Quality, adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to air quality if any of the following could occur.

AQ-1	**Would the project conflict with or obstruct implementation of the applicable air quality plan?**
AQ-2	**Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**
AQ-3	**Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors)?**
AQ-4	**Would the project expose sensitive receptors to substantial pollutant concentrations?**
AQ-5	**Would the project create objectionable odors affecting a substantial number of people?**

Discussion

The Ventura County Air Pollution Control District has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, the

VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NO_x emissions over 25 pounds per day. As shown above, construction emissions from the proposed Project would exceed 25 pounds per day for ROC and NO_x. Therefore, **Mitigation Measure MM AQ-1** is necessary to reduce the construction emissions. With implementation of **Mitigation Measure MM AQ-1** construction related impacts would be less than significant.

MM AQ-1	The following control measures provided in the most recent version of the Ventura County Air Quality Assessment Guidelines (October 2003) pursuant to Mitigation Measure AQ-3 of the 2005 General Plan Final EIR would minimize the generation of fugitive dust (PM10 and PM2.5), ROC, and NOX during construction activities and shall be implemented during construction: 1. To reduce impacts associated with NO_x emissions (a precursor to ozone) the following measures shall be implemented: a. Equipment idling time should be minimized; b. Equipment engines should be maintained in good condition and in proper tune, as per manufacture's specifications; c. During the smog seasons (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment operating at the same time; d. Alternatively fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric, should be used if feasible. 2. During clearing, grading, earth moving, or excavation operation, excessive fugitive dust emissions shall be controlled by regular watering, paving construction roads, or other dust preventive measures using the following procedures: a. All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day, so that water penetrates sufficiently to minimize fugitive dust during grading activities. Reclaimed water should be used if available; b. All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved roadways on-site, should be treated to prevent fugitive dust. Measures may include watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate; c. Graded and/or excavated inactive areas of the construction site should be monitored at least weekly for dust stabilization. If a portion of the site is inactive for over four days, soil on-site should be stabilized; d. Signs should be posted limiting on-site traffic to 15 miles per hour; e. All clearing, grading earth moving, or excavation activities shall cease

during period of high winds (i.e., greater than 20 mph averaged over one hour) so as to prevent excessive amounts of dust;

f. All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust pursuant to California Vehicle Code §23114;

g. Respiratory protection shall be used by all employees in accordance with California Division of Occupational Safety and Health regulations;

h. Measures to reduce the fungus that causes Valley Fever should include the following:

   i. Facemasks should be worn on employees involved in grading or excavation operations during dry period to reduce inhalation of dust.

   ii. Employment should be restricted to persons with positive coccidioidin skin tests.

   iii. Crews should be hired from local populations where possible, since it is more likely that they have previously been exposed to the fungus and are therefore immune.

   iv. Cabs of grading and construction equipment should be air-conditioned.

   v. Crews should work upwind from excavation sites.

   vi. Construction roads should be paved.

   vii. Weed growth should be controlled by mowing instead of discing.

   viii. The access way into the Project site should be paved or treated with environmentally-safe dust control agents during rough grading and construction.

   ix. The area disturbed by clearing, grading, earth moving, or excavation operations should be minimized so as to prevent excessive amounts of dust.

3. After clearing, grading, earth moving, or excavation operations, and during construction activities, fugitive dust emissions shall be controlled using the following procedures:

   a. All inactive portions of the construction site shall be seeded and watered until grass cover is grown;

   b. All active portions of the construction site shall be sufficiently watered to prevent excessive amounts of dust.

4. At all times, fugitive dust emissions shall be controlled by assuring that streets adjacent to the Project site shall be swept as needed to remove silt, which may be accumulated from construction activities so as to prevent excessive amounts of dust. Construction activities should utilize new technologies to control ozone precursor emissions as they become available and feasible. Streets must be swept at least once a day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

The VCAPCD has not adopted quantitative thresholds of significance for construction emissions since such emissions are temporary. Rather, the VCAPCD recommends implementation of emission and dust control requirements for all construction projects with ROC or NO_x emissions over 25 pounds per day. As shown above, construction emissions from the proposed Project would exceed 25 pounds per day for ROC and NO_x. Therefore, **Mitigation Measure MM AQ-1** is necessary to reduce the construction emissions. With implementation of **Mitigation Measure MM AQ-1** construction related impacts would be less than significant.

The Project's operational air quality emissions would not exceed the established VCAPCD thresholds of significance and the Project would be consistent with the AQMP. Thus, air quality impacts would be less than significant.

6.4 Biological Resources

The following thresholds for determining the significance of impacts related to biological resources are contained in the Environmental Checklist contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to biological resources, if any of the following could occur.

Bio-1	**Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**
Bio-2	**Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**
Bio-3	**Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**
Bio-4	**Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**
Bio-7	**Would the project substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal?**

Discussion

Implementation of the Project would not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species nor on any riparian or other sensitive natural community. Given that no sensitive species occur on-site, implementation of the Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Also, implementation of the Project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Lastly, implementation of the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act as no wetlands exist on-site.

As noted earlier, a limited number of trees exist on-site along the northerly boundary adjacent to SR-126 and mature trees exist off-site immediately adjacent to the easterly boundary. Construction of the Project has the potential to affect mature trees that could support nests by native bird species. Such an impact would be a potentially significant under CEQA and a violation of state and federal laws pertaining to the protection of native bird species. Implementation of **Mitigation Measure MM Bio-1** would ensure that impacts are mitigated to a less than significant level.

MM Bio-1	Active nests of native bird species are protected by the Migratory Bird Treaty Act (16 U.S.C. 704) and the *California Fish and Game Code* (§3503). If activities associated with construction or grading of previously undeveloped parcels are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Coopers hawks or hummingbirds) and from mid-March through September for most bird species, the applicant shall have a qualified biologist conduct surveys for active nests. To determine the presence/absence of active nests, pre-construction nesting bird surveys shall be conducted weekly, beginning 30 days prior to initiation of ground disturbing activities, with the last survey conducted no more than three days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days have elapsed between the survey and ground-disturbing activities. Surveys shall include examination of trees, shrubs, and the ground for nesting birds. Several bird species such as killdeer and night hawks are known to nest on bare ground. Protected bird nests that are found within or adjacent to the construction zone shall be protected by a buffer deemed suitable by a qualified biologist, and verified by the California Department of Fish and Wildlife. Typically, a 300-foot buffer is required for most species and a 500-foot buffer for

raptor species. Buffer areas shall be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone shall be verified by a qualified biologist prior to initiation of construction activities.

The buffer zone shall remain intact and maintained while the nest is active (i.e. occupied or being constructed by the adult bird(s)) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.

After mitigation impacts would be less than significant.

Bio-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Specific Plan Figure 3.6, Landscape Concept; Figure 3.7, Park, Open Space & Recreation Areas, and Figure 3.8, Street & Alley Trees, illustrate how trees would be incorporated throughout the Project area. Therefore, implementation of the Specific Plan landscape guidelines would ensure compliance with 2005 Ventura General Plan Action 1.24 and ensure that less than significant impacts occur.

Bio-6 Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Currently, no Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan has been adopted that cover the Project site. In addition, as noted earlier, no sensitive habitats or species exist on-site. Thus, implementation of the Project would result in no impacts to an adopted Habitat Conservation Plan.

6.5 Cultural Resources

According to Appendix G of the CEQA Guidelines under Section V, Cultural Resources, adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to cultural resources if any of the following could occur.

CR-1 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

CR-3 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

CR-4 Would the project disturb any human remains, including those interred outside of formal cemeteries?

The diversity of natural resources, the temperate climate that allows for long growing seasons, proximity to the coast, and abundant natural materials available for tool manufacturing all combine to produce an archaeological record in Ventura almost the entire chronological and cultural span of human activity in Southern California. There is considerable evidence that indigenous peoples inhabited the Ventura area. The Westside Planning Project lies within the historic territory of the Native American Indian group known as the Chumash. The Chumash occupied the region from San Luis Obispo County to Malibu Canyon on the coast, and inland as far as the western edge of the San Joaquin Valley and the four northern Channel Islands. Ventura County is within the historic territory of the Ventureno Chumash. The name Ventureno is derived from the mission with local jurisdiction, San Buenaventura.

In 1769, the Portola Expedition departed the San Diego settlement toward Monterey to establish five missions along the route, one of which Mission San Buenaventura established in 1782. After Mexican Independence in 1822, the mission was secularized in 1830 and lands granted to private parties. By the end of the Mexican-American War in the 1840s, most Spanish Europeans had fled the area, leaving the Indians at the Mission. American settlers slowly began to move into the area and large-scale subdivision of ranchos occurred in the 1860s. Ventura incorporated in 1866. The Project area was subsequently developed during 20th century oil industry booms and has been subject to extensive disruption.

Archaeological materials are extremely fragile and non-renewable. Thus, any activity that alters the surface of the land, including archaeological pursuits, can affect these resources. An inventory of recorded archaeological sites based on information collected from the State Information Center, Institute of Archaeology, University of California at Los Angeles, site records, excavation reports, and relevant literature, along with materials obtained from the City, local museums, Native American organizations, and historical groups, was prepared for the 2005 General Plan. This inventory forms the basis of analysis of archaeological resources. Known archaeological sites, historic landmarks, and points of interest are present within the planning area, some of which may also contain subsurface cultural resources.

The 2005 General Plan identify the following policy, actions, and mitigation measures pertaining to archaeological resources in Chapter 9, *Our Creative Community* that would reduce the potential for impacts to less than significant.

Policy 9D: Ensure proper treatment of archeological and historic resources.

- Action 9.14: Require archaeological assessments for projects proposed in the Coastal zone and other areas where cultural resources are likely to be located.
- Action 9.15: Suspend development activity when archaeological resources are discovered, and require the developer to retain a qualified archaeologist to oversee handling of the resources in coordination with the Ventura

County Archaeological Society and local Native American organizations as appropriate.

Based on the excellent ground surface visibility within almost the entirety of the proposed Project site boundaries, the intensive archaeological survey results are considered reliable. Due to the absence of any prehistoric or historic remains identified during the survey, the reliable conditions, and the absence of prehistoric cultural materials identified by one other previous investigation adjacent to and overlapping (by 200 feet or 61 meters) along the eastern property boundary of The Grove Project, the potential for prehistoric and/or historic archaeological resources within the proposed Project site is considered low.

As no potentially significant resources as defined by CEQA Guidelines were identified within the proposed The Grove Project site, future development within the proposed Project site would not have the potential to result in a significant impact on cultural resources as defined by CEQA Guidelines §15064.5(c)(4). As a result, no mitigation measures are required.

Round-disturbing construction activities could potentially uncover previously unknown paleontological resources. If such resources are disturbed during Project construction, impacts would be potentially significant.

The on-site monitor shall be equipped and permitted to salvage fossils and samples of sediments as they are unearthed. If unearthed paleontological resources determined to be significant by the on-site paleontologist are discovered during Project construction activities, all work should halt within 50 feet of the find until it can be fully evaluated and excavated by a qualified paleontologist.

Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage.

A report of findings, with an appended itemized inventory of specimens, shall be prepared and submitted to the City. The report and inventory, when submitted to the City, shall signify completion of the program to mitigate impacts on paleontological resources.

With the implementation of mitigation, impacts would be less than significant.

There are no known cemeteries or burial grounds on the Project site. As previously discussed, the site has a history of use by Native Americans; therefore, there is potential for additional archaeological resources, including burial grounds, to exist. Because the potential exists for human remains to be unearthed during earthwork and grading of the Project site, impacts would be potentially significant.

MM CR-2	Coroner Notification. If human remains are unearthed, California *Health and Safety Code* Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition pursuant to *Public Resources Code* Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC).

6.6 Geology and Soils

According to Appendix G of the CEQA Guidelines under Section VI, Geology and Soils, adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to geotechnical hazards if any of the following could occur.

Geo-1	**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:** **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?** **ii) Strong seismic ground shaking?** **iii) Seismic-related ground failure, including liquefaction?** **iv) Landslides?**
Geo-2	**Would the project result in substantial soil erosion or the loss of topsoil?**
Geo-3	**Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**
Geo-4	**Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**
Geo-5	**Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**
Geo-6	**Would the project change topography or ground surface relief features?**
Geo-7	**Would the project require earth movement (cut and/or fill) of 10,000 cubic yards or more?**
Geo-8	**Would the project develop and/or grade on a slope greater than 10 percent natural grade?**
Geo-9	**Would the project destroy, cover or modify any unique geologic or physical feature?**

Discussion

Geo-1	**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:** **iv) Landslides?**
Geo-5	**Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**
Geo-8	**Would the project develop and/or grade on a slope greater than 10 percent natural grade?**

The Project is evaluated for all of the above criteria except **Threshold Geo-1(iv)**, because there are no landslides on the site; for **Threshold Geo-5** because the proposed Project would not require the use of septic tanks for wastewater disposal and Threshold Geo-8 because they no slopes higher than 2% on the site. See **Section 6, Effects Found Not To Be Significant**, for a discussion of this environmental effect, as well as others, that were found not to be significant and are, therefore, not evaluated in detail in this EIR. The remaining thresholds are evaluated below.

Geo-2	**Would the project result in substantial soil erosion or the loss of topsoil?**

Construction activity associated with the Project site development may result in wind- and water- driven erosion of soils due to grading activities if soil is stockpiled or exposed during construction.

MM Geo-1	All mitigation measures recommended in the August 26, 2005 General Plan EIR and the January 4, 2011 GeoLabs Geotechnical Report shall be incorporated into the Project.

Geo-9	**Would the project destroy, cover or modify any unique geologic or physical feature?**

No unique geologic or physical features would be destroyed, covered or modified with implementation of the proposed Project. Impact under this criterion would be less than significant.

Geo-1	**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:** **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

As previously discussed, the Project site is not located in an Alquist-Priolo Earthquake Fault Zone, and no known active faults are located within the Project site. Therefore, impacts due

to rupture of a known earthquake fault would be less than significant under **Threshold Geo-1(i)**.

Geo-1	**Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:** **ii) Strong seismic ground shaking?** **iii) Seismic-related ground failure, including liquefaction?**

The results indicate an average peak ground acceleration (pga) of 0.60 g for the CBC design-basis earthquake ground motion. This value can be magnitude-weighted for use in the liquefaction analysis. The magnitude weighted pga is considered 0.5 g, which is identical to the pga used in the liquefaction analysis, when considering a magnitude of 7.5.

Implementation of **Mitigation Measure MM Geo-1** will reduce any impacts for seismic shaking.

Geo-3	**Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**
Geo-4	**Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**
Geo-6	**Would the project change topography or ground surface relief features?**
Geo-7	**Would the project require earth movement (cut and/or fill) of 10,000 cubic yards or more?**

The northwest portion of the site has a potential for lateral spreading. At this time the analysis indicates a potential of 1.5 feet of lateral spreading for the sloping ground case (the applicable condition). This lateral spreading may allow for localized areas of bearing loss during a design-level event in areas of weakened soil such as areas where sand boils or fissures occur. At this time, the area considered susceptible is the area within the State designated Seismic Hazard Zone.

Implementation of **Mitigation Measure MM Geo-1** will reduce any impacts for seismic shaking.

Geo-6	**Would the project change topography or ground surface relief features?**
Geo-7	**Would the project require earth movement (cut and/or fill) of 10,000 cubic yards or more?**

Topographic changes on the Project site would occur during grading operations to accommodate the proposed Project. The Project would include grading approximately 75,000 cut and 63,000 fill and is depicted on **Figure 4.6-2, Preliminary Earthwork Map** (page 4.6-18 above). All grading would concur consistent with the UBC and there would be no impacts.

6.7 Climate Change/Greenhouse Gases

In accordance with Appendix G of the CEQA Guidelines, the proposed Project could have a significant impact on climate change/greenhouse gases.

GHG-1	**Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?**
GHG-2	**Would the Project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

Discussion

Based on the information provided above, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and these impacts would be less than significant.

Therefore, based on the discussion above, the Project's generation of GHG emissions would not be considered cumulatively considerable because of the scope of the emissions (i.e., the Project would not exceed the 3,500 $MTCO_2e$ per year Tier 3 threshold for residential projects) and because the Project would not conflict with an applicable plan, policy or regulation for the purposes of reducing the emissions of greenhouse gasses. Therefore, the Project's cumulative impact would be less than significant.

The Project would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs, including SB 375, AB 32, and the corresponding Scoping Plan. Therefore, the Project's generation of GHG emissions would not make a cumulatively considerable contribution to GHG emissions and climate change, and impacts would be less than significant.

6.8 Hazards and Hazardous Materials

According to Appendix G of the CEQA Guidelines under Section VIII, Hazards and Hazardous Materials, adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to hazards and hazardous materials if any of the following could occur.

Haz-1	**Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
Haz-2	**Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**
Haz-3	**Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Haz-4	**Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?**
Haz-5	**For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area?**
Haz-6	**For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**
Haz-7	**Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?**
Haz-8	**Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

Discussion

As to Thresholds Haz-5, Haz-6 and Haz-8, a less than significant impact was determined, and therefore these thresholds are not evaluated in this section.

Haz-1	**Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Compliance with appropriate regulations and policies would limit the impact from routine use, transport, or disposal of significant amounts of hazardous materials to less than significant.

Haz-2	**Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Construction-related impacts would not be potentially significant. Operational impacts would be less than significant.

Haz-3	**Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Compliance with appropriate regulations and policies would limit the impact from release of hazardous materials to less than significant.

Haz-4	**Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Residents on or adjacent to the hazardous materials sites could be exposed to hazardous materials. Therefore, the hazardous materials sites have the potential to pose a significant hazard to the public or the environment. The impact to the public and environment from these hazardous materials sites would be potentially significant.

MM Haz-1	The structures on-site were constructed prior to 1981. Based on the age of construction, building materials in on-site structures may contain asbestos containing materials (ACM), and certain building materials are presumed to contain ACM (PACM), unless testing has shown otherwise. As of October 1, 1995, OSHA made building owners responsible for complying with the asbestos construction standard, for buildings built in 1981 or earlier. The building owner is responsible for identifying the presence, location and quantity of asbestos containing building materials. The building owner must tell employees, other employers, and tenants in the building of the presence and location of asbestos or presumed asbestos containing materials (PACM). If the building owner intends to demolish or remodel the structure(s), it is suggested that the building owner contact a California Certified Asbestos Consultant for assistance in compliance.
MM Haz-2	The subject parcel has been in agricultural land use for many decades, including citrus orchard (circa 1960s to 2003) and flower cultivation (to present). If future plans for the parcel contemplate possible change in land use, such as to residential uses, it may be warranted to investigate the site's shallow soils for the potential of agricultural chemicals possibly associated with historical farming activities, including organochlorine pesticides (OCP) and arsenic. Soil investigation might include reconnaissance sampling for general evaluation, or more thorough sampling in accordance with guidelines of the *Interim Guidance for Sampling Agricultural Properties (Third Revision)*, California Department of Toxic Substances Control (August 7, 2008).

Impacts would be less than significant.

Haz-7	**Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?**

The impact to the City of Ventura evacuation routes from construction under The Grove Specific Plan would not be potentially significant.

6.9 Hydrology and Water Quality

Based upon to Appendix G of the CEQA Guidelines under Section IX, Hydrology and Water Quality, the following significance thresholds are used to evaluate Project impacts related to Hydrology and Water Quality.

Hyd 1	**Would the project violate any water quality standards or waste discharge requirements?**
Hyd 2	**Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**
Hyd 3	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?**
Hyd 4	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**
Hyd 5	**Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**
Hyd 6	**Would the project otherwise substantially degrade water quality?**
Hyd 7	**Would the project place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**
Hyd 8	**Would the project place within a 100-year flood plain structures**
Hyd 9	**Would the project expose people or structures to a significant risk of loss, inquiry or death involving flooding, including flooding as a result of the failure of a levee or dam?**
Hyd 10	**Would the project be subject to inundation by seiche, tsunami, or mudflow?**

Effects Found Not to be Significant

Thresholds Hyd 7, **Hyd 8**, **Hyd 9**, and **Hyd 10** will not be affected, because the Project is not located in a floodplain.

Discussion

Hyd 1	**Would the project violate any water quality standards or waste discharge requirements?**
Hyd 6	**Would the project otherwise substantially degrade water quality?**

Federal and state programs require BMPs to be implemented by developers, property owners, and public agencies engaged in development and redevelopment activities. Site and facility planning and design for storm water quality protection consist of a multi-level strategy, such as:

- Reducing or eliminating post-project runoff
- Controlling sources of pollutants, and if required
- Treating contaminated runoff prior to discharging into the storm water system or receiving waters

All inlets located within the bio-swales are 12×12 dome inlets and were preliminarily sized to handle the treatment flows only. The proposed catch basins were sized to handle the 10-year storm.

The 100-year storm event values were checked to ensure that all pads can be protected from this event. Street capacity calculations show that the 100-year storm can be contained within the street.

Hyd 2	**Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

Implementation of the proposed Project would result in less than significant impacts to groundwater supplies or groundwater recharge. As discussed above, the Ventura County 2010 TGM would require that new development contain all runoff water on-site. This would provide additional recharge to the groundwater aquifer.

Hyd 3	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?**
Hyd 4	**Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?**
Hyd 5	**Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

All inlet structures will be sized to capture the flow for the 10-year storm. Runoff exceeding this storm event will be allowed to sheet flow towards the south of the site, where it will be

collected by sump type catch basins. Runoff entering the on-site storm drain system will be directed to a designated detention area.

Off-site runoff from approximately 0.6 acres will be allowed to flow directly into the proposed detention basin. This runoff corresponds to the area of the proposed park. Off-site runoff from the existing development west of the site will be diverted towards the Telephone Road Drain.

6.10 Land Use

The following thresholds for determining the significance of impacts related to land use are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to existing land uses if any of the following could occur.

LU-1	**Would the project physically divide an established community?**
LU-2	**Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**
LU-3	**Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?** *(Refer to analysis in Section 4.4, Biological Resources)*

Discussion

LU-1 Would the project physically divide an established community?

Implementation of The Grove Specific Plan Project would not physically divide an established community and would result in less than significant impact.

LU-2 Would the project conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Implementation of The Grove Specific Plan Project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project, and as such, impacts would be less than significant.

6.11 Noise

In accordance with Appendix G to the CEQA Guidelines, the Project would have a significant impact on noise if it would cause any of the following conditions to occur.

N-1	**Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**
N-2	**Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**
N-3	**Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**
N-4	**Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**
N-5	**For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**
N-6	**For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

Discussion

The Project site is not located within an airport land use plan, is not located within 2 miles of a public or public-use airport, and is not located within the vicinity of a private airstrip. Therefore, no impacts with respect to **Thresholds N-5** and **N-6** would occur, and no further analysis is required.

N-1	**Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Acceptable noise levels are found within the middle of the site, but those residences proposed to be located nearest the freeways would be subject to disturbing noise levels. Without mitigation impacts would be significant.

MM N-1	A sound barrier (solid concrete, masonry wall on berm, or other construction) should be constructed per the September 4, 2014 Concept Site Plan along the northern Project boundary along SR 126 with a height above the existing ground level of at least 10 feet and possibly up to 12 feet. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-2	The sound wall to be built on the west property line adjacent to Lots 1-22 as illustrated in the Conceptual Site Plan (September 4, 2014) shall be at a height above the existing ground of at least 8 feet. The portion of the 8-foot-high wall on

	Lot 1 shall not extend into the required front yard setback. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-3	A garden wall sound barrier 7 feet in height shall be constructed for Lot 58 located at the southern end of the site. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-4	All unshielded units and the second floor of units facing SR 126, US 101, and Telephone Road shall be constructed to include sufficient noise attenuation to reduce interior noise levels to a CNEL of 45 dBA. This would require, at a minimum. The use of double-paned windows on all windows that are exposed to freeway noise. Such windows shall have a minimum of STC of 35. Solid core doors shall be used for those doorways facing the freeway or Telephone Road and they should be insulated in conformance with California Title 24 requirements. The exterior wall facing material shall be stucco, or other surface with an STC rating of at least 45. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.
MM N-5	All units shall contain forced air ventilation. All duct work for ventilation shall include noise louvers at the exterior outlet and/or ducts shall be directed either opposite to or perpendicular to the nearest road. This measure shall be implemented prior to testing for noise mitigation prior to Certificate of Occupancy.

N-2 Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Impacts related to the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels would be less than significant with implementation of the policies and actions contained in the General Plan, and no mitigation measures are required. Impacts would be less than significant.

N-3 Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Impacts related to a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the proposed Project, would be less than significant with implementation of the policies and actions contained in the General Plan, and no mitigation measures are required.

N-4 Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Impacts would be less than significant with implementation of the policies and actions contained in the General Plan, and no mitigation measures are required.

6.12 Population and Housing

The following thresholds for determining the significance of impacts related to population and housing are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to population and housing, if any of the following could occur.

PH-1	**Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**
PH-2	**Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**
PH-3	**Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

Discussion

PH-1 Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

As concluded in Section **4.13, Public Services** and Section **4.15, Traffic and Circulation**, existing public services and utility/service systems can be readily upgraded and/or extended into the Specific Plan Area to serve the increased population. Project implementation would not require substantial development of unplanned or unforeseen public services and utility/service systems. Individual development projects would be reviewed on a project-by-project basis to determine if existing services and utilities are sufficient or if new and/or upgraded facilities are necessary to serve the development. The increased demands for public services and utility/service systems would not significantly reduce or impair any existing or future levels of services, either locally or regionally. Further, development within the Specific Plan Area is anticipated to occur over multiple years based on market demand, which would allow for development of necessary services and infrastructure to serve the anticipated growth. Therefore, impacts would be less than significant.

PH-2 Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

PH-3 Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project would displace one resident, but this would not require the construction of replacement housing elsewhere in the City, given the available housing stock in the City. Thus, implementation of the Project would result in less than significant impacts with respect to resident displacement or the need for replacement housing.

6.13 Public Services

The following thresholds for determining the significance of impacts related to public services are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of the Project could result in significant adverse impacts to public services, if any of the following could occur.

PS-1	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?**
PS-3	**Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**
PS-4	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public schools**
PS-5	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public libraries?**

Discussion

6.13-1 Police Services

PS-1	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police services?**

Impacts related to police services during construction of projects would be less than significant. Response times could increase within the Project area due to increased vehicle traffic generated from buildout of the Project, adversely affecting the operating condition of the local roadway network. With the Department's current staffing level, the officer to resident ratio is 1:850. Based on the projected potential increase in population of 653 residents, additional police officers would be absorbed over the lifetime of the Project.

Therefore, impacts related to new or expanded police protection facilities are considered less than significant.

Although impacts were found to be less than significant, the following measure is included to further reduce potential impacts:

MM PS-1	New construction within the specific plan area shall be designed to provide for safety measures (e.g., alarm systems, security lighting, other on-site security measures, and crime prevention through environmental design policies) and subject to the review and approval of the City Planning Department and Ventura Police Department.

Impacts would be less than significant after mitigation.

6.13-2 Fire Protection Services

PS-2	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?**
PS-3	**Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The proposed Project does not border on any land areas that are considered to be in the area of wildlands. Therefore, no further discussion of this topic is required.

The Ventura Fire Department reviews building permits and the proper installation of fire sprinkler, fire alarm, and fire suppression systems. Fire inspectors conduct inspections during different phases of construction projects to ensure that current codes and standards are followed. Implementation of the actions provided in The Grove Specific Plan and the General Plan would support VFD efforts to provide adequate fire protection services in the Project area and impacts would be less than significant.

6.13-3 School Services

Based upon Appendix G of the CEQA Guidelines under Section XIV, Public Services, the following significance threshold is used to evaluate Project impacts related to public schools.

PS-4	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public schools?**

The Ventura Unified School District collects fees for new development within its service area. Payment of these fees is considered full and complete mitigation for impacts to school services. Therefore, with payment of these fees and implementation of the policies provided in the City's 2005 General Plan, impacts to schools would be less than significant.

6.13-4 Libraries

Based upon Appendix G of the CEQA Guidelines under Section XIV, Public Services, the following significance threshold is used to evaluate Project impacts related to libraries.

PS-5	**Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public libraries?**

Library services are funded primarily by property tax increments collected by the state, supplemented by City general fund revenues; and impacts would be less than significant.

6.14 Parks and Recreation

The following thresholds for determining the significance of impacts related to parks and recreation are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Project could result in significant adverse impacts to parks and recreation, if any of the following could occur.

Rec-1	**Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**
Rec-2	**Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

Discussion

The pocket park (c) and the private recreation area (E) will not be dedicated to the City, whereas the linear park and other parks will be city owned. The Linear Park (which is netted out) does not count towards meeting General Plan Policy 6A, which will apply the

neighborhood park area requirement of 2 acres per 1,000 population. Consequently, the Project would be required to provide for 3.27 acres of parkland.

Nonetheless, the proposed Project would be subject to the Park and Recreational Facilities tax (based upon the number of bedrooms).

No additional parkland would be required for the proposed Project site.

6.15 Traffic and Circulation

The following thresholds for determining the significance of impacts related to traffic and circulation are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to traffic and circulation, if any of the following could occur.

T-1	**Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**
T-2	**Would the project conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?**
T-3	**Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**
T-4	**Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**
T-5	**Would the project result in inadequate emergency access?**
T-6	**Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

As to **Threshold T-3**, a less than significant impact was determined; therefore, this threshold is not evaluated in this section. The remaining thresholds are evaluated below.

Discussion

T-1	**Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The addition of Project-generated traffic has no significant impact on the operation of any study intersections under existing conditions. The study intersections will continue to operate as LOS D or better during the AM and PM peak hours.

T-2	**Would the project conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways?**

Based on the Project trip distribution and trip generation, existing counts would not increase the CMP thresholds. Thus, impacts to the CMP intersection location would be less than significant.

T-4	**Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Implementation of The Grove Specific Plan Project would not result in the construction and/or operation of hazardous design features (e.g., sharp curves and/or dangerous intersections) or the interaction of incompatible uses.

T-5	**Would the project result in inadequate emergency access?**

Impacts to the City of Ventura evacuation routes from construction under the Specific Plan would not be potentially significant.

T-6	**Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

The Specific Plan is consistent with the City's General Plan and Development Code. While the Specific Plan supersedes the Development Code within the specific plan area, its goals and principles provide for a more precise implementation of the City's existing, including providing district-specific development standards and design guidelines that support and encourage and increase safe, direct, and convenient pedestrian access, establish a potential by the City of Ventura to construct an overpass for safe access for pedestrians and bicyclists.

6.16 Utilities and Service Systems

6.16-1 Solid Waste

Based upon Appendix G of the CEQA Guidelines under Section XVII, Utilities and Service Systems, the following significance thresholds are used to evaluate project impacts related to Solid Waste.

Util-1	**Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**
Util-2	**Would the project comply with federal, state, and local statutes and regulations related to solid waste?**

Due to the urban design elements of the Project, the development cannot be served with the standard services described in the agreements. A standard collection vehicle cannot safely or legally traverse the streets with the bulb-out and round-about configurations. Special service rates will need to be developed and approved by the City of Ventura to provide service for this Project. Additionally, special service vehicles will be required due to the compact street figurations. Site design elements shall consider space for container storage and collection adequate to provide appropriate service levels for the various land uses.

Consequently, impacts would be significant prior to mitigation.

MM Util-1	Special service rates will need to be developed and approved by the City of Ventura to provide service for this Project. Special service vehicles will be required due to the compact street figurations.
MM Util-2	Site design elements shall consider space for container storage and collection adequate to provide appropriate service levels for the various land uses. The space allocation guidelines discussed in Table 4.16-2 to The Grove Specific Plan EIR should be used to design container storage areas to provide adequate service levels. Components to consider include but are not limited to, horizontal and vertical clearances, enclosure functionality and protection elements, collection vehicle circulation, accessibility, pedestrian circulation, construction materials, roofing, fire sprinklers, and other utilities.
MM Util-3	There is no protection provided for vehicles making right-turn movements off Telephone Road. Vehicles tend to move fast through the intersection trying to catch the next light, which is only 240 feet to the west. The Project applicant shall work with the City of Ventura to accommodate right-hand turn movements off Telephone Road.

Impacts would be less than significant after mitigation.

Development within The Grove Planning Area would comply with all actions provided in the General Plan and the City's programs and policies, and the impact would be less than significant.

6.16-2 Wastewater

Based upon Appendix G of the CEQA Guidelines under Section XVII, Utilities and Service Systems, the following significance thresholds are used to evaluate Project impacts related to wastewater.

Util-3	**Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**
Util-4	**Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**
Util-5	**Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**
Util-6	**Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**
Util-7	**Would the project require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Deficiencies exist in the existing and proposed scenarios for wastewater. Without mitigation there would be a significant impact.

MM Util-4	The subdivider/developer shall enter into a reimbursement agreement with the City to design and construct the replacement of the existing public sewer main and associated improvements, including but not limited to manholes, cleanouts and laterals, as described below: • Replace 1,910 linear feet of existing 10" with 15" pipe. Pipe segments: P-3904, P-4443, P-4441, P-4442, P-4440 and P-4439. • Replace 2,190 linear feet of existing 12" with 15" pipe. Pipe segments: P-3905, P-3906, P-3907, P-3908, P-3909, P-3910, P-3912, P-3911 and PC-250. • Replace 740 linear feet of existing 15" with 18" pipe. Pipe segment: P-3976, P-3982, P-3981 and PC-251. The subdivider/developer shall construct the proposed public mains prior to issuance of a Certificate of Occupancy. The reimbursement agreement shall explain the details of how the subdivider/developer shall be reimbursed by the City for designing and constructing the public sewers in Main Street as described above.

Impacts would be less than significant after mitigation.

6.16-3 Water Supply

The following thresholds for determining the significance of impacts related to water resources are contained in the environmental checklist form contained in Appendix G of the CEQA Statute and Guidelines. Adoption and/or implementation of The Grove Specific Plan could result in significant adverse impacts to water resources, if any of the following could occur.

Util-8	**Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**
Util-9	**Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The Urban Water Management Plan (UWMP) is required by the California State Water Code. The UWMP is a long-term planning tool that provides water purveyors and their customers a broad perspective on water supply issues over a 20- to 25-year period. The UWMP is a management tool, providing the framework for action but not functioning as a detailed project development plan.

In 2013 the City Council directed Ventura Water and the Community Development Department to work together to develop a short term balance of water supply and demand, the result of this collaboration is the annual Comprehensive Water Resource Report (CWRR). The CWRR specifically focuses on water demand of approved (entitled) projects only. The CWRR focuses on a short timeframe and on near-term demand changes. The CWRR estimates demands from approved projects whereas the UWNP estimates demands from population projections.

The current (normal year) available water supply for the City per the most recent (2015) CWRR is 19,600 Acre-feet per year (AFY). Drought condition water supply for 2015 is estimated to range from a low of 14,888 AFY to a high of 16,888 AFY. With the current drought conditions the estimated drought water supply is very close to current water demand in the city.

The 2015 CWRR includes information on tightening water supply restrictions. The report also includes estimated total future water demands based on existing water demands (17,167 AF baseline demand) plus estimated demands for approved development projects (1,128 AF). The total future water demand (18,298 AF) estimates do not account for any other recently initiated or pending projects.

The 2015 CWRR indicates that "the spread between the current water demand and the current water supply is very tight, and in some conditions the supply could be less than the demand." This presents challenges for the City moving forward in its ability to allocate water supply to development projects that will generate additional water demands

The estimated water demand for this Project is 81.33 AFY.

There are a few locations within the 330 Zone where the minimum pressure is not met; however, those deficiencies existed prior to the proposed Project, although these deficiencies are expected to slightly worsen. Under the build out of all Planning Projects, six additional junctions will become deficient. These deficient junctions represent two separate locations at the north-central area of the 330 Zone at the pressure zone boundary at Walcott Avenue and near the intersection of Telephone Road and Johnson Drive.

MM Util-5	The additional demand of the Project will require an increase in reservoir storage in the 330 Zone of 68,975 gallons (for 24-hour continuous pumping) or 134,731 gallons (for 9- hour off-peak pumping).

An adequate water supply for the proposed Project shall include the following four requirements.

MM Util-6	The property shall relinquish any water rights associated with the property to the City.

For additional water supply required to meet the estimated water demand of the proposed Project (81.33 AF) in addition to the water rights relinquished to the City the following will be required.

MM Util-7	The development shall utilize best management practice (BMP) low water use standards.
MM Util-8	The City of San Buenaventura is considering a Water Resource Net Zero Policy to apply to future development. Because adequate water rights may not be available to offset the projected water demand of 81.33 AFY, if the City Council adopts a Water Resource Net Zero Policy that applies to the proposed Project, then the Applicant/Developer shall be subject to compliance with the Water Resource Net Zero Policy, which would include implementation of conservation offsets and/or payment of a Water Resource Net Zero Fee. If no Water Resource Net Zero Policy is in place when building permits are issued, the applicant shall acquire and secure water rights that are acceptable and deemed transferable to the City.
MM Util-9	In addition, if prior to the issuance of building permits the City declares a Stage 4 Water Shortage Event or any higher Water Shortage Event per the City's adopted Water Shortage Event Contingency Plan, the Applicant/ Developer shall acquire and secure water rights that are acceptable and deemed transferable to the City to offset the Project's water demand of 81.33 AFY.

After mitigation impacts would be less than significant.

7. Growth-Inducing Impacts

7.1 Introduction

The purpose of this section is to evaluate the growth-inducing potential of the Project. With respect to potential growth-inducing impacts, the 2011 California Environmental Quality Act (CEQA) Statutes and Guidelines require a discussion of the ways in which a project could foster economic or population growth, or the construction of additional housing in the surrounding environment. Discussion should take into account the project characteristics that may encourage and/or facilitate future growth that, either individually or cumulatively, could significantly affect the environment. CEQA emphasizes that growth in an area should not be considered beneficial, detrimental, or of little significance.

7.2 Thresholds for Determining Growth-Inducing Impact

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any of the criteria, identified below, as determined by the City of Ventura.

- Removal of an impediment to growth (e.g., the establishment of an essential public service or the provision of new access to an area).
- Urbanization of land in a remote location (e.g., leapfrog development).
- Economic expansion or growth occurring in an area in response to a project (e.g., changes in revenue base, employment expansion, etc.).
- Establishment of a precedent-setting action (e.g., a change in zoning or general plan designation).

If a project meets any of these criteria, it is considered growth inducing. An evaluation of this Project against these four growth-inducing criteria is provided in the sections below.

7.3 Growth Inducement Potential

7.3-1 Removal of an Impediment to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential public services. The proposed Project is an infill project and is essentially land-locked,

An established transportation network presently exists in the area, which offers the proposed Project and surrounding area local and regional access. Regional access to the proposed Project is provided by US 101 and SR-126. The primarily local access within the proposed Project is provided

by Telephone Avenue. As part of The Grove Planning Project, Copland Avenue and Thille Street would be extended. While this extension would rearrange the flow of traffic in the Project area, it in itself would not cause nor encourage new traffic trips. Therefore, the extension of this roadway from the Project site is not considered growth inducing.

The water and sewer infrastructure required to support The Grove is available. No new major water or sewer mains other than those required to serve the individual new development and redevelopment projects associated with The Grove Specific Plan Project would be constructed.

Electricity and natural gas transmission infrastructure presently exist in the immediate area of The Grove Specific Plan Project. Individual development would not necessitate the construction of a distribution system to convey this energy to uses on individual project sites. This system would be designed to accommodate uses of individual projects, and would not extend beyond the requirements or boundary of the proposed Project site. Given the existence of established electrical and natural gas transmission lines in this area, no growth-inducing impacts are expected with regard to this type of infrastructure.

7.3-2 Leap-Frog Growth

Development can be considered growth inducing when it is not contiguous to existing urban development and intervening open space areas occur between developments. The Grove Specific Plan has established infrastructure and a variety of residential and park uses. The Project is an infill site and would not introduce leap-frog development to this site. Given this, The Grove Specific Plan Project would not induce growth under this criterion, as it would not result in the urbanization of land that is not contiguous to existing urban development.

7.3-3 Economic Growth

The growth forecast for the land uses proposed in The Grove Specific Plan Project area would add 1,680 new dwelling units in the Project area by 2025. Based on the City's estimated 2011 household size of 2.61 residents per dwelling unit, this would add approximately 1,175 residents to the City's estimated population. Property proximal to the site can be expected to experience increased economic pressure to develop. This pressure would be generated by the availability of supporting services, recreational opportunities, etc., on the proposed Project site. All of the above can increase land values and make development of adjacent properties financially attractive to property owners. Actions taken to entitle land for future development would be subject to approvals associated with the planning process, as described below under **Precedent Setting Action**.

Development of The Grove Specific Plan Project will increase the area's population over present conditions. As a result, the proposed Project can be expected to generate increased demand for goods and services. The Project is generally consistent with the General Plan. It is expected that existing retailers can meet the demand for goods and services. Therefore, development of the

proposed Project is not expected to induce substantial commercial growth in the City or surrounding areas.

Future residents of the proposed Project site also represent an incremental increase in the local labor force. Given the relatively small number of residents anticipated at predicted development growth (1,175) it is expected that new residents seeking employment in the City could be absorbed. Therefore, it is not anticipated that The Grove Specific Plan Project would induce substantial growth presently undeveloped properties in the City.

7.4 Precedent Setting Action

The decision to allow development and redevelopment in The Grove Specific Plan Project area would require the discretion of the decision-making body, which is the City of Ventura. If The Grove Specific Plan Project were to be approved by the City, its approval would not necessarily mean that other development approvals in the area would follow. Consequently, the Project is not considered to be precedent setting.

8. Organizations and Persons Consulted

This EIR was prepared by the City of Ventura Planning Department with the assistance of Tebo Environmental Consulting, Inc., City Staff, report preparers and other consultants identified below.

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9. Significant Irreversible Effects on the Environment

9.1 Introduction

Use of nonrenewable resources during the initial and continued phases of a proposed Project may be irreversible if a large commitment of these resources makes their restoration thereafter unlikely. According to §15126.2(c) of the California Environmental Quality Act (CEQA) Guidelines, irretrievable commitment of such resources is to be evaluated to ensure that their consumption by a proposed Project is justified. In addition, this section must also identify any irreversible damage caused by environmental accidents associated with the proposed Project.

9.2 Discussion

The construction and residential uses would irreversibly commit construction materials and nonrenewable energy resources to the purposes of the Specific Plan. These energy resource demands would be used for construction, heating, and cooling of buildings, transportation of people and goods, as well as lighting and other associated energy needs. Nonrenewable and slowly renewable resources used by the planning area land uses and improvements would include, but are not limited to, lumber and other forest products, sand and gravel, asphalt, petrochemical construction materials, steel, copper, lead and other metals, and water. A marginal increase in the commitment of facility maintenance services would also be required. Planning area impacts related to consumption of nonrenewable and slowly renewable resources are considered to be less than significant because development within the planning area would not use unusual amounts of energy or construction materials.

Irreversible long-term environmental changes would accompany the proposed conversion of a partially disturbed, but primarily undeveloped parcel to a residential urban-scale in-fill development site. Changes would include a significant change in the visual character of the site associated with landform modification and increased building height and bulk, an increase in local and regional traffic with associated increase in air pollution emissions and noise levels, volume of solid waste generation, volume of wastewater generation, and an increase in water and energy consumption. The Project would require additional school space and recreational opportunities. Although the Project site is partially disturbed, it contains natural open space areas that have biological habitat of value. It is unlikely that the existing environmental conditions would be restored to their original condition subsequent to Project development; however, mitigation measures are proposed throughout **Section 4, Environmental Impact Analysis** of this EIR to minimize the effects of the development impacts.

The CEQA Guidelines also require a discussion of the potential for environmental damage caused by an accident associated with the Project. The following discussion identifies site characteristics and proposed future uses that could be sources of potential accidents.

The planning area is located within a seismically active region and would be exposed to ground shaking in the event of a seismic event. Conformance with the regulatory provisions of the City of Ventura and the *Uniform Building Code* pertaining to construction standards would minimize, to the extent feasible, damage and injuries in the event of such an occurrence. Geotechnical hazards can be mitigated by stabilization, removal, or redesign; no significant impacts on the site are expected.

The planning area has numerous known or potential contamination sites based on a federal and state agency database search. Impacts would occur from the historic leaking or spillage of regulated substances into the shallow soils or groundwater of the planning area. The individual properties would need to be reviewed and assessed, as needed, to determine if they present a significant environmental concern or liability. Development and redevelopment proposed within the site plan could be impacted due to soil and groundwater contamination. The General Plan contains the following actions that aim to minimize adverse impacts to health and quality of life associated with exposure to hazardous materials:

> Action 7.24: Only approve projects involving sensitive land uses (such as residences, schools, daycare centers, playgrounds, medical facilities) within or adjacent to industrially designated areas if an analysis provided by the proponent demonstrates that the health risk will not be significant.

With implementation of the applicable General Plan actions and enforcement of state and federal laws governing the upset conditions associated with hazardous materials and wastes, impacts would be less than significant.

10. References and Resources Cited

Introduction

The following documents are incorporated by reference in this draft EIR, consistent with §15150 of the CEQA Guidelines, and are available for review at the City of Ventura in the City's Planning Division.

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California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011- 2015, with 2010 Benchmark (2015)

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City of Ventura, 2014-2021 Housing Element, September 16, 2013

City of Ventura, 2005 Ventura General Plan, August 2005

City of Ventura, 2005 Ventura General Plan Final Environmental Impact Report, August 2005

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