



CSUCI Specific Reuse Plan Amendment and Phase 2 Development of the East Campus Residential Neighborhood Project

Draft Environmental Impact Report
SCH#2016111068

prepared by
California State University, Channel Islands Site Authority
One University Drive
Camarillo, California, 93012

prepared with the assistance of
Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93001

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- Appendix D CalEEMod Calculations
- Appendix E Jurisdictional Delineation

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Executive Summary

This Environmental Impact Report (EIR) has been prepared to examine the potential environmental effects of the proposed CSUCI Specific Reuse Plan Amendment and Phase 2 Development of the East Campus Residential Neighborhood project. This section summarizes the characteristics of the proposed project, the identified significant environmental impacts, feasible mitigation measures, and residual impacts associated with the proposed project.

Project Synopsis

Project Sponsor

Owner

The Trustees of the California State University
400 Golden Shore
Long Beach, California 90802-4275

Ground Lessee/Locally represented by

Site Authority
California State University, Channel Islands
P.O. Box 2862
Camarillo, California 93011-2862

Project Summary

The proposed CSUCI Specific Reuse Plan Amendment and Phase 2 Development of the East Campus Residential Neighborhood Project, hereafter referred to as the “proposed project”, evaluates a proposed residential development of 600 residential units on an approximately 32-acre site within the East Campus Residential Neighborhood, or University Glen, at California State University, Channel State Islands (CSUCI) (“project site”). It is anticipated that the units would range between approximately 800 square feet (SF) to 2,400 SF. The proposed density would be 19 dwellings per gross acre.

The proposed project offers a mix of multi-family apartments for rent, for-sale single-family attached/detached homes, and income/age-restricted apartments. A portion of the residential development would be three-story development with some two-story massing. The maximum height of the proposed residences would not exceed 40 feet per the requirements of the Specific Reuse Plan. The site plan also includes approximately 3.7 acres of recreation/ park area that includes a central park and clubhouse, two vista parks along the northern periphery of the project site, and various paseos and courtyards. The design of the buildings would feature stucco wall surfaces, tile roofs, and Mission-revival and Spanish-colonial revival architectural styles that would blend with and complement University Glen Phase 1 development.

Development of the proposed project would require an amendment to the CSUCI Specific Reuse Plan. Under the existing CSUCI Specific Reuse Plan, the project site is entitled for 242 single-family residential units. However, under the proposed project, up to 600 residential units would be developed on the 32 acres of vacant land. The Specific Reuse Plan currently designates the project site for low to low-medium residential density (0-10 units per acre) development. The amendment would allow for low-medium to medium-high residential density (10-20 units per acre) at the project site.

To accommodate the increase in density, the number of lots, parcel and roadway configuration, and utility lines would be modified. Existing building pads and roads would be demolished and replaced. Much of the existing utilities and infrastructure would also need to be replaced and/ or modified to serve the new site layout; however, no alterations to existing pipelines that cross the unnamed drainage that traverses the site would take place.

The northern portion of the project site (called Inspiration Point) is accessed by a partially paved road that crosses an unnamed drainage feature and culvert. The drainage crossing does not provide adequate access to Inspiration Point and the culvert is currently undersized to withstand a 100-year storm event. Consequently, as part of the proposed project, the existing crossing and drainage culvert leading to Inspiration Point would be demolished and replaced with a new culvert and crossing sized to accommodate a 100-year storm event.

Onsite water quality treatment would be managed with multiple bio-filtration/bio-planter systems throughout the project site. In addition, improvements to the outlet from the downstream drainage basin/constructed wetlands would be made as part of the proposed project.

The proposed project would also include a 100-foot-wide zone to be maintained for fuel modification in the form of limited, select landscape types. Fuel modification would require removal of certain species of plants and limit the spacing of fuel intense shrubs and trees to meet Ventura County Fire Department requirements. The 100-foot buffer is measured from the most projected element of the eaves of structures measured out perpendicular from the structure for a minimum of 100 feet.

The following objectives have been proposed for the project:

- Provide multiple types of high-quality, local housing to attract faculty and staff to the CSUCI campus from outside the area.
- Provide additional housing resources that blend with and augment the existing University Glen community to form one cohesive neighborhood.
- Provide a live/work environment associated with the CSUCI campus.
- Provide age- and income-restricted housing to respond to the community request for a mixed demographic of apartments, single-family detached houses, and townhomes.
- Provide additional active and passive recreational amenities for use by the entire University Glen community.
- Utilize the Private-Public Partner (P3) development process to provide a method for implementation of the project.

Additional project details, including, among others, the mix of residential units, information regarding proposed amenities, required infrastructure improvements, and the anticipated construction schedule are provided in Section 2.0, *Project Description*.

The proposed project will require review and approval from a number of agencies. Provided below is a list of the anticipated discretionary permits requiring approval by California State University, Board of Trustees.

- Revision to the Campus Master Plan
- Schematic plan approval
- Final approval of real property public-private partnership
- Others, as may be necessary

In addition to the discretionary approvals by the California State University, Board of Trustees, additional approvals will need to be obtained from California State University, Channel Islands Site Authority, acting in its role as a responsible agency for the proposed project. These additional approvals include, but may not be limited to, the following:

- Specific Reuse Plan Amendment adoption
- Approval of the proposed project
- Schematic plan approval
- Others, as may be necessary

The following includes a list of other government agencies that would or may have some level of approval for one or more components of the proposed project, as required by State CEQA Guidelines Section 15124(d):

- Ventura County Watershed Protection District
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- Others, as may be necessary

Alternatives

Three alternatives to the proposed project were selected for consideration and analyzed in the EIR as follows:

- Alternative 1: No Project
- Alternative 2: Previously Entitled Development
- Alternative 3: Elimination of Inspiration Point

Summary of Impact and Mitigation Measures

Table 1 includes a brief description of the identified potential environmental impacts that would result from the proposed project, proposed mitigation measures to reduce those impacts, and residual impacts after implementation of mitigation. Significant, unavoidable adverse impacts require a statement of overriding considerations to be issued per section 15093 of the CEQA Guidelines if the project is to be approved. Significant but mitigable 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 State CEQA Guidelines.

Table 1 Summary of Environmental Impacts and Mitigation Measures

Impact	Mitigation Measures	Significance After Mitigation
Aesthetics		
Impact AES-1: Lewis Road and Potrero Road are designated as “eligible” county scenic highways. While CSUCI is not subject to the Ventura County General Plan, potential impacts to these roadways are provided for information purposes. Views of the project site from both Lewis Road and Potrero Road would be blocked by the intervening topography and existing vegetation. No impact on scenic vistas would occur.	n/a	No Impact
Impact AES-2: The proposed project would not be visible from either U.S. 101 or SR 1. Therefore, the proposed project would not damage scenic resources along a State Scenic Highway. No impact would occur.	n/a	No Impact
Impact AES-3: Although the project would alter views of the project site, the resulting character and quality of the project site	n/a	LTS

Impact	Mitigation Measures	Significance After Mitigation
<p>would be consistent with the surrounding area and existing development at the University. In addition, the proposed project would not block views of the scenic features in the area, namely the surrounding hills and ridgelines. Impacts would be less than significant.</p>		
<p>Impact AES-4: The proposed project would result in new sources of light and glare at the project site. However, these light and glare sources would be similar to those at existing, development in the vicinity of the project site and would be required to comply with university design guidelines aimed at avoiding impacts from light and glare associated with new development. Impacts would be less than significant.</p>	n/a	LTS
<p>Cumulative: The proposed project, in combination with planned development on the CSUCI campus under the Master Plan and Specific Reuse Plan, and elsewhere in this part of Ventura County, could contribute to the degradation of the visual character and quality of the cumulative study area. The projects included in the cumulative development scenario are primarily in the city of Camarillo and would not alter the rural aesthetic of the cumulative study area or the visual setting of the University which is one of compact, aesthetically coordinated development in its own independent setting. As such cumulative aesthetic and visual impacts would be less than significant.</p>		
<p>Air Quality</p>		
<p>Impact AQ-1: Operation of the proposed project would generate maximum daily NO_x emissions slightly above the VCAPCD significance threshold of 25 pounds per day. Maximum daily emissions of other criteria pollutants would be below significance thresholds. With mitigation, air quality impacts would be less than significant.</p>	MM AQ-1: Operational NO _x Emissions	LTS
<p>Impact AQ-2: The VCAPCD does not recommend any thresholds of significance for construction emissions. Therefore, significance is determined based on the control measures to be implemented. Incorporation of control measures would reduce construction air quality impacts to less than significant levels.</p>	MM AQ-2(a): Construction Fugitive Dust Emissions. MM AQ-2(b): Construction ROC and NO _x Emissions	LTS
<p>Impact AQ-3: The proposed project would accommodate population growth by providing up to 600 dwelling units for approximately 1,518 new residents. This would not cause the unincorporated county population to exceed population forecasts for unincorporated Ventura County. Therefore, population growth resulting from the proposed project would have less than significant air quality impacts.</p>	n/a	LTS
<p>Impact AQ-4: The proposed project would generate new vehicle trips that would generate CO emissions. However, there are no severely congested intersections (LOS E or F) in the vicinity of the project site and the proposed project would not result in any severely congested intersections. No CO hotspot would result and the proposed project would have less than significant air quality impacts.</p>	n/a	LTS
<p>Impact AQ-5: Construction of the proposed project would involve the use of diesel-powered equipment that would emit diesel particulate matter in the vicinity of residences adjacent to the project site. However, construction would be temporary, adjacent residences are located to the south of the project site while</p>	n/a	LTS

Impact	Mitigation Measures	Significance After Mitigation
<p>prevailing winds are from the west, grading activities would not require large numbers of diesel-engine equipment, and potential impacts would be largely attenuated by distance. Operation of residential uses, such as the proposed project, would not result in significant emission of TACs and the project site is not in the vicinity of a TAC hotspot. Impacts would be less than significant.</p>		
<p>Impact AQ-6: The majority of the project site contains disturbed soil that is unlikely to harbor the <i>Coccidioides immitis</i> spores that cause Valley Fever infections. However, there remains a low potential for the presence of <i>Coccidioides immitis</i> spores in previously undisturbed areas of the project site. Valley fever mitigation measures recommended by the VCAPCD would be implemented during construction activities on areas of the site with potential for presence of <i>Coccidioides immitis</i> spores to reduce potential impacts to a less than significant level.</p>	<p>MM AQ-6 Valley Fever</p>	<p>LTS</p>
<p>Cumulative: The significance criteria set by the VCAPCD take into consideration both individual and cumulative impacts (VCAPCD 2003). Therefore, individual projects that do not exceed significance criteria would not jeopardize attainment of State and federal standards in the Ventura County region and would not contribute significantly to existing air quality exceedances. With implementation of mitigation measure AQ-1, long-term operation of the proposed project would not exceed daily operational thresholds for ROC of NO_x. Therefore, cumulative air quality impacts are considered less than significant.</p>		
<p>Biological Resources</p>		
<p>Impact BIO-1: Construction of the project could have a substantial adverse effect on nesting birds. Mitigation measures to reduce potential impacts would be required, including timing restrictions and avoidance buffers. Impacts would be less than significant with mitigation incorporated.</p>	<p>MM BIO-1(a) Nesting Birds MM BIO-1(b) Special Status Plant Surveys MM BIO-1(c) Special Status Plant Avoidance Measures MM BIO-1(d) Restoration Plan</p>	<p>LTS</p>
<p>Impact BIO-2: The proposed project would result in a substantial adverse effect on jurisdictional wetlands and waters. Compensatory mitigation acreage is available under the campus habitat restoration program to replace impacted acreage. Impacts would be less than significant with mitigation incorporated.</p>	<p>MM BIO-2(a) Avoidance and Minimization MM BIO-2(b) Compensatory Mitigation</p>	<p>LTS</p>
<p>Cumulative: Given the existing disturbed nature of the project site, the availability of compensatory habitat and the limited potential for impacts to special status species, the proposed project’s contribution to cumulative biological resources impacts would not be considerable.</p>		
<p>Cultural Resources</p>		
<p><i>From Section 5 of the Initial Study (see Appendix A)</i> Threshold (b): Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5? Threshold (c): Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Threshold (d): Would the project disturb any human remains, including those interred outside of formal cemeteries?</p>	<p>MM CR-1 in the Initial Study has been replaced by the following measures in Section 4.11, <i>Tribal Cultural Resources</i>, in the EIR. MM TCR-2(a) Tribal Cultural Resource Worker Environmental Awareness Program</p>	<p>LTS</p>

Impact	Mitigation Measures	Significance After Mitigation
	MM TCR-2(b) Archaeological and Native American Monitoring	
Geology and Soils		
<p><i>From Section 6 of the Initial Study (see Appendix A)</i></p> <p>Threshold (a)(4) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?</p>	<p>MM GEO-1 Incorporate recommendations of Geotechnical Study: Cal State University GEO-1 Channel Islands East Campus Development (Site Authority 2000).</p> <p>MM GEO-2 Update Geotechnical Study, as needed</p>	LTS
<p>Threshold (c): Would the project be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?</p>	<p>MM GEO-3 Incorporate recommendations of 2007 Geotechnical Study Addendum</p>	LTS
Greenhouse Gas Emissions		
<p>Impact GHG-1: Development of the proposed project would generate additional GHG emissions beyond existing conditions due to construction activity and long-term operations. However, total estimated GHG emissions would not exceed SCAQMD Tier 4 or 2021 CSU efficiency targets. Impacts would be less than significant.</p>	n/a	LTS
<p>Impact GHG-2: Total estimated GHG emissions would not exceed SCAQMD Tier 4 or 2021 CSU efficiency targets, and thus, would not conflict with the GHG reduction goals of CSU, AB 32, or SB 32. The proposed project would be consistent with local, regional and State policies to reduce GHG emissions. Impacts would be less than significant.</p>	n/a	LTS
<p>Cumulative: As the proposed project would be consistent with local and regional thresholds for GHG emissions, which consider cumulative local and regional emissions, as well as AB 32 and SB 32, which consider cumulative statewide emissions, the proposed project would not result in cumulatively significant GHG emissions. Cumulative GHG impacts would be less than significant.</p>		
Hydrology and Water Quality		
<p>Impact HWQ-1: The proposed project would increase peak discharge from 12.5 cfs, in the existing condition, to 22.5 cfs at the existing constructed wetlands during a 100-year storm event. The increase in peak flows from the proposed project would exceed existing condition flows resulting in a significant impact. Improvements to the outlet at the constructed wetland would reduce flows to equal the existing condition. Impacts regarding drainage patterns and flooding would be less than significant with mitigation incorporated.</p>	<p>MM HWQ-1 Modification of the rectangular orifice outlet from the constructed wetlands</p>	LTS
<p>Impact HWQ-2: The existing culvert underneath the Inspiration Point crossing will overtop in a burn condition 100-year storm event and potentially risk damage and safety to proposed adjacent</p>	n/a	LTS

Impact	Mitigation Measures	Significance After Mitigation
<p>residences. However, proposed modifications to the culvert beneath the Inspiration Point crossing would reduce flooding potential associated with a 100-year burn storm event. Impacts regarding increased runoff would be less than significant.</p>		
<p>Cumulative: The project site is surrounded by open space (hillsides) and agriculture; these areas are not planned for development and there are no cumulative projects proposed for the sites adjacent to the project site. As discussed under Impact HWQ-1, improvements to the outlet at the constructed wetland area included as part of the project design would ensure that flows exiting the project site following project implementation would be the same as flows exiting the project site under existing (pre-project) conditions. Potential impacts to hydrology and water quality related to the proposed project would not be cumulatively considerable.</p>		
<p>Land Use and Planning</p>		
<p>Impact LU-1: With approval of the amendment to the allowed density at the site in the Specific Reuse Plan, adherence to other applicable policies and standards in the Specific Reuse Plan, and implementation of mitigation measures provided in this document, the proposed project would be consistent with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Noise</p>		
<p>Impact N-1: Noise from construction of the project has the potential to adversely impact nearby sensitive receptors for a period longer than eight weeks. Impacts would be less than significant with mitigation incorporated.</p>	<p>MM N-1(a) Construction Activity Timing and Disclosure MM N-1(b) Vehicle and Equipment Idling MM N-1(c) Sound Control Curtains</p>	<p>LTS</p>
<p>Impact N-2: Construction-related activities associated with the proposed project would intermittently generate groundborne vibration on and adjacent to the project site. This may affect existing sensitive receptors near the project site; however, construction vibration would not exceed FTA thresholds for vibration. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Impact N-3: University Glen residents would not experience a noise level increase exceeding applicable thresholds as a result of project-generated traffic on Channel Islands Drive. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Cumulative: Existing residences located along Channel Islands Drive would not experience a change in roadway noise levels that would exceed the FTA thresholds under Cumulative (2022) + Project conditions. Therefore, cumulative noise impacts would be less than significant</p>		
<p>Public Services</p>		
<p>Impact PS-1: implementation of the proposed project would increase the service population for the Ventura County Fire Department and require police protection services from the University Police Department, but this increase would not trigger the need to construct a new fire station, police facilities, or alter existing facilities to accommodate additional personnel or equipment to maintain acceptable performance standards and</p>	<p>n/a</p>	<p>LTS</p>

Impact	Mitigation Measures	Significance After Mitigation
<p>levels of service. Therefore, impacts related to fire protection and police protection services would be less than significant.</p>		
<p>Cumulative: The project, in combination with other past, present and reasonably foreseeable cumulative development, would result in an increase in demand for fire protection and police protection services. Although the need for new or expanded fire or police stations are not anticipated at this time, if new facilities needed to be constructed in the future, appropriate environmental review would be required under CEQA, which would address impacts resulting from the new or expanded facility. Because the exact location of future facilities is currently unknown it would be speculative to evaluate their environmental impacts at this time.</p>		
<p>Recreation</p>		
<p>Impact REC-1: The proposed project would increase the use of existing neighborhood and regional parks or other recreational facilities by increasing the population of the University Glen community. The increased demand would be met by existing parks and recreational facilities as well as those proposed as part of the project. Available parklands and proposed parklands would meet the minimum threshold of five acres of park land per 1,000 residents.</p>	<p>n/a</p>	<p>LTS</p>
<p>Impact REC-2: the adverse physical effects associated with the parks and recreational components of the proposed project are part of the wider project analyzed in this EIR. Potential adverse impacts associated with the proposed project have been identified in several environmental issue areas, related primarily to construction activities associated with the proposed project.</p>	<p>See Air Quality, Biological Resources, Tribal Cultural Resources, Noise, Geology and Soils, and Transportation and Circulation</p>	<p>LTS</p>
<p>Cumulative: Based on a future population at the CSUCI campus of 5,811 and the guideline park acreage of five acres per 1000 residents, park and recreation requirements would be 29 acres. Based on available and proposed park resources available for by cumulative development at the campus, more than sufficient park land would be provided to meet the five acres per 1,000 residents guideline included in the Specific Reuse Plan.</p>		
<p>Transportation and Traffic</p>		
<p>Impact T-1: Implementation of the proposed project would not cause operations at study area intersections or segments to exceed applicable LOS criteria under Existing (2016) plus Project Conditions. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Impact T-2: Implementation of the proposed project would not cause operations at any of the 11 study area intersections or any of the eight study area segments to exceed applicable significance criteria under the Cumulative Plus Project condition. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Impact T-3: The proposed project would not result in impacts to the CMP roadway network. The study area intersections would operate at LOS D or better. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Impact T-4: Analysis of two intersections under Caltrans jurisdiction indicates that Caltrans thresholds would be exceeded under Existing (Year 2016) plus Project conditions at the intersection of U.S. 101 Southbound Ramps/Ventura Boulevard as a result of proposed project traffic. Impacts would be less than significant with mitigation incorporated.</p>	<p>MM T-4 Signal Timing</p>	<p>LTS</p>

Impact	Mitigation Measures	Significance After Mitigation
<p>Impact T-5: An analysis of four Caltrans freeway segments to determine passengers per mile per lane and corresponding level of service indicates that these Caltrans locations operate at LOS D, exceeding Caltrans target thresholds under Existing (Year 2016) and Cumulative (Year 2022) without the proposed project conditions. Addition of project-related traffic would not result in further reductions to level of service on these freeway segments. Impacts would be less than significant.</p>	n/a	LTS
<p>Impact T-6: A queuing analysis of two Caltrans freeway off-ramps at Daily Road and Ventura Boulevard along U.S. 101 indicates that none of the freeway off-ramp queues forecasted would exceed the available storage under Existing (2016) plus Project conditions or under Cumulative (2022) plus Project conditions. Impacts would be less than significant.</p>	n/a	LTS
<p>Impact T-7: The proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Impacts would be less than significant.</p>	n/a	LTS
<p>Impact T-8: The proposed project could potentially create hazards due to design features incompatible with the Ventura County Fire Code. Consistency with the Ventura County Fire Code minimum access standards would be included in the proposed project design. Impacts would be less than significant.</p>	n/a	LTS
<p>Impact T-9: Previous concerns regarding emergency access have been raised as a result of the Springs Fire, the increase in population at the project site and the overall population increase in University Glen neighborhood. The roadways within the project site and throughout the University Glen community would comply with Ventura County Fire Code and would not result in inadequate emergency access to the area. However, in consideration of residents' concerns, mitigation measures are recommended to further reduce this already less than significant impact.</p>	<p><i>Recommended</i> MM T-9(a) Adopt an Emergency Evacuation Plan for the University Glen Community MM T-6(b) Conduct Emergency Evacuation Drills</p>	LTS
<p>Cumulative: As discussed under the Cumulative (2022) plus Project Conditions, the traffic analysis estimated an acceptable LOS of D or better at all intersections and roadway segments studied resulting in a less than significant cumulative impact. All future (2022) traffic impacts described in the above discussions consider cumulative project traffic growth.</p>		
<p>Tribal Cultural Resources</p>		
<p>Impact TCR-1: Construction of the proposed project would result in increased pedestrian activity in the vicinity of the proposed project, which has the potential to indirectly impact Round Mountain. Impacts would be less than significant with mitigation incorporated.</p>	MM TCR-1(a) Interpretive Signage	LTS

Impact	Mitigation Measures	Significance After Mitigation
<p>Impact TCR-2: Construction of the proposed project would involve ground disturbance, which has the potential to unearth or adversely impact previously unidentified tribal cultural resources. Impacts would be less than significant with mitigation incorporated.</p>	<p>MM TCR-2(a) Tribal Cultural Resource Worker Environmental Awareness Program MM TCR-2(b) Archaeological and Native American Monitoring</p>	<p>LTS</p>
<p>Cumulative: Because the proposed project incorporates measures to reduce impacts to tribal cultural resources and the University has complied with the provision of AB 52, the proposed project’s contribution to cumulative impacts to tribal cultural resources would not be considerable.</p>		
<p>Utilities and Service Systems</p>		
<p>Impact U-1: The proposed project would increase demand for potable and recycled water through the introduction of up to 600 new residential units and landscaped areas. Recycled water and domestic water would be provided by the Camrosa Water District. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Impact U-2: The proposed project would increase wastewater generation at the project site, but this increase would not require new or expanded treatment facilities and would not exceed treatment requirements. Impacts would be less than significant.</p>	<p>n/a</p>	<p>LTS</p>
<p>Cumulative: The CWD anticipates sufficient water supply availability to accommodate the proposed project requirements as well as other anticipated development within its service territory. In addition, the demand from the proposed project would not exceed the daily demand value in current water agreement in place between the University and Camrosa. Therefore, the proposed project would not contribute to cumulative impacts to water supply. The proposed project would also increase wastewater generation at the project site, in comparison with the previously entitled development; however, the increase would not require new or expanded treatment facilities and would not exceed treatment requirements. Therefore, the proposed project would not contribute to cumulative impacts regarding wastewater conveyance or treatment</p>		

1 Introduction

1.1 Environmental Impact Report Background

This document is an Environmental Impact Report (EIR) that evaluates the proposed CSUCI Specific Reuse Plan Amendment and Phase 2 Development of the East Campus Residential Neighborhood Project (hereafter referred to as “the project”) located at the California State University, Channel Islands Campus in southern Ventura County, California. This section describes: (1) the purpose and legal authority of the EIR; (2) the scope and content of the EIR; (3) lead, responsible, and trustee agencies; and (4) the environmental review process required under the California Environmental Quality Act (CEQA).

1.2 Purpose and Legal Authority

The proposed project requires the discretionary approval of The Trustees of the California State University as well as potential approvals (both discretionary and ministerial in nature) from other public agencies. Therefore, it is subject to the requirements of CEQA. In accordance with Section 15121 of the State CEQA Guidelines, the purpose of this EIR is to serve as an informational document that:

...will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.

This EIR is to serve as an informational document for the public, California State University decision makers, as well as any other public agencies that may have discretionary review over certain aspects of the project. The process will culminate with Board of Trustees hearings to consider certification of a Final EIR and approval of the project.

1.3 Scope and Content

Of the 18 areas discussed in the Initial Study prepared for the project and provided in Appendix A, the following areas were identified as requiring further study in an EIR:

- Aesthetics
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

Table 2, below, lists the Notice of Preparation (NOP) Comments received during the public review of the Initial Study and the EIR Responses addressing these comments (see Appendix B for the NOP comments).

Table 2 NOP Comments and EIR Response

Commenter	Comment/Request	How and Where it was Addressed
Native American Heritage Commission (NAHC)	Recommends consultation with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed project to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.	See Section 4.8, <i>Tribal Cultural Resources</i> , for a discussion of the Native American consultation conducted under AB 52 for the proposed project.
Department of Fish and Wildlife, South Coast Region	Identifies a number of special status species (coastal California gnatcatcher, least Bell’s vireo, coastal cactus wren) that should be addressed in the EIR.	See Section 4.3, <i>Biological Resources</i> , for a description of the potential for special status species to occur at or around the site and the potential impacts of the proposed project.
	Recommends that the EIR include a complete project description and range of feasible alternatives.	See Section 2.0, <i>Project Description</i> , and Section 6.0, <i>Alternatives</i> , for the requested information.
	Provides a summary of the Department’s jurisdiction over waters of the State and notes that the Department is a Responsible Agency under CEQA if a Lake or Streambed Alteration agreement is required.	See Section 4.3, <i>Biological Resources</i> , and Appendix E for information related to impacts to jurisdictional waters. Impacts related to changes in drainage patterns and sedimentation are addressed in Section 4.5, <i>Hydrology and Water Quality</i> .
	Recommends mitigation measures to compensate for unavoidable impacts to wetlands and avoidance of water practices and structures that use excessive amounts of water	See Section 4.3, <i>Biological Resources</i> , and Appendix E for information related to impacts to jurisdictional areas. Impacts related to water supply are discussed in Section 4.12, <i>Utilities and Service Systems</i> , and Appendix K, <i>Water Supply Assessment</i> .
	Provides information regarding assessment of impacts and potential mitigation for impacts to species listed under the California Endangered Species Act and other special status species.	See Section 4.3, <i>Biological Resources</i> , for a description of the potential for special status species to occur at or around the site and the potential impacts of the proposed project.
Sandi Boyd	Queries whether enhanced public transportation is part of the proposed project.	Section 4.10, <i>Transportation and Traffic</i> , provides information about current public transit service to the campus. Improvements to the public transit system would be led by the providers of those services.
Ventura County Watershed Protection District (VCWPD)	This commenter indicates that on-site detention systems should detain any increase in peak flows, that design of the stormwater management system should include mitigation to ensure that peak flow will not increase during 10-year, 25-year, and 100-year storm events, that the hydrology report should follow VCWPD Guidance, that the EIR should analyze the potential impacts of the proposed alteration to the existing drainage culvert. The comment also provides information on the permit requirements if watercourses are affected by the proposed project.	This potential for the proposed project to alter the existing drainage pattern of the area is addressed within Section 4.5 <i>Hydrology and Water Quality</i> . The impact of the proposed alterations to the existing drainage basin are also discussed in Section 4.3, <i>Biological Resources</i> .

Commenter	Comment/Request	How and Where it was Addressed
Ventura County Air Pollution Control District	Provides information regarding the evaluation of air quality impacts that may result from the project, including emissions from construction and operation equipment and vehicle use as well as the potential risk of Valley Fever during construction activities.	Impacts related to construction and operational emissions are discussed in Section 4.2, <i>Air Quality</i> , and Section 4.4, <i>Greenhouse Gases</i> .
Camrosa Water District	Provides information regarding the District's permanent moratorium on any new development, the type of water infrastructure that should be included as part of the project and recommends a meeting to investigate mitigation projects. Also, suggests that fire flow analysis be included in the water system demand analysis. Queries the extent of additional cumulative development at the campus and provides information regarding the current water provision agreement with University.	Impacts related to water supply are discussed in Section 4.12, <i>Utilities and Service Systems</i> , and Appendix K, <i>Water Supply Assessment</i> .
Barbareno/Ventureno Band of Mission Indians(Chumash)	Provides comments related to the potential for Tribal Cultural Resources to be present at the site and in the project vicinity. Specific comments related to the wording of the mitigation proposed in the Initial Study are also provided.	Impacts related to Tribal Cultural Resources, including the mitigation proposed to address them are discussed in Section 4.11, <i>Tribal Cultural Resources</i> .
Caltrans, District 7	Recommends a Traffic Study be completed and provides suggestions on the content of the study.	Impacts related to traffic on Caltrans facilities are described in Section 4.10, <i>Transportation and Traffic</i> . Appendix I includes the Traffic Impact Assessment for the proposed project.

This EIR addresses the issues referenced above and identifies potentially significant environmental impacts of the project and other cumulative development in the vicinity in accordance with provisions set forth in the *State CEQA Guidelines*. The EIR also recommends feasible mitigation measures, where needed and possible, that would reduce or eliminate adverse environmental effects. In preparing the EIR, the current Specific Reuse Plan, existing EIRs, and other background documents were used for reference. A full reference list is contained in Section 7.0, *References and Preparers*.

The Alternatives section of the EIR was prepared in accordance with Section 15126.6 of the CEQA Guidelines and focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the project while feasibly attaining most of the basic project objectives. In

addition, the Alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA required "No Project" Alternative and two alternative development scenarios for the project area.

1.4 Lead, Responsible, and Trustee Agencies

The *State CEQA Guidelines* require the identification of "lead," "responsible," and "trustee" agencies. The Board of Trustees for the California State University is the "lead agency" for the proposed project because it has the principal responsibility for approving the project.

A "responsible agency" is a public agency other than the "lead agency" that has discretionary approval authority over certain components of a project (the CEQA Guidelines define a public agency as a state or local agency, but specifically exclude federal agencies from the definition). A "trustee agency" refers to 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 (for example, the California Department of Fish and Wildlife).

The proposed project will require review and approval from a number of agencies. Provided below is a list of the anticipated discretionary permits requiring approval by California State University, Board of Trustees as the lead agency for the proposed project.

- Revision to the Campus Master Plan
- Schematic plan approval
- Final approval of real property public-private partnership
- Others, as may be necessary

In addition to the discretionary approvals by the California State University, Board of Trustees, additional approvals will need to be obtained from California State University, Channel Islands Site Authority, acting in its role as a responsible agency for the proposed project. These additional approvals include, but may not be limited to, the following:

- Specific Reuse Plan Amendment adoption
- Approval of the proposed project
- Schematic plan approval
- Others, as may be necessary

The following includes a list of other government agencies that would or may have some level of approval for one or more components of the proposed project, as required by State CEQA Guidelines Section 15124(d):

- Ventura County Watershed Protection District
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- Others, as may be necessary

1.5 Environmental Review Process

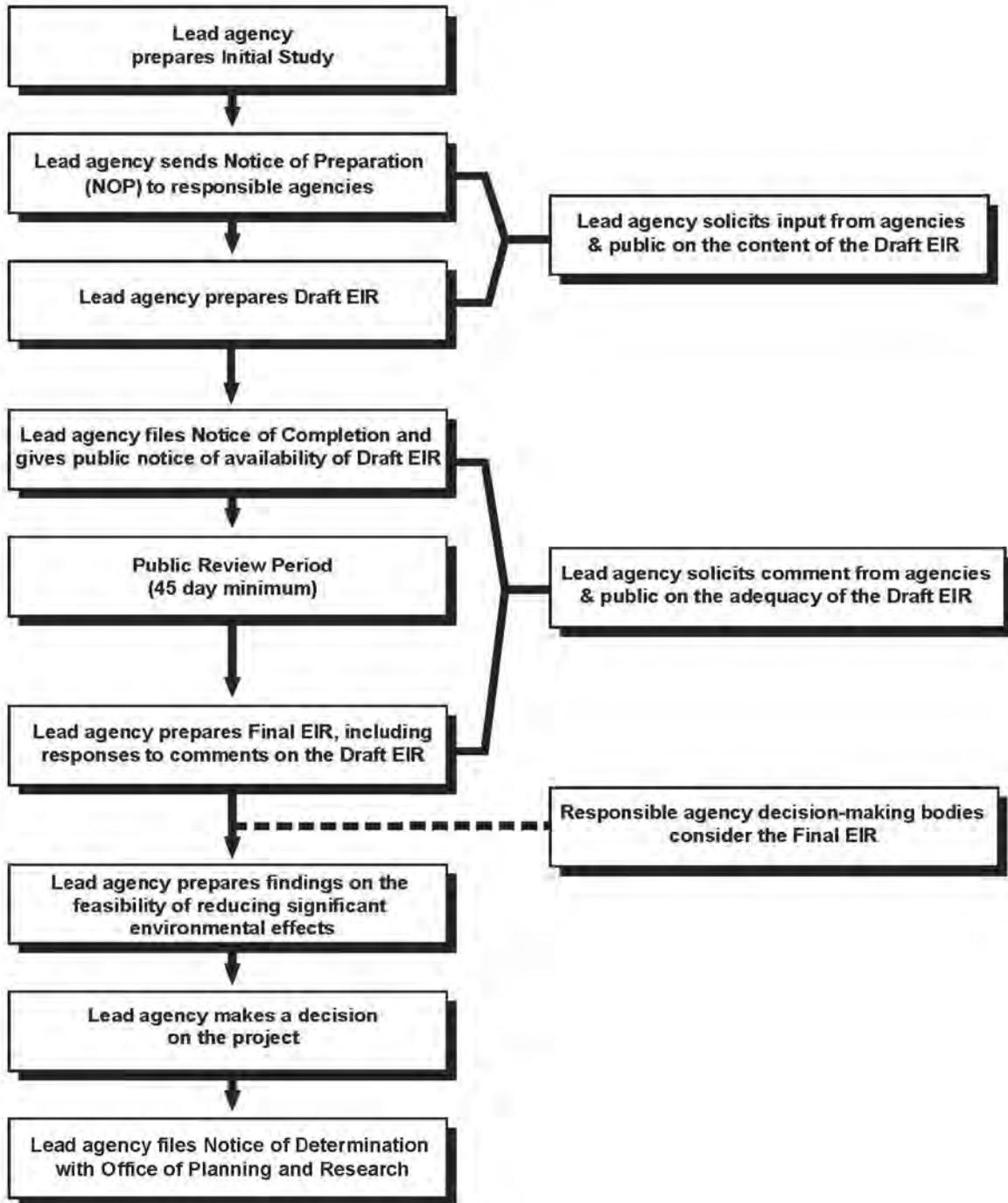
The environmental impact review process required under CEQA is summarized below and illustrated in Figure 1. The steps appear in sequential order.

1. **Notice of Preparation (NOP) Distributed.** Immediately after deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing. A scoping meeting to solicit public

input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency. Two public scoping meetings were held for the proposed project on December 15, 2016 and January 4, 2017.

2. **Draft EIR Prepared.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) alternatives; g) mitigation measures; and h) irreversible changes.
3. **Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice will be placed in the County Clerk's office for 30 days and sent to anyone requesting it. Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the Draft EIR from responsible and trustee agencies, and adjacent cities and counties. The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days, unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the Draft EIR may be required through the State Clearinghouse.
4. **Notice of Completion.** A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a Draft EIR.
5. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.
6. **Certification of Final EIR.** The lead agency shall certify: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project.
7. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.
8. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible. If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.
9. **Mitigation Monitoring/Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared. If the lead agency is a State agency, the lead agency shall file the notice of determination with the Office of Planning and Research within five working days after approval of the project by the lead agency. The Notice of Determination must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice of Determination starts a 30-day statute of limitations on CEQA challenges.

Figure 1 Environmental Review Process



2 Project Description

2.1 Project Applicant

Owner

The Trustees of the California State University
400 Golden Shore
Long Beach, California 90802-4275

Ground Lessee/Locally represented by:

Site Authority
California State University, Channel Islands
P.O. Box 2862
Camarillo, California 93011-2862

2.2 Project Location

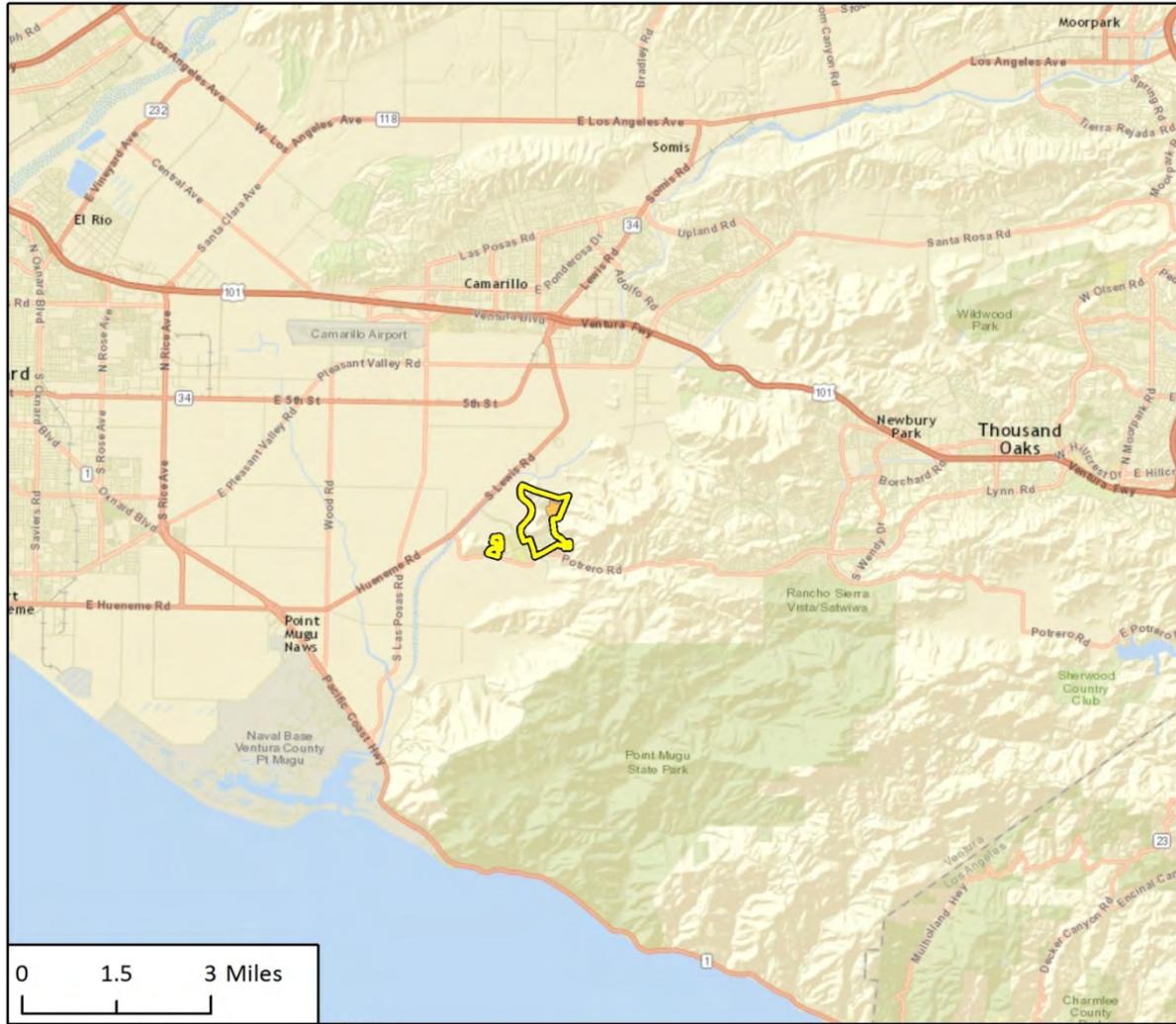
The project site (referred to as Phase 2 of the East Campus Residential Neighborhood, also known as University Glen Phase 2) is located on the California State University, Channel Islands (CSUCI) campus in southern Ventura County at the eastern edge of the Oxnard Plain and at the western flank of the Santa Monica Mountains. The CSUCI campus lies 2.5 miles south of the city of Camarillo, northeast of the intersection of Lewis and Potrero Roads, and east of Calleguas Creek. Primary access to the CSUCI campus is provided by U.S. Highway 101 (U.S. 101) to the north, via Lewis Road and Camarillo Street, or by State Route (SR) 1 to the southwest, via Las Posas Road and Hueneme Road. The project site is included within the CSUCI Specific Reuse Plan and is a part of the Community Development Area (CDA) designated within the plan. The CDA is planned for development of university-related support uses. Figure 2 shows the location of the Specific Reuse Plan area in its regional context. Figure 3 shows the geographic area of the East Campus, within which the Specific Reuse Plan amendment area and the proposed residential development are located. Figure 4 through Figure 6 and Figure 18 through Figure 21 provide photos of the site and surrounding area.

2.3 Description of Project

2.3.1 Project Background

The existing CSUCI campus is broadly organized into three areas of development: the Academic Core, which includes classrooms, administrative buildings, student housing, research facilities, offices, and Broome Library; a Town Center directly east of the Academic Core; and University Glen, which consists of residential areas to the east and north of the Town Center (Figure 7). Generally speaking, the Specific Reuse Plan guides development of University Glen (referred to as East Campus Residential Neighborhoods in prior documents, such as the Specific Reuse Plan), as well as two smaller areas, one to the west of the Academic Core (referred to as Business Campus or Research & Development Area in prior documents), and the far eastern end of the campus, which is planned for K-8 school facilities (CSUCI Site Authority 2000).

Figure 2 Regional Location



Imagery provided by ESRI and its licensors © 2016.

-  Specific Reuse Plan Area
-  Phase Two Residential – Project Site



Figure 3 Project Location



Imagery provided by Google and its licensors © 2016.

Figure 4 Site Photos – Photo Location Map



Figure 5 Site Photos



Photo 1: Aerial from southwest looking northeast over project site.

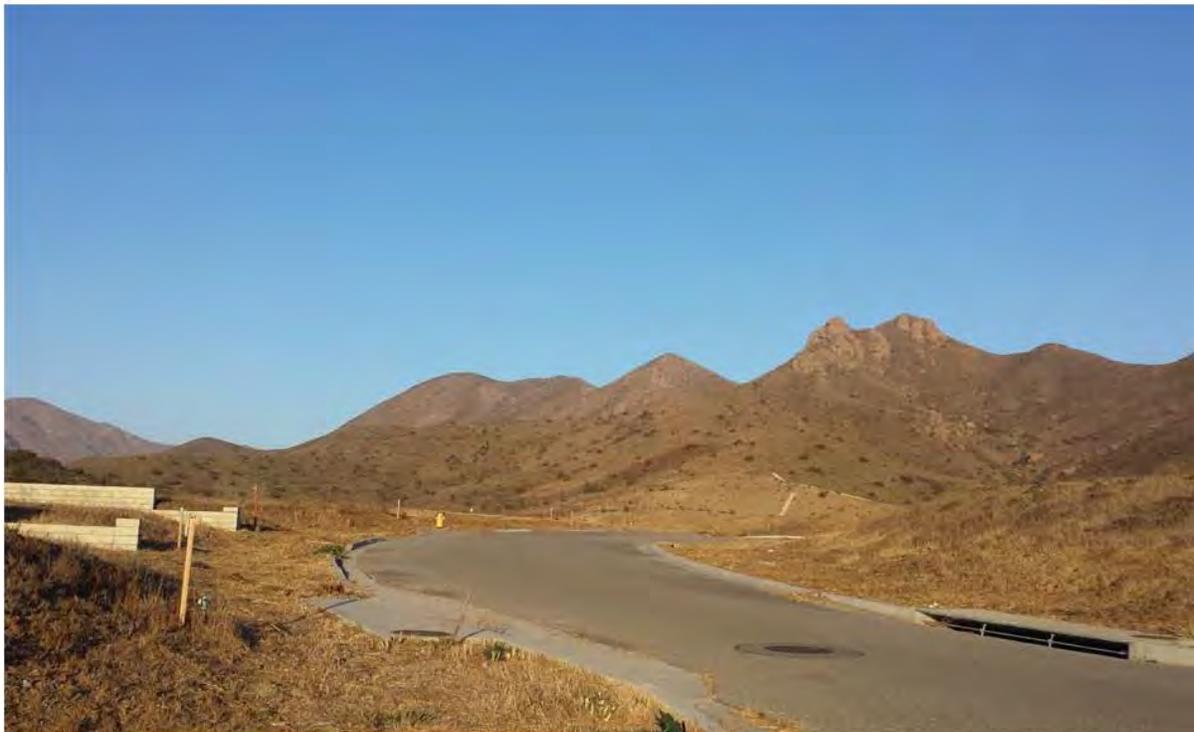


Photo 2: Facing northeast near the Channel Islands Drive and Santa Rosa Islands Drive intersection.

Figure 6 Site Photos

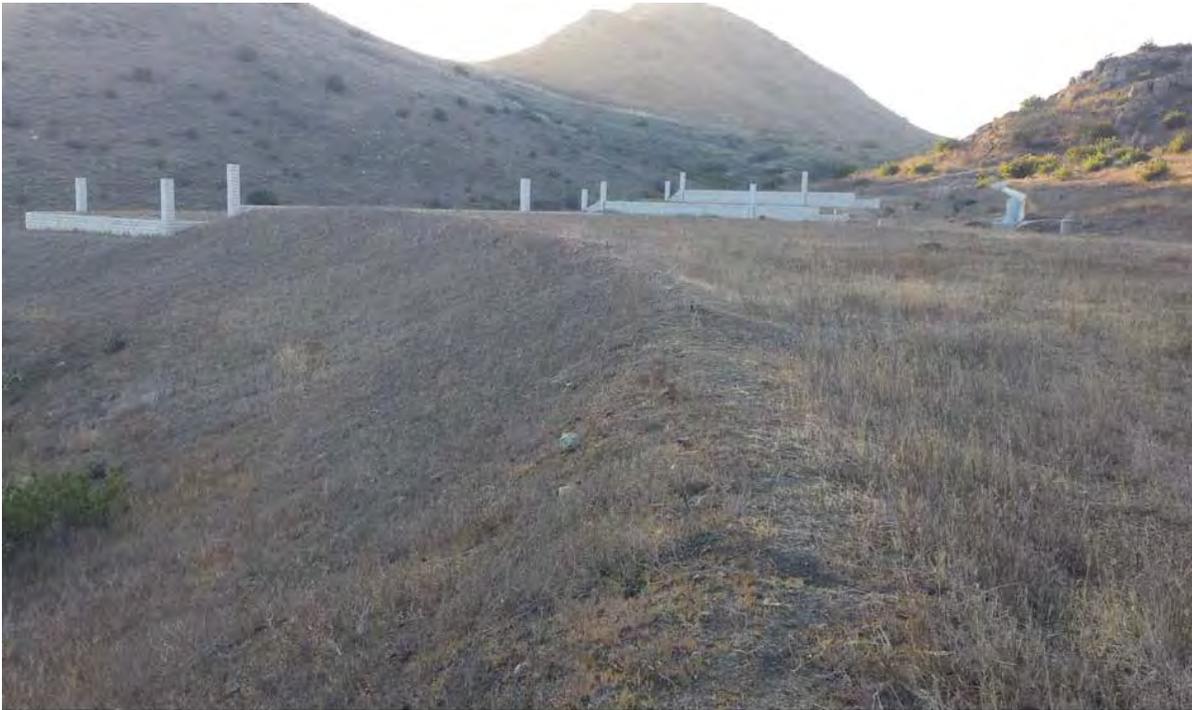


Photo 3: Facing west toward western boundary of project site.



Photo 4: Facing south from Inspiration Point toward drainage and project site.

Figure 7 Campus Master Plan



University Glen is intended to provide a range of housing opportunities for faculty and staff near the Academic Core and create a community that invites pedestrian activity and bicycling (CSUCI Site Authority 2000). The University Glen development has been subdivided into two phases. Phase 1 of the development resulted in a sizeable residential community and a mixed-use town center located at the pivot of the East Campus and the Academic Core, located east of the Broome Library. The proposed project consists of Phase 2, which is located on 32 acre undeveloped area that lies north of Phase 1 and extends eastward (shown in Figure 3). The majority of the 32-acre project site is level due to previous grading, and features level building pads, retaining walls, and an array of paved streets, curbs, and gutters.

2.3.2 Proposed Project

The proposed project offers a mix of multi-family apartments for rent, for-sale single-family attached/detached homes, and income/age-restricted apartments (Figure 8). Table 3 provides further details on the types of proposed units, including approximate square footages and parking spaces. The site plan (Figure 8) also includes approximately 3.7 acres of recreation/ park area that consists of a central park and clubhouse, two vista parks along the northern periphery of the project site, and various paseos and courtyards.

Figure 8 Site Plan

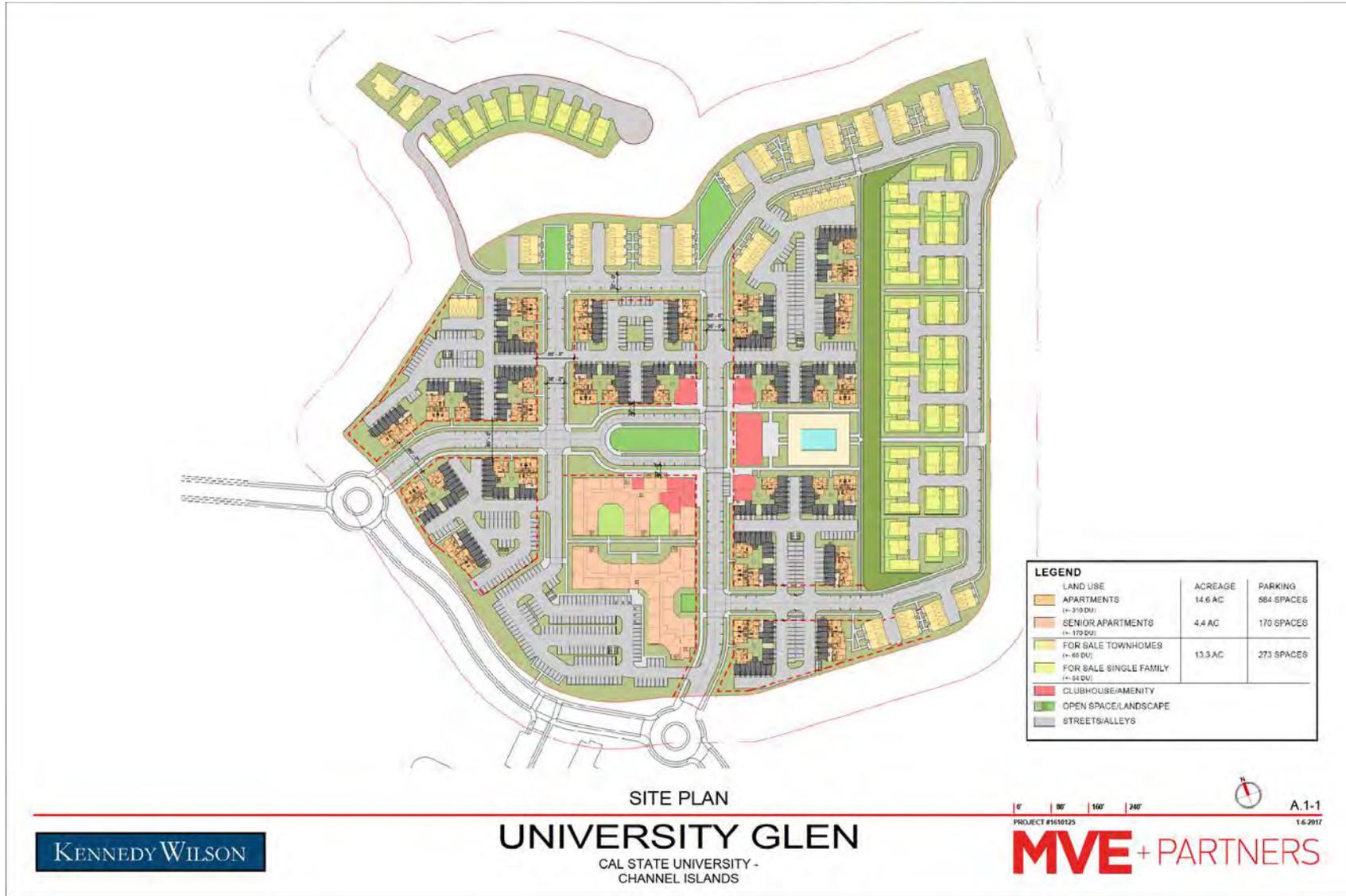


Table 3 Project Summary

Site Plan Totals				
Approximate Site Area (SF)	1,394,000 (32 acres)			
Approximate Building Footprint Area (SF)	343,000 (24.6 % site coverage)			
Approximate Landscape Area (SF)	460,000 (33% site coverage)			
Approximate Hardscape Area (SF)	607,000 (43.5% site coverage)			
Building Area				
Unit Type	Bedrooms x Bathrooms	Unit Size (SF)	Number of Units	Total Area (SF)
Apartment rental	1x1	800	50	40,000
Apartment rental	2x2	950	180	171,000
Apartment rental	3x2	1,200	80	96,000
Income/Age-Restricted rental	1x1	552	85	46,920
Income/Age-Restricted rental	2x1	712	85	60,520
Townhome for sale	2x2.5	1,450	22	31,900
Townhome for sale	3x2.5	1,650	22	36,300
Townhome for sale	3x3	1,850	22	40,700
Single Family for sale	3x2.5	1,675	15	25,125
Single Family for sale	3x2.5	1,727	14	24,178
Single Family for sale	5x3	2,120	14	29,680
Single Family for sale	4x3	2,400	11	26,400
Total			600	628,283
Community Amenities				
Amenity Type	Area (SF)			
Central Park and Community Center	60,984			
Neighborhood Parks-Vistas	53,578			
Neighborhood Parks-Paseos and courtyards	47,916			
Total	162,478			
Parking				
Parking Type	Number of Spaces			
Enclosed/Covered	508			
Standard	519			
Handicap Accessible	per California Building Code Standards			
Total	Approx. 1,027 spaces			
Notes: SF = square feet				

Development of the proposed project would require an amendment to the CSUCI Specific Reuse Plan and Campus Master Plan. Under the existing CSUCI Specific Reuse Plan, the project site is entitled for 242 single-family residential units. However, under the proposed project, up to 600 residential units would be developed on the 32 acres of vacant land. The Specific Reuse Plan currently designates the project site

for low to low-medium residential density (0-10 units per acre) development. The Campus Master Plan includes a corresponding density designation to the Specific Reuse Plan. The amendments would allow for low-medium to medium-high residential density (10-20 units per acre) at the project site.

Architectural and Landscape Design

The design of the buildings would feature stucco wall surfaces, tile roofs, and Mission-revival and Spanish-colonial revival architectural styles that would blend with and complement University Glen Phase 1 development. The proposed project would also include landscaping of roadways and greenways as established in the Specific Reuse Plan (CSUCI Site Authority 2000). In addition, all parking and hardscape areas require landscape setbacks, with requirements for landscaped areas adjacent to medium-high density homes to include trees. Figure 9, Figure 10, and Figure 11 show examples of the proposed architectural elevations for the market rate apartments, age/income-restricted housing, and amenity building components of the proposed project.

Infrastructure Improvements

To accommodate the increase in density, the number of lots, parcel and roadway configuration, and utility lines would be modified. Existing building pads and roads would be demolished and replaced in accordance with the site plan shown in Figure 8. Much of the existing utilities and infrastructure would also need to be replaced and/ or modified to serve the new site layout; however, no alterations to existing pipelines that cross the unnamed drainage that traverses the site would take place.

The proposed Domestic Water Master Plan (shown in Figure 12) involves using the University Glen Phase 1 domestic water conveyance system for the residences, including the use of dual domestic water storage and pressure tanks located south of the project site. Existing 8-inch polyvinyl chloride (PVC) domestic water pipes throughout the project site would remain as is, with additional 8-inch PVC “backbone” and “in-tract” piping added to the system to supply water to the proposed residences. Existing 12-inch PVC water main located primarily along the western boundary of the project site would be altered in the following ways:

- Proposed residences north of the Inspiration Point crossing would join the existing water main also located north of the Inspiration Point crossing
- Rerouted through the project site’s proposed alleys and streets
- Removed and demolished (recycled) along the western boundary, after the water main is rerouted through the proposed alleys and streets
- The (proposed) rerouted water main would join the existing 12-inch water main, located within the Channel Islands Drive roundabout along the western boundary of the project site
- The existing water main would be protected in place along the southern boundary of the project site

The proposed Domestic Water Master Plan also includes six University Glen sub-meters, primarily along the western boundary of the project site.

Figure 13 shows the conceptual Storm Drain Master Plan. Proposed alterations to the existing storm drain system at the project site include:

- Rerouting of proposed backbone storm drain through the proposed streets for on- and off-site flows
- The off-site flow includes new storm drain placed along the eastern boundary of the project site, flowing to the existing off-site drainage adjacent to the eastern boundary
- The on-site flow includes new storm drain placed from the northeastern area and southeast area of the project site along the proposed streets towards the western boundary where it connects to an existing storm drain under the Channel Islands and Santa Rosa Island Drive roundabout

Figure 9 Elevation: Market Rate Apartment



MARKET RATE - BUILDING A



MARKET RATE - BUILDING B

MARKET RATE - ELEVATIONS

UNIVERSITY GLEN

CAL STATE UNIVERSITY -
CHANNEL ISLANDS

KENNEDY WILSON

0' 8' 16' 24'
PROJECT #1619125
MVE + PARTNERS
A1.2
2-10-2017

Figure 10 Elevation: Income/Age Restricted Housing



Figure 11 Elevation and Floor Plan: Amenity Building

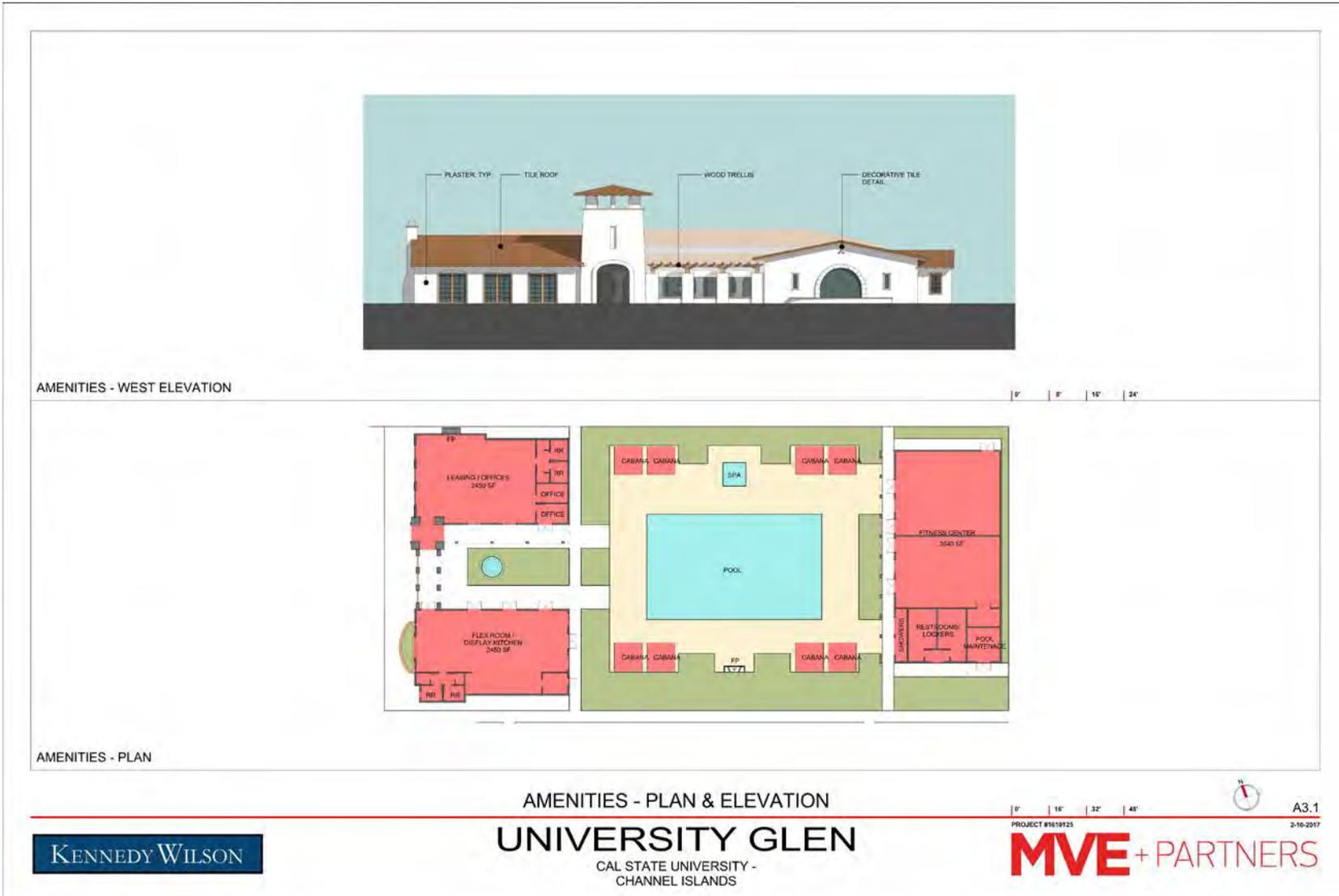


Figure 12 Conceptual Domestic Water Master Plan

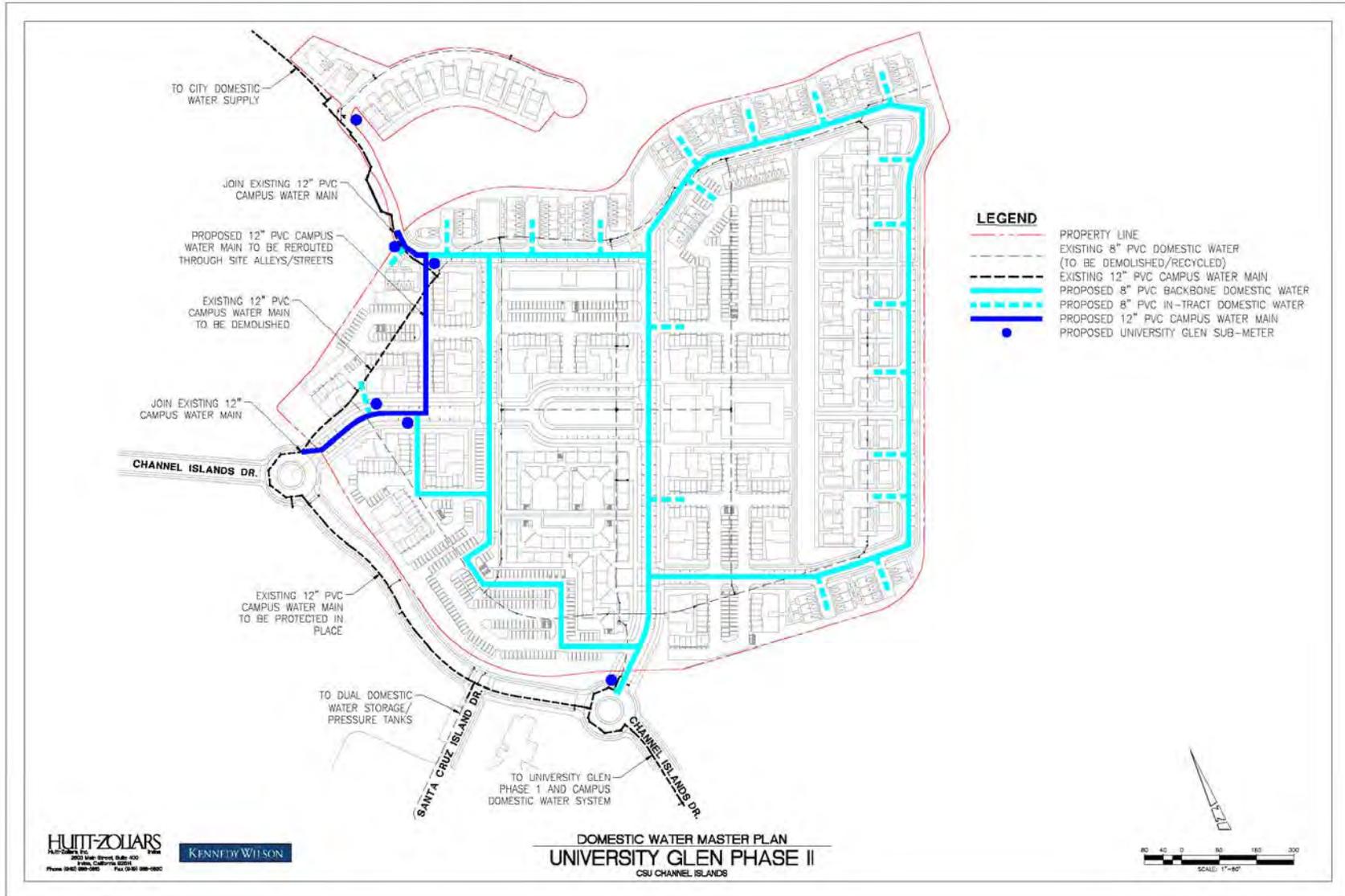


Figure 13 Conceptual Storm Drain Master Plan



- An existing flood control basin to the west of the project site, adjacent to Channel Islands Drive will remain as is with only minor improvements to the basin outlet. These modifications are described further later in this section.
- Series of proposed biofiltration and/or bioplanter boxes throughout the project site

The proposed Recycled Water Master Plan (shown in Figure 14) involves using an existing 8-inch PVC water main located along the western and southern boundaries of the project site, as well as utilizing existing recycled water infrastructure south of the project site, connecting to the existing University Glen Phase 1 Recycled Water System. Alterations to the existing 8-inch PVC recycled water mains are proposed as follows:

- An irrigation point connection will be made north of the Inspiration Point crossing
- An irrigation point connection near the southern roundabout along Channel Islands Drive
- Rerouted through the project site's proposed alleys and streets
- Removed and demolished (recycled) along the western boundary, after the water main is rerouted through the proposed alleys and streets
- The (proposed) rerouted water main will join the existing 8-inch water main, located northeast of the Channel Islands Drive roundabout along the western boundary of the project site
- The existing water main will be protected in place along the southern boundary of the project site

The proposed Sewer Master Plan (shown in Figure 15) would use an existing 12-inch PVC sewer main located near the western and southern boundary of the project site that is connected to the University Glen Phase 1 sewer system, and an existing 8-inch PVC sewer main located under the existing paved road north of the Inspiration Point crossing that connects to the existing 12-inch PVC sewer main southwest of the Inspiration Point proposed residences. The proposed project involves adding 8-inch PVC sewer "backbone" and "in-tract" mains throughout the proposed streets and alleys of the proposed project. The existing 12-inch PVC sewer that runs along Channel Islands Drive and serves the proposed project is to be protected in place while the 8-inch PVC sewer on the project site is to be demolished and recycled. The existing 8-inch PVC sewer that crosses the unnamed drainage would remain in place.

Figure 16 shows the conceptual Street Light Master Plan. Figure 17 shows the conceptual Circulation Plan.

The northern portion of the project site is accessed by a partially paved road called Inspiration Point that crosses an unnamed drainage feature and culvert. The area accessed by the unpaved Inspiration Point roadway (also referred to as Inspiration Point in this document) is at a higher elevation than the majority of the site and contains a eucalyptus tree grove. The drainage crossing does not provide adequate access to Inspiration Point and the culvert is currently undersized to withstand a 100-year storm event. Consequently, as part of the proposed project, the existing crossing and drainage culvert leading to Inspiration Point would be demolished and replaced with a new culvert and crossing sized to accommodate a 100-year storm event. The proposed culvert at the Inspiration Point crossing would be an approximately 30' long Corrugated Steel Pipe-Arch Culvert (11.41' x 7.25' - 5" x 1"). The culvert rests on a 24" section of ¾" rock bedding and is capped by two concrete retaining wall head walls. Scour protection at the inlet and outlet would be achieved by two 24" thick 20' x 20' rip rap pads. The proposed street crossing over the culvert would be 20' wide and has a 4' sidewalk on the east side. Barriers along the bridge are composed of a concrete/redwood rail with three bridge lights located on each side.

Figure 15 Conceptual Sewer Master Plan

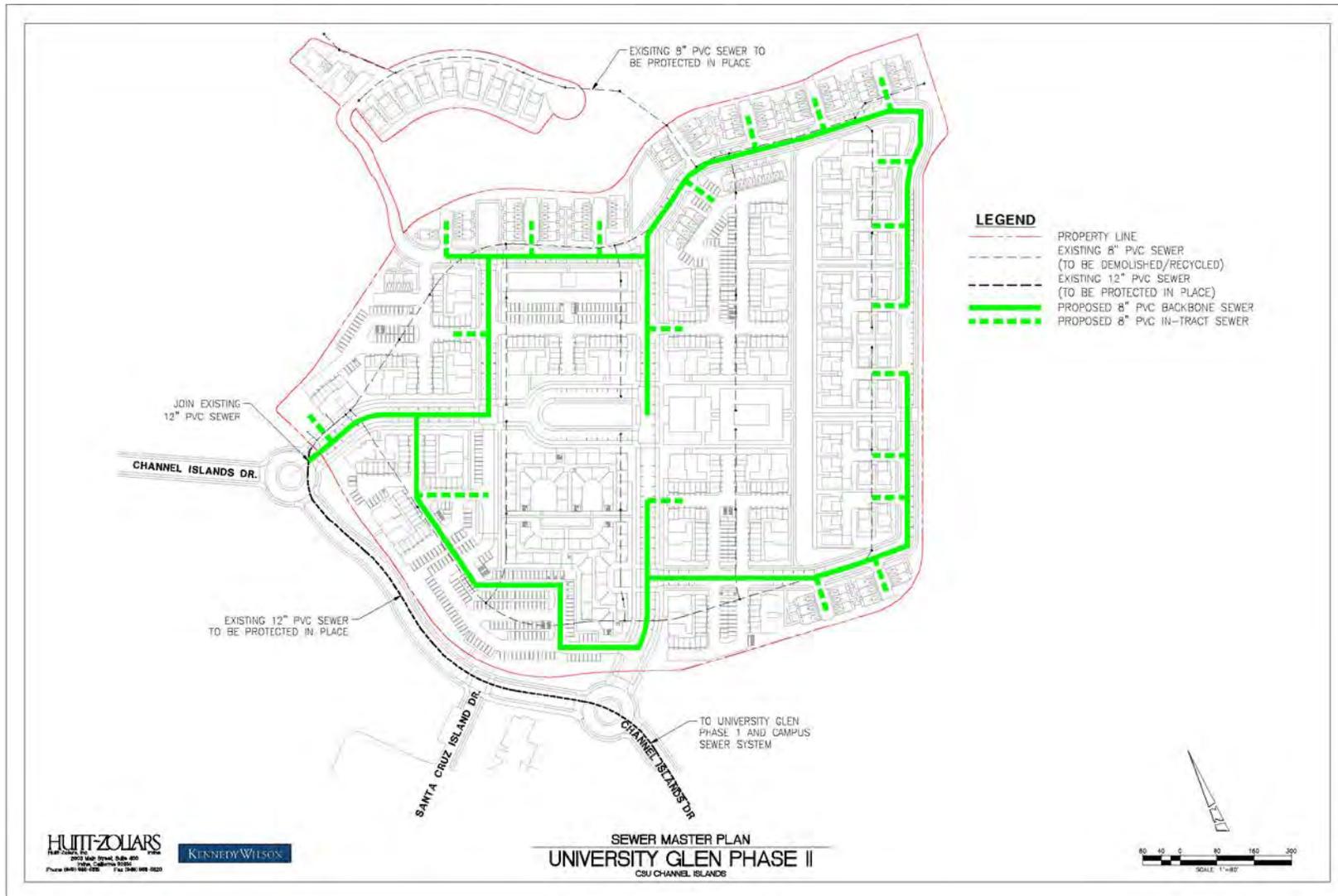
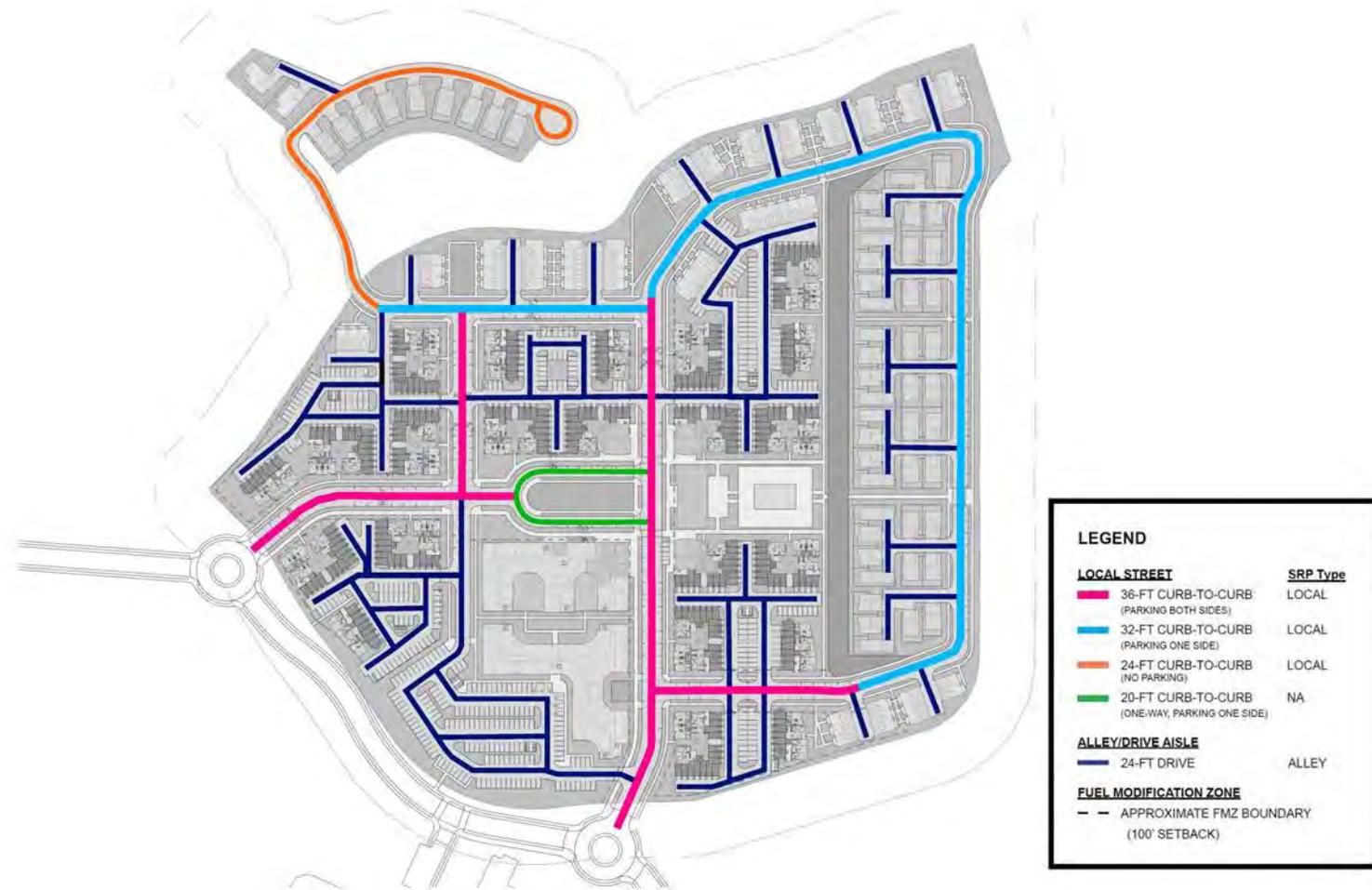


Figure 16 Conceptual Street Light Master Plan



Figure 17 Conceptual Circulation Plan



CIRCULATION PLAN

UNIVERSITY GLEN
CAL STATE UNIVERSITY - CHANNEL ISLANDS

0' 80' 160' 240'

PROJECT #1610125

MVE + PARTNERS

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Construction Phasing

Construction of the proposed project is anticipated to start as early as summer 2018 and continue until mid-2020. Table 4, below, summarizes the scheduled construction phasing.

Table 4 Proposed Construction Phasing

Construction Phase	Duration (weeks)	Start	Finish
Site Prep	16	7/11/18	12/11/18
Income/Age Restricted Housing	59	12/12/18	7/10/20
Apartment Housing	59	12/12/18	7/10/20
Single-Family Housing	60	12/12/18	7/21/20

Access and Parking

Regional access to the project site is provided by U.S. 101 and Lewis Road from the north to Camarillo Street, and SR 1 and Hueneme Road from the south. Local access is provided via Channel Islands Drive, which runs along the southwest border of the project site and provides access from the west and south. Access from the main campus north to the project site is provided by Channel Islands Drive.

The proposed project would provide approximately 1,027 new parking spaces, inclusive of accessible parking. Parking for apartment units would consist of a combination of garages, covered, and surface parking. Townhomes and single family homes would have onsite parking spaces, as well as individual one or two-car garages accessible via alleys.

Water Quality and Drainage

Onsite water quality treatment would be managed with multiple bio-filtration/bio-planter systems throughout the project site (Huitt-Zollars 2017a). Bio-filtration/bio-planter systems would be provided at all inlet locations to the public storm drain system, which would be modified for the proposed project as shown in Figure 7 (Storm Drain Master Plan). Catch basin inserts would also be installed. Treated on-site water would flow downstream and then comeingle with off-site water and ultimately be stored in the existing flood control basin along Camarillo Street.

As identified in the Hydrology, Hydraulics, and Water Quality Report for University Glen Phase 2 at CSU Channel Islands prepared by Huitt-Zollars (2017a; see Appendix C), in order to maintain current flow rates from the downstream drainage basin/constructed wetlands, the size of the outlet from the basin would need to be reduced. The existing culvert opening is 10.3' wide x 2.8' high and would need to be reduced to a 5.0' x 2.8' opening for hydrology purposes. The estimated disturbance area within the drainage basin to accommodate this change is 10' x 10' directly adjacent to the outlet within the basin.

Fuel Modification Zone

In general a 100-foot-wide zone would be maintained for fuel modification in the form of limited, select landscape types. Fuel modification would require removal of certain species of plants and limit the spacing of fuel intense shrubs and trees to meet Ventura County Fire Department requirements. The 100-foot buffer is measured from the most projected element of the eaves of structures measured out perpendicular from the structure for a minimum of 100 feet.

Roadways and yards that are properly landscaped for fire resistance would form a portion of the 100-foot fuel modification zone. However, the fuel modification zone would extend beyond the developed area of the site shown in Figure 25 in some locations. The Board of Trustees is the current owner of the property directly adjacent to the development area and has ownership over the property that would

comprise the fuel modification zone. Any fences, walls, planters, or other improvements in the modification zone would be of non-combustible materials.

Where an environmentally sensitive area of the site (e.g. the unnamed drainage on the northern boundary of the site) is within 100 feet of a structure, the 100 feet would be split where a portion would be on the development side of the environmentally sensitive area and the remainder on the other side. Fuel modification activities (if any) within the environmentally sensitive area would be limited to only those invasive non-native species that are a distinct fire hazard.

2.3.3 Specific Reuse Plan Development Areas

The CSUCI campus is not subject to County planning and land use policies. However, the Ventura County General Plan land use designation of the project site as State or Federal Facility is provided as information only (Ventura County 2016b). The General Plan land use designation of lands immediately surrounding the project site include State or Federal Facility to the north, south, and west, and open space, adjacent to the east.

The Specific Reuse Plan is the document that designates the development areas for the project site. The existing designation for the project site is Low to Low-Medium (L/LM) Residential Density of 0 to 10 dwellings per acre (CSUCI Site Authority 2000). The proposed designation is Low-Medium to Medium-High (LM/MH) Residential Density of 10 to 20 dwellings per acre. The Specific Reuse Plan development areas of the project site and surrounding land uses are summarized in Table 5.

Table 5 Proposed Development Areas

Lots	Specific Reuse Plan Designation
Project Site	
Existing	Low to Low-Medium Residential Density (0-10 dwellings/acre)
Proposed	Low-Medium to Medium-High Residential Density (10-20 dwellings/acre)
Surrounding Areas	
North	Open Space
South	Low-Medium to Medium-High (10-20 dwellings/acre) and Open Space
West	Academic Area and Open Space
East	Open Space

Source: California State University, Channel Islands Community Development Area Specific Reuse Plan (2000)

2.4 Project Objectives

The following objectives have been proposed for the project:

- Provide multiple types of high-quality, local housing to attract faculty and staff to the CSUCI campus from outside the area.
- Provide additional housing resources that blend with and augment the existing University Glen community to form one cohesive neighborhood.
- Provide a live/work environment associated with the CSUCI campus.
- Provide age- and income-restricted housing to respond to the community request for a mixed demographic of apartments, single-family detached houses, and townhomes.
- Provide additional active and passive recreational amenities for use by the entire University Glen community.

- Utilize the Private-Public Partner (P3) development process to provide a method for implementation of the project.

2.5 Required Approvals

The proposed project will require review and approval from a number of agencies. Provided below is a list of the anticipated discretionary permits requiring approval by California State University, Board of Trustees.

- Revision to the Campus Master Plan
- Schematic plan approval
- Final approval of real property public-private partnership
- Others, as may be necessary

In addition to the discretionary approvals by the California State University, Board of Trustees, additional approvals will need to be obtained from California State University, Channel Islands Site Authority, acting in its role as a responsible agency for the proposed project. These additional approvals include, but may not be limited to, the following:

- Specific Reuse Plan Amendment adoption
- Approval of the proposed project
- Schematic plan approval
- Others as may be necessary

The following includes a list of other government agencies that would or may have some level of approval for one or more components of the proposed project, as required by State CEQA Guidelines Section 15124(d):

- Ventura County Watershed Protection District
- California Department of Fish and Wildlife
- Regional Water Quality Control Board
- Others as may be necessary

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3 Environmental Setting

This section provides a general overview of the environmental setting for the project. More detailed descriptions of the environmental setting for each environmental issue area can be found in Section 4.0, *Environmental Impact Analysis*.

3.1 Regional Setting

The project site is located in Ventura County, at the western edge of the Santa Monica Mountains, with Calleguas Creek to the west. The broad, flat alluvial Oxnard Plain extends to the west of the project site, towards the Pacific Ocean. The lowlands of the plain west of the project site are extensively used for agriculture, particularly row crops and citrus. The city of Camarillo is the nearest urban center to the project site, located about 2.5 miles north. Most of the developed area of the city lies north of U.S. Highway 101 (U.S. 101), with a general east-west orientation. The city's urban edge has continued to expand with new developments southward of U.S. 101, although these areas remain within the Camarillo's Sphere of Influence.

Ventura County occupies over 1.2 million acres or approximately 1,875 square miles (County of Ventura 2016). The region is characterized by a Mediterranean climate, with rainfall concentrated in the winter months. Most rainfall occurs between November and March, with an average annual rainfall of approximately 14 inches. The wettest months of the year are January and February, with an average rainfall of 3.00 and 3.27 inches, respectively (Icside.com 2017). Summer temperatures in Ventura County average in the low- to mid-70s degrees Fahrenheit (°F) during the day and in the upper 40s to mid-50s°F at night (Western Regional Climate Center [WRCC] 2016). Average daytime temperature during the winter is in the mid-60s°F and nighttime temperatures average in the mid-40s°F (WRCC 2016).

3.2 Project Site Setting

The project site is located at the north end of the East Campus Residential area, approximately 0.5 mile northeast of the eastern edge of the main CSUCI campus. The residential uses in the Community Development Area (CDA) are intended to provide a range of housing opportunities for faculty and staff near the Academic Core and create a community that invites pedestrian activity and bicycling (CSUCI Site Authority 2000). The majority of the 32-acre project site is level due to previous grading, and features level building pads, retaining walls, and an array of paved streets, curbs, and gutters.

While the majority of the site is contained within a convex-shaped development area, the tail-like northern portion of the project site is accessed by a road (Inspiration Point) that crosses an unnamed drainage feature. The northern portion is at a higher elevation than the majority of the site and contains a eucalyptus tree grove.

3.3 Cumulative Development

The *State CEQA Guidelines* require the analysis of the cumulative effects of a project in combination with other past, present and reasonably foreseeable future development in the area. CEQA defines "cumulative impacts" as two or more individual events that, when considered together, are considerable or would compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other

nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Section 15130 of the State CEQA Guidelines prescribes two methods for analyzing cumulative impacts: (1) use of a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts; or (2) use of a summary of projections contained in an adopted general plan or related planning document.

The proposed project is a residential development with a proposed buildout and occupancy timeframe of mid-2018 to mid-2021. Based on the approximate buildout horizon, cumulative conditions in this EIR are based on a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts. Table 6 includes the list of projects considered in the cumulative analysis.

Table 6 Cumulative Projects List

No.	Description/Land Use	Size
City of Camarillo		
1	High-Turnover (Sit-Down) Restaurant	10.99 KSF
2	Single Family	26 Units
3	Apartments	10 Units
4	Apartments	368 Units
4	Apartments	82 Units
4	Apartments	83 Units
5	Condominium	87 Units
6	Apartments	22 Units
7	Condominium	129 Units
8	Single Family	9 Units
8	Single Family	4 Units
9	Single Family	4 Units
10	Specialty Retail Center	42.36 KSF
10	Specialty Retail Center	8 KSF
11	Specialty Retail Center	5 KSF
12	Specialty Retail Center	2.49 KSF
13	General Light Industrial	68.2 KSF
13	General Light Industrial	70.615 KSF
13	General Light Industrial	56.45 KSF
13	General Light Industrial	88.185 KSF
13	General Light Industrial	20.832 KSF
13	General Light Industrial	23.602 KSF
13	General Light Industrial	14.43 KSF
14	General Light Industrial	129.016 KSF
15	General Light Industrial	31.386 KSF
Ventura County		
16	Assisted Living	205 beds
CSUCI		
17	CSUCI FTE Campus Growth	1,000 students

Notes: CSUCI = California State University, Channel Islands, No. = Number, KSF = Thousand Square-Feet, FTE = Full-Time Equivalent (Student)

Source: Fehr & Peers 2017

Cumulative impacts are discussed within each of the specific impact analysis discussions in Section 4.0, *Environmental Impact Analysis*.

4 Environmental Impact Analysis

This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified in the Initial Study (Appendix A) as having the potential to experience significant impacts.

“Significant effect” is defined by the State CEQA Guidelines §15382 as:

...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with the setting and is followed by the impact analysis. Within the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by The Trustees of the California State University (as the CEQA Lead Agency) or other resource agencies. Other thresholds are universally recognized or have been developed specifically for this analysis. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation.

Each effect under consideration for an issue area is separately listed in bold text, with the discussion of the effect and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

Significant and Unavoidable: An impact that cannot be reduced to below the significance threshold level with implementation of reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the State CEQA Guidelines.

Less than Significant with Mitigation Incorporated: An impact that can be reduced to below the significance threshold level with implementation of reasonably available and feasible mitigation measures. Such an impact requires findings to be made under §15091 of the State CEQA Guidelines.

Less than Significant: An impact that may be adverse, but does not exceed the significance threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

No Impact: No impact would occur.

Beneficial Impact: The project would result in a beneficial impact on the environment.

Following each environmental effect discussion is a listing of mitigation measures (if required) and the residual effects or level of significance remaining after the implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect. The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts of the proposed project in conjunction with other future development in the area.

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4.1 Aesthetics

4.1.1 Setting

In evaluations of the aesthetic environment under CEQA, aesthetic resources can be defined as the collective and overall appearance of the built and natural environment from a visual quality perspective. This section analyzes the potential aesthetic effects, including the potential for viewshed alteration, impacts on important visual features, and the introduction of new sources of light and glare associated with the implementation of the proposed project.

Visual Character of the Project Site and Vicinity

Ventura County enjoys a high-quality visual environment owing to its unique and dramatic geographic features. These include its coastal location with broad river valleys and estuarine systems, mountain ranges, rich farmlands, and sweeping vistas of these features afforded from locations throughout the region. At a finer grain, the CSUCI campus vicinity enjoys special scenic features that include exposed rock formations, the channel and riparian vegetation of Calleguas Creek, mature agricultural windrow trees, and historic buildings dating from the site's use as a state hospital campus. The campus lies at the western edge of the Santa Monica Mountain range, and the Topa Topa branch of the coastal transverse range is visible to the north across the broad Oxnard Plain. These many features frame the scenic rarity and uniqueness of quality of the region.

The project vicinity is characterized primarily by the structures making up the California State University, Channel Islands (CSUCI) campus, both its academic and residential communities. The built environment is very definitively framed by the surrounding agricultural lands and the steep foothills of the Santa Monica Mountains.

The campus provides one of the most visually unified and aesthetically integrated campus developments in Ventura County. Great care has been taken to balance landscaped and built areas to complement one another (CSUCI 1998). Structures in the campus core area are primarily designed in the Spanish Colonial Revival style characterized by low-slung terra cotta tile-roofed buildings with arched openings and ceramic-tile detailing, and white-washed concrete or stucco facades. The CSUCI Master Plan calls for new campus buildings to be "designed in a manner that is sensitive to and reflective of the Mission Revival and Spanish Colonial Revival styles" (CSUCI 2007 and 2014).

The project site is located approximately 0.5 mile northeast of the CSUCI academic campus. The site occupies approximately 32 acres. The majority of the site is level as a result of previous grading, and features level building pads, retaining walls, and a number of paved streets, curbs, and gutters (see Figure 18, photo 5). While the majority of the site is contained within a circularly-shaped development area, the project site also includes an area to the northwest known as Inspiration Point, which is physically separated from the rest of the project site by an unnamed drainage which is crossed by a developed road.

The project site is surrounded by a hilly open space to the north, east, and west. The previously developed University Glen Phase 1 residential development is to the south. Figure 18, Photo 6 depicts an existing view of the nearby University Glen Phase 1 neighborhood from the project site, which is designed in an architectural style in keeping with the rest of the University campus.

Figure 18 Site Photos of Project Site and the University Glen Community



Photo 5: Note the undeveloped open space, rock outcroppings, and water tanks visible north of the project site.



Photo 6: Facing West-Southwest Towards University Glen Phase 1. Note the mature landscaping that interrupts views of the site from existing University Glen residences.

Views from the Project Site

Views surrounding the project site are dominated by hills and ridgelines, constituting the western edge of the Santa Monica Mountain range. The collective aesthetic of the surrounding foothills and mountains provides for dramatic vistas in winter and spring months, when, following rainfall events, the vegetation covering the steeply sloping lower elevations turns green. The project site sits inside a small valley surrounded by mountainous features ranging from roughly 400 feet in elevation to the north, west and south, to over 1,000 feet to the east.

Channel Islands Drive provides the only road for ingress and egress from the project site, connecting to Camarillo Street to the west and Rincon Drive to the south. Views from within the site to the north, east and west would encompass the surrounding Santa Monica Mountains. In addition, views from Channel Islands Drive leaving the project site include the University Glen Phase 1 residential area and adjacent open space and University core along the road to the south, and the agricultural areas of the Oxnard Plain along the road to the west.

Figure 19 and Figure 20 show examples of views available from the project site and immediately surrounding areas. Due to the dramatic topography and enclosed valley location, views into the project site from surrounding locations are quite limited. The project site can only be viewed from roads within the immediate vicinity of the northern edge of University Glen community and those leading out of the project site.

Figure 19 Site Photos of Project Site Viewshed



Photo 7: View from the Project Site Looking South-Southwest Toward the Existing Hillside and Open Space Areas.



Photo 8: View from the Project Site Looking Southwest Toward the Existing University Glen Development and the Ridgeline in the Distance.

Figure 20 Site Photos of Project Site Viewshed



Photo 9: View from the Project Site Looking Southeast Towards the Prominent Ridgelines in the Distance.



Photo 10: View from the Project Site Looking Northeast.

Scenic Resources

COUNTY-DESIGNATED SCENIC RESOURCES

CSUCI is not subject to County planning and land use regulations such as the Ventura County General Plan. However, information regarding County-designated scenic resources is provided here for information purposes. The Ventura County General Plan highlights specific areas in the region as eligible for listing or listed as scenic resources areas; however, there are no scenic resource areas designated by the Ventura County General Plan in the vicinity of the CSUCI campus (Ventura County 2011b).

SCENIC HIGHWAYS

There are no State-designated scenic highways within the project vicinity (Caltrans 2016). Both Lewis Road and Potrero Road are listed in the County's General Plan as "eligible" County Scenic Highways and both roads are the public viewpoints with the most possible direct views of the project site (Ventura County 2011b). Views of the project site from Lewis Road and Potrero Road are both obscured by the intervening topography, existing development at the University, existing vegetation and the substantial distances between the two roadways and the project site. No views are available from Potrero Road of the project site, which is 0.6 mile from Potrero Road at its closest point. Brief views of the site from Lewis Road, which is about one mile from the project site, could be available if the intervening vegetation was not present. Overall, the Lewis Road viewshed is dominated by agricultural fields in the foreground with Round Mountain and the Santa Monica Mountains visually prominent in the background. Round Mountain forms a major visual landmark, roughly one mile south west of the project site, and is visible in many directions for several miles.

Light and Glare

The project site is adjacent to University areas which are mainly lighted along the University's internal roadway system. Lighting was provided with updated 1930s-style candle standards. These were retrofitted in 1999 and ongoing to provide more efficient illumination of the academic area of the campus. University Drive has contemporary street lighting on poles and acts as the primary access to the University campus from Lewis Road. Camarillo Street remains unlit and is the primary access to the project site from Lewis Road. Channel Islands Drive has street lighting in character with the University Glen neighborhood that extends to the culvert/bridge crossing about 160 yards from the intersection at Camarillo Street leaving that area dark, however the project site area about 300 yards farther up Channel Islands Drive is adjacent to an area with an existing level of nighttime glow when viewed from the nearby roadway network. Daytime glare typically results from automobiles and window glazing. The exception is the co-generation facility in the western edge of the Academic Core, which includes a number of highly reflective framing structures and stainless steel stacks. In general, the project site is not a major source of daytime glare due to the lack of existing development.

The CSUCI campus is located approximately 3.5 miles northeast of Naval Base Ventura County Point Mugu. As identified in the Naval Base Ventura County Joint Land Use Study (JLUS; Ventura County Transportation Commission 2015), man-made lighting (street lights, airfield lighting, building lights) and glare (direct or reflected light) that disrupts vision. Light sources from commercial, industrial, recreational, and residential uses at night can cause excessive glare and illumination, impacting the use of military night vision devices and air operations. Light pollution from development can make it difficult for night training to occur effectively. The JLUS does not provide a geographic area within which increased light or glare could result in impacts on nighttime flight training operations. Instead the JLUS recommends the development of standard conditions of approval to protect night skies from significant increases in ambient light and glare, including designs that ensure lighting is limited to illuminating the site in question (no spill over lighting), no uplighting, require specific siting locations of lighting fixtures so

wasted light is not reflected upwards, and lighting should be designed to direct light downward and fixtures be shielded.

Current campus guidelines (2014) for street, parking, and building lighting are consistent with the above statements from the JLUS and defines types of poles, fixtures, color, shielding, lumen limitations, light rendition, spacing, height, etc. with intent of being compatible with the existing University Glen aesthetic.

4.1.2 Regulatory Setting

As described in Section 2.0, *Project Description*, the Specific Reuse Plan guides development of University Glen (referred to as East Campus Residential Neighborhoods in prior documents, such as the Specific Reuse Plan), as well as two smaller areas, one to the west of the Academic Core (referred to as Business Campus or Research & Development Area in prior documents), and the far eastern end of the campus, which is currently planned for K-8 school facilities (CSUCI Site Authority 2000). The Specific Reuse Plan incorporates the CSU Channel Islands Architectural Design Guidelines manual dated April 17, 2000. It should be noted that the Guidelines refer to the CSUCI Campus Master Plan, which has been amended since preparation of the Guidelines. This document is intended to guide the physical design details of buildings, open space areas, parking areas, and other features of the campus built environment. Site plan review and approval will be conducted by the Site Authority, while schematic architectural designs and building site plans will be jointly reviewed and approved by the Site Authority and Board of Trustees.

4.1.3 Methodology and Significance Thresholds

Methodology

The evaluation of impacts to aesthetic/visual resources involves qualitative analysis that is inherently subjective in nature. Different viewers react to viewsheds and aesthetic conditions differently. Visual or aesthetic resources generally are defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, a visual or aesthetic impact may occur. This evaluation measures the existing visual resource against the proposed project. The project site was observed and photographically documented in its surrounding context. The Campus Master Plan and Specific Reuse Plan were reviewed for policy instruction relative to visual resources and design policy. CEQA distinguishes between public and private views, and focuses on whether a project would affect the public environment rather than the views of particular individuals. Effects on private views, such as from residential or commercial structures, are not considered significant impacts on the environment pursuant to CEQA (*Ocean View Homeowners Assn., Inc. v. Montecito Water District* [116 Cal. App. 4th 396]). Accordingly, views from private residences are not discussed in this impact analysis.

Views may be characterized in terms of foreground, middleground, and distant background views. Foreground views are those immediately presented to the viewer, and include objects at close range. Middleground views occupy the center of the viewshed, and tend to include objects that dominate the viewshed in normal circumstances. Background views include distant objects and other objects that form the horizon.

Significance Thresholds

According to Appendix G of the *State CEQA Guidelines*, an aesthetic impact from the proposed project would be significant if the project would:

- 1 Have a substantial adverse effect on a scenic vista.

- 2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a state scenic highway.
- 3 Substantially degrade the existing visual character or quality of the site and its surroundings.
- 4 Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

An impact is considered significant if it can be reasonably argued that (a) the change would adversely affect a viewshed from a public viewing area (such as a park, roadway, or other publicly-accessible property), (b) new light and glare sources would be introduced that substantially alter the nighttime lighting character of the area, or (c) an existing identified visual resource would be adversely altered or obstructed.

In this analysis, modifications to the viewshed were considered less than significant if the modification would be unnoticeable or visually subordinate to existing predominating features. A modification that would be visually dominant or one that would significantly and adversely modify the existing view is considered a significant impact.

4.1.4 Project Impacts and Mitigation Measures

Impact AES-1 : LEWIS ROAD AND POTRERO ROAD ARE DESIGNATED AS "ELIGIBLE" COUNTY SCENIC HIGHWAYS. WHILE CSUCI IS NOT SUBJECT TO THE VENTURA COUNTY GENERAL PLAN, POTENTIAL IMPACTS TO THESE ROADWAYS ARE PROVIDED FOR INFORMATION PURPOSES. VIEWS OF THE PROJECT SITE FROM BOTH LEWIS ROAD AND POTRERO ROAD WOULD BE BLOCKED BY THE INTERVENING TOPOGRAPHY AND EXISTING VEGETATION. NO IMPACT ON SCENIC VISTAS WOULD OCCUR. (THRESHOLD 1)

A site reconnaissance visit was conducted to document views of the project site from the existing "eligible" scenic roadways on November 22, 2016. As observed during the site visit, views of the project site from Lewis Road are effectively blocked by the surrounding mountains and existing vegetation along the intervening roadways, University Drive and Camarillo Street. Views from Potrero Road are blocked by the intervening topography and existing development at the University.

Figure 21 provides views in the direction of the project site from Lewis Road. As shown, the Santa Monica Mountains dominate views looking southeast towards the project site. The substantial distances between Lewis Road and the project site, approximately one mile, along with the height of the intervening topography, effectively block views of the project site from Lewis Road. The only possible view access from Lewis Road would be along Channel Islands Drive where it intersects with Camarillo Street. Given the speed at which motorists would be traveling on Lewis Road, the presence of mature trees at the intersection of Channel Islands Drive and Camarillo Street, and the curving nature of Channel Islands Drive the potential for motorists to be able to view the project site along Channel Islands Drive from Lewis Road would be fleeting at best. As such, the proposed project would result in no impact scenic vistas.

Figure 21 View of Project Site from Lewis Road



Photo 11: Views Facing Southeast Toward the Project Site from Lewis Road. Note the surrounding topography that blocks views of the site from this roadway.

Mitigation Measures

No mitigation measures are required.

Impact AES-2 : THE PROPOSED PROJECT WOULD NOT BE VISIBLE FROM EITHER U.S. 101 OR SR 1. THEREFORE, THE PROPOSED PROJECT WOULD NOT DAMAGE SCENIC RESOURCES ALONG A STATE SCENIC HIGHWAY. NO IMPACT WOULD OCCUR. (THRESHOLD 2)

According to the California Scenic Highway Mapping System (2016), State Route (SR) 33 is the only officially designated State Scenic Highway located in Ventura County and is not located in proximity to the University. In addition, there are a number of eligible state scenic highways, not officially designated, including U.S. Highway 101 (U.S. 101) and SR 1.

SR 1 is located 4.5 miles southwest of the project site in a north to south alignment. Some of the previous development that has taken place at the University is visible from SR 1. However, views of the project site are blocked from SR 1 by the foothills of the Santa Monica Mountains and by existing development at the campus. Therefore, the proposed project would not be visible from the SR 1 corridor in either direction.

U.S. 101 is located roughly 3 miles north of the project site, in an east to west alignment. Views from U.S. 101 where it passes in proximity to the University are primarily of the city of Camarillo. The city is highly developed along U.S. 101, generally blocking foreground and middleground views of the base of the Santa Monica Mountains with existing buildings and landscaping. The distance between U.S. 101 and the project site make it impossible to see the project site due to existing development and atmospheric

perspective, creating a slight haze along the mountain range looking from the city. Thus, the proposed project would not be visible from U.S. 101. Therefore, the proposed project would have no impact on scenic resources along U.S. 101.

Mitigation Measures

No mitigation measures are required.

Impact AES-3 : ALTHOUGH THE PROJECT WOULD ALTER VIEWS OF THE PROJECT SITE, THE RESULTING CHARACTER AND QUALITY OF THE PROJECT SITE WOULD BE CONSISTENT WITH THE SURROUNDING AREA AND EXISTING DEVELOPMENT AT THE UNIVERSITY. IN ADDITION, THE PROPOSED PROJECT WOULD NOT BLOCK VIEWS OF THE SCENIC FEATURES IN THE AREA, NAMELY THE SURROUNDING HILLS AND RIDGELINES. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 3)

The project site is currently vacant with graded building pads and paved roads. The project site is currently designated for Low to Low-Medium Residential density development (up to 10 units/acre). As part of the proposed project, the designation would be revised to allow Low-Medium to Medium-High Residential density development (10-20 units/acre). The proposed project would include development of up to 600 multi-family and single family residential units on the project site, which is currently entitled for 242 single-family residential units in the existing Specific Reuse Plan. The proposed project would alter the visual character of the project site relative to what currently exists, as well as what is currently entitled on the project site.

The proposed project would include two- to three-story townhomes at heights of 28 feet to 40 feet, three-story age/income-restricted and market rate apartments at a height of 40 feet, and two-story single-family detached homes at a height of 28 feet. The project site would be developed in a manner that provides for a seamless expansion of the existing University Glen Phase I community, to include a similar scale, character, quality, and connective nature with the proposed University Glen Phase 2. The structures would be a maximum of 40 feet in height, similar to the existing University Glen Phase 1 housing located directly south of the project site and would be similar in massing to those structures. Figure 22 and Figure 23 show examples of the proposed conceptual architectural design for the market rate apartments, and age/income-restricted housing, along with the heights of the structures. Proposed architecture and design would include stucco wall surfaces, tile roofs and mission-revival and Spanish-colonial revival architectural styles in order to blend with and complement the existing University Glen Phase 1 neighborhoods. The proposed project would also include landscaping of roadways and greenways as established in the Specific Reuse Plan (CSUCI Site Authority 2000). In addition, all parking and hardscape areas require landscape setbacks, with requirements for landscaped areas adjacent to medium-high density homes to include trees.

Figure 22 Conceptual Elevation and Heights of Proposed Apartments



Figure 23 Conceptual Elevations and Heights of the Proposed Income/Age-Restricted Housing



In addition to the main part of the project site, up to 11 single-family homes would be developed adjacent to the hillside within the Inspiration Point portion of the project site. During the site visit on November 22, 2016, the visual character of the Inspiration Point area and main project site were catalogued. Figure 24, Photo 13 shows a view looking west from the Inspiration Point area. The existing culvert on the unnamed drainage is shown in the bottom of the view, while Round Mountain is shown in the middleground of the view. Figure 24, Photo 14 shows the view from the northeast corner of the project site looking northwest towards Inspiration Point. As shown in these photos, Inspiration Point is also graded with existing infrastructure in place and the surrounding hillsides have minimal vegetation due to the 2013 Springs Fire that occurred in the area.

The development of the proposed residences at Inspiration Point would be at the base of the existing hillside on an already graded area. Due to the location the development at the base of the existing hillside, the site plan for Inspiration Point would preserve those features along the hillside that are unique in character, such as the dramatic ridgelines, and as such would not substantially degrade the existing character of the project site. The placement of the buildings would be along the already developed roadway, visible in Figure 24, Photo 14. The proposed buildings would be two stories in height, minimizing impacts to the visual character of the surrounding mountains by reducing obstruction of views of the topography. The incorporation of landscaping would provide a softening effect on the building features, and would serve to ease the contrast between the structures and the open space vegetation surrounding the proposed residences at Inspiration Point.

Construction of the new Inspiration Point culvert would alter the visual character of the existing drainage crossing, which is part of an unpaved, perimeter road. The proposed culvert would be composed of retaining walls and a steel corrugated culvert and would include concrete sidewalks. These upgrades would alter the visual character of the existing concrete culvert structure, visible in Figure 24, Photo 13.

As noted above, the proposed project would be similar to University Glen Phase 1 in style, scale, character, and quality and be consistent with the overall architectural style of the wider University campus. Articulation and building massing of the three story buildings would be consistent with those developed in University Glen Phase 1, through the planned use of architectural features such as cut-outs, to minimize massing effects of large buildings (see Figure 22 and Figure 23). Though the proposed project would include an increase in density over the existing condition as well as beyond what is currently entitled at the project site under the Specific Reuse Plan, the placement of buildings of similar mass adjacent to the three story structures already present along Rincon Drive (Cathedral Cove) and along Channel Islands Drive (Frenchys Cove) of the site, would reduce the potential for the proposed project to result in a visual character that is inconsistent with nearby residential development. The current visual quality of the project site is characterized as moderate since it is partially developed with streets and graded building pads present. Placement of the new buildings at the site would potentially affect the visual character of the project site through the interruption of sight lines to the surrounding mountains and ridge lines from nearby roadways and existing development. However, the orientation of the buildings, decoration and planned articulation of roof lines and installation of landscaping would serve to soften the alteration of the visual character and maintain important visual features, such as views of the nearby mountains and ridgelines, which contribute to the site's and surrounding area's visual quality. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required.

Figure 24 Visual Character of the Project Site

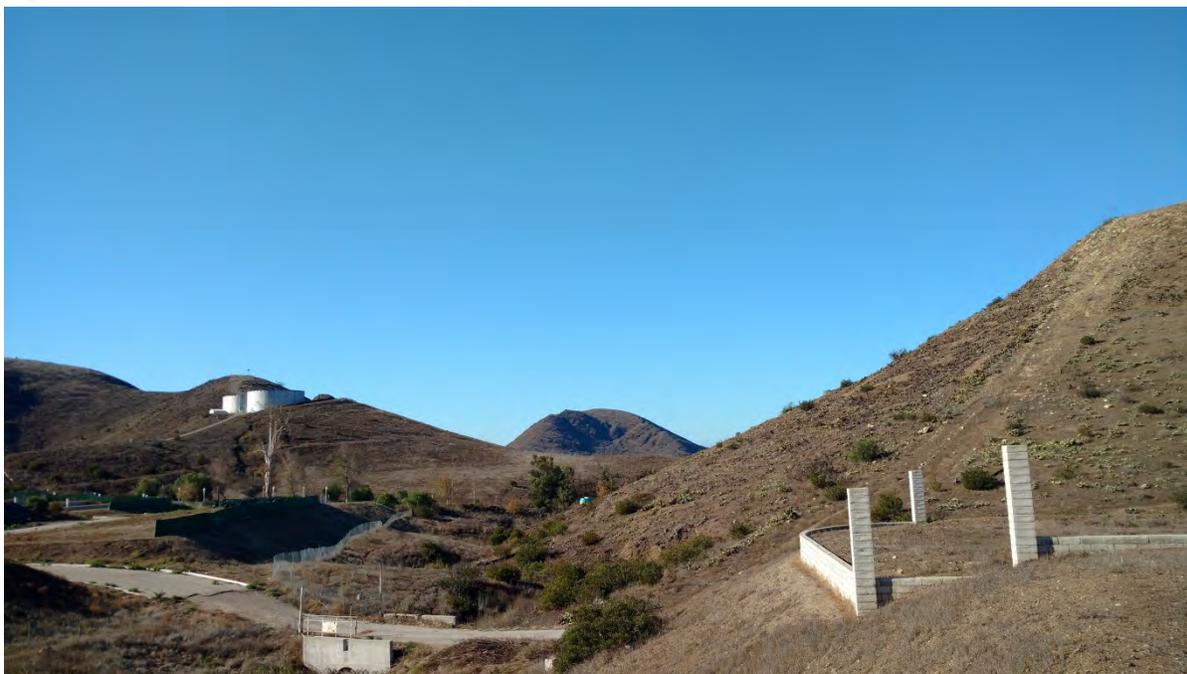


Photo 13: View from Inspiration Point Area Looking West Toward Round Mountain.



Photo 14: View from Northeast Corner of the Main Project Site, Looking Northwest Towards Inspiration Point.

Impact AES-4 : THE PROPOSED PROJECT WOULD RESULT IN NEW SOURCES OF LIGHT AND GLARE AT THE PROJECT SITE. HOWEVER, THESE LIGHT AND GLARE SOURCES WOULD BE SIMILAR TO THOSE AT EXISTING, DEVELOPMENT IN THE VICINITY OF THE PROJECT SITE AND WOULD BE REQUIRED TO COMPLY WITH UNIVERSITY DESIGN GUIDELINES AIMED AT AVOIDING IMPACTS FROM LIGHT AND GLARE ASSOCIATED WITH NEW DEVELOPMENT. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 4)

Development of the project site would increase existing nighttime lighting at the project site both as a result of street lighting, as shown in the Conceptual Street Lighting Master Plan (see Figure 16 in Section 2.0, *Project Description*), and from lights on and within the buildings themselves. Based on the conceptual design for the buildings (see Figure 9, Figure 10 and Figure 11, in Section 2.0, *Project Description*) and the University Design Guidelines, the proposed project would not contain a high level of reflective surfaces.

The addition of up to 600 residential units at the site would increase light and glare impacts during daytime and nighttime hours relative to existing site conditions. Potential sources of new nighttime light include light spillover from residential windows, outdoor security lighting, and streetlights. The type and level of light produced by the proposed project would be consistent with existing residential development in the area, including that associated with medium-high density structures and communal spaces located directly adjacent to the project site. The University's Specific Reuse Plan and Design Guidelines require that all new lighting poles and fixture heads be similar in aesthetics appearance to the existing adjacent development. As to intensity and color spectrum, some technology changes have occurred and code efficiency requirements have changed since 2000; the intensity and color rendition in addition to better shielding now, as required and/or limited by building and energy codes, can still substantially honor the intentions of the Design Guidelines.

The proposed project would also be subject to Landscape Design guidelines (including in the University Design Guidelines previously referenced), which require site lighting to be achieved with the greatest extent possible through shielded lighting fixtures mounted on the buildings. The CSUCI Campus Master Plan also requires a lighting hierarchy consistent with the Green Campus program be established for roadways and pedestrian areas. In accordance with the Campus Design Guidelines, the style, location and height of lighting fixtures must be compatible with existing development. Note that the guidelines regarding lighting have been updated since adoption of the Specific Reuse Plan to respond to technology, reduced energy usage, and better shielding, but that the updated Guidelines are considered compatible with the existing development. This would ensure that the proposed project would not result in negative aesthetic or safety impacts due to lighting, including interference with nighttime flight training from Naval Base Ventura County.

Glare is primarily a daytime phenomenon, caused by sunlight reflecting from structures, roadways, and cars. However, glare can also be created at night by vehicle headlights. Potential sources of glare associated with the proposed project would consist of glazing (windows) and other reflective materials used in the façades of proposed residential structures, the reflective surfaces of vehicles parked and traveling within and around the project site, and nighttime vehicle headlights. As noted above, existing residential development with similar sources of glare from windows, vehicle surfaces and nighttime vehicle headlights is located to the south of the project site. The surfaces proposed for use in the project buildings would have a low potential to generate glare. In addition, proposed landscape trees around the perimeter and throughout the project site would help to shield surrounding properties and roadways from the minimal potential glare created by on-site development.

Based on the above, impacts associated with new sources of light and glare would be less than significant.

Mitigation Measures

No mitigation measures are required.

4.1.5 Cumulative Impacts

For the purposes of this EIR, the cumulative study area of the proposed project area includes the southeastern edge of the Oxnard Plain, in the vicinity of Calleguas Creek. The aesthetic condition in these areas is not expected to undergo major changes within the buildout period of the Campus Master Plan and Specific Reuse Plan based on existing development potential in the various Generals Plans that apply in this area and local initiatives restricting the conversion of large areas of open space and agricultural resources (i.e. SOAR).

The proposed project, in combination with planned development on the CSUCI campus under the Master Plan and Specific Reuse Plan and elsewhere in this part of Ventura County, some of which is identified in Table 6 in Section 3.3, *Cumulative Development*, could contribute to the degradation of the visual character and quality of the cumulative study area. The projects included in the cumulative development scenario are primarily in the city of Camarillo and would contribute to the existing urban environment in that area but would not alter the rural aesthetic of the cumulative study area or the visual setting of the University which is one of compact, aesthetically coordinated development in its own independent setting. As such cumulative aesthetic and visual impacts would be less than significant.

4.2 Air Quality

This section analyzes the proposed project's potential temporary and long-term impacts to local and regional air quality from sources such as construction emissions, operational emissions, and carbon monoxide hotspots, as well as its consistency with the regional air quality management plan. Greenhouse gas emissions are discussed in Section 4.4, *Greenhouse Gas Emissions*.

4.2.1 Setting

Local Climate and Meteorology

The semi-permanent high-pressure system west of the Pacific coast strongly influences California's weather (CSUCI 2009). It creates sunny skies throughout the summer and influences the pathway and occurrence of low pressure weather systems that bring rainfall to the area during October through April. As a result, wintertime temperatures at the University are generally mild, while summers are warm and dry. During the day, the predominant wind direction is from the west and southwest, and at night, wind direction is from the north.

These predominant wind patterns are occasionally broken during the winter by storms coming from the north and northwest and by episodic Santa Ana winds. Santa Ana winds are strong northerly to northeasterly winds that originate from high-pressure areas centered over the desert of the Great Basin. These winds are usually warm, very dry, and often full of dust. They are particularly strong in the mountain passes and at the mouths of canyons.

Two types of temperature inversions (warmer air on top of colder air) are created in the Ventura County area: subsidence and radiational (surface). The subsidence inversion is a regional effect created by the Pacific Ocean in which air is heated as it is compressed when it flows from the high pressure area to the low pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but is most evident during the summer months. Surface inversions are formed by the more rapid cooling of air near the ground at night, especially during winter. This type of inversion is typically lower and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed. The primary air pollutant of concern during the subsidence inversions is ozone, while carbon monoxide (CO) and nitrogen oxides (NO_x) are of greatest concern during winter surface inversions.

Current Ambient Air Quality

Federal and state standards have been established for ozone, CO, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulates less than 10 microns in diameter (PM₁₀) and less than 2.5 microns in diameter (PM_{2.5}), and lead. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. Local air pollution control districts are required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Air basins in which air pollutant standards (refer to *Regulatory Setting*) are exceeded are referred to as "non-attainment areas." The Ventura County Air Basin, in which the project site is located, is a non-attainment area for both the federal and state standards for ozone and the state standard for PM₁₀ (Ventura County Air Pollution Control District [VCAPCD] 2006).

The El Rio air quality monitoring station, located at Rio Mesa High School (545 Central Ave, Oxnard, CA 93036) is the closest station to the project site. This station measures ozone, NO₂, and PM₁₀. None of the

monitoring stations within Ventura County record CO measurements. Table 7 summarizes the annual air quality data over the past three years for the local airshed.

The criteria pollutants and their potential health effects are described below.

Carbon Monoxide. Carbon monoxide, a colorless, odorless, poisonous gas, is a local pollutant that in high concentrations is found only very near the source. Carbon monoxide is a by-product of fuel combustion, but is generally not a concern with typical residential stationary sources (gas water and space heaters, gas dryers) since these are required by law to be properly vented. Automobile traffic is a major source of carbon monoxide with elevated concentrations usually found only near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, carbon monoxide reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Ozone. Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG)¹. Nitrogen oxides are formed during fuel combustion while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of May and October. Ozone is a pungent, colorless toxic gas that can cause detrimental health effects including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Nitrogen Dioxide. Nitrogen dioxide (NO₂) is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. Nitrogen dioxide is an acute irritant, but at typical atmospheric concentrations, it is only potentially irritating. A relationship between NO₂ and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM₁₀ and acid rain.

Suspended Particulate Matter. PM₁₀ is small particulate matter measuring no more than 10 microns in diameter, while PM_{2.5} is fine particulate matter measuring no more than 2.5 microns in diameter. Suspended particulates are mostly dust particles, nitrates, and sulfates. Suspended particulates are a by-product of fuel combustion and wind erosion of soil and unpaved roads, and are directly introduced into the atmosphere through these processes. Suspended particulates are also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and fine particulates (PM_{2.5}) can be very different. The small particulates generally come from windblown dust and dust kicked up from mobile sources. The fine particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. Fine particulate matter is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an adsorbed toxic substance.

¹ ROGs are also referred to as reactive organic compounds (ROC) and volatile organic compounds (VOC).

Table 7 Ambient Air Quality Data at the El Rio Monitoring Station

Pollutant	2013	2014	2015
Ozone, ppm - Worst Hour	0.067	0.112	0.070
Number of days of State exceedances (>0.09 ppm)	0	1	0
Number of days of Federal exceedances (>0.12 ppm)	0	0	0
Carbon Monoxide, ppm - Worst 8 Hours	*	*	*
Number of days of State/Federal exceedances (>9.0 ppm)	*	*	*
Nitrogen Dioxide, ppm - Worst Hour	40	39	36
Number of days of State exceedances (>0.25 ppm)	0	0	0
Particulate Matter <10 microns, $\mu\text{g}/\text{m}^3$ Worst 24 Hours	45.9	51.1	93.3
Number of samples of State exceedances (>50 $\mu\text{g}/\text{m}^3$)	4	7	6
Number of samples of Federal exceedances (>150 $\mu\text{g}/\text{m}^3$)	0	0	0
Particulate Matter <2.5 microns, $\mu\text{g}/\text{m}^3$ Worst 24 Hours	22.2	22.2	25.5
Number of samples of Federal exceedances (>35 $\mu\text{g}/\text{m}^3$)	0	0	0

* insufficient data

Source: California Air Resources Board (ARB) 2013- 2015.

The pollutants of greatest concern in Ventura County are ozone and PM₁₀. Concentrations of PM₁₀ have exceeded state standards on one or more days during each of the past three calendar years (Table 7). The major sources of PM₁₀ are road dust, construction, mobile sources, and farming operations. Locally, Santa Ana winds are responsible for entraining dust and occasionally causing elevated PM₁₀ levels. Ozone is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between NO_x and ROG_s in the presence of sunlight. Reductions in ozone concentrations are dependent upon reducing emissions of these precursors. The major sources of ozone precursors in Ventura County are motor vehicles and other mobile equipment, solvent use, pesticide application, the petroleum industry, and electric utilities.

Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14, the elderly, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools, hospitals, and residences.

Because CSUCI is an institution, the entire campus is considered a sensitive use. However, certain portions of the campus are considered to be more sensitive than others, such as residential areas, including the existing University Glen Phase 1 neighborhood. The project site is separated from the existing University Glen Phase 1 neighborhoods by Channel Islands Drive along its southwestern boundary. The boundary of the project site lies approximately 65 feet from the nearest existing residential structure.

4.2.2 Regulatory Setting

Both the federal and state governments have established ambient air quality standards for the protection of public health. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (ARB) is the State equivalent in the California Environmental Protection Agency (CalEPA). Local control in air quality management is provided by the ARB through county-level Air Pollution Control Districts (APCD). The ARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources within their district. The ARB has established 14 air basins statewide. The project site is located in the Ventura County Air Basin, which is under the jurisdiction of the VCAPCD.

The 2007 Ventura County Air Quality Management Plan (AQMP), adopted by the VCAPCD on May 13, 2008, presents Ventura County's strategy for attaining the federal 8-hour ozone standard as required by the federal Clean Air Act (CAA) Amendments of 1990. The 2007 AQMP also presents the District's Triennial Assessment and Plan Update required by the CAA Amendments of 1988. A draft 2016 Air Quality Management Plan is currently under review, but has not yet been adopted (VCAPCD 2016).

The 2007 AQMP contains an attainment demonstration (photochemical modeling and weight of evidence analyses) showing that Ventura County will attain the federal 8-hour ozone standard by June 15, 2013, the deadline for serious 8-hour ozone non-attainment areas. Table 8 illustrates current federal and state air quality standards and the attainment status of the pollutants. The 2007 AQMP also contains: a Reasonable Further Progress demonstration, a Motor Vehicle Conformity Budget for transportation conformity purposes, an emissions inventory and emission forecasts, and a local control strategy containing several new and "further study" emission control measures. The new control measures are proposed revisions to existing District rules that District staff has found practicable for Ventura County. The 2007 AQMP also incorporates the ARB's State Strategy to achieve additional emission reductions needed for all areas of the state, including Ventura County, to attain the federal 8-hour ozone standard.

Table 8 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	Federal Attainment (Y/N)	California Standard	State Attainment (Y/N)
Ozone	1-Hour	---	Y	0.09 ppm	N
	8-Hour	0.070 ppm	N	0.070 ppm	N
Carbon Monoxide	8-Hour	9.0 ppm	Y	9.0 ppm	Y
	1-Hour	35.0 ppm	Y	20.0 ppm	Y
Nitrogen Dioxide	Annual	0.053 ppm	Y	0.030 ppm	Y
	1-Hour	0.100 ppm	Y	0.18 ppm	Y
Sulfur Dioxide	Annual	---	---	---	---
	24-Hour	---	---	0.04 ppm	Y
	1-Hour	0.075 ppm	Y	0.25 ppm	Y
PM ₁₀	Annual	---	---	20 µg/m ³	N
	24-Hour	150 µg/m ³	Y	50 µg/m ³	N
PM _{2.5}	Annual	12 µg/m ³	Y	12 µg/m ³	Y
	24-Hour	35 µg/m ³	Y	---	---

Pollutant	Averaging Time	Federal Primary Standards	Federal Attainment (Y/N)	California Standard	State Attainment (Y/N)
Lead	30-Day Average	---	---	1.5 µg/m ³	Y
	3-Month Average	0.15 µg/m ³	Y	---	---

ppm = parts per million

µg/m³ = micrograms per cubic meter

Source: ARB 2007 and VCAPCD 2006

4.2.3 Methodology and Significance Thresholds

Based on Appendix G of the State CEQA Guidelines, a project may be deemed to have a significant impact on air quality if it would:

- 1 Conflict with or obstruct the implementation of the regional applicable air quality management plan.
- 2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- 3 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 releasing emissions, which exceed quantitative thresholds for ozone precursors).
- 4 Expose sensitive receptors to substantial pollutant concentrations.
- 5 Create objectionable odors affecting a substantial number of people.

Threshold 5 has been previously addressed in the Initial Study for the proposed project, which concluded that the proposed project would have less than significant impacts related to the generation of objectionable odors (see Appendix A). This section addresses the remaining four thresholds (Thresholds 1-4).

Significance Thresholds

The VCAPCD provides an advisory document for assessing air quality impacts of projects under CEQA—the *Ventura County Air Quality Assessment Guidelines* (Guidelines; 2003). The Guidelines provide a framework and methods for preparing air quality evaluations and have been used to guide the analysis of the proposed project’s air quality impacts.

CRITERIA POLLUTANTS

The VCAPCD has established significance thresholds for reactive organic compounds (ROC) and nitrous oxides (NO_x) that apply to operational emissions. The Guidelines state that a project’s impact is significant if the project would:

- Generate daily operational emissions exceeding 25 pounds of ROC or NO_x.
- Generate emissions causing an exceedance or making a substantial contribution to an exceedance of an ambient air quality standard.²

According to the Guidelines, projects that generate more than 25 pounds per day of ROG and NO_x may jeopardize attainment of the federal and State ozone standard, resulting in a significant impact on air quality. Conversely, projects that generate fewer than 25 pounds per day of ROG and NO_x would have a less than significant impact on air quality and would not contribute to an exceedance of an ambient air

² According to VCAPCD *Guidelines*, “Substantial” is defined as making measurably worse an existing exceedance of a state or federal ambient air quality standard (2003).

quality standard. Importantly, the 25 pounds per day threshold for ROG and NO_x are not intended to be applied to construction emissions since such emissions are temporary. However, the VCAPCD recommends all projects that include construction activities to adopt measures provided in “Fugitive Dust Mitigation Measures” and “ROG and NO_x Mitigation Measures” to mitigate a project’s contribution to existing exceedance of state and federal ozone standards and State PM₁₀ standards.

The VCAPCD has not established quantitative thresholds for particulate matter emissions for associated with either project operation or construction. However, the VCAPCD indicates that a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property would have a significant air quality impact. This threshold is particularly applicable to the generation of fugitive dust during construction grading operations. As previously mentioned, the VCAPCD recommends inclusion of fugitive dust mitigation measures for all projects that involve construction activities, and especially grading and excavation.

AQMP CONSISTENCY

According to the Guidelines, if a proposed project would generate emissions above two pounds per day of ROG or NO_x, an assessment to evaluate consistency with the AQMP is required (VCAPCD 2003). The CSUCI campus lies in a non-growth area of Ventura County as shown on Figure 4-1 of the Guidelines. According to the Guidelines, a consistency determination with the AQMP for projects in the aggregated non-growth areas in the County is based on actual population growth relative to projected growth (VCAPCD 2003). If the estimated population for the aggregated non-growth areas is below the following year’s target population the proposed project would be consistent with the AQMP.

CARBON MONOXIDE HOTSPOTS

A CO hotspot is a localized concentration of CO that exceeds the state one-hour or eight-hour CO ambient air standards (VCAPCD 2003). Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal Ambient Air Quality Standard (AAQS) of 35.0 ppm or the State AAQS of 20.0 ppm. According to the Guidelines, a CO screening analysis should be conducted for a project with indirect emissions greater than the applicable ozone project significance thresholds that may significantly impact intersections that experience, or are anticipated to experience, a level of service (LOS) of E or F.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TAC)³ are air-borne substances that are known to have serious effects on human health and/ or the environment. Benzene fumes (i.e., gas fumes), asbestos, and metals such as mercury, chromium, and lead compounds are all recognized TACs regulated by the USEPA under the Clean Air Act (USEPA 2016). The ARB has also identified a list of TACs and regulates their emission from stationary sources under the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588; Connelly 1987). While residential uses are not generally associated with high levels of TAC emissions during operation, construction activities usually utilize diesel-powered equipment that release diesel particulate matter (DPM). DPM is a mixture of chemicals found in diesel exhaust and poses a risk to health in gas and particle form. Both short and long-term exposure to DPM can result in negative health effects. Short-term exposure may cause irritation to the eyes, nose, throat and lungs and exacerbate asthma, while

³ Also referred to as hazardous air pollutants or toxic air pollutants

chronic exposure has been shown to lead to lung inflammation and cellular changes in animals and has been linked to cancer (USEPA 2017).

The VCAPCD requires projects that may emit TAC be assessed to determine whether TAC emissions may adversely impact nearby populations. Impacts are to be considered both in the case where a proposed new or modified facility may emit TACs near existing land uses, or a new land use is proposed near an existing facility that emits TACs.

VALLEY FEVER

Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus, *Coccidioides immitis*. The fungal spores grow in the top few inches of virgin, undisturbed soil, and are often found at the base of hillsides. Infection occurs when the fungal spores become airborne due to wind or other soil disturbance and the spores are inhaled. Both humans and animals are susceptible to infection, but infection is not known to be transmitted between species or across species. Due to the mechanism of infection, people who are involved in ground-disturbing activities, such as construction workers, agriculture workers, and archaeologists typically have an increased risk of exposure.

Most people who are exposed to Valley Fever fungal spores do not develop symptoms, or have relatively mild flu-like symptoms. Others, however, can experience more severe symptoms, particularly individuals with a weakened immune system, who are of African-American or Filipino descent, or who are pregnant (Monterey 2014). The elderly may also be prone to more severe cases. Common symptoms include fever, cough, headache, rash, muscle aches, and joint pain. Symptoms of advanced Coccidioidomycosis may include skin lesions, chronic pneumonia, meningitis, bone or joint infection. Symptoms may appear between one and three weeks after exposure. Some patients have reported having symptoms for six months or longer, especially if the infection is not diagnosed early.

Valley Fever is common in arid and semiarid areas of the Western Hemisphere. In the United States, it is found primarily in the southwestern states (especially Arizona and Southern California). Valley Fever infection rates are the highest in California from June to November, when soils are typically very dry. Major events that contribute to an increased movement of soil, such as earthquakes, which directly disturb soil, or fires, which can alter soil composition and make soil more airborne, can increase the risk of exposure to Valley Fever. Ventura County experiences an average of about 40 reported infections each year (VCAPCD 2003). However, the year of the Northridge earthquake, the number of reported cases rose to 243.

The Guidelines provide a list of factors that may indicate a project's potential to create significant Valley Fever impacts:

- Disturbance of the top soil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils
- Virgin, undisturbed, non-urban areas
- Windy areas
- Archaeological resources probable or known to exist in the area (Native American midden sites)
- Special events and motorized activities on unvegetated soil
- Non-native population

The VCAPD recommends that project activities that may create a significant Valley Fever impact consider including provided "Valley Fever Mitigation Measures," which focus on controlling fugitive dust and minimizing worker exposure.

Methodology

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in the Guidelines (VCAPCD 2003) and Air Quality Management Plan (VCAPCD 2007). The VCAPCD recommends the use of the latest version of the California Emissions Estimator Model (CalEEMod) for estimating emissions from proposed land use development projects. Therefore, CalEEMod 2016.3.1 was used to estimate long-term air pollutant emissions associated with project operation, as well as short-term emissions associated with construction of the proposed project. As detailed below, emissions from the proposed project were estimated using inputs for the expected length of construction phases, known project details regarding land use type, lot size, and number of residences, and known regulatory requirements; CalEEMod defaults were used for all other inputs.

Project construction would occur over a period of approximately two years, beginning in July 2018 and ending in July 2020, with operation beginning in 2021. Based on estimations provided by the project applicant, site preparation and grading would take approximately 110 days and building construction of all residences would take 420 days. The CalEEMod default for architectural coating—35 days at the very end of all construction—was adjusted to 190 days, beginning a little over halfway through construction and ending one week after paving, to better reflect actual construction practices (residences would be painted as building construction of each building is completed). The proposed project would include a mix of residential buildings, hardscape, and landscape area that were accounted for in CalEEMod with the following land uses: mid-rise apartments, low-rise apartments, condo/ townhomes, single-family houses, parking lot, and city park. To account for the much lower trip generation rates associated with age/income-restricted residential units, and because CalEEMod currently does not allow for different trip generation rates to be assigned to the same land use, age/income-restricted units were entered into CalEEMod as low-rise apartments (defined as 1-2 stories; CAPCOA 2016) and the corresponding trip generation rate was adjusted consistent with the traffic study (see Appendix I). It was conservatively assumed that all condo/townhomes would be high-rise townhomes (defined as 3 stories or more; CAPCOA 2016). Again the trip generation for this land use was adjusted to match the traffic study. The size of the parking lot was based on the estimated total hardscape for the project site (see Table 3, Project Summary). The size of the city park was based on the estimated total landscape area for the project site. The remaining area was divided among the different residential uses in proportion to the total building area for each residential land use type. As no buildings currently exist on the project site, no demolition would occur. The majority of the existing roads on the project site would be demolished and recycled onsite and would not contribute to export of construction waste offsite.

A number of VCAPCD and State regulations would apply to the proposed project and have been included in the modeling of project emissions. It was assumed that construction areas would be watered twice a day to comply with VCAPCD Rule 55, which requires watering to control wind-driven dust and that the ROC content of architectural coatings would not exceed 150 g/L, which is a reasonable average limit for architectural coatings that would be applied to the proposed project based on VCAPCD Rule 74.2 limits. In addition, a number of Land Use "Mitigation" options were applied in CalEEMod that adjust model defaults based on project attributes. Specifically, the proposed project would have a density higher than that assumed by CalEEMod for the selected land use ("Increase Density"), would be a mile from a job center (i.e., CSUCI main campus; "Improve Destination Accessibility"), would be a mile from a transit station ("Increase Transit Accessibility"), and would improve the pedestrian network on the project site ("Improve Pedestrian Network"). CalEEMod inputs, assumptions, and results are provided in Appendix D.

4.2.4 Project Impacts and Mitigation Measures

Impact AQ-1 : OPERATION OF THE PROPOSED PROJECT WOULD GENERATE MAXIMUM DAILY NO_x EMISSIONS SLIGHTLY ABOVE THE VCAPCD SIGNIFICANCE THRESHOLD OF 25 POUNDS PER DAY. MAXIMUM DAILY EMISSIONS OF OTHER CRITERIA POLLUTANTS WOULD BE BELOW SIGNIFICANCE THRESHOLDS. WITH MITIGATION, AIR QUALITY IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLDS 2, 3 AND 4)

Operational, or long-term, air pollutant emissions would be generated by mobile and area sources associated with the proposed project. Implementation of the proposed project would generate new trips to and from the project site and demand energy to power residential utility use, as well as outdoor lighting, landscape irrigation, and other amenities associated with the proposed project. Table 9 provides estimated criteria pollutant emissions associated with project operation. The proposed project would not exceed the VCAPCD threshold for ROC (25 pounds per day) operational emissions, generating a maximum of 23.6 pounds per day of ROC. However, the proposed project would exceed the threshold for NO_x (25 pounds per day), generating a maximum of 25.9 pounds per day. The proposed project would also generate a maximum of 117.9 pounds per day of CO, 20.6 of PM₁₀, and 6.0 pounds per day of PM_{2.5}, but the VCAPCD does not provide significance thresholds for these pollutants. Therefore, mitigation measures would be incorporated to reduce NO_x emissions below threshold level and mitigate project operational air quality impacts to a less than significant level.

Table 9 Maximum Daily Operation Air Pollutant Emissions (lbs/day)

	Emissions (lbs/day)				
	ROC	NO _x	CO	PM ₁₀	PM _{2.5}
Area	17.9	1.5	50.1	0.3	0.3
Energy	0.3	2.4	1.0	0.2	0.2
Mobile	5.4	22	66.9	20.0	5.5
Total	23.6	25.9	117.9	20.6	6.0
VCAPCD Threshold	25	25	NA	NA	NA
Exceed Threshold?	No	Yes	No	No	No

Notes: See Appendix D for CalEEMod calculations. The higher of winter or summer emissions are shown for each criteria pollutant.

Mitigation Measure

The proposed project’s maximum daily operational NO_x emission is within a pound of the threshold level and could be mitigated to below threshold level through the incorporation of mitigation measures. Estimated reductions were determined by comparing the baseline CalEEMod run described in the *Methodology* section above to a baseline run with mitigation measures included. Mitigated emissions were calculated using winter emissions, as winter has the highest level of NO_x operational emissions.

MM AQ-1 OPERATIONAL NO_x EMISSIONS

The proposed project shall incorporate the following measures to reduce NO_x emissions to a less than significant level:

- All landscape maintenance equipment shall be electric. This would achieve a reduction of 0.12 pounds of NO_x per day.
- No fireplaces (wood or gas) shall be included in the proposed project. This would achieve a reduction of 0.9 pounds of NO_x per day.

If the above mitigation options are not preferable, the project applicant shall propose alternative mitigation options and submit proof to the lead agency that emissions would be reduced to below daily threshold levels through these measures prior to commencement of ground disturbing activities. The lead agency shall verify compliance during construction activities.

SIGNIFICANCE AFTER MITIGATION

With incorporation of the mitigation measures above, maximum operational NO_x emissions would be reduced to below 25 pounds per day. This would bring operational emissions for the proposed project in compliance with VCAPCD significance thresholds for criteria pollutants. Therefore, with mitigation, project operational emissions would have a less than significant air quality impact.

Impact AQ-2 : THE VCAPCD DOES NOT DOES NOT RECOMMEND ANY THRESHOLDS OF SIGNIFICANCE FOR CONSTRUCTION EMISSIONS. THEREFORE, SIGNIFICANCE IS DETERMINED BASED ON THE CONTROL MEASURES TO BE IMPLEMENTED. INCORPORATION OF CONTROL MEASURES WOULD REDUCE CONSTRUCTION AIR QUALITY IMPACTS TO LESS THAN SIGNIFICANT LEVELS. (THRESHOLDS 2, 3 AND 4)

The proposed project would generate air quality pollutants from construction activities associated with all phases of construction, such as worker trips, hauling trips, construction vehicle emissions, and paint application. Table 10 provides the maximum daily pollutant emissions associated with construction of the proposed project. Construction of the proposed project would emit a maximum of 48 pounds of ROC per day and 59.6 pounds of NO_x per day. The proposed project would also result in a PM₁₀ and PM_{2.5} maximum daily emission of 42.1 and 12.3 pounds per day, respectively. As discussed above, significance thresholds set by the VCAPCD for daily ROC and NO_x emissions apply to operational emissions and are not intended to be used to determine the significance of construction emissions, which are temporary. However, the VCAPCD recommends all projects that include construction activities to adopt provided “Fugitive Dust Mitigation Measures” and “ROC and NO_x Construction Mitigation Measures” to mitigate a project’s contribution to existing exceedance of state and federal ozone standards and State PM₁₀ standards, and also requires inclusion of “Fugitive Dust Mitigation Measures” when construction ROC and NO_x emissions exceed 25 pounds per day. ROC and NO_x emissions generated by construction activities would exceed 25 pounds per day. Therefore, to ensure construction activities would not contribute to existing air quality exceedances in the Ventura County Air Basin and to reduce air quality impacts to a less than significant level, mitigation measures would be incorporated.

Table 10 Maximum Daily Construction Air Pollutant Emissions (lbs/day)

	Emissions (lbs/day)				
	ROC	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily Emissions	48.0	59.6	78.5	42.1	12.3
VCAPCD Construction Emissions Threshold	NA	NA	NA	NA	NA
Threshold Exceeded?	No	No	No	No	No

Notes: see Appendix D for CalEEMod calculations. The higher of winter or summer emissions are shown for each criteria pollutant.

Mitigation Measure

MM AQ-2 (A) CONSTRUCTION FUGITIVE DUST EMISSIONS

The following mitigation measures shall be incorporated to reduce construction emissions of fugitive dust (based on the Ventura County Air Quality Assessment Guidelines, Section 7.4.1).

- The area disturbed by clearing, grading, earth moving, or excavation operations shall be implemented in a manner to prevent excessive amounts of dust.

- Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
- All trucks shall be required to cover their loads as required by California Vehicle Code §23114.
- All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be watered periodically to reduce fugitive dust. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
- Graded and/or excavated inactive areas of the construction site shall be monitored at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
- Signs shall be posted on-site limiting traffic to 15 miles per hour or less.
- During periods of high winds, all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to minimize fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in determining when winds are excessive.
- Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
- Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

MM AQ-2 (B) CONSTRUCTION ROC AND NO_x EMISSIONS

The following mitigation measures shall be incorporated to reduce ROC and NO_x emissions during construction (based on the Ventura County Air Quality Assessment Guidelines, Section 7.4.3).

- Minimize equipment idling time.
- Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.
- Minimize the number of vehicles and equipment operating at the same time during the smog season (May through October), to the extent practicable.
- Use alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, to the extent practicable.

SIGNIFICANCE AFTER MITIGATION

Incorporation of mitigation measures AQ-2(a) and AQ-2(b) would decrease ROC, NO_x, and fugitive dust construction emissions in accordance with VCAPCD Guidelines. As the VCAPCD provides no significance thresholds for construction emissions due to their temporary nature, adherence to VCAPCD recommendations would ensure that the proposed project would not conflict with the County's AQMP, contribute to an existing air quality exceedance, or contribute to a new violation of air quality standards. Air quality impacts due to construction emissions would be less than significant with mitigation incorporated.

Impact AQ-3 : THE PROPOSED PROJECT WOULD ACCOMMODATE POPULATION GROWTH BY PROVIDING UP TO 600 DWELLING UNITS FOR APPROXIMATELY 1,518 NEW RESIDENTS. THIS WOULD NOT CAUSE THE UNINCORPORATED COUNTY POPULATION TO EXCEED POPULATION FORECASTS FOR UNINCORPORATED VENTURA COUNTY. THEREFORE, POPULATION GROWTH RESULTING FROM THE PROPOSED PROJECT WOULD HAVE LESS THAN SIGNIFICANT AIR QUALITY IMPACTS. (THRESHOLD 1)

According to the VCAPCD Guidelines, the proposed project would have a significant impact to air quality if it causes the existing population to exceed population forecasts in the most recently adopted AQMP or cause the population for the proposed project's AGA to exceed the following year's target population. However, AQMP and AGA population forecasts are not available for the proposed project's planning horizon, as the project is anticipated to be operational in 2021. Thus, to determine consistency with the AQMP and its population forecasts, population estimates and forecasts for unincorporated Ventura County were obtained from the VCAPCD and used to determine consistency (Hocking, pers. comm. 2016).

The VCAPCD provided a 2016 population estimate for unincorporated Ventura County of 99,433 people and a 2025 forecast of 108,233 taken from the adopted 2008 Regional Transportation Plan (RTP) forecast for the Southern California Association of Governments (SCAG), as recommended for use by VCAPCD. The proposed project would provide new dwelling units for approximately 1,518 residents, based on an average household size of 3.21 for single-family residences and 2.36 for multi-family residences, over the existing population in the county. This estimate is based on Ventura County Municipal Code, Section 8209-6.3 *Additional population generated by subdivision*. Therefore, the proposed project would increase the current unincorporated county population to 100,951, which falls within the 2008 RTP projection for 2025 and also within the 2016 RTP/Sustainable Communities Strategy (SCS) population forecast of 102,000 for 2020 (SCAG 2016). As the proposed project would not cause the population of unincorporated Ventura County to exceed population forecasts, the proposed project would be consistent with the VCAPCD AQMP and would meet the VCAPCD Guidelines significance criterion regarding population impacts. Impacts would be less than significant and no mitigation would be required.

Impact AQ-4 : THE PROPOSED PROJECT WOULD GENERATE NEW VEHICLE TRIPS THAT WOULD GENERATE CO EMISSIONS. HOWEVER, THERE ARE NO SEVERELY CONGESTED INTERSECTIONS (LOS E OR F) IN THE VICINITY OF THE PROJECT SITE AND THE PROPOSED PROJECT WOULD NOT RESULT IN ANY SEVERELY CONGESTED INTERSECTIONS. NO CO HOTSPOT WOULD RESULT AND THE PROPOSED PROJECT WOULD HAVE LESS THAN SIGNIFICANT AIR QUALITY IMPACTS. (THRESHOLD 2 AND 4)

Areas with high vehicle density, such as congested intersections, have the potential to create high concentrations of CO known as CO hotspots. A project's localized air quality impact is considered significant if CO emissions create a hotspot where either the California one-hour standard of 20 ppm or the federal and State eight-hour standard of 9.0 ppm is exceeded. This typically occurs at severely congested intersections (LOS E or worse). According to the VCAPCD, a CO screening analysis should be conducted for intersections that would be significantly affected by a project and that experience, or are anticipated to experience, level of service (LOS) E or F. Based on a traffic impact analysis prepared by Fehr & Peers for the proposed project, the intersections near the project site currently experience a LOS of D or better and the proposed project would not reduce intersections to a LOS E or F (2017). Therefore, the proposed project would not result in a CO hotspot and no mitigation is required. Impacts would be less than significant.

Impact AQ-5 : CONSTRUCTION OF THE PROPOSED PROJECT WOULD INVOLVE THE USE OF DIESEL-POWERED EQUIPMENT THAT WOULD EMIT DIESEL PARTICULATE MATTER (DPM) IN THE VICINITY OF RESIDENCES ADJACENT TO THE PROJECT SITE. HOWEVER, CONSTRUCTION WOULD BE TEMPORARY, ADJACENT RESIDENCES ARE LOCATED TO THE SOUTH OF THE PROJECT SITE WHILE PREVAILING WINDS ARE FROM THE WEST, GRADING ACTIVITIES WOULD NOT REQUIRE LARGE NUMBERS OF DIESEL ENGINE EQUIPMENT, AND POTENTIAL IMPACTS WOULD BE LARGELY ATTENUATED BY DISTANCE. OPERATION OF RESIDENTIAL USES, SUCH AS THE PROPOSED PROJECT, WOULD NOT RESULT IN SIGNIFICANT EMISSION OF TACs AND THE PROJECT SITE IS NOT IN THE VICINITY OF A TAC HOTSPOT. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 4)

The proposed project would involve the construction of a residential community on a 32-acre (1,394,000 square feet) site. As discussed above, operation of residential uses would not result in significant emission of TACs, and the project site is not located in the vicinity of a major stationary source of TACs. Construction of the proposed project would utilize diesel-engine equipment that would emit DPM, particularly during site preparation and grading. Residences are located to the south of the western half of the project site, across Channel Islands Drive. The nearest residential buildings to the project site are located approximately 65 feet from the project site boundary.

Project construction activities are not anticipated to result in levels of DPM at adjacent residences that would result in significant health impacts to sensitive receptors. The project site would employ at most seven to eight pieces of diesel-engine equipment each day during site preparation and grading, according to CalEEMod defaults, and maximum daily on-site emission of particulate matter from construction vehicle exhaust would reach approximately five pounds per day during site preparation and grading (see Appendix D for CalEEMod worksheets). Importantly, grading and site preparation is anticipated to take 110 days, i.e. less than four months. Thus, long-term exposure to DPM that could result in more serious long-term health effects, such as cancer and impacts to the reproductive system, would not occur.

Distance is an important attenuating factor for DPM concentrations as estimated cancer risk from DPM along rural and urban roadways has been shown to decrease by 68 percent at a distance of approximately 492 feet from the edge of the roadway (SCAQMD 2005). The project site encompasses 1,394,000 square feet and is approximately 1,000 feet wide and 1,000 feet along its east-west, north-south axes. Due to the size of the project site, the majority of construction activity would occur far enough away from nearby residences to allow for substantial dispersal of DPM. In addition, the adjacent residences are located to the southwest of the project site while prevailing winds in Ventura County come from the west (Sailor's Choice 2017), so emissions on the project site would be blown primarily away from existing residences. Due to the small magnitude of DPM emissions that would be generated during construction, the attenuation of emissions by distance and wind direction, and the temporary duration of construction activities, potential TAC impacts due to DPM emissions would be less than significant. No mitigation would be required.

Impact AQ-6 : THE MAJORITY OF THE PROJECT SITE CONTAINS DISTURBED SOIL THAT IS UNLIKELY TO HARBOR THE COCCIDIOIDES IMMITIS SPORES THAT CAUSE VALLEY FEVER INFECTIONS. HOWEVER, THERE REMAINS A LOW POTENTIAL FOR THE PRESENCE OF COCCIDIOIDES IMMITIS SPORES IN PREVIOUSLY UNDISTURBED AREAS OF THE PROJECT SITE. VALLEY FEVER MITIGATION MEASURES RECOMMENDED BY THE VCAPCD WOULD BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES ON AREAS OF THE SITE WITH POTENTIAL FOR PRESENCE OF COCCIDIOIDES IMMITIS SPORES TO REDUCE POTENTIAL IMPACTS TO A LESS THAN SIGNIFICANT LEVEL. (THRESHOLD 4)

The fungal spores responsible for Valley Fever generally grow in virgin, undisturbed soil. *Coccidioides* is thought to grow best in soil after heavy rainfall and then disperse into the air most effectively during hot, dry conditions.⁴

The majority of the project site has been previously graded in anticipation of entitled development, is regularly rotary de-weeded, and is occasionally used as a parking lot for University events. Due to the previous amount of disturbance at the site, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection. However, ground disturbing activities within previously undisturbed areas of the project site, could result in release of spores, if present, and would pose a risk to workers at the site.

As discussed under Impact AQ-2, construction activities would incorporate mitigation measures to reduce release of fugitive dust that would minimize disturbance to topsoil and potential release of spores [MM AQ-2(a)]. In addition, VCAPCD recommends implementation of measures to reduce the risk of infection during construction activities in areas with a potential for presence of Valley Fever. Implementation of these measures during construction on areas of the site with a potential for presence of Valley Fever causing spores would reduce the potential risk of Valley Fever infection during ground-disturbing construction activities to a less than significant level.

Mitigation Measure

MM AQ-6 VALLEY FEVER

The following mitigation measures shall be implemented, as practicable, during ground disturbing activities in previously undisturbed areas of the project site determined to have potential for presence of Valley Fever causing spores, as recommended in the Ventura County Air Quality Assessment Guidelines, Section 7.4.2.

- Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.

Prior to the start of ground disturbing activities, the applicant shall submit a grading plan to the University, which indicates the areas of the site that are previously undisturbed where Valley Fever mitigation measures will be implemented.

SIGNIFICANCE AFTER MITIGATION

Incorporation of VCAPCD recommended Valley Fever mitigation measures, as well as mitigation measures listed in MM AQ-2(a) to control fugitive dust, would reduce potential release of pathogenic spores from the soil and protect construction workers from exposure during construction activities. Potential impacts would be reduced to a less than significant level.

⁴ <https://www.cdc.gov/fungal/diseases/coccidioidomycosis/causes.html>

4.2.5 Cumulative Impacts

The air basin is currently in non-attainment for the State PM_{10} standard and the State and federal ozone standard. The proposed project, in combination with pending and approved development on the CSUCI campus and elsewhere in Ventura County, as identified in Table 6 in Section 3.3, Cumulative Development, could contribute to the cumulative degradation of regional air quality through construction, operation, and by facilitating population growth.

However, the significance criteria set by the VCAPCD take into consideration both individual and cumulative impacts (VCAPCD 2003). Therefore, individual projects that do not exceed significance criteria would not jeopardize attainment of State and federal standards in the Ventura County region and would not contribute significantly to existing air quality exceedances. With implementation of the required mitigation measure, long-term operation of the proposed project would not exceed daily operational thresholds for ROC of NO_x , be inconsistent with Ventura County AQMP, or cause the existing population to exceed population forecasts. Impacts related to Valley Fever would occur in the immediate vicinity of the project site during construction only and would not contribute to cumulative impacts. Therefore, cumulative air quality impacts are considered less than significant.

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4.3 Biological Resources

This section assesses potential impacts to biological resources from the proposed project, including potential impacts to special status species and impacts related to consistency with the regulatory framework protecting biological resources. The impact analysis is based on review of the California Natural Diversity Database (CNDDDB), United States Geological Survey (USGS) topographic maps, the Initial Study for the proposed project (see Appendix A), reconnaissance site visits conducted on November 10, 2016 and December 28, 2016 and the *Jurisdictional Delineation Report* for the proposed project (Appendix E).

4.3.1 Setting

Existing Conditions at the Project Site

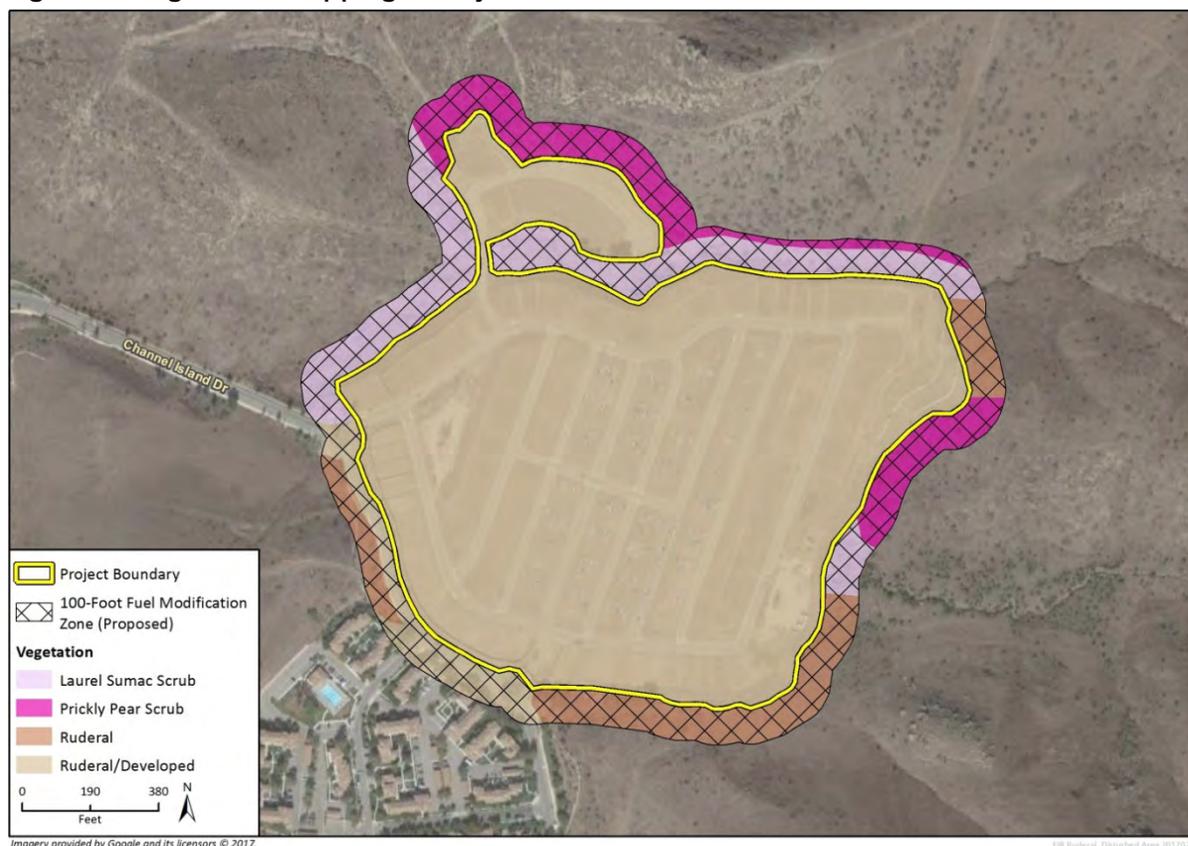
The project site is located in Sections 23 and 24, Township 1 North, and Range 21 West of the Camarillo, California USGS 7.5-minute topographic quadrangle. More specifically, the project site is located on the California State University, Channel Islands (CSUCI) campus in southern Ventura County, at the eastern edge of the Oxnard Plain and at the western flank of the Santa Monica Mountains. The project site lies approximately 2.5 miles south of the city of Camarillo, northeast of the intersection of Lewis and Potrero Roads, and east of Calleguas Creek. The project site is immediately surrounded by University Glen Phase 1 residential development to the south and open space belonging to the CSU Channel Islands campus to the east, west, and north. Less than 0.5 mile to the west of the project site is Camarillo Street and agricultural fields. The regional climate is Mediterranean, characterized by warm, dry summers, and mild, wet winters.

The majority of the 32-acre project site is level due to previous grading, and features level building pads, retaining walls, and an array of paved streets, curbs, and gutters. The northern portion of the project site, Inspiration Point, is accessed by an unpaved road that crosses an unnamed blue line stream feature. The Inspiration Point area is at a higher elevation than the majority of the project site and contains a eucalyptus (*Eucalyptus* sp.) tree grove.

VEGETATION

Primary habitats within the project site are best classified as ruderal and landscaped areas, and developed lands (see Figure 25). Laurel sumac scrub (*Malosma laurina* Shrubland Alliance) best describes the vegetation community associated with the unnamed blue line stream located between the main body of the project site and Inspiration Point, as well as the adjacent natural areas surrounding the previously developed portions of the project site. Due to previous fires in the area, early successional laurel sumac scrub, prickly pear scrub, and disturbed grassland are located on adjacent hillsides, particularly in the hillsides located east, northeast, and north of the project. The classification of these habitat types, or plant communities, is based upon the California Native Plant Society (CNPS) Manual of California Vegetation (Sawyer et. al. 2009) with the Holland (1986) classification system noted. The basic characteristics of the onsite habitat types, including structure and composition of the dominant vegetation, are discussed below.

Figure 25 Vegetation Mapping at Project Site



Laurel sumac scrub. The laurel sumac scrub habitat is a vegetation community defined as having laurel sumac as the dominant or co-dominant plant species in the shrub canopy with Lemonade berry (*Rhus integrifolia*), California sagebrush (*Artemisia californica*), orange bush monkey-flower (*Diplacus aurantiacus*), California brittlebush (*Encelia californica*), coastal buckwheat (*Eriogonum cinereum*), California buckwheat (*Eriogonum fasciculatum*), chaparral yucca (*Hesperoyucca whipplei*), toyon (*Heteromeles arbutifolia*), chaparral mallow (*Malacothamnus fasciculatus*), prickly pear cactus (*Opuntia* spp.), buckthorn (*Rhamnus crocea*), purple sage (*Salvia leucophylla*), black sage (*Salvia mellifera*), black elderberry (*Sambucus nigra*) and mission manzanita (*Xylococcus bicolor*).

The laurel sumac scrub habitat type observed on the project site can be more accurately described as emerging laurel sumac scrub. The emerging habitat is the result of the wildfire, known as the Springs Fire, which burned through the area in May 2013. Although laurel sumac and lemonade berry are the dominant and co-dominant emerging shrubs in the canopy layer, many of the species typically associated with laurel sumac scrub habitat are either emerging or not present. Additionally, ruderal plant species (e.g., non-native grasses, fennel, mustard, tree tobacco, Russian thistle, etc.) are prevalent throughout.

Prickly pear scrub. The hillsides in the vicinity (i.e., within 500 feet) of the project site contain areas of relatively undisturbed prickly pear scrub vegetation with scattered lemonade berry and laurel sumac. Although native vegetation is present in these areas, herbaceous ruderal species with a mix of native and ruderal plant species are ubiquitous between native shrubs and trees as well as in the understory.

Ruderal and Landscape Areas. This is a highly disturbed and/or man-made habitat that is inclusive of various ornamental plants, often composed of regularly mowed non-native annual grasses and introduced weedy herbs of the composite family (Asteraceae). Neither Holland (1986) nor Sawyer et. al.

(2009) have a description of this habitat as it is not semi-naturalized, rather it is continuously maintained and remains in a ruderal state.

Developed Areas. As discussed above, the main body of the project site is level due to previous grading, and features level building pads, retaining walls, and an array of paved streets, curbs, and gutters.

WILDLIFE

Due to the developed condition of the project site, natural biological habitat is limited to the laurel sumac scrub occurring between Inspiration Point and the main body of the project site and the eucalyptus trees on Inspiration Point. Laurel sumac scrub habitat, in general, provides suitable habitat for a large variety of animal species. The natural habitat within the drainage area (i.e., unnamed stream) and surrounding the project site provides suitable habitat for a diversity of species commonly seen in Southern California scrub vegetation types. Common species observed in this habitat type include bushtit (*Psaltriparus minimus*), yellow-rumped warbler (*Setophaga coronata*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), western fence lizard (*Sceloporus occidentalis*), and desert cottontail (*Sylvilagus audubonii*). Eucalyptus trees serve as potential roosting and nesting habitat for raptors and other birds, and provide a nectar source for hummingbirds and butterflies. The majority of the project site is disturbed and has been previously graded. Therefore, species diversity and abundance onsite are relatively low.

4.3.2 Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with potential responsibility for protection of biological resources within the project site include:

- Board of Trustees (Lead Agency)
- Site Authority (Responsible Agency)
- Regional Water Quality Control Board (waters of the State)
- United States Army Corps of Engineers (waters of the U.S.)
- United States Fish and Wildlife Service (federally listed species and migratory birds)
- California Department Fish and Wildlife (state-listed species and nesting birds, streams and associated riparian vegetation)

Primary authority for general biological resources lies within the land use control and planning authority of lead agencies (in this instance, the Board of Trustees). The California Department of Fish and Wildlife (CDFW) is a trustee agency and responsible for biological resources throughout the state under CEQA, and also has direct jurisdiction under the California Fish and Game Code. Under the State and federal Endangered Species Acts, the CDFW and the United States Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered. The United States Army Corps of Engineers (USACE) has regulatory authority over wetlands and waters of the United States under Section 404 of the federal Clean Water Act. Statutes within the Clean Water Act, the California Fish and Game Code, and the Regional Water Quality Control Boards (RWQCB) all protect wetlands and riparian habitat.

Special Status Species and Vegetation Communities

Special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act; those listed or proposed for listing, or candidates for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act; animals designated as Fully Protected, Species of Special Concern, or

Rare by the CDFW; and those species on the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2017c). Section 3503.5 of the California Fish and Game Code protects birds of prey and their nests and eggs against take, possession, or destruction. Vegetation in California is accorded sensitivity ranking by the CDFW using the community classification system of Holland (1986), and the more recently accepted series concepts of Sawyer et al. (2009).

The 1998 Campus Master Plan Final EIR and Final Supplemental EIR for the Revised Campus Master Plan (2000) did not identify any special-status species as being present specifically within the drainage area adjacent to the main body of the project site. Additionally, the 2016 reconnaissance-level site visit did not identify any sensitive species, sensitive habitat, or suitable habitat for sensitive species within the project site, including the area of Inspiration Point.

Plant Communities of Special Concern. In response to legislative mandates, regulatory authorities have defined sensitive biological resources as those specific organisms that have regionally declining populations such that they may become extinct if declining population trends continue. Habitats are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. Three plant communities of special concern identified by the CNDDDB occur within the vicinity of the project site. These communities include southern coast live oak riparian forest, southern sycamore alder riparian woodland, and valley needlegrass grassland. None of the three plant communities of special concern were observed on the project site during the 2016 reconnaissance-level site visit.

Special Status Plants. Review of the CNDDDB and USFWS information indicated that 12 special status plants are known to occur within five miles of the project site (see Table 11). Of these species, none are expected to occur onsite due to lack of suitable habitat. This is primarily due to the fact that most of the site has been previously graded and disturbed, greatly reducing the potential for special status plants to occur.

Table 11 Special Status and Rare Plant Species and Communities Known to Occur within Five-Miles of the Project Site

Scientific Name / Common Name	¹ Status Fed / ² State ESA ³ CRPR ⁴ G-Rank / S-Rank	Habitat Preference / Requirements	Potential for Occurrence / Basis for Determination
Plants			
<i>Astragalus brauntonii</i> Braunton's milk-vetch	FE / -- 1B.1 G2 / S2	Closed-cone coniferous forest, chaparral, coast scrub, valley and foothill grassland. Recent burns or disturbed areas; in saline, somewhat alkaline soils high in calcium, magnesium, with some potassium. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 200-650m (655-2130ft).	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.

Scientific Name / Common Name	¹ Status Fed / ² State ESA ³ CRPR ⁴ G-Rank / S-Rank	Habitat Preference / Requirements	Potential for Occurrence / Basis for Determination
<i>Berberis nevii</i> Nevin's barberry	FE / SE -- 1B.1 G1 / S1	Sandy or gravelly habitat in alluvial scrub, coastal scrub, chaparral, cismontane woodland, and riparian scrub or woodland between approximately 70-825m (950-5,170 ft).	Not Expected. Evergreen shrub that can be identified outside of blooming season, and was not observed within the project area. Elements of suitable habitat present; however, majority of site previously graded and disturbed.
<i>Delphinium pany</i> dune larkspur	-- / -- 1B.2 G4T2 / S2	Chaparral, coastal dunes. On rocky areas and dunes. 15-375m (49-1230ft).	Not Expected. Suitable habitat not present. Majority of site was previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	FE / SE 1B.1 G1 / S1	Chaparral, valley and foothill grassland, coastal scrub. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630m (98-2067ft).	Not Expected. Suitable habitat not present. Majority of site was previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.
<i>Calochortus plummerae</i> Plummer's mariposa lily	-- / -- 4.2 G4 / S4	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 100-1700m (330-5575ft).	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.
<i>Chloropyron maritimum</i> ssp. <i>Maritimum</i> salt marsh bird's-beak	FE / SE 1B.2 G4?T1 / S1	Coastal salt marsh, coastal dunes. Limited to the higher zones of the salt marsh habitat. 0-30m (0-100ft).	Not Expected. Suitable habitat not present. Majority of site was previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat. Site lacks marsh and dune habitat.
<i>Dudleya blochmaniae</i> ssp. <i>Blochmaniae</i> Blochman's dudleya	-- / -- 1B.1 G3T2 / S2	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5-450m (15-1475ft).	Not Expected. Suitable habitat not present. Majority of site was previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat. Site lacks preferred rocky slopes and shallow clays.

Scientific Name / Common Name	¹ Status Fed / ² State ESA ³ CRPR ⁴ G-Rank / S-Rank	Habitat Preference / Requirements	Potential for Occurrence / Basis for Determination
<i>Dudleya parva</i> Conejo dudleya	FT / -- 1B.2 G1 / S1	Coastal scrub, valley and foothill grassland. In clayey or volcanic soils on rocky slopes and grassy hillsides. 60-450m (195-1475ft).	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat. Site lacks clayey and volcanic soils on rocky slopes or grassy hillsides
<i>Dudleya verity</i> Verity's dudleya	FT / -- 1B.1 G1 / S1	Chaparral, cismontane woodland, coastal scrub. On volcanic rock outcrops in the Santa Monica Mountains. 60-120m (195-395ft).	Not Expected. Suitable habitat not present. Majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat. No rock outcrops present onsite.
<i>Eriogonum crocatum</i> Conejo buckwheat	-- / SR 1B.2 G1 / S1	Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops; rocky sites. 50-580m (165-1900ft).	Not Expected. Suitable habitat not present. Majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.
<i>Monardella sinuata</i> ssp. <i>Gerryi</i> Gerry's curly-leaved monardella	-- / -- 1B.1 G3T1 / S1	Coastal scrub. Sandy openings. 150-245 m.	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	-- / -- 2B.2 G4 / S2	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites. 0-2100m (0-6890ft).	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.

Scientific Name / Common Name	¹ Status Fed / ² State ESA ³ CRPR ⁴ G-Rank / S-Rank	Habitat Preference / Requirements	Potential for Occurrence / Basis for Determination
<i>Senecio aphanactis</i> chaparral ragwort	-- / -- 2B.2 G3 / S2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 15-800m (50-2625ft).	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat. Site lacks drying alkaline flats.
<i>Texosporium sancti-jacobi</i> woven-spored lichen	-- / -- 3 G3 / S1	Chaparral. Open sites; in California w/ <i>Adenostoma fasciculatum</i> , <i>Eriogonum</i> , <i>Selaginella</i> . At Pinnacles, on small mammal pellets. 290-660m (950-2165ft).	Low Potential. Elements of suitable habitat present; however, majority of site previously graded and disturbed. Natural habitat associated with unnamed stream dominated by ruderal species, further reducing suitable habitat.

Plant Communities

southern coast live oak riparian forest	-- / -- -- G4 / S4	Riparian forest	Not Expected. Community not observed onsite.
southern sycamore alder riparian woodland	-- / -- -- G4 / S4	Riparian woodland	Not Expected. Community not observed onsite.
valley needlegrass grassland	-- / -- -- G3 / S3.1	Valley and foothill grassland	Not Expected. Community not observed onsite.

Code Designations

¹ Federal Status: 2017 USFWS Listing	² State Status: 2017 CDFW Listing	³ CNPS California Rare Plant Rank	⁴ G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind 5
FT = Federally Threatened FC = Federally Candidate FE = Federally Endangered FD = Federally Delisted -- = Not Listed	SE = State Endangered ST = State Threatened SR = State Rare SD = State Delisted -- = Not Listed	1A = Presumed Extinct in CA 1B = Rare, Threatened, or Endangered in CA and elsewhere 2 = Rare, Threatened, or Endangered in CA, but more common elsewhere 3 = Need more information (a Review List) 4 = Plants of Limited Distribution (a Watch List) <u>CRPR Threat Code Extension:</u> .1 = Seriously endangered in California (> 80% of occurrences threatened / high degree and immediacy of threat)	G1 or S1 - Critically Imperiled Globally or Subnationally G2 or S2 - Imperiled Globally or Subnationally G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally G4 or S4 - Apparently secure Globally or Subnationally G5 or S5 - Secure Globally or Subnationally T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species) Q – Questionable taxonomy that may reduce

.2 = Fairly endangered in California (20-80% occurrences threatened)
 .3 = Not very endangered in California (<20% of occurrences threatened)
 -- = Not Listed

Source: CDFW 2017b, USFWS 2017b

Special Status Animals. Review of the CNDDDB identified 14 special status wildlife species that may occur within five miles of the project site (Table 12). Sensitive wildlife species typically have very specific habitat requirements which may include, but are not limited to, vegetation communities, elevation levels and topography, and availability of primary constituent elements (i.e., space for individual and population growth, breeding, foraging, and shelter).

Table 12 Special Status Wildlife Species Known to Occur within Five Miles of the Project Site

<i>Scientific Name</i>	Status ¹ Fed / ² State ESA ² CDFW	³ G-Rank / S-Rank	Habitat Requirements	Potential for Occurrence / Basis for Determination
Invertebrates				
<i>Bombus crotchii</i> Crotch bumble bee	-- / -- -- G3G4 / S1S2		Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Not Expected. Suitable habitat not present. Site lacks preferred food plants.
<i>Cicindela senilis frosti</i> senile tiger beetle	-- / -- -- G2G3T1T3 / S1		Inhabits marine shoreline, from central California coast south to salt marshes of San Diego. Also found at Lake Elsinore. Inhabits dark-colored mud in the lower zone and dried salt pans in the upper zone.	Not Expected. Suitable habitat not present. Site lacks preferred mud shore/flats and wetland type habitats.
<i>Panoquina errans</i> wandering (=saltmarsh) skipper	-- / -- -- G4G5 / S2		Southern California coastal salt marshes. Requires moist saltgrass for larval development.	Not Expected. Suitable habitat not present. Site lacks preferred marsh and wetland type habitats.
<i>Trimerotropis occidentiloides</i> Santa Monica grasshopper	-- / -- -- G1G2 / S1S2		Known only from the Santa Monica Mountains (SMM). Found on bare hillsides and along dirt trails in chaparral.	Low Potential. Elements of suitable habitat present; however, site has been graded and is located on westernmost edge of SMM.
Fish				
<i>Gila orcutti</i> arroyo chub	-- / -- SSC G2 / S2		Native to streams from Malibu Cr to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Not Expected. Suitable habitat not present. Unnamed stream onsite does not contain a permanent source of water.

<i>Scientific Name</i>	Status ¹ Fed / ² State ESA ² CDFW	³ G-Rank / S-Rank	Habitat Requirements	Potential for Occurrence / Basis for Determination
<i>Oncorhynchus mykiss irideus</i> steelhead – southern California DPS and south/central California DPS	FE / -- SSC G5T1Q / S1		Fed listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	Not Expected. Suitable habitat not present. Unnamed stream onsite does not contain a permanent source of water.
Reptiles				
<i>Emys marmorata</i> western pond turtle	-- / -- SSC G3G4 / S3		A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected. Suitable habitat not present. Unnamed stream onsite does not contain a permanent source of water. Site lacks preferred aquatic vegetation.
<i>Thamnophis hammondi</i> two-striped garter snake	-- / -- SSC G4 / S3S4		Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected. Suitable habitat not present. Unnamed stream onsite does not contain a permanent source of water. Site lacks preferred aquatic vegetation.
Birds				
<i>Artemisospiza belli belli</i> Bell's sage sparrow	-- / -- WL G5T2T4 / S2?		Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Low Potential. Preferred habitat not present onsite; however, adjacent land contains potential foraging and nesting habitat.
<i>Athene cunicularia</i> burrowing owl	-- / -- SSC G4 / S3		Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected. Suitable habitat not present. Site has been previously graded and lacks vegetation and mammal burrows for foraging and nesting.
<i>Campylorhynchus brunneicapillus sandiegensis</i> Coastal cactus wren	-- / -- SSC G5T3Q / S3		Southern California coastal sage scrub. Wrens require tall <i>Opuntia</i> cactus for nesting and roosting.	Low Potential. Suitable habitat not present onsite; however, adjacent lands contain marginally suitable habitat with the presence of <i>Opuntia</i> .

<i>Scientific Name</i> Common Name	Status ¹ Fed / ² State ESA ² CDFW ³ G-Rank / S-Rank	Habitat Requirements	Potential for Occurrence / Basis for Determination
<i>Elanus leucurus</i> white-tailed kite	-- / -- FP G5 / S3S4	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low Potential. Elements of suitable habitat present. Species known to occur on campus. Eucalyptus trees on Inspiration Point may serve as perch and/or nest site. However, site largely lacks foraging habitat, except for drainage area between main site and Inspiration Point.
<i>Eremophila alpestris actia</i> California horned lark	-- / -- WL G5T3Q / S3	Coastal regions, chiefly from Sonoma Co. to San Diego Co. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Low Potential. Preferred habitat not present onsite; however, adjacent land contains potential foraging and nesting habitat.
<i>Lanius ludovicianus</i> Loggerhead shrike	-- / -- SSC G4 / S4	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Low Potential. Preferred habitat not present onsite; however, adjacent land contains potential foraging and nesting habitat.
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	-- / SE -- G5T3 / S3	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County. Nests in Salicornia on and about margins of tidal flats.	Not Expected. Suitable habitat not present. Site lacks marsh, swamp, and wetland habitat types.
<i>Polioptila californica californica</i> coastal California gnatcatcher	FT / -- SSC G4G5T2Q / S2	Obligate, permanent resident of coastal sage scrub below 2500 feet. in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Low Potential. Preferred coastal sage scrub habitat not present onsite. Adjacent land (within 500 feet) contains elements of scrub habitat, but has not recovered sufficiently to be considered suitable for the species.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE / SE -- G5T2 / S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Not Expected. Suitable habitat not present. Site lacks preferred riparian vegetation for nesting and foraging.

Code Designations		
¹ Federal Status: 2017 USFWS Listing	² State Status: 2017 CDFW Listing	³ G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind 5
FT = Federally Threatened	SE = State Endangered	G1 or S1 - Critically Imperiled Globally or Subnationally
FC = Federally Candidate	ST = State Threatened	G2 or S2 - Imperiled Globally or Subnationally
FE = Federally Endangered	SR = State Rare	G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally
FD = Federally Delisted	SD = State Delisted	G4 or S4 - Apparently secure Globally or Subnationally
-- = Not Federally Listed	SSC = CDFW Species of Special Concern	G5 or S5 - Secure Globally or Subnationally
	FP = CDFW Fully Protected	T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
	WL = CDFW Watch List	Q – Questionable taxonomy that may reduce conservation priority

Source: CDFW 2017b

4.3.3 Methodology and Significance Thresholds

The impact assessment for biological resources consisted of a review of relevant literature followed by a field reconnaissance survey and preparation of this analysis. The analysis of potential presence of special status species and sensitive habitat was based on the literature review and field survey designed to assess habitat suitability and presence or absence of special status species.

Methodology

LITERATURE REVIEW

Queries of the USFWS Information, Planning, and Conservation System (IPaC), CDFW CNDDDB, and the CNPS CRPR were conducted to obtain comprehensive information regarding State and federally listed species as well as other special status species considered to have the potential to occur within the *Camarillo, California* USGS 7.5-minute topographic quadrangle and the surrounding seven quadrangles (*Saticoy, Santa Paula, Moorpark, Newbury Park, Triunfo Pass, Point Mugu, Oxnard*). Note that for CNDDDB mapping purposes, a 5-mile search radius was used.

In addition, the following resources were reviewed for information about the project site and surrounding vicinity (i.e. within 500 feet of the development boundary):

- Aerial photographs of the study area and vicinity
- Federal Register listing package for each federally listed endangered or threatened species and/or their Critical Habitat potentially occurring on the site
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (2016)
- USFWS IPaC list of federally listed species (2017b)
- USFWS Critical Habitat Portal (2017a)
- CDFW CNDDDB (2017b)
- CNPS Rare Plan Program, Inventory of Rare and Endangered Plants (2017)
- USGS topographic maps and current aerial photos for evidence of USACE or CDFW jurisdictional areas pursuant to Section 404 of the Clean Water Act and Section 1602 of the California Fish and Game Code
- eBird Online Database (2017)

FIELD RECONNAISSANCE SURVEY

A field reconnaissance survey was conducted to document the existing site conditions and to evaluate the potential for presence of sensitive biological resources, including sensitive plant and animal species, sensitive plant communities, potentially jurisdictional waters of the U.S. and wetlands, potentially jurisdictional waters of the State, and habitat for federally and State protected nesting birds.

The field reconnaissance survey was conducted by Rincon Biologist, James Rasico on November 9, 2016. Weather conditions during the surveys included an average temperature of 82 degrees Fahrenheit, with winds of one to three miles per hour, and clear skies. Mr. Rasico surveyed the Inspiration Point crossing area of the project site on foot and recorded all biological resources encountered.

In addition to the field reconnaissance surveys, Rincon Senior Biologist, Robin Murray, conducted a formal jurisdictional delineation of the unnamed creek on December 28, 2016. All potentially jurisdictional features within the site were inspected to record existing conditions and determine jurisdictional limits.

During the surveys, an inventory of all plant and animal species observed was compiled and an evaluation of potentially jurisdictional aquatic features was conducted. Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012). All plant species encountered were noted and identified to the lowest possible taxonomic level. The vegetation classification system used for this analysis is based on *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009) and *Preliminary Descriptions of the Terrestrial Communities of California* (Holland 1986). These vegetation communities were mapped onto aerial imagery depicting the project site and then later digitized using ArcGIS® (ESRI 2016).

Wildlife identification and nomenclature followed standard reference texts including *Sibley Field Guide to Birds of Western North America* (Sibley 2003), *Field Guide to Western Reptiles and Amphibians* (Stebbins 2003), and *Mammals of North America* (Bowers et al. 2004). The habitat requirements for each regionally occurring special status species were assessed and compared to the type and quality of the habitats observed within the project site during the field survey. Numerous sensitive species were eliminated from consideration as having potential to occur on site due to lack of suitable habitat, lack of suitable soils/substrate, and/or knowledge of regional distribution. The relative density of fossorial mammal burrows and soil characteristics throughout the site were also noted.

Significance Thresholds

The following threshold criteria, as defined within the *State CEQA Guidelines, Appendix G – Initial Study Checklist*, are used as the basis to evaluate potential environmental effects. Based on these criteria, a proposed project would have a significant effect on biological resources if it would:

- 1 Have substantial adverse effects, 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.
- 2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.
- 3 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.

- 4 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.
- 5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- 6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.

As explained fully in the Initial Study (see Appendix A), implementation of the proposed project would not result in significant impacts to: sensitive riparian or natural communities (Threshold b); wildlife corridors and movement (Threshold d); local policies and ordinances (Threshold e); and adopted habitat conservation and natural community conservation plans (Threshold f). Therefore, no further discussion of these impacts is included in this section. Thresholds “a” and “c” are discussed below.

4.3.4 Project Impacts and Mitigation Measures

Impact BIO-1 : CONSTRUCTION OF THE PROJECT COULD HAVE A SUBSTANTIAL ADVERSE EFFECT ON NESTING BIRDS. MITIGATION MEASURES TO REDUCE POTENTIAL IMPACTS WOULD BE REQUIRED, INCLUDING TIMING RESTRICTIONS AND AVOIDANCE BUFFERS. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. [THRESHOLD 1]

The proposed project primarily involves the development of a residential project on land that has already been disturbed and graded. The proposed project does involve the demolition of a drainage culvert and crossing, and construction of a new approximately 75-foot long, 30-foot wide crossing with a culvert and two reinforced concrete retaining walls. The Campus Master Plan FEIR (CSUCI 1998) identified the presence of arroyo willows adjacent to and downstream of the existing culvert, as well as several mulefat shrubs with an understory of cattails (*Typha* sp.) and sedges (*Carex* sp.). The Campus Master Plan FEIR determined that well-defined southern willow scrub habitat, which is a sensitive plant community, was not present, but that this category best described the two areas. The 2016 reconnaissance-level site visit identified one arroyo willow with scattered mulefat shrubs, confirming that this area has not developed into full southern willow scrub habitat. Plant species observed during the 2016 reconnaissance-level site visit were not indicative of an intact southern willow scrub community or other wetland habitat (i.e., cattail, sedges, or other hydrophytic vegetation were not observed), and were more typical of a dry river wash. Therefore, southern willow scrub habitat does not occur within the project site.

The Campus Master Plan FEIR (CSUCI 1998) and Final Supplemental EIR for the Revised Campus Master Plan (2000) did not identify any special-status species specifically within the drainage area. Additionally, the 2016 reconnaissance-level site visit did not identify any sensitive species or suitable habitat for sensitive species within the project site, including the area of Inspiration Point.

Special Status Plants and Vegetation Communities

The proposed project is not expected to impact special status plant species, primarily due to the fact that the majority of the site was previously graded and disturbed. The small natural area associated with the unnamed drainage does not contain suitable habitat for special status plant species to occur. Adjacent habitat within the fuel modification areas (i.e., within 100 feet of the project site) does not contain sensitive vegetation communities, but may provide suitable habitat for special status plants. Therefore, although impacts to vegetation communities are not expected from implementation of the proposed project, mitigation measures are not required to address potential impacts to special status plant species.

Special Status Wildlife

COASTAL CALIFORNIA GNATCATCHER

Coastal California gnatcatcher (*Polioptila californica californica*) is a federally threatened species and a CDFW species of special concern. Its preferred habitat is coastal sage scrub generally below 2,500 feet. The project site is located in the western extent of the species range. The nearest USFWS designated critical habitat for the species occurs approximately 12 miles northeast of the site near State Route 23 and in the Santa Susanna Mountains. According to the eBird online database, the species has been frequently observed on the CSU Channel Islands campus within the last few years; however none of the recorded observations were on or adjacent to the project site. Additionally, the CNDDDB contains one record (Occurrence No. 918) from 2009 of the species being observed in the open space east of the CSU Channel Islands campus, approximately 0.75 mile south of the project site.

Due to the project site being previously graded and disturbed, no suitable habitat for the species is present at the site. Therefore, the proposed project would not result in direct impacts to coastal California gnatcatcher habitat. The hillsides adjacent to the site (within approximately 500 feet) contain elements of coastal sage scrub (i.e., laurel sumac scrub), but overall this habitat has not recovered sufficiently from the Springs Fire to be considered suitable for the species. Thus, the potential for the species to occur in the surrounding habitat, including the fuel modification area, is low. Potential indirect impacts on this species resulting from the proposed project are addressed under *Indirect Impacts to Nesting Birds*.

LEAST BELL'S VIREO

Least Bell's vireo (*Vireo bellii pusillus*) is a federal and State endangered species. Its preferred habitat includes low riparian zones within the vicinity of water or in dry river bottoms below 2,000 feet. The species typically nests in dense willow, *Baccharis* sp., or mesquite vegetation. The nearest USFWS designated critical habitat for the species occurs approximately 21 miles northeast of the project site in the Santa Clara River, east of the town of Piru. According to the eBird online database, the species has been frequently observed within the last few years in the vicinity of Round Mountain, located west of the CSU Channel Islands campus and adjacent to Calleguas Creek. Furthermore, one CNDDDB occurrence exists approximately 0.75 mile southwest of the project site in Long Grade Canyon Creek adjacent to the CSU Channel Islands campus. No eBird or CNDDDB occurrence records exist for the species on or adjacent to the project site. This is primarily due to the fact that the project site and adjacent lands lack suitable habitat for the species. Therefore, the species is not expected to occur at or adjacent to the project site.

WHITE-TAILED KITE

White-tailed kite (*Elanus leucurus*) is a CDFW fully-protected species. Its preferred habitat includes rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. It forages in open grasslands, meadows, or marshes. Although none of the species' preferred habitat exists at or adjacent to the site, the species is known to occur in Long Grade Canyon Creek adjacent to the CSU Channel Islands campus. The CNDDDB contains one occurrence record (Occurrence No. 157) from 2009 within Long Grade Canyon Creek and the eBird online database contains numerous observations from the last few years in the vicinity of the campus. No CNDDDB or eBird records exist at the project site.

Due to the project site being previously graded and disturbed, no suitable habitat for the species is present onsite. Therefore, the proposed project would not result in direct impacts to white-tailed kite habitat. However, the species, as well as other raptors, may occur in suitable habitat adjacent to the project site. Indirect impacts on this species resulting from the proposed project are addressed under *Indirect Impacts to Nesting Birds*.

COASTAL CACTUS WREN

Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is a CDFW species of special concern. Its preferred habitat includes coastal sage scrub with tall *Opuntia* sp. cactus for nesting and roosting. No CNDDDB records exist at the project site or within 5 miles of the project site. The eBird online database contains numerous observations from the last few years in the vicinity of the campus. No CNDDDB or eBird records exist on or adjacent to the project site.

Due to the project site being previously graded and disturbed, no suitable habitat for the species is present onsite. Therefore, the proposed project would not result in direct impacts to coastal cactus wren habitat. However, the species may occur in suitable habitat adjacent to the project site. Indirect impacts on this species resulting from the proposed project are addressed under *Indirect Impacts to Nesting Birds*.

CALIFORNIA HORNED LARK

California horned lark (*Eremophila alpestris actia*) is a CDFW watch list species. Its preferred habitat includes short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats. The CNDDDB does not contain any occurrence records within 5 miles of the project site. However, the eBird online database contains numerous records from the last few years in the vicinity of the CSU Channel Islands campus. No CNDDDB or eBird records exist within or adjacent to the project site.

Due to the project site being previously graded and disturbed, no suitable habitat for the species is present onsite. Therefore, the proposed project would not result in direct impacts to California horned lark habitat. However, the species may occur in suitable habitat adjacent to the project site. Indirect impacts on this species resulting from the proposed project are addressed under *Indirect Impacts to Nesting Birds*.

LOGGERHEAD SHRIKE

Loggerhead shrike (*Lanius ludovicianus*) is a CDFW species of special concern. Its preferred habitat includes broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. More specifically, it prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. The CNDDDB does not contain any occurrence records within 5 miles of the project site. However, the eBird online database contains numerous records from the last few years in the vicinity of the CSU Channel Islands campus. No CNDDDB or eBird records exist at or adjacent to the project site.

Due to the project site being previously graded and disturbed, no suitable habitat for the species is present onsite. Therefore, the proposed project would not result in direct impacts to loggerhead shrike habitat. However, the species may occur in suitable habitat adjacent to the project site. Indirect impacts on this species resulting from the proposed project are addressed under *Indirect Impacts to Nesting Birds*.

BELL'S SAGE SPARROW

Bell's sage sparrow (*Artemisospiza belli belli*) is a CDFW watch list species. Its preferred habitat includes coastal sage scrub and it nests in chaparral dominated by fairly dense stands of chamise. The CNDDDB does not contain any occurrence records within 5 miles of the project site. The eBird online database contains records of the species occurring approximately 3.5 miles east of the project site. No CNDDDB or eBird records exist within or adjacent to the project site.

Due to the project site being previously graded and disturbed, no suitable habitat for the species is present onsite. Therefore, the proposed project would not result in direct impacts to Bell's sage sparrow

habitat. However, the species may occur in marginally suitable habitat adjacent to the project site. Indirect impacts on this species resulting from the proposed project are addressed under *Indirect Impacts to Nesting Birds*.

INDIRECT IMPACTS TO NESTING BIRDS

Existing vegetation within and adjacent to the project site could provide habitat for nesting birds that are protected under the Migratory Bird Treaty Act (MBTA) (16 United States Code Section 703-711) and California Fish and Game Code (Section 3500). Protected birds include common songbirds, waterfowl, shorebirds, hawks, owls, eagles, ravens, crows, native doves and pigeons, swifts, martins, swallows, and others, including their body parts (e.g., feathers, plumes), nests, and eggs. The proposed project has the potential to impact migratory and other bird species if construction activities occur during the nesting/breeding/dispersal season, typically February 1 through September 15. Construction-related disturbances could result in nest abandonment or premature fledging of the young. Therefore, the proposed project could result in potentially significant impacts to nesting birds. Mitigation is required to reduce these potential impacts to less than significant.

Mitigation Measure

MM BIO-1 (A) NESTING BIRDS

The following mitigation measure, in compliance with MBTA and California Fish and Game Code requirements, is required to reduce potentially significant impacts to nesting birds.

To avoid disturbance of nesting and special-status birds, including raptorial species protected by the MBTA and California Fish and Game Code, activities related to construction of the proposed project, including, but not limited to vegetation removal, ground disturbance, and construction and demolition, should occur outside of the nesting season (February 1 through September 15). If construction activities must occur during the nesting season, a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of ground disturbance and vegetation removal activities. The survey shall be conducted on foot and visually assess the entire project site, including a 300-foot line-of-site buffer (500-foot for raptors) using binoculars to the extent practical. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist using bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and instructed to avoid entering the buffer zone during the nesting season. No construction activities shall occur within this buffer until the biologist has confirmed that breeding / nesting is completed and the young have fledged. Encroachment into the buffer shall occur only at the discretion of the qualified biologist. In the event a coastal California gnatcatcher, or other special status species, is observed nesting within the 500-foot survey buffer during the survey, no construction activities shall occur until the project proponent has consulted with USFWS and/or CDFW, as appropriate, for additional guidance regarding take avoidance.

MM BIO-1 (B) SPECIAL STATUS PLANT SURVEYS

To avoid impacts to special status plants within the fuel modification area, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity within this area. The surveys shall be floristic in nature, seasonally-timed to coincide with the blooming period of the target species identified in this EIR as having a potential to occur, and be conducted by a qualified biologist. All special status plant species identified on-site shall be mapped onto a site-specific aerial

photograph and topographic map. Surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions, if any such protocols exist. A report of the survey results shall be submitted to the implementing agency, and the CDFW and/or USFWS, as appropriate, for review and approval.

MM BIO-1 (C) SPECIAL STATUS PLANT AVOIDANCE MEASURES

Any State listed or California Rare Plant List 1B species found during special status plant surveys [pursuant to mitigation measure BIO-2] shall be avoided, and any vegetation clearing within 50 feet of any identified rare plant will be conducted by hand, if feasible. Any rare plant occurrences shall have bright orange protective fencing installed at least 50 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm.

MM BIO-1 (D) RESTORATION PLAN

If special status plants species cannot be avoided and will be impacted by the project, all impacts shall be mitigated at a minimum ratio of 2:1 (number of acres/individuals restored to number of acres/individuals impacted) for each species as a component of habitat restoration, including but not limited to transplantation and habitat restoration. A restoration plan shall be prepared and submitted to CDFW and/or USFWS, as appropriate, for approval (e.g., if a state listed plant species will be impacted, the restoration plan shall be submitted to the CDFW for approval).

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures BIO-1(a) through BIO-1(d) would reduce impacts to nesting birds to a less than significant level by avoiding disturbance of nesting birds during the breeding season or the performance of a pre-construction nesting bird survey prior to initiation of ground disturbance and vegetation removal activities and establishment of appropriate buffers, if needed. Measures would also reduce the potential for impacts to special status plant species during maintenance of the fuel modification buffer.

Impact BIO-2 : THE PROPOSED PROJECT WOULD RESULT IN A SUBSTANTIAL ADVERSE EFFECT ON JURISDICTIONAL WETLANDS AND WATERS. COMPENSATORY MITIGATION ACREAGE IS AVAILABLE UNDER THE CAMPUS HABITAT RESTORATION PROGRAM TO REPLACE IMPACTED ACREAGE. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. [THRESHOLD 3]

As stated above, the majority of the project site has previously been disturbed and graded, except for the unnamed blue line stream feature. However, as determined by the *Jurisdictional Delineation Report* (Appendix E), no special status vegetation communities are present within or adjacent to the unnamed blue line stream feature. In addition, as described in the Initial Study, no suitable habitat for special status species was observed onsite (see Appendix A). As described in Section 2.0, *Project Description*, the rectangular orifice outlet that drains the constructed wetland located south of the project site along Channel Islands Drive and Camarillo Street would be modified to reduce flows during a 100-year storm event. Although the culvert is not located within any sensitive habitat (i.e., dominant vegetation is coyote bush scrub), the culvert is located within a USACE/RWQCB and CDFW jurisdictional drainage.

As described in Chapter 2.0, *Project Description*, the existing Inspiration Point crossing culvert is undersized; therefore, the proposed project includes replacement of the existing culvert with a larger culvert. Temporary and permanent impacts associated with replacing the culvert are discussed in detail in the *Jurisdictional Delineation Report* (Appendix E). Table 13 below provides a summary of the impacts. As stated in the *Jurisdictional Delineation Report*, the compensatory mitigation for permanent impacts to jurisdictional resources would be negotiated with the individual agencies during the regulatory permit application process.

Table 13 Potential Resource Agency Jurisdiction Within the Project Area

Resource Agency	Total Jurisdiction	Temporary Impacts	Permanent Impacts
Inspiration Point Area			
USACE/RWQCB	0.019 acre (836 ft ²) / 90 linear feet	0.004 acre (196 ft ²) / 75 linear feet	0.008 acre (362 ft ²) / 20 linear feet
CDFW	0.043 acre (1,882 ft ²) / 90 linear feet	0.015 acre (649 ft ²) / 75 linear feet	0.014 acre (602 ft ²) / 20 linear feet
Constructed Wetland Outlet Area			
USACE/RWQCB	0.002 acre (100 ft ²) / 10 linear feet	0.002 (100 ft ²) / 10 linear feet	0.000 acre (0 ft ²) / 0 linear feet

The proposed project would utilize existing infrastructure located in the unnamed blue line creek for the stormwater system, sewer system, and potable/recycled water. Therefore, no additional impacts would occur to the unnamed blue line stream related to upgrades/replacement of these systems. No new permanent impacts would occur as a result of the modifications to the rectangular orifice outlet that drains the constructed wetland, and temporary impacts would be confined to a 100 ft² area within USACE and CDFW jurisdiction areas. Access would be restricted to existing roadway and trails, with no additional impacts to native vegetation.

As a component of the CSU Channel Islands Campus Master Plan, habitat restoration has occurred within multiple areas of the campus since 2002. This mitigation program has resulted in development of excess acreage of restored habitat that is available to compensate for future impacts associated with campus buildout. Specifically, 5.11 acres of USACE waters of the U.S. and wetlands, 4.76 acres of RWQCB waters of the state, and 10.33 acres of CDFW streambed and associated riparian habitat of “banked” acreage remain (Rincon Consultants, Inc. 2012). As such, temporary and permanent impacts associated with replacement of the culvert at the Inspiration Point crossing have been “pre-mitigated” and would, therefore, be subtracted from the remaining total acreage in the compensatory mitigation program to satisfy mitigation requirements.

Mitigation Measure

MM BIO-2 (A) AVOIDANCE AND MINIMIZATION

Potential jurisdictional areas (ephemeral drainages) shall be avoided to the extent practical. Any material/spoils generated from project activities shall be located away from jurisdictional areas and protected from stormwater run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank. Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned and any contaminated materials properly disposed. For all spills, the project foreman will be notified.

MM BIO-2 (B) COMPENSATORY MITIGATION

Prior to ground disturbance activities that will impact waters and wetlands of the U.S. and/or State, the project proponent shall consult with USACE on the need for a Clean Water Act Section 404 permit, the RWQCB regarding compliance with Section 401 of the Clean Water Act, and CDFW on the need for a Streambed Alteration Agreement. Based on consultation with the agencies, if permits are required for the project, appropriate permits shall be obtained prior to disturbance of jurisdictional resources. To

provide compensatory mitigation for impacts associated with replacement of the culvert, permanent impacts will be mitigated at a minimum 1:1 ratio, and subtracted from the excess acreage of the campus mitigation program. Temporary impact areas adjacent to the new Inspiration Bridge culvert, and temporary impacts associated with modification of the constructed wetlands outlet will be re-vegetated consistent with the requirements of the existing Habitat Mitigation and Monitoring Plan (HMMP; Rincon Consultants, Inc. 2002) and HMMP Update (Rincon Consultants, Inc. 2009). Further information regarding the HMMP is provided in the Regulatory Due Diligence and Mitigation Planning Memorandum (Rincon Consultants, Inc. 2012).

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures BIO-2(a) and (b) would reduce impacts to jurisdictional waters to a less than significant level through provision of compensatory mitigation acreage. As noted in Table 13, the proposed project would result in a total of 0.19 acre of impact to USACE/RWCQB jurisdictional areas and 0.043 acre to CDFW jurisdictional area. Assuming a mitigation ratio of 1:1, there would be more than sufficient existing restored habitat at the campus to compensate for these impacts.

4.3.5 Cumulative Impacts

Per the Campus Master Plan FEIR (CSUCI 1998) and Final Supplemental EIR for the Revised Campus Master Plan (CSUCI 2000), urban and agricultural development of the Oxnard Plain has essentially eliminated the natural communities that once existed within the lowland areas. The western portion of the Santa Monica Mountains, however, has not been developed and large land holdings in this area are within permanent open space conservation easements. As described in the Campus Master Plan FEIR, reuse of the area as a University campus with limited ancillary development of previously disturbed areas, of which the proposed project is a part, would act to conserve the remaining natural communities within the property. Nonetheless, development of other areas within the Calleguas Creek watershed would result in further significant habitat losses.

As shown in the Campus Master Plan, the development of University Glen Phase 2 is one of the final areas of development proposed at the University outside of the main campus area and was considered as part of the cumulative project scenario in the previous CEQA documentation for the University and would assist in completing the development program previously envisioned in the Campus Master Plan. In addition, the University has undertaken a program of habitat restoration and conservation at the campus that would reduce the cumulative effect of loss of jurisdictional waters due to the proposed project and development at the campus as a whole. As shown in Table 6, in Section 3.3, *Cumulative Development*, the majority of reasonably foreseeable planned and future projects in the vicinity of the project site would occur in and around the urbanized area of the city of Camarillo. Therefore, while impacts to biological resources resulting from cumulative projects in the region could be significant, given the existing disturbed nature of the project site, the availability of compensatory habitat and the limited potential for impacts to special status species, the proposed project's contribution to the cumulative impact would not be considerable.

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4.4 Greenhouse Gas Emissions

This section discusses the contribution of human activities to global climate change, and provides a summary of existing greenhouse gas (GHG) emissions both globally and locally. This section also describes the criteria for determining significance and analyzes the proposed project's potential impacts related to GHG emissions, including generation of GHG emissions and consistency with plans, policies, and regulations related to GHGs.

4.4.1 Setting

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (IPCC 2014), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-20th century (IPCC 2014).

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxides (N₂O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Observations of CO₂ concentrations, globally-averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently observed increases in CH₄ and N₂O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and sulfur hexafluoride (SF₆) (California Environmental Protection Agency [CalEPA] 2006). Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one.

By contrast, methane CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis (IPCC 2007).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, the earth's surface would be about 34° C cooler (CalEPA 2015). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The following discusses the primary GHGs of concern.

CARBON DIOXIDE

The global carbon cycle is made up of large carbon flows and reservoirs. Billions of tons of carbon in the form of CO₂ are absorbed by oceans and living biomass (i.e., sinks) and are emitted to the atmosphere annually through natural processes (i.e., sources). When in equilibrium, carbon fluxes among these various reservoirs are roughly balanced (United States Environmental Protection Agency [USEPA] 2014). CO₂ was the first GHG demonstrated to be increasing in atmospheric concentration, with the first conclusive measurements made in the second half of the twentieth century. Concentrations of CO₂ in the atmosphere have risen approximately 40 percent since the industrial revolution. The global atmospheric concentration of CO₂ has increased from a pre-industrial value of about 280 parts per million (ppm) to 391 ppm in 2011 (IPCC 2007; Oceanic and Atmospheric Administration [NOAA] 2010). The average annual CO₂ concentration growth rate was larger between 1995 and 2005 (average: 1.9 ppm per year) than it has been since the beginning of continuous direct atmospheric measurements (1960–2005 average: 1.4 ppm per year), although there is year-to-year variability in growth rates (NOAA 2010). Currently, CO₂ represents an estimated 74 percent of total GHG emissions (IPCC 2007). The largest source of CO₂ emissions, and of overall GHG emissions, is fossil fuel combustion.

METHANE

Methane (CH₄) is an effective absorber of radiation, though its atmospheric concentration is less than that of CO₂ and its lifetime in the atmosphere is limited to 10 to 12 years. It has a GWP approximately 25 times that of CO₂. Over the last 250 years, the concentration of CH₄ in the atmosphere has increased by 148 percent (IPCC 2007), although emissions have declined from 1990 levels. Anthropogenic sources of CH₄ include enteric fermentation associated with domestic livestock, landfills, natural gas and petroleum systems, agricultural activities, coal mining, wastewater treatment, stationary and mobile combustion, and certain industrial processes (USEPA 2014).

NITROUS OXIDE

Concentrations of nitrous oxide (N₂O) began to rise at the beginning of the industrial revolution and continue to increase at a relatively uniform growth rate (NOAA 2010). Microbial processes in soil and water produce N₂O. These include reactions that occur in fertilizers that contain nitrogen, fossil fuel combustion, and other chemical processes. Use of these fertilizers has increased over the last century. Agricultural soil management and mobile source fossil fuel combustion are the major sources of N₂O emissions. The GWP of nitrous oxide is approximately 298 times that of CO₂ (IPCC 2007).

FLUORINATED GASES (HFCs, PFCs, AND SF₆)

Fluorinated gases, such as HFC, PFCs, and SF₆, are powerful GHGs that are emitted from a variety of industrial processes. Fluorinated gases are used as substitutes for ozone-depleting substances such as chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), and halons, which have been regulated since the mid-1980s because of their ozone-destroying potential and are phased out under the Montreal Protocol (1987) and Clean Air Act Amendments of 1990. Electrical transmission and distribution systems

account for most SF₆ emissions, while PFC emissions result from semiconductor manufacturing and as a by-product of primary aluminum production. Fluorinated gases are typically emitted in smaller quantities than CO₂, CH₄, and N₂O, but these compounds have much higher GWPs. SF₆ is the most potent GHG the IPCC has evaluated.

Greenhouse Gas Emissions Inventory

Worldwide anthropogenic emissions of GHGs were approximately 46,000 million metric tons (MMT, or gigatonne) CO₂e in 2010 (IPCC 2014). CO₂ emissions from fossil fuel combustion and industrial processes contributed about 65 percent of total emissions in 2010. Of anthropogenic GHGs, carbon dioxide was the most abundant accounting for 76 percent of total 2010 emissions. Methane emissions accounted for 16 percent of the 2010 total, while nitrous oxide and fluorinated gases account for six and two percent respectively (IPCC 2014).

Total U.S. GHG emissions were 6,870.5 MMT CO₂e in 2014 (USEPA 2014). Total U.S. emissions have increased by 7.4 percent since 1990; emissions increased by 1.0 percent from 2013 to 2014 (US EPA 2014). The increase from 2013 to 2014 was due to relatively cool winter conditions, which led to an increase in fuels consumed for heating and cooling for the residential and commercial sectors. Additionally, transportation emissions increased as a result of a small increase in vehicle miles traveled (VMT) and fuel use across on-road transportation modes. There also was an increase in industrial production across multiple sectors resulting in slight increases in industrial sector emissions (USEPA 2014). Since 1990, U.S. emissions have increased at an average annual rate of 0.3 percent. In 2014, the industrial and transportation end-use sectors accounted for 29.2 percent and 26.4 percent of CO₂ emissions (with electricity-related emissions distributed), respectively. Meanwhile, the residential and commercial end-use sectors accounted for 16.6 percent and 17.1 percent of CO₂ emissions, respectively (USEPA 2014).

Based upon the California Air Resources Board (ARB) California Greenhouse Gas Inventory for 2000-2014, California produced 441.5 MMT CO₂e in 2014 (ARB 2016b). The major source of GHG in California is transportation, contributing 37 percent of the state's total GHG emissions. Industrial sources are the second largest source of the state's GHG emissions, contributing 24 percent of the state's GHG emissions (ARB 2016b). California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. The ARB has projected statewide unregulated GHG emissions for the year 2020 will be 509.4 MMT CO₂e (ARB 2016b). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The global combined land and ocean temperature data show an increase of about 0.89°C (0.69°C–1.08°C) over the period 1901–2012 and about 0.72°C (0.49°C–0.89°C) over the period 1951–2012 when described by a linear trend. Several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations are in agreement that LSAT as well as sea surface temperatures have increased. In addition to these findings, there are identifiable signs that

global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2014).

According to the CalEPA's 2010 Climate Action Team Biennial Report, potential impacts of climate change in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CalEPA 2010). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

Air Quality

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Energy Commission [CEC] 2009).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varied hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future water supplies in California. However, the average early spring snowpack in the Sierra Nevada decreased by about 10 percent during the last century, a loss of 1.5 million acre-feet of snowpack storage. During the same period, sea level rose eight inches along California's coast. California's temperature has risen 1°F, mostly at night and during the winter, with higher elevations experiencing the highest increase. Many southern California cities have experienced their lowest recorded annual precipitation twice within the past decade. In a span of only two years, Los Angeles experienced both its driest and wettest years on record (California Department of Water Resources [DWR] 2008; CCCC 2009).

This uncertainty complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. The Sierra snowpack provides the majority of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers. Based upon historical data and modeling DWR projects that the Sierra snowpack will experience a 25 to 40 percent reduction from its historic average by 2050. Climate change is also anticipated to bring warmer storms that result in less snowfall at lower elevations, reducing the total snowpack (DWR 2008).

Hydrology and Sea Level Rise

Climate change could potentially affect: the amount of snowfall, rainfall, and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. According to *The Impacts of Sea-Level Rise on the California Coast*, prepared by the California Climate Change Center (CCCC) (CCCC 2009), climate change has the potential to induce substantial sea level rise in the coming century. The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend

of 1.6 mm per year (World Meteorological Organization [WMO] 2013). As a result, sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO 2013). Sea levels are rising faster now than in the previous two millennia, and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report (2014) predicts a mean sea-level rise of 11-38 inches by 2100. This prediction is more than 50 percent higher than earlier projections of 7-23 inches, when comparing the same emissions scenarios and time periods. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply due to salt water intrusion. In addition, increased CO₂ emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a \$30 billion annual agricultural industry that produces half of the country's fruits and vegetables. Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater air pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (CCCC 2006).

Ecosystems and Wildlife

Climate change and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the average global surface temperature could rise by 1.0-4.5°F (0.6-2.5°C) in the next 50 years, and 2.2-10°F (1.4-5.8°C) in the next century, with substantial regional variation. Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006).

Local Effects of Climate Change

While the above discussion identifies the possible effects of climate change at a global and potentially statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. In general, regional and local predictions are made based on downscaling statewide models (CalEPA 2010). Local air quality, water supplies, agriculture, and ecosystems and wildlife could all be impacted to varying degrees by climate change.

4.4.2 Regulatory Setting

International

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

The United States is, and has been, a participant in the United Nations Framework Convention on Climate Change (UNFCCC) since it was produced 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 and 2.4°C above pre-industrial levels (IPCC 2007). 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.

KYOTO PROTOCOL

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 (CO₂, CH₄, N₂O, SF₆, HFCs, and PFC) to 5.2 percent 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 (UNFCCC 2007). The first commitment period of 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 (UNFCCC 2011).

DURBAN PLATFORM FOR ENHANCED ACTION

In Durban (17th session of the Conference of the Parties in Durban, South Africa 2011), governments decided to adopt a universal legal agreement on climate change. Work began on that task 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, for which a management framework was adopted (UNFCCC 2011; United Nations 2011).

PARIS AGREEMENT

In December 2015, the 21st session of the Conference of the Parties (COP21) adopted the Paris Agreement. The deal requires all countries that ratify it to commit to cutting greenhouse gas emissions, with the goal of peaking greenhouse gas emissions “as soon as possible” (Worland 2015). The agreement includes commitments to (1) achieve a balance between sources and sinks of greenhouse gases in the second half of this century; (2) to keep global temperature increase “well below” 2 degrees Celsius (C) or 3.6 degrees Fahrenheit (F) and to pursue efforts to limit it to 1.5 C; (3) to review progress every five years; and (4) to spend \$100 billion a year in climate finance for developing countries by 2020 (UNFCCC 2015). The agreement includes both legally binding measures, like reporting requirements, as well as voluntary or non-binding measures while, such as the setting of emissions targets for any individual country (Worland 2015).

Federal

The United States Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al.* ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act.

The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines, and requires annual reporting of emissions. The first annual reports for these sources were due in March 2011.

On May 13, 2010, the USEPA issued a Final Rule that took effect on January 2, 2011, setting a threshold of 75,000 tons CO₂e per year for GHG emissions. New and existing industrial facilities that meet or exceed that threshold will require a permit after that date. On November 10, 2010, the USEPA published the “PSD and Title V Permitting Guidance for Greenhouse Gases.” The USEPA’s guidance document is directed at state agencies responsible for air pollution permits under the Federal Clean Air Act to help them understand how to implement GHG reduction requirements while mitigating costs for industry. It is

expected that most states will use the USEPA's new guidelines when processing new air pollution permits for power plants, oil refineries, cement manufacturing, and other large pollution point sources.

On January 2, 2011, the USEPA implemented the first phase of the Tailoring Rule for GHG emissions Title V Permitting the first phase of the Tailoring Rule, all new sources of emissions are subject to GHG Title V permitting if they are otherwise subject to Title V for another air pollutant and they emit at least 75,000 tons CO₂e per year. Under Phase 1, no sources were required to obtain a Title V permit solely due to GHG emissions. Phase 2 of the Tailoring Rule went into effect July 1, 2011. At that time new sources were subject to GHG Title V permitting if the source emits 100,000 tons CO₂e per year, or they are otherwise subject to Title V permitting for another pollutant and emit at least 75,000 tons CO₂e per year.

On July 3, 2012 the USEPA issued the final rule that retains the GHG permitting thresholds that were established in Phases 1 and 2 of the GHG Tailoring Rule. These emission thresholds determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

State

California Air Resources Board (ARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. California has a numerous regulations aimed at reducing the state's GHG emissions. These initiatives are summarized below.

ASSEMBLY BILL 1493

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires ARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of Clean Air Act preemption to California for its greenhouse gas emission standards for motor vehicles beginning with the 2009 model year. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction from 2009 levels by 2012 and 30 percent by 2016. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (ARB 2011).

EXECUTIVE ORDER S-3-05

In 2005, the governor issued Executive Order (EO) S-3-05, establishing statewide GHG emissions reduction targets. EO S-3-05 provides that by 2010, emissions shall be reduced to 2000 levels; by 2020, emissions shall be reduced to 1990 levels; and by 2050, emissions shall be reduced to 80 percent below 1990 levels (CalEPA, 2006). In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report") (CalEPA, 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc. In April 2015 the governor issued EO B-30-15, calling for a new target of 40 percent below 1990 levels by 2030.

ASSEMBLY BILL 32

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05), and requires ARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires ARB to adopt regulations to require reporting and verification of statewide GHG emissions.

After completing a comprehensive review and update process, ARB approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO₂e. The Scoping Plan was approved by ARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted over the last five years. Implementation activities are ongoing and ARB is currently the process of updating the Scoping Plan.

In May 2014, ARB approved the first update to the AB 32 Scoping Plan. The 2013 Scoping Plan update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in EO S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (ARB 2016c).

SENATE BILL 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

AIR RESOURCES BOARD RESOLUTION 07-54

ARB Resolution 07-54 establishes 25,000 MT of GHG emissions as the threshold for identifying the largest stationary emission sources in California for purposes of requiring the annual reporting of emissions. This threshold is just over 0.005 percent of California's total inventory of GHG emissions for 2004.

SENATE BILL 375

Senate Bill (SB) 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing ARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, ARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The SCAG was assigned the target of eight percent reduction in GHGs from transportation sources by 2020 and a 13 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional councils of governments and the county transportation commissions to meet SB 375 requirements.

In April 2011, the governor signed SB 2X requiring California to generate 33 percent of its electricity from renewable energy by 2020.

SENATE BILL 32

On April 29, 2015, the governor issued an executive order to establish a statewide mid-term GHG reduction target of 40 percent below 1990 levels by 2030. SB 32 (Pavley 2016) codified this interim reduction target on September 8, 2016. According to ARB, reducing GHG emissions by 40 percent below 1990 levels in 2030 ensures that California will continue its efforts to reduce carbon pollution and help to achieve federal health-based air quality standards. Setting clear targets beyond 2020 also provides market certainty to foster investment and growth in a wide array of industries throughout the State, including clean technology and clean energy. ARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target. An updated Scoping Plan is expected to be completed and adopted by ARB in 2017 that would provide State guidance in meeting long-term reduction targets (ARB 2016c).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *State CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *State CEQA Guidelines* provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

Local Regulations and Policies

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

The CSU system has committed to reducing CO₂ emissions by 15 percent to reach 1990 levels by 2020, and 80 percent below 1990 levels by 2040, as stated in *Sustainability Report 2014: The California State University*. Efforts to achieve this goal are primarily organized at the campus level. CSUCI has conducted greenhouse gas inventory analyses for its campus that identify sources of emissions. It has also participated in the Sustainability Tracking, Assessment and Rating System (STARS) to examine and report on sustainability activities. However, it has not yet adopted a certified GHG reduction plan or specific policies to reduce greenhouse gas emissions.

4.4.3 Methodology and Significance Thresholds

Significance Thresholds

Based on Appendix G of the *State CEQA Guidelines*, a project may be deemed to have a significant impact on greenhouse gas emissions if it would:

- 1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2 Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The vast majority of individual projects do not generate sufficient GHG emissions to create a project-specific impact through a direct influence to climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether

a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. Both the VCAPCD and CSU provide guidance for GHG impacts applicable to the proposed project. Therefore, two significance thresholds are considered in this analysis: 1) a significance threshold based on VCAPCD recommendations, and 2) a significance threshold calculated from CSU's system-wide GHG reduction target. These two thresholds are discussed in greater detail below.

VCAPCD SIGNIFICANCE THRESHOLD

While the VCAPCD has not yet set significance threshold options for Ventura County, it has stated a preference for GHG threshold consistency with the South Coast Air Quality Management District (SCAQMD) and the SCAG region in a white paper, "Greenhouse Gas Thresholds of Significance Options for Land Use Development Projects in Ventura County" (VCAPCD 2011). In the latest guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group, SCAQMD considered a tiered approach to screening the significance of residential and commercial projects. Projects that fall below the significance threshold for the applicable tier are considered to have a less than significant impact on GHG emissions. The draft-tiered approach is outlined in the meeting minutes, dated September 28, 2010.

Tier 1 - *If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.*

Tier 2 - *Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.*

Tier 3 - *Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 3,500 MT CO₂e per year for residential projects.*

Tier 4, Option 3 - *Establishes a screening significance threshold level based on an efficiency target. The Working Group has provided a recommendation of 4.8 MT CO₂e per year per service population as a project-level threshold.*

The Tier 4 efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissions-reducing features and/or that are located in a manner that results in relatively low vehicle miles traveled. Thus, the Tier 4 threshold is most appropriate for the proposed project, which is a large-scale residential project intended to attract faculty, retirees, and staff to the University by providing housing opportunities near the campus. In accordance with VCAPCD's preferences, GHG emissions generated by the proposed project would be considered less than significant if they fall below the Tier 4 efficiency threshold or 4.8 MT CO₂e per year.

2021 CSU SIGNIFICANCE THRESHOLD

The CSU system has committed to reducing CO₂ emissions to 1990 levels by 2020, in accordance with AB 32, and 80 percent below 1990 levels by 2040 (CSU 2014). The latter goal exceeds statewide reduction

target goals codified in SB 32, which sets an interim goal of 40 percent below 1990 levels by 2030. CSU does not provide target emission levels that correspond to these reduction targets, however, and no 1990 baseline emissions and population data are available at the system-wide or campus level from which target reductions can be calculated. Therefore, consistent with the recommendations contained in a white paper published by the Association of Environmental Professionals (AEP), “Beyond 2020: The Challenge of Greenhouse Gas Reduction Planning by Local Governments in California,” and in the Newhall Ranch decision (*Center for Biological Diversity v. California Department of Fish and Wildlife*), this analysis utilizes statewide 1990 emissions inventory data and population projections to determine a target efficiency metric (i.e., a per person annual emission rate) for the proposed project that is consistent with an 80 percent reduction in emissions by 2040.

To determine the appropriate efficiency metric for the proposed project’s 2021 operational year, this analysis assumes that statewide emissions will continue along a linear trajectory from 2020 through 2040 to achieve an 80 percent reduction in emissions relative to 2020 by 2040. The project-specific target efficiency metric was determined using emissions from sectors in the statewide inventory that apply to the proposed project. California’s electricity, residential, transportation, wastewater treatment, and landfill sectors emitted 294.2 million metric tons of CO₂e (MMT CO₂e) in 1990. Table 14 summarizes the sectors included in this analysis and provides their 1990 statewide inventory levels.

Table 14 1990 Statewide Inventory for Proposed Project (million metric tons CO₂e)

Sector	1990 Statewide Inventory (MMT CO ₂ e)
Electricity generation (in-state and imports)	110.6
Residential	29.7
Transportation	150.7
Wastewater treatment	3.2
Landfills	6.3
Total	294.2

Source: ARB 2007

Equation 4.4-1 details how the 2021 statewide emission goal was calculated based on statewide 1990 emissions in sectors applicable to the proposed project.

Equation 4.4-1

$$2021 \text{ Emissions Goal} = 2020 \text{ Goal} + (2040 \text{ Goal} - 2020 \text{ Goal}) * \frac{(2021 - 2020)}{(2040 - 2020)}$$

Where:

2020 Goal = 1990/2020 inventory for California: 294.2 MMT CO₂e per year (per AB 32)

2040 Goal = 80% below the 1990/2020 inventory for California: 235.36 MT CO₂e per year (per CSU)

Based on these calculations, California would need to emit no more than 291.3 MMT CO₂e in 2021 to be on trajectory to meet a 2040 reduction target of 80 percent consistent with CSU reduction targets.

To determine an efficiency threshold (emissions per person) for the proposed project, the 2021 statewide emissions goal was divided by the predicted 2021 residential population for California, as detailed in Equation 4.4-2.

Equation 4.4-2

$$Efficiency\ Threshold = \frac{2021\ Emissions\ Goal}{2021\ Population}$$

Where:

2021 Emissions Goal = 291.33 MT CO₂e per year (linear interpolation of AB 32 and CSU goals, refer to Equation 4.4-1)

2021 Population = 40,965,875 (DOF 2014)

Thus, the project-specific target efficiency metric is 7.1 MT CO₂e per person. This is higher than the efficiency target of 4.8 MT CO₂e per person set by SCAQMD Tier 4 significance criterion. Therefore, if the project meets the SCAQMD Tier 4 efficiency target, it would be consistent with State and local policies to reduce GHG emissions.

Table 15 Project-Specific Target Efficiency Metric

Target 2021 Emissions (MT CO ₂ e)	2021 Service Population	Project Target Efficiency Metric (MT CO ₂ e/person/year)
282,400,000	40,965,875	7.1

Source: ARB 2007, DOF 2014

Methodology

Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO₂, CH₄, and N₂O because these make up 98.9 percent of all GHG emissions by volume (IPCC 2007) and are the GHG emissions that the project would emit in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF₆, were not included in the impact analysis because fluorinated gases are primarily associated with industrial processes and the proposed project involves residential development. Minimal amounts of other GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the total calculated CO₂e amounts. Calculations are based on the methodologies discussed in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper (CAPCOA 2008) and included the use of the California Climate Action Registry (CCAR) General Reporting Protocol (CCAR 2009).

The methodology utilized to determine the potential GHG impacts of the proposed project, calculates GHG emissions by quantifying the proposed project’s amenities and design features and also takes into account regulatory measures that are intended to reduce GHG emissions. State and federal measures that are already built into the emissions model calculation include Title 24 Energy Standards, Pavley (Clean Car Standards) and Low Carbon Fuel Standards. Annual GHG emissions associated with the proposed project were calculated using CalEEMod version 2016.3.1 as previously described in Section 4.2, Air Quality. Appendix D provides inputs, assumptions, and results for emissions modeling.

CONSTRUCTION EMISSIONS

Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the CEQA and Climate Change white paper, “More study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA 2008). As discussed above, following VCAPCD’s guidance this analysis follows SCAQMD’s recommended GHG thresholds; therefore,

construction-related emissions are amortized over a 30-year period, which is recommended by SCAQMD (2010).

ON-SITE OPERATIONAL EMISSIONS

Operational emissions from energy use (electricity and natural gas use) for the project were estimated using CalEEMod (see Appendix D for CalEEMod results). The default values on which CalEEMod are based include the CEC sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. CalEEMod provides operational emissions of CO₂, N₂O and CH₄. This methodology is considered reasonable and reliable for use, as it has been subjected to peer review by numerous public and private stakeholders and in particular by the CEC. It is also recommended by CAPCOA (2008).

Operational emissions include area sources (consumer products, landscape maintenance equipment, and painting), energy use (electricity and natural gas), solid waste, electricity to deliver water, and transportation emissions. In accordance with AB 939, it was assumed that the project would achieve at least a 50 percent waste diversion rate. CalEEMod does not calculate N₂O emissions related to mobile sources. As such, N₂O emissions were calculated based on the project's VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (2009) (see Appendix D for calculations).

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and utilize standard emission rates from ARB, USEPA, and district supplied emission factor values (CAPCOA 2016).

Emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2016). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

Emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's "Refining Estimates of Water-Related Energy Use in California" using the average values for Northern and Southern California.

MOBILE SOURCE OPERATIONAL EMISSIONS

CalEEMod quantifies CO₂ and CH₄ emissions for mobile sources. Because CalEEMod does not calculate N₂O emissions from mobile sources, N₂O emissions were quantified using the California Climate Action Registry General Reporting Protocol direct emissions factors for mobile combustion (CAPCOA 2009); calculations are provided in Appendix D. The estimate of total daily trips associated with the proposed project was taken from the project's Traffic Impact Analysis (Fehr and Peers 2017) and used to derive total annual mileage in CalEEMod. Emission rates for N₂O were based on the default vehicle mix output in CalEEMod and the emission factors found in the California Climate Action Registry General Reporting Protocol.

4.4.4 Project Impacts and Mitigation Measures

Impact GHG-1 : DEVELOPMENT OF THE PROPOSED PROJECT WOULD GENERATE ADDITIONAL GHG EMISSIONS BEYOND EXISTING CONDITIONS DUE TO CONSTRUCTION ACTIVITY AND LONG-TERM OPERATIONS. HOWEVER, TOTAL ESTIMATED GHG EMISSIONS WOULD NOT EXCEED SCAQMD TIER 4 OR 2021 CSU EFFICIENCY TARGETS. IMPACTS RELATED TO GHG EMISSIONS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 1)

Construction Emissions

Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment onsite, as well as from vehicles transporting construction workers to and from the project site. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod provides an estimate of emissions associated with the construction period, based on parameters such as the duration of construction activity, area of disturbance, and anticipated equipment-use during construction.

Construction of the proposed project would generate an estimated 3,636 MT of CO₂e over the entire construction period, as shown in Table 16. Amortized over a 30-year period, construction of the proposed project would generate an estimated 121 MT CO₂e per year.

Table 16 Construction Greenhouse Gas Emissions

Emission Source	Annual Emissions
Construction	3,636 MT CO ₂ e
Amortized over 30 years	121 MT CO ₂ e/year

See Appendix D for CalEEMod calculations

Operational Emissions

Operational on-site and mobile emissions were calculated for the proposed project using CalEEMod as previously described. Table 17 shows estimated operational and mobile GHG emissions for the proposed project categorized by different emission sources. The proposed project would generate approximately 5,750 MT CO₂e per year from operational and mobile emissions.

Table 17 Operational and Mobile Greenhouse Gas Emissions

Emission Source	Annual Emissions CO₂e (MT CO₂e)	
Operational (excluding Mobile)	Area	13
	Energy	1,594
	Solid Waste	161
	Water	348
Mobile	CH ₄ and CO ₂	3,434
	N ₂ O	200
Total Project Operational Emissions	5,750	

See Appendix D for calculations and for GHG emission factor assumptions

Total Project Greenhouse Gas Emissions

Table 18 combines the construction, operational and mobile GHG emissions that would be generated by the proposed project. As noted above, construction emissions associated with construction activity were amortized over 30 years. The proposed project would generate a total of approximately 5,871 MT CO₂e per year with the majority of the proposed project’s GHG emissions coming from associated vehicle trips (62 percent). The estimated population for the proposed project would be 1,518 persons. Therefore, the proposed project would have a GHG efficiency metric of about 3.9 MT CO₂e per person per year. GHG emissions generated by the proposed project would fall below the SCAQMD Tier 4 significance threshold of 4.8 MT CO₂e per person; therefore, impacts would be less than significant.

Table 18 Total Project Greenhouse Gas Emissions

Emission Source	Annual Emissions CO₂e (metric tons)
Construction	121
Operational (excluding Mobile)	2,116
Mobile	3,634
Total Emissions	5,871
Emission Efficiency Metric (MT CO ₂ e/person) ¹	3.9
SCAQMD Tier 4 Efficiency Metric (MT CO ₂ e/person)	4.8
Thresholds Exceeded	NO

1. The estimated service population for the proposed project is 1,518 persons.
See Appendix D for calculations and for GHG emission factor assumptions.

Mitigation Measure

No mitigation is required

Impact GHG-2 : TOTAL ESTIMATED GHG EMISSIONS WOULD NOT EXCEED SCAQMD TIER 4 OR 2021 CSU EFFICIENCY TARGETS, AND THUS, WOULD NOT CONFLICT WITH THE GHG REDUCTION GOALS OF CSU, AB 32, OR SB 32. THE PROPOSED PROJECT WOULD BE CONSISTENT WITH LOCAL, REGIONAL AND STATE POLICIES TO REDUCE GHG EMISSIONS. IMPACTS RELATED TO GHG EMISSIONS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 2)

GHG emissions generated by the proposed project would fall below the SCAQMD Tier 4 significance threshold of 4.8 MT CO₂e per person, which is the most stringent efficiency metric that applies to the proposed project under VCAPCD recommended policies, AB 32, or SB 32. Therefore, the proposed project would be consistent with these local and State policies. The proposed project would also be consistent with regional policies to reduce GHG emissions through strategic housing and transportation growth embodied in the SCAG RTP/SCS. SCAG published its first RTP/SCS for the 2012-2035 planning period and more recently adopted an RTP/SCS for the 2016-2040 planning period on April 7, 2016. Table 19 below lists policies or strategies contained in the 2016 RTP/SCS that are applicable to the proposed project and demonstrates the project’s consistency with each applicable policy and strategy. Since the project would be consistent with local, regional, and State policies to reduce GHG emissions, would be constructed in accordance with CALGreen building standards, and would comply with other environmental regulations that contribute to GHG reductions (e.g., AB 939), the project would not conflict with any applicable plans or policies to reduce GHG emissions and impacts would be less than significant.

Table 19 Consistency with Applicable SCAG RTP/SCS GHG Emission Reduction Strategies

Goal RS-2	Project Consistency
Land Use Actions and Strategies	
<p>Reflect the changing population and demands</p> <p>The SCAG region is expected to grow by 3.8 million people by 2040, resulting in nearly 1.5 million more homes and 2.4 million more jobs. High Quality Transit Areas (HQTAs) are areas typified by high-density infill development near transit corridors that allow for greater mobility, more active lifestyles, increased economic opportunity and an overall higher quality of life. HQTAs are better able to accommodate a growing population, as they are typified by higher densities, mixed uses, and access to public transit. They also reflect a continuing shift in housing demand for small-lot, single-family and multifamily housing near transit corridors. Higher-density infill development provides a means to add local housing stock and help combat gentrification and displacement of lower-income households.</p>	<p>Consistent</p> <p>The proposed project would result in higher density residential development within a mile of a major suburban employment center. It would meet housing demands of a growing campus population in a manner that would encourage use of alternative modes of transportation and minimize transit-related GHG emissions resulting from expected population growth.</p>
<p>Focus new growth around transit</p> <p>The 2016 RTP/SCS land use pattern reinforces the trend of focusing growth in the region’s HQTAs. Concentrating housing and transit in conjunction concentrates roadway repair investments, leverages transit and active transportation investments, reduces regional life cycle infrastructure costs, improves accessibility, avoids greenfield development, and has the potential to improve public health and housing affordability. HQTAs provide households with alternative modes of transport that can reduce VMT and GHG emissions.</p>	<p>Consistent</p> <p>The proposed project would result in higher density residential development within a mile of a major suburban employment center and a mile of the CSUCI Ventura County Transportation Commission (VCTC) bus stop, which provides public transit throughout Ventura County and between neighboring Santa Barbara and Los Angeles Counties.</p>
<p>Plan for growth around livable corridors</p> <p>The Livable Corridors strategy seeks to create neighborhood retail nodes that would be walking and biking destinations by integrating three different planning components:</p> <ol style="list-style-type: none"> 1. Transit improvements 2. Active transportation improvements (i.e. improved safety for walking and biking) 3. Land use policies that include the development of mixed-use retail centers at key nodes and better integrate different types of ritual uses. 	<p>Consistent</p> <p>The proposed project would develop a campus residential neighborhood in compliance with Specific Reuse Plan policies and guidelines. The Specific Reuse Plan provides policies and guidelines to promote pedestrian and bicycle use, facilitate transit use, and create a walkable community with amenities and recreational areas near the campus’s Town Center, which offers retail and dining services. See Section 4.6, Land Use and Planning, for a discussion of Specific Reuse Plan policies.</p>
<p>Provide more options for short trips</p> <p>38 percent of all trips in the SCAG region are less than three miles. The 2016 RTP/SCS provides two strategies to promote the use of active transport for short trips. Neighborhood Mobility Areas are meant to reduce short trips in a suburban setting, while “complete communities” support the creation of mixed-use districts in strategic growth areas and are applicable to an urban setting.</p>	<p>Consistent</p> <p>The proposed project would result in higher density residential development within a mile of a major suburban employment center and regional transit. The proposed project would promote local pedestrian and bicycle use by providing an extensive network of pedestrian and bike facilities and would create a walkable community with amenities and recreational areas near the campus’s Town Center, which offers retail and dining services.</p>

Goal RS-2	Project Consistency
Transportation Strategies	
<p>Preserve our existing transit system Ensuring that the existing transportation system is operating efficiently is critical for the success of HQTAs, Livable Corridors, and other land use strategies outlined in the 2016 RTP/SCS.</p>	<p>Consistent The project site is located within a mile of a regional bus transit stop and within a mile of the CSUCI campus. It would promote pedestrian and bicycle transportation through the provision of walkable streets and bike paths. In addition,</p>
<p>Manage congestion The 2016 RTP/SCS promotes further research and active management of transport systems through existing management programs/ processes:</p> <ul style="list-style-type: none"> ▪ Congestion Management Process (federally required process that focuses on improving and optimizing the transportation system) ▪ Transportation Demand Management (strategies to reduce the number of vehicle trips) ▪ Transportation Systems Management (strategies that work in concert to optimize the existing transportation system) 	<p>the proposed project would not result in congestion of local or regional roadways that would obstruct efficient operation of existing transit (see Section 4.10, Transportation and Circulation).</p>
<p>Promote safety and security SCAG supports the goal of zero deaths promulgated by the state’s Strategic Highway Safety Plan and is working to meet state’s short-term goals of reducing the number of fatalities by 3 percent per year and reducing the number of severe injuries by 1.5 percent per year.</p>	<p>Consistent The proposed project is located in close proximity to campus and existing regional public transit, facilitating safe and easy use of public transportation. Therefore, it would encourage the use of alternative transportation and contribute to reduced vehicle use.</p>
Transit Initiatives	
<p>Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or neighborhood electric vehicle or other ZEV options.</p>	<p>Consistent The proposed project would result in higher density residential development within a mile of a major suburban employment center and regional transit. The proposed project would promote local pedestrian and bicycle use by providing an extensive network of pedestrian and bike facilities and would create a walkable community with amenities and recreational areas near the campus’s Town Center, which offers retail and dining services.</p>
Other Initiatives	
<p>Reduce emissions resulting from a project through implementation of project features, project design, or other measures. Incorporate design measures to reduce energy consumption and increase use of renewable energy.</p>	<p>Consistent The design and implementation of the proposed project would comply with CALGreen Building Standards, which includes measures to reduce emissions, including specified parking for clean air vehicles. The project would also comply with VCAPCD rule 74.2 that limits ROG’s from building architectural coatings.</p>

Mitigation Measure

No mitigation is required

4.4.5 Cumulative Impacts

As noted under *Significance Thresholds*, since the vast majority of individual projects do not generate sufficient GHG emissions to directly influence to climate change, analysis of GHG emissions under CEQA is inherently an analysis of whether a project's emissions would be cumulatively considerable. As the proposed project would be consistent with local and regional thresholds for GHG emissions, which consider cumulative local and regional emissions, as well as AB 32 and SB 32, which consider cumulative statewide emissions, the proposed project would not result in cumulatively significant GHG emissions. Cumulative GHG impacts would be less than significant.

4.5 Hydrology and Water Quality

This section analyzes potential impacts to hydrology and water quality, including a discussion of altering existing drainage patterns of the project site, capacity of existing or planned stormwater drainage systems, and the exposure of people or structures to flooding. This section is based on, among other things, the Huitt-Zollars, Inc. (2017) *Hydrology, Hydraulics, and Water Quality Report for the University Glen Phase 2 at CSU Channel Islands*, which is included as Appendix C.

4.5.1 Setting

Regional Setting

The CSUCI campus is located at the western edge of the Santa Monica Mountains, with the Calleguas Creek watercourse to the west. The broad, flat alluvial Oxnard Plain extends to the west of the CSUCI campus, towards the Pacific Ocean. The campus is approximately 2.5 miles south of the city of Camarillo. The proposed project lies entirely within the Transverse Range geomorphic province. The Transverse Ranges are an east-west trending series of steep mountain ranges and valleys. The east-west structure of the Transverse Ranges is oblique to the normal northwest trend of coastal California, hence the name "Transverse." The province extends offshore to include San Miguel, Santa Rosa, and Santa Cruz Islands. Its eastern extension, the San Bernardino Mountains, has been displaced to the south along the San Andreas Fault. Intense north-south compression is squeezing the Transverse Ranges. As a result, this is one of the most rapidly rising regions on earth. Great thicknesses of Cenozoic petroleum-rich sedimentary rocks have been folded and faulted, making this one of the important oil-producing areas in the United States (CGS 2002).

The CSUCI campus is within the Calleguas Creek Watershed (Calleguas Municipal Water District [Calleguas MWD] 2004). Presently, 50 percent of the watershed is undeveloped open space, 25 percent is agricultural, and the remaining 25 percent is in urban land use. The watershed ultimately drains to the Pacific Ocean through Mugu Lagoon. Prior to the 1940s, Calleguas Creek and its main tributaries provided drainage for stormwater and irrigation discharge with rare occurrences of year-round flow. However, over the past 50 years, steadily increasing wastewater discharges and urban runoff now provide portions of Calleguas Creek and its tributaries with perennial flow.

Figure 26 identifies the regional hydrologic setting for the project site, including upstream and downstream watercourse reaches in the vicinity of the project site. Redline streams are within the jurisdiction of the Ventura County Watershed Protection District (VCWPD) for flood control purposes. Blue line streams are shown on a USGS 7.5 Minute Series (Topographic) map and represent perennial and intermittent streams.

Long Grade Canyon Creek, located approximately 0.25 mile south of the project site, flows westward towards Calleguas Creek, which is located approximately one mile west of the project site. Long Grade Canyon Creek is an improved and engineered channel of earthen bed and riprap banks that drain approximately 1,600 acres of tributary area, including a majority of the CSUCI campus; and confluences with Calleguas Creek west of the campus, which runs for approximately 4.9 miles before reaching Point Mugu and the Pacific Ocean (Huitt-Zollars 2017a). The CSUCI campus is located between the city of Camarillo and the Las Posas Hills to the north and the Santa Monica Mountains to the south. Elevations on the campus range from approximately 10 feet to approximately 115 feet above mean sea level.

The city of Camarillo and the CSUCI campus experience a Mediterranean climate, generally dry in the summer with mild, wet winters. The wettest months of the year are January and February, with an average rainfall of 3.00 and 3.27 inches, respectively (Icside.com 2017).

Figure 26 Regional Hydrology of Receiving Waters



Source: Huitt-Zollars 2017a

SURFACE WATER

The California Department of Water Resources (DWR) divides surface watersheds in California into 10 hydrologic regions. The CSUCI campus lies within the South Coast Hydrologic Region (HR), a large coastal watershed in southern California (DWR 2003). The South Coast HR spans approximately 6.78 million acres and is bounded on the west by the Pacific Ocean, on the north by the Transverse Ranges, on the east by the Colorado River HR, and on the south by the international boundary with Mexico (DWR 2003). The DWR subdivides Hydrologic Regions into Hydrologic Units (HU), and further into Hydrologic Areas (HA) and Hydrologic Subareas (HSA). Within the South Coast HR, the CSUCI campus is located within the Calleguas HU (United States Geological Survey [USGS] 2016). The Los Angeles Regional Water Quality Control Board (RWQCB) governs basin planning and water quality within the Calleguas HU (LARWQCB 1994). Within the Calleguas HU, the CSUCI campus is located within the Calleguas Creek HA (USGS 2016). Within the Calleguas Creek HA, the CSUCI campus is within the Lower Conejo Arroyo HSA (USGS 2016).

The CSUCI campus, including the project site, lies in the Calleguas Creek Watershed. The watershed is 30 miles long by 14 miles wide and has an area of approximately 341 square miles (218,441 acres). Virtually the entire watershed is located in Ventura County. It extends from the Los Angeles County line in the northeast to Mugu Lagoon and the Pacific Ocean in the southwest. The Santa Susana Mountains, South Mountain and Oak Ridge form the northern boundary of the watershed; the Simi Hills and Santa Monica Mountains form the southern boundary. The watershed includes the following major water bodies: Calleguas Creek, Arroyo Las Posas, Arroyo Simi, Conejo Creek, Arroyo Santa Rosa, Arroyo Conejo, Revolon Slough, Beardsley Wash and Mugu Lagoon. The area includes the cities of Camarillo, Moorpark, Simi Valley, Thousand Oaks, and unincorporated areas of Ventura County (Calleguas MWD 2004).

WATER SUPPLY

Calleguas MWD provides water service to approximately three-quarters of Ventura County residents; roughly 635,000 people rely on Calleguas MWD for all or part of their water. Calleguas MWD distributes high quality drinking water on a wholesale basis to 19 cities, local water agencies, and investor-owned and mutual water companies throughout southeast Ventura County. These retail purveyors receive water through 140 miles of large-diameter pipeline operated and maintained by Calleguas MWD. In turn, these purveyors deliver water to area residents, businesses, and agricultural customers (Calleguas MWD 2016). Camrosa Water District (one of the purveyors for Calleguas MWD), is the provider for the CSUCI campus (CSUCI 2017h). See Section 4.12, *Utilities and Service Systems*, for further detail regarding water supply for the CSUCI campus.

Project Site Setting

The project site is located within the Calleguas Creek Watershed, as described above under *Regional Setting*. An unnamed natural stream runs along the northern boundary of the project site for approximately 1,500 feet, then traverses beneath Inspiration Point Road through an existing 5-foot corrugated metal pipe (CMP) culvert, and is ultimately collected and conveyed through a 96-inch reinforced concrete pipe (RCP) running underneath Channel Islands Drive, west of the project site.

The main academic campus and the University Glen area are largely developed with university facilities, residences, commercial uses, parking lots and associated landscaped areas. The project site is graded and paved, but without any major structures. Runoff from the project site generally sheet flows in a westerly direction before being captured and conveyed through existing onsite storm drain infrastructure. Onsite flows are comingled with the runoff from the adjacent unnamed drainage and outlets into 3.78 acres of constructed wetlands located at the intersection of Camarillo Street and Channel Islands Drive. Overflows from the constructed wetlands are captured within an existing culvert underneath Camarillo Street and flow in a southwesterly direction, ultimately discharging into Long Grade Creek. The existing hydrology and local drainage patterns at the project site are further described in *Existing Hydrology*.

Figure 27 shows the existing hydrologic conditions at the project site and in its immediate vicinity, including the existing storm drain lines, existing drainage areas, and location of the existing constructed wetlands.

Existing Hydrology at the Project Site

HYDROLOGIC COMPUTATIONS

Huitt Zollars (2017) performed hydrologic computations for the 10-year, 25-year, and 100-year events based on the Modified Rational Method (MRM) as adopted by VCWPD. Existing condition drainage areas are shown in Figure 27. The proposed condition drainage areas are shown in Figure 28. For further details on the methodology used to characterize existing hydrology at the site see Appendix C.

Topography

A composite topographic dataset was created based on the best available data for the project site. The composite topographic dataset exhibits steep canyons upstream of the project site, with slopes averaging 20 percent to 45 percent. Because the project site was previously graded, the existing residential pads are generally flat (slope less than 2 percent). However, three levels of terraces were graded creating a vertical gradient of 34 feet between the highest terrace and the lowest terrace. For further detail on how the topographic dataset was created see Appendix C.

Soils

The amount of infiltration is related to the imperviousness of the surfaces, the permeability of the surficial soils, the local geomorphology, and the amount and type of vegetation cover or canopy.

Soil survey maps prepared by Natural Resource Conservation Service (NRCS), and classified by Ventura County in its *Hydrology Manual for Ventura County*, were used to determine the soil groups within each existing and proposed drainage areas, as identified in Figure 27 and Figure 28, respectively. The underlying soils are mostly composed of igneous rock and Gilroy clay loam, which offer poor infiltration characteristics. Figure 29 delineates the soil types within the project boundaries. For a definition of the VCWPD soil classifications see Appendix C.

Figure 27 Existing Hydrology at the Project Site



HYDROLOGY MAP EXISTING CONDITIONS
UNIVERSITY GLEN PHASE II
CSU CHANNEL ISLANDS

HUETT-ZOLLARS
Hydrology & Water Quality
2025 Main Street, Suite 400
Irvine, California 92614
Phone (949) 988-9855 Fax (949) 988-9820

KENNEDY WILSON

Figure 28 Hydrology at the Project Site with Implementation of the Proposed Project

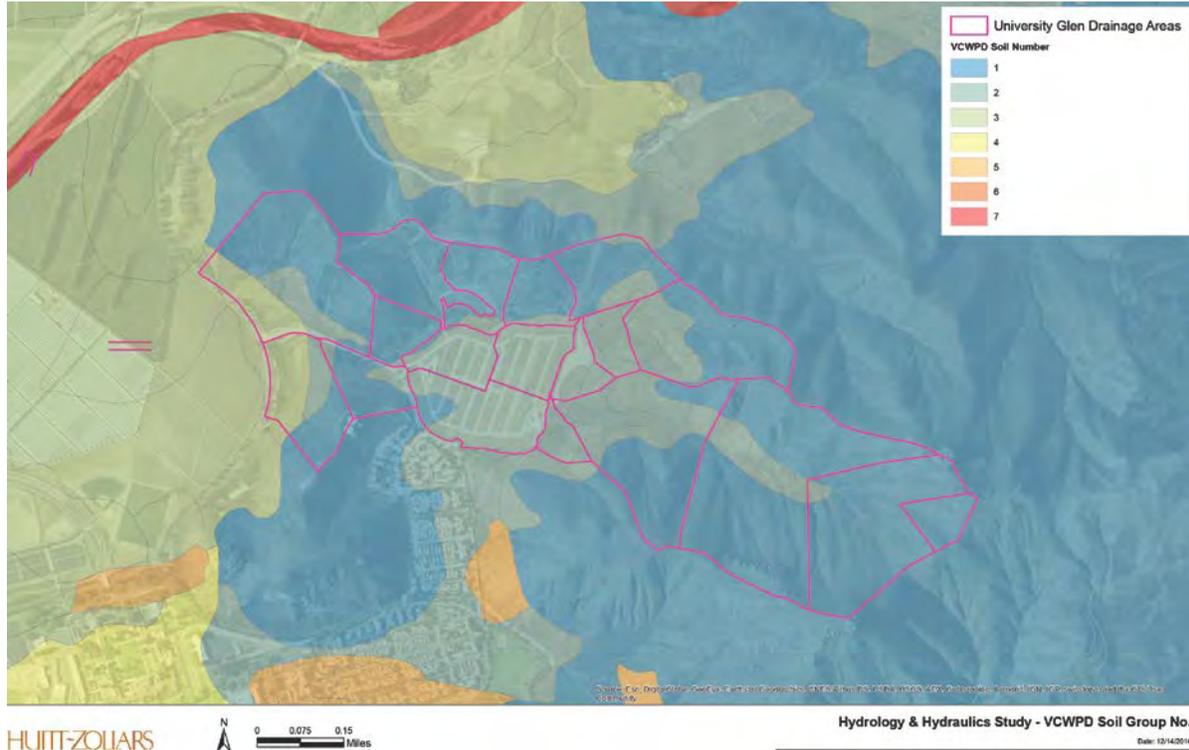


HYDROLOGY MAP PROPOSED CONDITIONS
UNIVERSITY GLEN PHASE II
CSU CHANNEL ISLANDS

HUTT-ZOLLARS
Hutt-Zollars, Inc.
2020 Main Street, Suite 400
Irvine, California 92614
Phone (949) 968-0200 Fax (949) 968-0820

KENNEDY WILSON

Figure 29 Hydrologic Soil Groups (Ventura County Watershed Protection District Soil Numbering)



Land Uses

Hydrologic parameters were defined for the land uses present in the existing condition and in the proposed project consistent with Exhibit 14a of the VCWPD Hydrology Manual. For planning purposes, hydrologic computations assumed a weighted average imperviousness of 30 percent and 70 percent in the existing and proposed conditions, respectively. Table 20 summarizes the hydrologic parameters associated with each land use.

Table 20 Land Use Hydrologic Parameters

Land Use	Percent Impervious
Chamise/Chaparral Vegetation (Fair Condition)	0
Open Space, Lawns, Parks (Good Condition)	0
Residential 1/8 Acre Lot	65
Residential Condos	69
Parking Lots ,Roofs, Driveways, Paved Streets with Curbs and Drains	100

Sources: Ventura County Watershed Protection District Hydrology Manual, Exhibit 14a and Huitt-Zollars 2017a

Rainfall

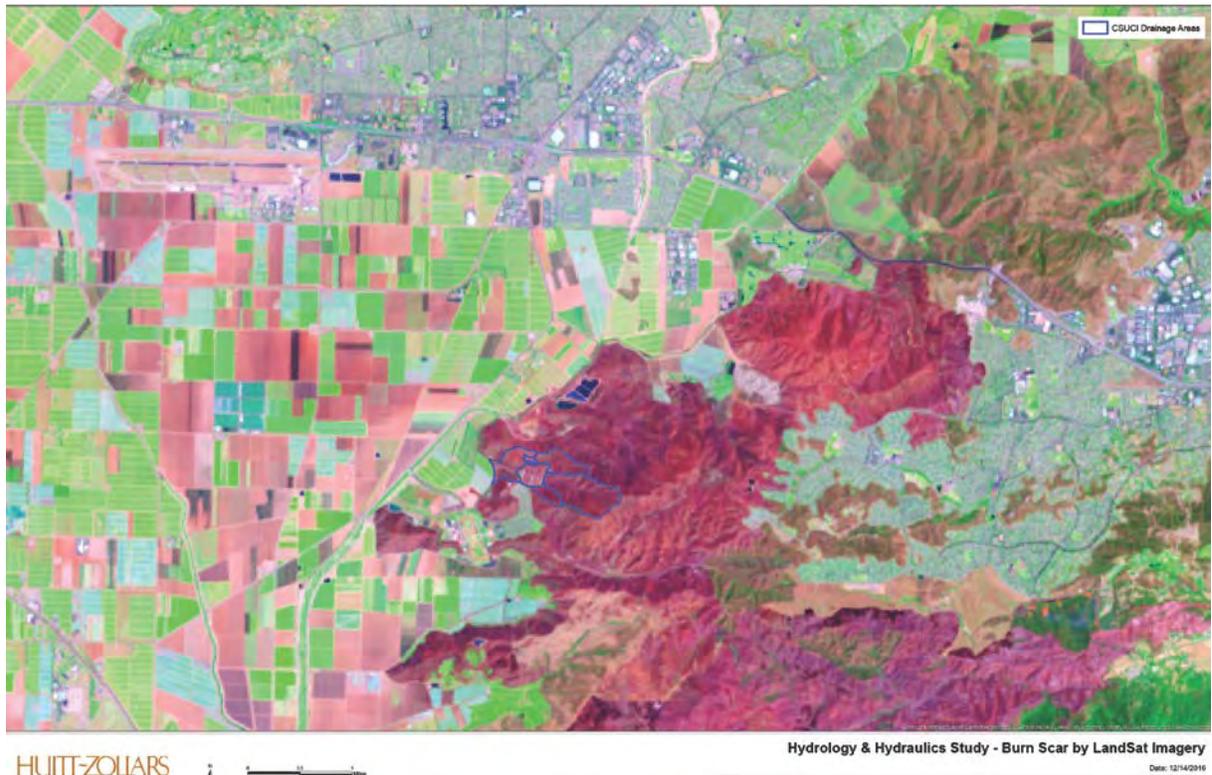
Most precipitation in the Ventura County area results from winter storms during the months from November through April. Precipitation may occur over large areas and major storms last four days or

more. The beginning of the storm is normally light and persistent at moderate intensity, while the latter portion is characterized by short periods of extremely high intensity. (Huitt-Zollars 2017a)

Bulking Factor

The upstream drainage area was subject to the Springs Fire Incident in May 2013. The California Department of Forestry and Fire Protection (CAL FIRE) characterized the incident as burning 24,251 acres of chaparral on the Santa Monica Mountains, forcing the closure of parts of U.S. Highway 101 (U.S. 101) and threatening thousands of homes in Camarillo, Newbury Park, and Thousand Oaks. Figure 30 provides a satellite imagery of the area that shows the extents of the burn scar in red. The hydrologic area of the project site is outlined in blue on the map.

Figure 30 Satellite Imagery of Springs Fire (2013)



Source: Huitt-Zollars, 2017a

A Final Report of the “Sediment/Debris Bulking Factors and Post-Fire Hydrology for Ventura County” was adopted by VCWPD in June 2011. Section 11 of the Final Report defines the methodology to compute a proposed burn severity factor (BSF) that will be applied to the pre-burn hydrology peaks to derive post-fire peak discharges. Per CAL FIRE, the burn severity condition of the upstream drainage areas is high (Hazard Class 3).

Constructed Wetlands

Currently, constructed wetlands are located at the southeast corner of Camarillo Street and Channel Islands Drive. The constructed wetlands receive the entire runoff from the project site and upstream tributaries, including the unnamed drainage running adjacent to the project site. The constructed wetlands are designed to retain runoff from a majority of storm events with the exception of exceedingly large, rare storms. As discussed in *Existing Hydrology*, the capacity of the constructed wetlands is

sufficient to contain the volume associated with a 25-year, 24-hour storm. Minor discharges from the constructed wetlands are observed during a 100-year, 24-hour storm.

The 2005 topographic mapping dataset (as discussed in *Topography*) included survey points and one-foot contours within the constructed wetlands. The total storage capacity of the basin is estimated to be 168.7 acre-feet. Flows are retained within the basin and controlled through a rectangular orifice as the water surface elevation reaches elevation 57.30 feet NGVD29. The top crest of the basin is elevation 60.60 feet NGVD29, over which flows would spill onto Camarillo Street.

On-Site Drainage

The project site drains primarily in a westerly direction, towards the constructed wetlands to the west of the project site; while the project site north of the unnamed drainage, at Inspiration Point, flows in a southerly direction, towards the unnamed drainage. As shown in Figure 27, the existing onsite drainage can be split into two major drainage areas south of the Inspiration Point crossing, and two regional drainage areas north of Inspiration Point crossing.

Approximately 6.75 acres of drainage area (Drainage Area B) located at the northeast corner of the project site would drain in northerly direction. Existing catch basin inlets along paved streets collect runoff and existing storm drain laterals convey it to the 72" RCP that is tributary to the unnamed drainage. Runoff from Drainage Area D1 (24.51 acres, see Figure 27) sheet flows in a westerly direction and is captured by catch basin inlets along paved streets. Catch basin inlets are connected to the main storm drain line (36" RCP) that connects with the 96" RCP running underneath Channel Islands Drive.

In addition, 2.03 acres have been rough graded north of the existing Inspiration Point crossing. The 2.03-acre are spilt between regional Drainage Area A6 (9.96 acres) and Drainage Area A7 (14.26 acres) that drain hillsides to the adjacent unnamed drainage.

The total tributary drainage area to the constructed wetlands, including drainage from the project site and other offsite tributaries, is 284 acres.

Hydrologic computations for the existing condition are included as Attachment B-2, Attachment B-3, and Attachment B-4, respectively within the Hydrology Report for the proposed project (see Appendix C). The results indicate that the constructed wetlands currently suffice to retain the entire volume produced by the 25-year storm event. A peak discharge of 12.5 cubic-feet per second (cfs) is observed from the basin during the 100-year storm event.

100-year peak discharges from the two existing onsite drainage areas B and D1 are 29 cfs and 111 cfs, respectively. Table 21 provides a summary of the peak discharges from onsite drainage areas and to the constructed wetlands for the 10-, 25- and 100-year storm scenarios. The numbered nodes correspond to a subwatershed outlet boundary, depicted as a dashed line "minor drainage boundary" (see Figure 271).

Table 21 Existing Condition Peak Discharges

Storm Frequency (Year)	Location			
	On-Site to Node 103 Discharge Volume (cfs)	On-Site to Node 107 Discharge Volume (cfs)	Upstream Basin (Node 108) Discharge Volume (cfs)	Downstream Basin (Node 109) Discharge Volume (cfs)
10	15	51	409	0
25	18	67	469	0
100	29	111	714	12.5

cfs = cubic feet per second
Source: Huitt-Zollars 2017a

Unnamed Drainage Hydraulic Infrastructure

Existing Storm Drain Lines A and E currently allow the unnamed drainage to bypass the project site, and run underneath Channel Islands Drive. The drainage currently crosses the Inspiration Point crossing through an existing 5-foot CMP with straight concrete headwalls on each end, as shown in Figure 31.

Figure 31 Existing 5-Foot Corrugated Metal Pipe through Inspiration Point Crossing



Source: Hutt-Zollars, 2017.

The tributary drainage area to the unnamed drainage is classified as a zone of high severity with regards to wildfires. As identified in the Hydrology Report, a burn severity factor will be applied for design purposes to account for the wildfire severity potential in the project vicinity. See Appendix C for further details.

VCWPD criteria require that the instream hydraulic structure capture and convey the 50-year storm burn peak discharge. However, the drainage runs alongside proposed residential pads that are required to be protected from the 100-year flood elevation. For the purpose of the conceptual analysis, the inline storm conveyance infrastructure is designed to convey the 100-year burn peak discharge.

4.5.2 Regulatory Setting

Federal

At the federal level, Ventura County falls under the jurisdiction of the Region 9 of the United States Environmental Protection Agency (USEPA). The USEPA is primarily responsible for implementing federal water quality laws. The United States Army Corps of Engineers (USACE) also has responsibility for implementing certain aspects of federal water quality requirements, as described below.

CLEAN WATER ACT

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, aquifers, and coastal areas. Although the CWA applies to groundwater, implementation is focused on the protection of surface water. The CWA is a 1977 amendment to the federal Water Pollution Control Act of 1972 (United States Code, Title 33, section 1251 et seq.), which established the basic structure for regulating pollutant discharges to navigable waters of the United States. Under the CWA, USEPA sets national standards and effluent limitations, but delegates significant responsibilities to the State Water Resources Control Board (SWRCB) and its regional boards. The CWA is based on the concept that all discharges into the nation's waters are unlawful unless specifically authorized by permit. The CWA includes a permit system that provides two general types of pollution control limits: (1) Effluent limits that are technology-based and limit the quantity of pollutants discharged from a point source such as a pipe, ditch, or tunnel into a navigable water body; and (2) Ambient water quality standards that limit the concentration of pollutants in navigable waters based on the beneficial uses to which particular waters are put.

- Section 401 of the CWA requires water quality certification for any activity, including the construction or operation of a facility, which may result in any discharge into navigable waters (Title 33 Code of Federal Regulations §1341). Within California, Section 401 is implemented by SWRCB and the RWQCBs.
- Section 404 of the CWA requires a permit for the discharge of dredged fill material into navigable waters at specified disposal sites (Title 33 Code of Federal Regulations §1344). Responsibility for administering and enforcing Section 404 is shared by the USACE and USEPA.
- In 1987, amendments to the CWA added section 402(p), which establishes a framework for regulating non-point source stormwater discharges under the National Pollutant Discharge Elimination System (NPDES). The NPDES stormwater program is further described below under the "State Regulations" subsection.

FEDERAL EMERGENCY MANAGEMENT AGENCY

The Federal Emergency Management Agency (FEMA) is part of the United States Department of Homeland Security and is tasked with responding to, planning for, recovering from, and mitigating against disasters. Formed in 1979, FEMA is responsible for determining flood elevations and floodplain boundaries based on USACE studies and approved agencies studies and for coordinating the federal response to floods, earthquakes, hurricanes, and other natural or man-made disasters. FEMA also provides disaster assistance to states, communities and individuals. FEMA distributes the Flood Insurance Rate Maps, which identify the locations of special flood hazard areas, including the 100-year flood zone. Executive Order 11988 (Flood Plain Management) links the need to protect lives and property with the need to restore and preserve natural and beneficial flood plain values. Specifically, federal agencies are directed to avoid conducting, allowing, or supporting actions on the base floodplain unless the agency finds that the base floodplain is the only practicable alternative location.

State

The USEPA has delegated direct authority for implementation and oversight of federal water quality laws within California to the SWRCB and the nine RWQCBs. At the State level Ventura County falls under the jurisdiction of the Los Angeles RWQCB, as described below (SWRCB 2013b).

WATER BOARD

The SWRCB and the nine RWQCBs have the responsibility in California to protect and enhance water quality, both through their designation as the lead agencies in implementing the Section 319 non-point source program of the federal CWA, and through the State's primary water pollution control legislation, the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.). 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. All projects resulting in discharges, whether to land or water, are subject to California Water Code Section 13263 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 privately or publicly treated domestic wastewater and process and wash-down wastewater. WDRs for discharges to surface waters also serve as NPDES permits, which are further described below.

The Los Angeles (Region 4) office of the RWQCB guides and regulates water quality in streams and aquifers between Rincon Point, on the coast of western Ventura County, to the eastern Los Angeles County line, through designation of beneficial uses, establishment of water quality objectives, and administration of the NPDES permit program for construction site runoff (LARWQCB 1994). The Los Angeles RWQCB is also responsible for providing permits and water quality certifications in the above-referenced areas (Section 401) pursuant to the CWA. With regards to stormwater runoff, the project site is under the jurisdiction of the USEPA's NPDES Phase II Final Rule and the SWRCB General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s) (WQ Order No. 2013-0001-DWQ). The USEPA's NPDES Phase II Final Rule and the SWRCB General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s) (WQ Order No. 2013-0001-DWQ), provides coverage for smaller municipalities (population less than 100,000), including non-traditional Small MS4s, such as university campuses like CSUCI.

Federal regulations allow two permitting options for storm water discharges: individual permits and general permits. The SWRCB elected to adopt a statewide general permit for Small MS4s in order to efficiently regulate numerous storm water discharges under a single permit. CSUCI is listed as a non-traditional small MS4 permittee in Attachment B of the Phase II Small MS4 General Permit Order No. 2013-0001-DWQ.

All dischargers of waste to waters of the State are subject to regulation under the Porter-Cologne Act and the requirement for WDRs is incorporated into the California Water Code. This includes both point and non-point source dischargers. All current and proposed non-point source discharges to land must be regulated under WDRs, waivers of WDRs, a basin plan prohibition, or some combination of these administrative tools. Discharges of waste directly to State waters would be subject to an individual or general NPDES permit, which also serve as WDRs. The RWQCBs may issue individual WDRs to cover individual discharges or general WDRs to cover a category of discharges. WDRs may include effluent limitations or other requirements that are designed to implement applicable water quality control plans, including designated beneficial uses and the water quality objectives established to protect those uses and prevent the creation of nuisance conditions. Violations of WDRs may be addressed by issuing Cleanup and Abatement Orders or Cease and Desist Orders, assessing administrative civil liability, or seeking imposition of judicial civil liability or judicial injunctive relief.

Construction activity on projects that disturb one or more acres of soil, or less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Program (SWPPP). The SWPPP should identify stormwater collection and discharge points, drainage patterns across the project site, and Best Management Practices that the discharger would use to protect stormwater runoff and the placement of those Best Management Practices.

As mandated by Section 303(d) of the federal CWA, the SWRCB maintains and updates a list of “impaired water bodies” (i.e., water bodies that do not meet State and federal water quality standards). This list is known as the Section 303(d) list of impaired waters. The State is then required to prioritize waters/watersheds for development of Total Maximum Daily Load (TMDL) regulations. This information is compiled in a list and submitted to the USEPA for review and approval. The SWRCB and RWQCBs monitor and assess water quality on an ongoing basis.

The Los Angeles RWQCB adopted Order Number 2009-0009-DWQ on September 2, 2009 setting forth a general permit for construction (Construction Activities Storm Water General Permit), which regulates stormwater runoff from construction sites (with amendments by 2010-0014-DWQ and 2012-0006-DWQ). These requirements include providing a SWPPP (SWRCB 2013a).

CALIFORNIA STREAMBED ALTERATION AGREEMENT

Sections 1600–1616 of the California Fish and Game Code require that any entity that proposes an activity that would substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or, deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, must notify the California Department of Fish and Wildlife (CDFW). The CDFW would require a Lake or Streambed Alteration Agreement if it determines that the alteration may adversely affect fish and wildlife resources. The Agreement includes conditions necessary to protect those resources. The Agreement applies to any stream, including ephemeral streams and desert washes. See Section 4.3, *Biological Resources*, for further detail regarding Sections 1600–1616 of the California Fish and Game Code.

Local

VENTURA COUNTY WATERSHED PROTECTION DISTRICT

The VCWPD was formed, in part, to provide for the control and conservation of flood and storm waters and for the protection of watercourses, watersheds, public highways, life and property in the district from damage or destruction from these waters (VCWPD 2017). The VCWPD’s mission is to protect life, property, watercourses, watersheds, and public infrastructure from the dangers and damages associated with flood and stormwaters. VCWPD goals include:

- Comprehensive, long range watershed planning
- Collaboration with watershed stakeholders
- Administration of adopted regulations, policies, and resolutions
- Responsible and accountable use of public resources
- Excellence in public service

To facilitate management of revenues and projects, VCWPD was divided into four zones, roughly corresponding to the major river systems in the county. The project site is located in Zone 3, which essentially follows the boundaries of the Calleguas Creek Watershed and its tributaries (VCWPD 2017).

VCWPD’s authority over its jurisdictional channels is established through a number of ordinances and policies passed by Ventura County Board of Supervisors (VCWPD 2017). The primary ordinance establishing VCWPD’s authority and the requirement to obtain permits for any encroachment into jurisdictional channels, including rights of way, is Ventura County Watershed Protection Ordinance WP-2, an ordinance relating to the Protection and Regulation of Flood Control Facilities and Watercourses (VCWPD 2017). VCWPD also implements the Flood Plain Management Ordinance 3841 on behalf of the County to ensure compliance with the National Flood Insurance Program. This includes permit review for structures built in the floodplain and evaluation of site plans for developments that include identified floodplains (VCWPD 2017).

4.5.3 Methodology and Significance Thresholds

Methodology

This section describes the potential environmental impacts of the proposed project relevant to hydrology and water quality. The impact analysis is based on an assessment of baseline conditions for the project site, including climate, topography, watersheds and surface waters, and floodplains, as described in the *Setting* section. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction, operation, and maintenance activities related to the proposed project. This section describes impacts in terms of location, context, duration, and intensity, and recommends mitigation measures, when necessary, to avoid or minimize impacts.

Significance Thresholds

According to Appendix G of the *State CEQA Guidelines*, hydrology and water quality impacts related to the proposed project would be considered significant if the project would:

- 1 Violate any water quality standards or waste discharge requirements.
- 2 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).
- 3 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.
- 4 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.
- 5 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;
- 6 Otherwise substantially degrade water quality.
- 7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- 8 Place within a 100-year flood hazard area structures which would impede or redirect flood flows.
- 9 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- 10 Be subject to inundation by seiche, tsunami, and/or mudflow.

As explained more fully in the Initial Study (see Appendix A) implementation of the proposed project would result in a less than significant impact to water quality standards or waste discharge requirements (Threshold 1); would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge (Threshold 2); would not otherwise substantially degrade water quality (Threshold 6); have no impact in regards to placing housing or structures within a 100-year flood hazard area (Thresholds 7 and 8); and would have a less than significant impact in regards to inundation by seiche, tsunami, or mudflow (Threshold 10). Therefore, no further discussion of these impacts is included in this section. Thresholds 3, 4, 5 and 9 are discussed below.

Hydrologic and hydraulic criteria included in the VCWPD standards were used to determine whether the proposed project would result in significant impacts under the thresholds listed above.

4.5.4 Project Impacts and Mitigation Measures

IMPACT HWQ-1: THE PROPOSED PROJECT WOULD INCREASE PEAK DISCHARGE FROM 12.5 CFS, IN THE EXISTING CONDITION, TO 22.5 CFS AT THE EXISTING CONSTRUCTED WETLANDS DURING A 100-YEAR STORM EVENT. THE INCREASE IN PEAK FLOWS FROM THE PROPOSED PROJECT WOULD EXCEED EXISTING CONDITION FLOWS RESULTING IN A SIGNIFICANT IMPACT. IMPROVEMENTS TO THE OUTLET AT THE CONSTRUCTED WETLAND WOULD REDUCE FLOWS TO EQUAL THE EXISTING CONDITION. IMPACTS REGARDING DRAINAGE PATTERNS AND FLOODING WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. (THRESHOLDS 3, 4 AND 9)

The conceptual drainage plan for onsite storm drain infrastructure follows the same general drainage patterns as in the existing condition (see Figure 27). Off-site drainage is culverted beneath the project site and then discharged to the jurisdictional unnamed drainage adjacent to the site.

The proposed project would modify the onsite hydrology, and result in four distinct on-site drainage areas (see Figure 28):

- **Drainage Area A7** (15.1 acres) includes the residential pads and streets that are located north of the Inspiration Point crossing (2.03 acres), as well as offsite runoff from several tributaries (13.07 acres). Urban runoff generally sheet flows in an easterly direction before being collected by street curb inlets and convey to the drainage through Storm Drain Line D. The discharge location will not change from that in the existing condition. Terrace slope drains collect offsite runoff and allow offsite runoff to bypass the proposed project.
- **Drainage Area C1** (8.80 acres) is located in the northeast corner of the project site. Runoff generally sheet flows in a northwesterly direction before being collected by street curb inlets and conveyed through Storm Drain Line B towards Channel Islands Drive. During final design of the project, the feasibility to drain C1 to Storm Drain Line B will be evaluated based on grading and utility requirements. If infeasible, Drainage Area C1 would discharge directly to Storm Drain Line A and the unnamed drainage, as in the existing conditions.
- **Drainage Area C2** (7.57 acres) is located in the northwest corner of the project site. Runoff generally sheet flows in a westerly direction before being collected by street curb inlets and convey through Storm Drain Line B towards Channel Islands Drive.
- **Drainage Area C3** (15.20 acres) consists of the southern portion of the project site. Runoff generally sheet flows in a southwesterly direction before being collected by street curb inlets and convey through Storm Drain Line B towards Channel Islands Drive.

Offsite drainage areas would remain unchanged. The total tributary drainage area (284 acres) to the constructed wetlands would also remain unchanged.

The proposed project would increase the impervious surface area of the project site, as the existing conditions include graded and paved roads, without structures, while the proposed project would include the residential and recreational structures. Similar to existing conditions, the results also indicate that the constructed wetlands currently suffice to retain the entire volume produced by the 25-year storm event. However, the proposed project would result in a peak discharge of 22.5 cfs from the existing basin during the 100-year storm event, which is higher than 12.5 cfs under existing conditions. The increase is due to the higher volume of runoff produced by the proposed project (87.3 acre-feet) when compared to the existing condition (78.0 acre-feet) and would exceed VCWPD criteria for discharges from new development. Modification of the outlet from the constructed wetland to reduce the peak discharges during a 100-year storm event are included as part of the proposed project as

described in Section 2.0, *Project Description*. However, depending on the timing of this improvement there is the potential for changes to the existing drainage pattern of the site, which could result in increased flooding and the potential for substantial erosion or siltation to occur on- or off-site. Therefore, a potentially significant impact could occur and mitigation is required.

Mitigation Measure

MM HWQ-1 MODIFICATION OF THE RECTANGULAR ORIFICE OUTLET FROM THE CONSTRUCTED WETLANDS

In accordance with the provisions of the *Hydrology, Hydraulics, and Water Quality Report for University Glen Phase 2 at CSU Channel Islands* (Huitt-Zollars, Inc., 2017), the existing outlet from the constructed wetlands will be modified to ensure the proposed peak discharges are equal to or less than those under the existing condition, for the 10-, 25-, and 100-year storm events. As such, the existing culvert opening will be reduced in size from 10.3 feet wide x 2.8 feet high to 5.0 feet wide x 2.8 feet high, in order to achieve a discharge of 12.5 cfs during the 100-year storm scenario. These modifications are required to occur prior to occupancy of the first phase of the proposed project, in order to ensure that no phase of the project results in discharges exceeding current conditions.

SIGNIFICANCE AFTER MITIGATION

The modification to the outlet required under Mitigation Measure HWQ-1 would ensure a 100-year peak discharge of 12.5 cfs from the constructed wetlands. In addition, the modification would not result in a 100-year water surface elevation that would overtop the adjacent roadway. Table 22 provides a summary of the peak discharges from onsite drainage areas and to the constructed wetlands for the 10-, 25-, and 100-year storm events before and after implementation of the required mitigation measure.

Table 22 Post-Mitigation Condition Peak Discharges

Storm Frequency (year)	Location				
	On-Site to Node 105 Discharge Volume (cfs)	On-Site to Node 801 Discharge Volume (cfs)	Upstream Basin (Node 108) Discharge Volume (cfs)	Downstream Basin – Existing Outlet (Node 109) Discharge Volume (cfs)	Downstream Basin – Modified Outlet (Node 109) Discharge Volume (cfs)
10	42	15	387	0	0
25	53	72	460	0	0
100	72	111	652	22.2	12.5

Source: Huitt-Zollars 2017a

The analyses demonstrate that the VCWPD criteria are met through a modification of the outlet structure from the constructed wetlands, which allows proposed peak discharges to be equal or less than those under the existing condition, for the 10-, 25-, and 100-year storm events. Impacts would be less than significant.

Implementation of Mitigation Measure HWQ-1 would result in secondary impacts on biological resources, in particular jurisdictional areas. These impacts are described in Section 4.3, *Biological Resources*, of this EIR.

IMPACT HWQ-2: THE EXISTING CULVERT UNDERNEATH THE INSPIRATION POINT CROSSING WILL OVERTOP IN A BURN CONDITION 100-YEAR STORM EVENT AND POTENTIALLY RISK DAMAGE AND SAFETY TO PROPOSED ADJACENT RESIDENCES. HOWEVER, PROPOSED MODIFICATIONS TO THE CULVERT BENEATH THE INSPIRATION POINT CROSSING WOULD REDUCE FLOODING POTENTIAL ASSOCIATED WITH A 100-YEAR BURN STORM EVENT. THEREFORE, IMPACTS REGARDING INCREASED RUNOFF WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 5)

Figure 32 identifies the conceptual drainage plan and backbone storm drain infrastructure for the proposed project. Five main storm drain lines would allow adequate drainage of the proposed project consistent with VCWPD criteria:

- Existing Line A allows the unnamed drainage to bypass the project site through an existing 72-inch RCP that daylights to the north of the project site. No modifications would be made to Line A as part of the proposed project.
- Proposed Line B would successively collect and convey runoff from onsite drainage areas C1, C2, and C3 before connecting to the existing 30-inch RCP running underneath Channel Islands Drive.
- Proposed Line C would collect and convey runoff from onsite Drainage Area C3 before connecting to the existing 30-inch RCP running underneath Channel Islands Drive.
- Proposed Line D would collect and convey runoff from onsite Drainage Area A7.1 and discharge directly to an existing discharge location along the unnamed drainage. The existing discharge location is approximately 550 feet upstream of the Inspiration Point crossing.
- Existing Line E was built during the 2001 improvements. It consists of a 96-inch RCP that captured all flows from the adjacent unnamed drainage and conveyed flows to the 3.78-acre constructed wetlands for mitigation. The inlet to the 96-inch RCP includes a straight concrete headwall that is approximately 800 feet downstream of the Inspiration Point crossing. Conceptual hydraulic analyses show that no modifications would be required to Line E.

Consistent with the VCWPD criteria, catch basins at low points would use bio-filtration/bio-planter systems at all inlet locations and are included as part of the proposed project.

The analyses included in the Huitt-Zollars (2017a) report demonstrate that the proposed project would have no hydraulic impacts on properties and proposed infrastructure would be sufficient to convey stormwater flows. Hydraulic analyses confirm that the existing Storm Drain Line A (72-inch RCP) and Storm Drain Line E (96-inch RCP) are adequately sized and meet the VCWPD design criteria and that proposed Storm Drain Lines B, C, and D would provide adequate capacity per VCWPD criteria. However, the existing culvert underneath the Inspiration Point crossing would overtop in a 100-year burn storm event and is proposed to be redesigned as part of the proposed project to ensure the safety of adjacent properties, as discussed below.

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Figure 32 Conceptual Storm Drain Plan with Peak Flow Rates



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Hydraulic Infrastructure in the Adjacent Drainage

The existing culvert entrance to Storm Drain Line A is adequately sized to capture and convey the 100-year burn peak discharge of 408 cfs and would not result in flooding of the adjacent building pad. The existing culvert entrance to Storm Drain Line E is also adequately sized to capture and convey the 100-year burn peak discharge of 653 cfs.

However, the existing entrance to the 5-foot CMP culvert running underneath the Inspiration Point crossing would become submerged with peak discharges above 220.15 feet NGVD29. Analysis results for the existing condition crossing show that 378.55 cfs would overtop the crossing during a 100-year burn storm event (see Appendix C for model results). The under-capacity of the culvert was identified in 2007, during development of plans for an improved culvert associated with the previous development proposal at the site. Proposed improvements included as part of the proposed project are:

- An 11.14-foot by 7.25-foot Corrugated Steel Pipe-Arch Culvert that runs for a longitudinal distance of 29.3 feet.
- A proposed vertical alignment of the Inspiration Point crossing with a sag elevation of 114.99 feet NGVD29.

A copy of the proposed culvert design and vertical alignment of the Inspiration Point crossing are included in Attachment D-6 of Appendix C. With the proposed culvert design, the resulting 100-year burn water surface elevation is 112.97 feet NGVD29, which is 2.02 feet below the lowest point along the crossing deck. Therefore, the proposed project would not result in an exceedance of the capacity of existing or planned stormwater drainage systems, resulting in a less than significant impact.

Mitigation Measure

No mitigation is required.

4.5.5 Cumulative Impacts

The cumulative study area for hydrology and water quality is defined as the Calleguas Creek Watershed, because potential impacts to hydrology and water quality associated with the proposed project would be limited to this area. As discussed in Section 3.3, *Cumulative Development*, cumulative projects in the region would include new residential and non-residential developments, some of which are included in Table 6. The majority of reasonably foreseeable planned and future projects would occur in and around the urbanized area of the city of Camarillo. As described above in Section 4.5.1, the CSUCI campus is located between the city of Camarillo and the Las Posas Hills to the north, and the Santa Monica Mountains to the south.

As shown on Figure 27, the project site is surrounded by open space (hillsides) and agriculture; these areas are not planned for development and there are no cumulative projects proposed for the sites adjacent to the project site. Some cumulative development could occur in portions of the Calleguas Creek Watershed; however, as discussed under Impact HWQ-1, improvements to the outlet at the constructed wetland area included as part of the project design would ensure that flows exiting the project site following project implementation would be the same as flows exiting the project site under existing (pre-project) conditions.

Therefore, implementation of the proposed project would not contribute to the cumulative scenario, and potential impacts to hydrology and water quality related to the proposed project would not be cumulatively considerable.

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4.6 Land Use and Planning

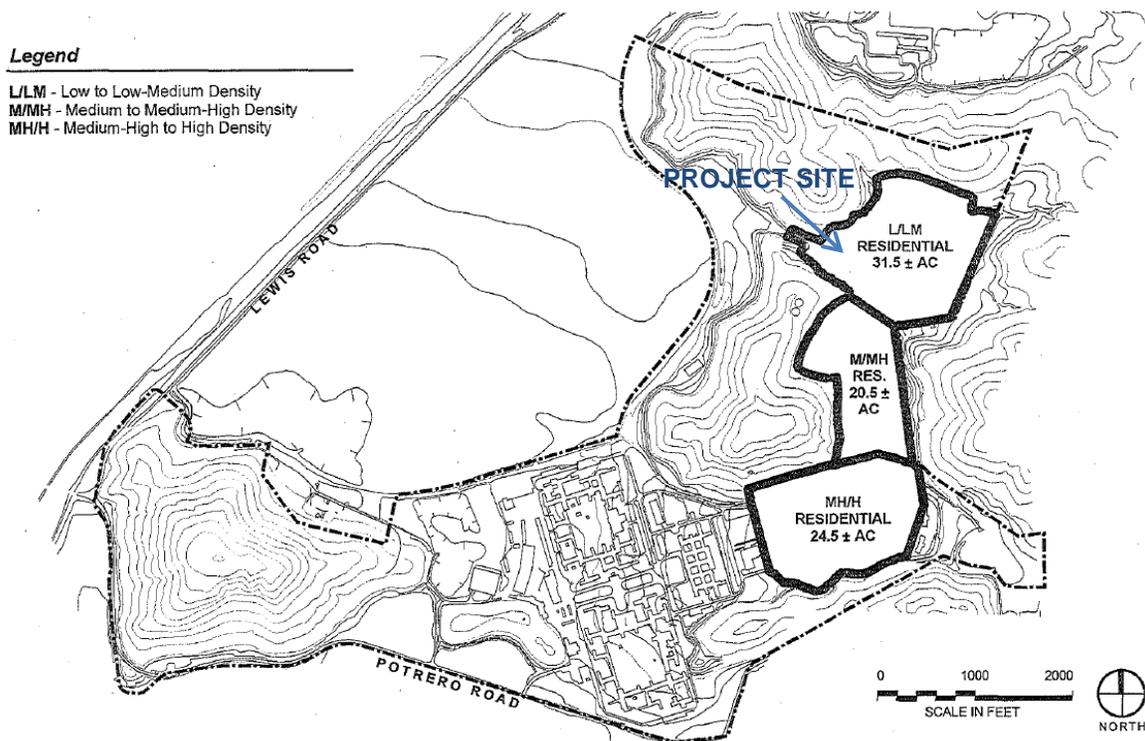
4.6.1 Setting

Project Site

As illustrated in Figure 2, Regional Location, in Section 2.0, *Project Description*, the project site is located in Ventura County, approximately 2.5 miles south of the city of Camarillo. Regional access to the project site is provided by U.S. Highway 101 (U.S. 101) and Lewis Road from the north to Camarillo Street, and State Route (SR) 1 and Hueneme Road from the south. Local access to the project site is provided via Channel Islands Drive, which runs along the southwest border of the project site and provides access from the west and south. Access from the main campus north to the project site is provided by Channel Islands Drive.

The project site consists of an approximately 32-acre site on the northernmost parcel of the East Campus Residential Neighborhoods, shown in Figure 33. This site is currently designated for Low to Low-Medium (L/LM) Residential Density (0 to 10 dwellings per acre) under the current Specific Reuse Plan, which is the guiding land use document for the East Campus Residential Neighborhoods, which are also collectively referred to as University Glen.

Figure 33 East Campus Residential Neighborhoods and Existing Specific Reuse Plan Designations



Source: CSUCI Site Authority 2000

Surrounding Land Uses

The project site is immediately surrounded by developed University Glen residences to the south and open space belonging to the CSUCI campus to the east, west, and north. The open space directly east of University Glen had been identified for use as a fuel modification zone in the Specific Reuse Plan and was

incorporated into the 2000 Specific Reuse Plan. The current SRP required fuel modification zone along the eastern boundary of University Glen provides a 100-foot-wide buffer area against wildfires originating in the Santa Monica Mountains east of campus. Beyond the campus boundary, there is agricultural land to the west and privately-owned open space to the north and east. Figure 2 in Section 2.0, *Project Description*, provides an aerial image of the project site and surrounding areas. Land uses surrounding the project site are discussed further in Section 2.3.1 of this EIR. Figure 33 above illustrates the designations for developed areas to the south of the site, and Table 23 describes the current Specific Reuse Plan designations.

Table 23 Surrounding Land Use Designations

Lots	Specific Reuse Plan Designation
Surrounding Land Use Designations	
North	None*
South	Low-Medium to Medium-High: 10-20 units per acre Medium-High to High: 20-30 units per acre
West	None*
East	Fuel Modification Zone: Requires 100 feet total width with 50 feet of fire-resistant vegetation adjacent to development and an additional 50 feet of thinned out native vegetation with a minimum distance between large shrubs of 20 feet.**

* Part of the CSUCI campus not yet planned under Specific Reuse Plan or Campus Master Plan.

** As described in Chapter 2.0, *Project Description*, all sides of the project site would be required to comply with the fuel modification requirements. Currently, only the area to the east of the project has been designated for fuel modification in the Specific Reuse Plan. An estimated extent of the fuel modification zone required for the project is shown on Figure 25.

4.6.2 Regulatory Setting

As the lead agency under CEQA, the California State University Board of Trustees is not subject to the land use regulations of a local government entity. As described in Section 2.0, *Project Description*, the Specific Reuse Plan guides development of University Glen, the campus’s main residential area, as well as two smaller areas, one to the west of the Academic Core and one at the far eastern end of the campus.

Specific Reuse Plan

The Specific Reuse Plan was adopted in June 5, 2000 and contains policies, regulations, and design standards to guide development of the Community Development Area, of which the project site is a part. It serves as a direct link between the goals, policies, and purposes of campus development and specific development projects, assuring that as future developments are individually reviewed, they remain consistent with one another and with the provisions of the Plan. The Specific Reuse Plan was developed in consultation with adjacent local governments.

The Specific Reuse Plan (p. II-1) establishes the following objectives for the Community Development Area:

1. Create a residential community conveniently located to the Academic Core of the university for the purpose of providing a range of housing opportunities for faculty and staff.
2. Establish a Research and Development Area that will take advantage of the academic setting and create a physical interface with the University's academic quadrants.
3. Work carefully with existing landforms, drainage patterns, biological resources, tree specimens and structures of historic value in devising the community plan. Establish strong visual connections to these important elements.

4. Create a community that invites pedestrian activity and bicycling and establishes well-defined linkages to the Academic Core.

The Specific Reuse Plan (p. I-6) also establishes the following goal for the development of East Campus:

...[T]o create a diverse mixed-income community with a unique sense of place, contributing to the growth and vitality of the entire University campus. A key element in achieving this goal is to develop a wide range of housing embracing and articulating the concepts of "home" and "neighborhood." Important community components are to create a sense of belonging, have a hierarchical circulation system, and encourage neighborhood interaction through linkages with community facilities suitable for group gatherings and open space areas for active and passive recreation.

4.6.3 Methodology and Significance Thresholds

This analysis evaluates the project's consistency with the Specific Reuse Plan. In accordance with Appendix G of the *State CEQA Guidelines*, a land use impact is considered significant if implementation of the proposed project would:

- 1 Physically divide an established community.
- 2 Conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.
- 3 Conflict with any applicable habitat conservation plan or natural community conservation plan.

The Initial Study, included in Appendix A, concluded that the proposed project would not divide an established community or conflict with a habitat conservation plan or natural community conservation plan. Therefore, only conflicts with applicable land use plans (Threshold 2) are addressed in this section.

4.6.4 Project Impacts and Mitigation Measures

Impact LU-1 : WITH APPROVAL OF THE AMENDMENT TO THE ALLOWED DENSITY AT THE SITE IN THE SPECIFIC REUSE PLAN, ADHERENCE TO OTHER APPLICABLE POLICIES AND STANDARDS IN THE SPECIFIC REUSE PLAN, AND IMPLEMENTATION OF MITIGATION MEASURES PROVIDED IN THIS DOCUMENT, THE PROPOSED PROJECT WOULD BE CONSISTENT WITH APPLICABLE LAND USE PLANS, POLICIES, AND REGULATIONS ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT. (THRESHOLD 2)

The Specific Reuse Plan is the guiding land use document for the project site and contains policies and standards for residential development in the East Campus that apply to the proposed project. The following analysis discusses the proposed project's consistency with applicable land use policies and regulations in the Specific Reuse Plan.

Consistency Analysis

DEVELOPMENT DENSITY

The proposed project would develop up to 600 residential units on the project site. Units would include a mix of market-rate apartments, income/ age-restricted apartments, and attached and detached single-family homes. Under the Specific Reuse Plan, the project site is currently entitled for the development of up to 242 single-family residential units at a low/ low-medium residential density of zero to ten dwellings per acre. Consequently, the proposed project includes an amendment to the Specific Reuse Plan to alter the allowable density at the project site to low-medium to medium-high residential density, which would

allow for 10 to 20 dwellings per acre and permit the 600 units proposed. With approval of the amendment, the proposed project would be consistent with the Specific Reuse Plan.

OTHER POLICIES

The proposed project would be required to comply with policies and design standards applicable to residential development in the East Campus as contained in the Specific Reuse Plan. The proposed project’s consistency with applicable goals, policies and standards is evaluated in Table 24 below. The proposed project would be consistent with all applicable Specific Reuse Plan goals, policies and design standards as indicated below.

Table 24 Project Consistency with Specific Reuse Plan Goals, Policies and Standards

Goal/Policy	Project Consistency
Open Space System	
<p>The Specific Reuse Plan includes development guidelines requiring five acres of local park per thousand inhabitants.</p>	<p>Consistent As discussed in Section 4.9, Recreation, of this EIR, there is sufficient existing park land and recreational facilities in the University Glen community to meet an increase in demand due to the proposed project. In addition, the proposed project would provide an additional 3.73 acres of park land and recreational facilities.</p>
Building Design	
<p>Complement existing campus historic character and fabric.</p>	<p>Consistent The proposed project would feature stucco wall surfaces, tile roofs, and Mission-revival and Spanish-colonial revival architectural styles that would blend with and complement University Glen Phase 1 development. See Figure 9 through Figure 11 for conceptual elevations of the buildings proposed as part of the project and Figure 18 for images of existing University Glen residences in Section 4.1, <i>Aesthetics</i>.</p>
<p>The architectural character of proposed buildings, while not necessarily recreating the existing styles established on site, will feature stucco, tile-style roofs and simple openings.</p>	<p>Consistent The proposed project would feature residences with stucco, tile-style roofs, and simple openings, as illustrated in conceptual elevations of the project (see Figure 9 through Figure 11).</p>
<p>The residential community is envisioned to be primarily two stories with one-story elements for massing relief. Three-story elements will tend to be located in interior or in vertical accent locations within the community.</p>	<p>Consistent The proposed project would include two-story single family homes, two and three-story townhomes, and three-story market rate apartments and income/ age-restricted apartments. Three-story elements would be located adjacent to existing three-story University Glen Phase 1 development for consistency in massing. Figure 8, Site Plan, shows the arrangement of different housing elements in the site.</p>

Goal/Policy	Project Consistency
<p>Buildings responding to community pedestrian elements will maintain a degree of formality while providing direct connections by way of front doors, porches, and building entrances.</p>	<p>Consistent The proposed project would be designed to emulate existing University Glen neighborhoods, which provide distinct entrances at buildings responding to community pedestrian elements and provide direct connections by way of front doors, porches, and building entrances, as illustrated in Figure 9 through Figure 11 in Section 2.0.</p>
<p>Buildings responding to perimeter conditions will direct private yards and patios toward the desired views.</p>	<p>Consistent Residences located along Inspiration Point would respond to perimeter conditions and some would have private yards oriented towards open space to the north and others would have private yards open towards the project site.</p>
<p>Perimeter walls will not be constructed in order to maintain open residential community consistent with the desired university character and environment. Low patio walls or open fencing will be utilized adjacent to open space amenities.</p>	<p>Consistent The proposed project would be designed to emulate existing University Glen neighborhoods, which maintain an open residential community without perimeter walls and with low patio walls or open fencing adjacent to open space amenities.</p>
<p>East Campus Design Standards</p>	
<p>Streets: Local (Single-Family Dwelling) <u>Street width (feet)</u> 32, 28, or 24</p> <p><u>Parking requirements</u> For residents 2 spaces per unit (one covered, plus guest) Street and guest parking - 32-foot street: Parking on both sides - 28-foot street: Parking on one side - 24-foot street: No parking</p> <p><u>Sidewalk location</u> Curb parallel both sides of street. One side only required for single-loaded streets.</p> <p>Other Development Standards Single-Family Dwelling <u>Maximum height¹</u> 35 feet</p>	<p>Consistent The proposed project would provide a 32-foot wide street along the eastern perimeter of the site that provides access to 24-foot drive alleys for access to single-family home garages.</p> <p>Each single-family home would have a garage with two parking spaces.</p> <p>The 32-foot street would provide parking on one side, consistent with the Ventura County Fire Code, and the 24-foot drive alleys would provide no parking (see Figure 17, Circulation Plan).</p> <p>Sidewalks would be provided on both sides of the streets in the project site except where a sidewalk isn't reasonably necessary or a hiking/walking path is provided in its place.</p> <p>Consistent The maximum height of all single-family dwellings would be 28 feet.</p>
<p>Streets: Local (Multi-family/ apartments) <u>Street width (feet):</u> 32, 28, or 24</p>	<p>Consistent Market-rate and income/age-restricted apartments would be served primarily by a 36-foot street with 24-foot drive alleys providing access to parking areas. Townhomes along the northern perimeter of the site would be served primarily by a 32-foot street with 24-foot drive alleys providing access to motor courts with resident and guest parking for townhomes.</p>

Goal/Policy	Project Consistency
<p><u>Parking requirements:</u> For residents Studio: 1 space 1 bedroom: 1.5 space 2 bedroom: 1.75 space 3+ bedroom: 2 spaces (one min covered per unit, plus guest)</p> <p>Street and guest parking - 32-foot street: Parking on both sides - 28-foot street: Parking on one side - 24-foot street: No parking - Guest Parking: 0.25 spaces per dwelling unit</p>	<p>The proposed project would be required to provide 1,061 parking spaces total with 178 covered spaces based on SRP requirements. As proposed, the project would provide 508 enclosed/covered spaces and 519 standards spaces for a total of 1,027 spaces.</p> <p>36-foot streets would provide parking on both sides, 32-foot streets would provide parking on one side, and 24-foot drive alleys would provide no parking. Available street parking is indicated in Figure 17, Circulation Plan.</p>
<p>Other Development Standards Multi-family/ apartments</p> <p><u>Maximum height</u>¹ 45 feet</p>	<p>Consistent The maximum height of proposed townhomes and apartments would be 40 feet. See Figure 22 in Section 4.1, <i>Aesthetics</i>.</p>
Landscape Program Components: General	
<p>Lighting Lighting is of low intensity within the warm incandescent color spectrum. A lighting hierarchy consistent with Green Campus program will be established for roadways and pedestrian areas. Accent lighting of featured landscaping is to be used where appropriate. Safety and security are of primary concern.</p>	<p>Consistent The proposed project would be subject to Landscape Design guidelines (including in the University Design Guidelines previously referenced), which require site lighting to be achieved with the greatest extent possible through shielded lighting fixtures mounted on the buildings. The CSUCI Campus Master Plan also requires a lighting hierarchy consistent with the Green Campus program be established for roadways and pedestrian areas. In accordance with the Campus Design Guidelines, the style, location and height of lighting fixtures must be compatible with existing development. Note that the guidelines regarding lighting have been updated since adoption of the Specific Reuse Plan to respond to technology, reduced energy usage, and better shielding, but that the updated Guidelines are considered compatible with the existing development.</p>
Landscape Objectives	
<p>Strive for sustainability in regard to maintenance, waste and water conservation.</p>	<p>Consistent The proposed project would comply with waste and water conservation measures required in the 2016 California Green Building Standards Code (CALGreen), including installation of reduced-flow water fixture and providing areas for recycling and composting. The proposed project would comply with future campus policies to reduce waste and conserve water, as applicable.</p>

Goal/Policy	Project Consistency
<p>Use simple plant palettes and limit use of turf to high visibility and recreation areas.</p>	<p>Consistent Landscaping throughout the site would utilize a substantially native, drought tolerant plant palette. Exceptions to native may be granted based on lack of availability of nursery stock. Turf would be limited to pocket parks and the central green.</p>
<p>Use plant materials that are compatible with the native coastal sage scrub ecosystem or riparian plant communities where appropriate.</p>	<p>Consistent Landscaping throughout the site would utilize a substantially native, drought tolerant plant palette, where appropriate. Exceptions to native may be granted based on lack of availability of nursery stock.</p>
<p>Natural Edge Park (from Figure 2-8, Landscape Framework Plan)</p>	
<p>The northern and eastern perimeter of the project site is designated as a Natural Edge Park in the Landscape Framework Plan of the Specific Reuse Plan. <i>Natural Edge Park characteristics:</i></p> <ul style="list-style-type: none"> - Fire resistant planting - Transitional planting to native landscape - Barrier fence at sensitive areas 	<p>Consistent The proposed project will incorporate landscape design elements that will complement the characteristics of Natural Edge Park. The northern and eastern edges of the site would comprise a portion of the fuel modification zone which by its nature would include removal of highly flammable vegetation.</p>
<p>Greenways (from, Figure 2-8, Landscape Framework Plan)</p>	
<p>The unnamed drainage to the north of the project site and area in the immediate vicinity is designated as a Greenway in the Landscape Framework Plan of the Specific Reuse Plan. <i>Greenway characteristics:</i></p> <ul style="list-style-type: none"> -Riparian habitat with groves of sycamore, oaks and California Pepper -Bioswale plantings of grasses suitable for decreasing pollutants from drainage runoff - Rural character 	<p>Not Applicable As discussed in Section 4.3, <i>Biological Resources</i>, there is no riparian community at the unnamed drainage at the north of the project site, nor groves of sycamore, oaks, or California Pepper emblematic of a Greenway as described in the SRP. No additional planting is proposed as part of the proposed project. As discussed in Section 4.5, <i>Hydrology and Water Quality</i>, the proposed project would not result in significant amounts of polluted runoff. Appendix C provides details regarding the stormwater control measures that would be utilized at the site including Low Impact Development features such as biofiltration planters.</p>
<p>Neighborhood (from, Figure 2-8, Landscape Framework Plan)</p>	
<p>The project site is identified as a Neighborhood in the Landscape Framework Plan. <i>Neighborhood characteristics:</i></p> <ul style="list-style-type: none"> - Play fields - Picnic Facilities 	<p>Consistent The proposed project would include open spaces and parks that could be used for both the passive and active recreation activities envisioned in the Specific Reuse Plan.</p>
<p>Resource Management Plan: Tree Preservation</p>	
<p>The removal of trees must meet the mitigation measures adopted as part of the 1998 Final EIR for the conceptual Master Plan: BIO-3 Removal of potential raptor nest trees should be limited to the time period between September 1 to January 31. Alternatively prior to any trees being removed during the raptor nesting season, a survey for active nests shall be</p>	<p>Consistent Mitigation Measure BIO-1(a) in Section 4.3, <i>Biological Resources</i>, of this EIR contains similar requirements to the measure cited in the Specific Reuse Plan and addresses impacts to both raptors and other avian species.</p>

Goal/Policy	Project Consistency
<p>conducted by a qualified biologist at the site two weeks prior to any tree removal. If active nests are located, then all construction work must be conducted at least 500 feet from the nest until the young have fledged and are independent of the adults.</p>	
<p>All mature trees with trunk measurements of six inches or greater when measured 4.5 feet above the ground will be incorporated into the site design when feasible. If their removal is required by construction, they will be replaced at a 1:1 ratio with a like species or transplanted to a suitable location. Planting locations will be determined by a qualified landscape architect in consultation with the building architect.</p>	<p>Consistent</p> <p>The main area of the project site and Inspiration Point have both been previously cleared and graded for entitled development. No mature trees would need to be removed from these areas.</p> <p>One arroyo willow is present adjacent to the existing culvert at the north of the project site. If its removal is required due to the required expansion of the Inspiration Point crossing culvert, it would be replaced at a 1:1 ratio with a like species or transplanted to a suitable location.</p>
<p>Air Quality Mitigation/ Trip Reduction Program</p>	
<p>Site modifications that will sufficiently accommodate and encourage walking, transit, bicycle, bus, and van use, and the creation of a multi-purpose trail system.</p>	<p>Consistent</p> <p>The proposed project would be a pedestrian and bicycle-oriented residential development consistent with existing University Glen neighborhoods. An objective of the proposed project is to attract faculty and staff to the University by providing housing opportunities near the campus, including retirees, which encourages the use of alternative modes of transportation for daily commute purposes. In addition, the proposed project may include a multi-purpose trail through select areas of the project site that would connect with some of the new parks where possible based on topography and to the Channel Islands street sidewalk.</p>
<p>Roadway Design Standards</p>	
<p>Project consistency with Roadway Design Standards is evaluated under Section 4.10, <i>Transportation and Circulation</i>, of this EIR.</p> <p>The proposed project would be consistent with roadway design standards identified in the Specific Reuse Plan and current County Fire Department requirements.</p>	
<p>Residential Measures to Reduce Solid Waste and Sources of Solid Waste</p>	
<p>Install cabinets or other similar features for home sorting of recyclables</p>	<p>Consistent</p> <p>The proposed project would comply with 2016 CALGreen standards requiring new residential buildings to provide areas for recycling.</p>
<p>Provide a compost bin in the yard of each single-family residence, or in the case of multi-family areas, provide a shared composting facility.</p>	<p>Consistent</p> <p>The proposed project would comply with 2016 CALGreen standards requiring new residential buildings to provide areas for composting.</p>
<p>¹ Measured to top of highest roofing material. Chimneys, tower forms and other such non-occupied architectural elements may exceed height limit by ten feet for a maximum of ten percent of roof area.</p>	

4.7 Noise

This section evaluates the potential impacts of the proposed project on existing noise conditions. Both temporary construction noise and long-term noise generated by operation of the proposed project are evaluated.

4.7.1 Setting

Overview of Noise

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate at a rate of approximately 6 dBA per doubling of distance from point sources (such as industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. 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 reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Federal Transit Administration [FTA] 2006).

In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measuring period, and Lmin is the lowest RMS sound pressure level within the measuring period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10 p.m. to 7 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 p.m. to 10 p.m. and a 10 dBA penalty for noise occurring from 10 p.m. to 7 a.m. Noise levels described by Ldn and CNEL usually do not differ by more than 1 dBA.

Fundamentals of Groundborne Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and, in the U.S., is referenced as vibration decibels (VdB).

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. According to the Federal Transit Administration (2006) *Transit Noise and Vibration Impact Assessment*, 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 operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne 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.

The general human response to different levels of groundborne vibration velocity levels is described in Table 25.

Table 25 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many humans.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Federal Transit Administration 2006

4.7.2 Regulatory Setting

Federal

The FTA has recommended noise criteria related to traffic-generated noise. Recommendations contained in the FTA (2006) *Transit Noise and Vibration Impact Assessment* can be used as guidance to determine whether or not a change in traffic would result in a substantial permanent increase in noise. Under the FTA standards, the allowable noise exposure increase is reduced with increasing ambient existing noise exposure, such that higher ambient noise levels have a lower allowable noise exposure increase. Table 26 shows the significance thresholds for increases in traffic-related noise levels. These standards are applicable to project impacts on existing sensitive receptors (as defined under *Sensitive Receptors* below).

The FTA also recommends vibration impact thresholds to determine whether groundborne vibration would be “excessive.” According to the FTA, groundborne vibration impact criteria for residential receptors are 72 vibration decibels (VdB) for frequent events, 75 VdB for occasional events, and 80 VdB for infrequent events (FTA 2006). With regard to groundborne vibration impacts on structures, the FTA states that groundborne vibration levels in excess of 100 VdB would damage fragile buildings (FTA 2006).

Table 26 Significance of Changes in Operational Roadway Noise Exposure

Existing Noise Exposure (dBA Ldn or Leq)	Allowable Noise Exposure Increase (dBA Ldn or Leq)
45-49	7
50-54	5
55-59	3
60-64	2
65-74	1
75+	0

Source: Federal Transit Administration 2006

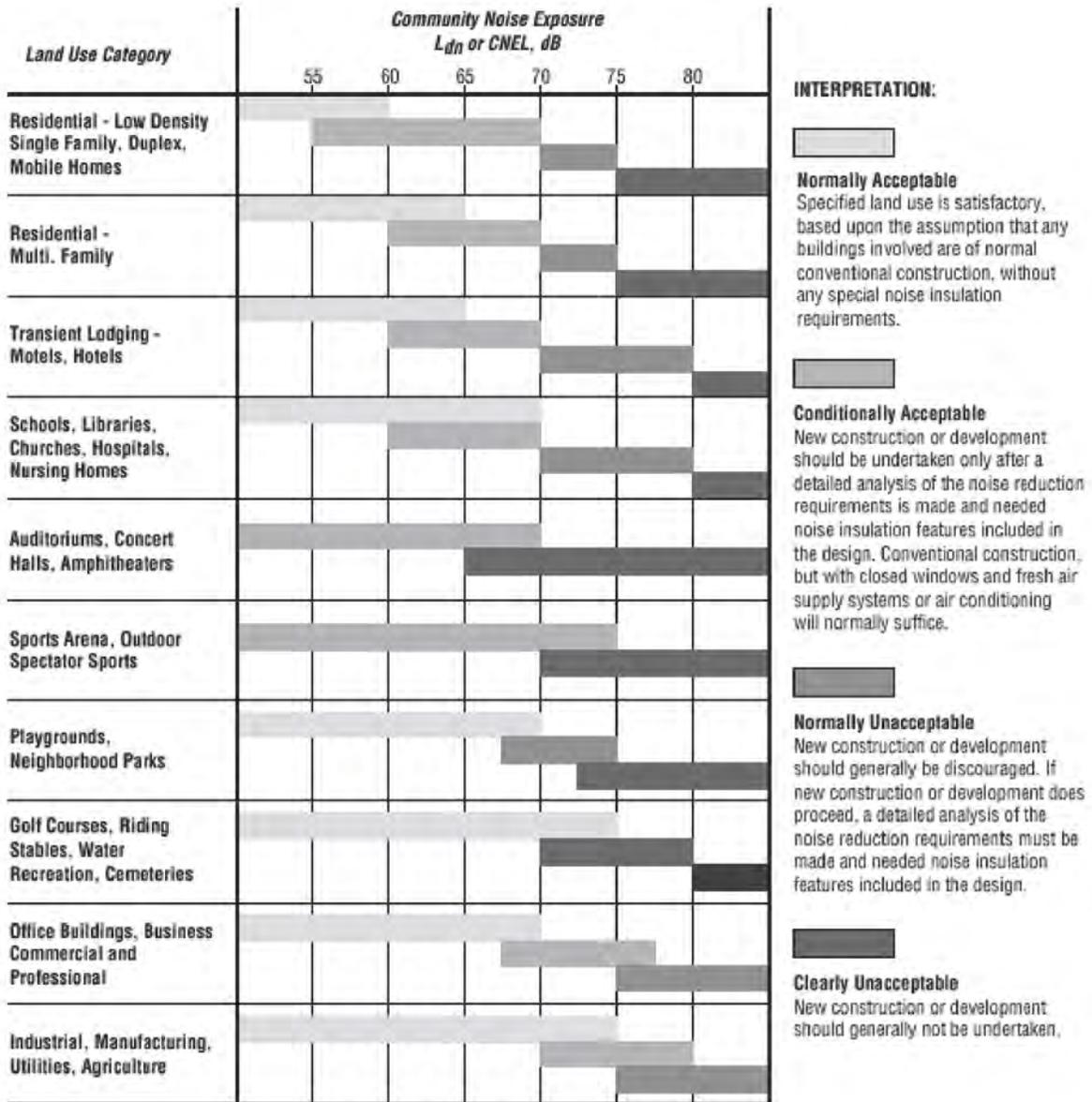
State

CALIFORNIA GOVERNMENT CODE § 65302

The California Government Code encourages each local government entity to implement a noise element as part of its general plan. In addition, the California Governor’s Office of Planning and Research (OPR) has developed Guidelines for the Preparation and Content of Noise Element of the General Plan (2003). The guidelines include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure. The recommendations established by the Office of Planning and Research for noise-compatible land uses are listed in Figure 34. The guidelines also include adjustment factors shown in Table 27 that can be used to arrive at noise-acceptability standards that reflect the noise-control goals of the community, the particular community’s sensitivity to noise, and the community’s assessment of the relative importance of noise pollution.

The CSU does not have an adopted a planning document similar to a Noise Element; however, for the purposes of this assessment recommendations included in OPR’s (2003) Guidelines have been used in this assessment to determine compatibility of the proposed project and surrounding land uses with post-project noise levels.

Figure 34 Noise-Compatible Land Uses Matrix



Source: Governor's Office of Planning and Research, General Plan Guidelines, 2003.

Table 27 Noise Adjustment Factors

Type of Correction	Description	Amount of Correction to be Added to Measured CNEL in dB
Seasonal Correction	Summer (or year-round operation)	0
	Winter only (or windows always closed)	-5
Correction for Outdoor Residual Noise Level	Quiet suburban or rural community (remote from large cities and from industrial activity and trucking)	+10
	Quiet suburban or rural community (not located near industrial activity)	+5
	Urban residential community (not immediately adjacent to heavily traveled roads and industrial areas)	0
	Noisy urban residential community (near relatively busy roads or industrial areas)	-5
	Very noisy urban residential community	-10
Correction for Previous Exposure and Community Attitudes	No prior experience with the intruding noise	+5
	Community has had some previous exposure to intruding but little effort is being made to control the noise. This correction may also be applied in a situation where the community has not been exposed to the noise previously, but the people are aware that bona fide efforts are being made to control the noise	0
	Community has had considerable previous exposure to the intruding noise and the noise maker's relations with the community are good	-5
	Community aware that operation causing noise is very necessary and it will not continue indefinitely. This correction can be applied for an operation of limited duration and under emergency circumstances.	-10
Pure Tone or Impulse	No pure tone or impulsive character	0
	Pure Tone or impulsive character present	+5

Source: State of California, Office of Planning and Research 2003

TITLE 24

Title 24 of the California Code of Regulations codifies sound transmission control requirements establishing uniform minimum noise insulation performance standards for dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior noise sources shall not exceed 45 dBA CNEL in any habitable room of a new building.

Local

Neither the University nor the overall CSU system have adopted any policies and standards identifying acceptable noise levels at campus receptors.

4.7.3 Sensitive Receptors

Noise exposure standards for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, hotels and motels, libraries, churches, recreational areas and parks, prisons and correctional facilities, and group shelters are most sensitive to noise intrusion and, therefore have, more stringent noise exposure standards than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. The sensitive receptors closest to the project site are multi-family residences within the University Glen community located

approximately 65 feet south of the southern boundary of the project site, single-family residences located approximately 450 feet south of the project site, a community pool located approximately 350 feet south-southwest of the project site, and the John Spoor Broome Library located approximately 2,800 feet southwest of the project site (see Figure 35).

4.7.4 Existing Noise Environment

Project Site and Vicinity

Major sources of noise in the project vicinity generally include: motor vehicle traffic, aircraft, railroad traffic, and agricultural operations. The predominant noise source in the project area is motor vehicle noise along area roadways. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create a sustained noise level. The main roadways of concern near the project site that are the major sources of noise include State Route (SR) 34, U.S. Highway 101 (U.S. 101), Cawelti Road, Lewis Road, and Potrero Road. Of these roadways, only Lewis Road and Potrero Road are within one mile of the project site.

The general noise environment of the project site and the vicinity is characterized by open space, residential neighborhood, institutional uses and agricultural uses with low ambient noise levels during the evening and nighttime hours. The project site is bounded to the north, west, and east by open space. The southern boundary of the project site is a residential area, where the primary noise sources include local traffic within the residential neighborhood. The closest existing street to the project site is Channel Islands Drive along the western and southern boundary of the project site. Channel Islands Drive has approximately 197 hourly trips during the AM peak hour and 173 hourly trips during the PM peak hour (the busiest hours of the day) (see Section 4.10, *Transportation and Circulation*, for further information). The land west of the project site is agricultural land and primary sources of noise in this area include periodic agricultural activity, such as the use of tractors.

There are two airports located within 5 miles of the project site. These airports include the City of Camarillo Airport, located approximately 3.7 miles northwest of the project site and the Naval Air Weapons Station Point Mugu, located approximately 5.0 miles south-southwest of the project site. Due to the distance between the Camarillo Airport and the project site, aircraft would be sufficiently high over project site to preclude substantial noise effects on the proposed project. The project site is located outside the Prospective (2020) Air Installation Compatible Use Zones 60 dBA CNEL Noise Contour for the runways at Point Mugu (Naval Base Ventura County Point Mugu 2016).

On-Site Noise Level Measurements

In order to establish the existing noise conditions, noise level measurements were collected on November 22, 2016 at six locations on or near the project site using an ANSI Type II integrating sound level meter in accordance with standard protocols. These six sound level measurements were collected during morning and evening peak traffic conditions (between 7:00 am and 9:00 am and 4:00 pm and 6:00 pm), and provide an estimate of the general noise environment in the project vicinity. The sound level measurement locations are shown in Figure 35. Locations were selected along the most heavily traveled roadways to represent the highest sound level associated with the roadways adjacent to the project site to capture ambient noise levels. Location 4 borders the southern boundary of the project site and is adjacent to Channel Islands Drive. Location 4 is near the closest sensitive receptor to the project site and is representative of the existing noise environment at those residences. Table 28 identifies the sound level measurement locations and measured sound levels.

Figure 35 Sound Measurement Locations and Sensitive Receptors



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Noise 2 Sound Msrmt Locn Sensitive Repts_2

Table 28 Sound Level Measurement Results (dBA)

Measurement Location	Primary Noise Source	Sample Time	Leq Measured	Lmax	Lmin
1 – Along Camarillo Street, approximately 15 feet from the centerline of the road	Vehicle traffic on Camarillo Street	7:11 am– 7:25 am	66.7	83.4	51.6
2 – Along University Drive, approximately 35 feet from the centerline of the road	Vehicle traffic on University Drive	7:44 am– 7:59 am	67.6	91.1	50.7
3– Along Channel Islands Drive, near Camarillo Street, approximately 20 feet from the centerline of the road	Vehicle traffic on Channel Islands Drive	8:13 am– 8:28 am	58.4	79.1	32.9
4 – Along Channel Islands Drive, near Santa Cruz Island Drive, approximately 20 feet from the centerline of the road	Vehicle traffic on Channel Islands Drive	8:40 am– 8:55 am	61.4	82.2	33.4
5 – Along Channel Islands Drive, near Platts Harbor Drive, approximately 15 feet from the centerline of the road	Vehicle traffic on Channel islands Drive	4:12 pm– 4:27 pm	57.4	77.3	29.1
6 – Along San Miguel Island Drive, at the approximate location of the proposed Central Park, approximately 600 feet from the centerline of Channel Islands Boulevard	Vehicle traffic on Channel Islands Drive	4:57 pm– 5:12 pm	43.6	61.6	33.0

Source: Field visit on November 22, 2016, using ANSI Type II Integrating sound level meter.
See Appendix F for sound level measurement data sheets

As shown in Table 28, measured sound levels along roadways near the project site are between 67.6 Leq and 43.6 Leq. Noise measurement locations 4 and 5 are near identified sensitive-receptors, including the existing multi- and single-family residences (see Figure 35), while noise measurement location 6 is located on the project site, where a park is proposed.

4.7.5 Methodology and Significance Thresholds

Methodology

The analysis of noise impacts considers the effects of both temporary construction-related noise and operational noise associated with long-term project-related activities, including project-generated traffic and stationary noise sources. Construction noise estimates are based upon noise levels reported by the FTA (2006) in the *Transit Noise and Vibration Impact Assessment*, the Federal Highway Administration's (FHWA; 2006) *Construction Noise Handbook*, the University of Washington(2004) *Construction Industry Noise Exposures: Operating Engineers*, and the distance to nearby sensitive receptors. The equipment used is based on the default equipment lists provided by the CalEEMod land use emissions computer model program's analysis, as analyzed in Section 4.4, *Greenhouse Gas Emissions* (see Appendix D for equipment analyzed and Appendix G for phasing noise calculations). This analysis assumes that all the equipment that would be used on-site during each phase of project construction would operate simultaneously and continuously for up to 70 percent of the work day as reasonable worst case assumptions for activity. Reference noise levels from the FTA (2006) are used to estimate noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dB per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Construction noise level estimates do not account for the presence of intervening structures or topography, which may reduce noise levels

at receptor locations. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual temporary construction noise.

Noise levels associated with existing and future traffic along area highways and roadways were estimated using the FHWA's Traffic Noise Model (TNM) Version 2.5 (FHWA 2004) (noise model data is provided in Appendix H of this EIR). The model calculations are based on traffic data from *Traffic Impact Study for the CSU Channel Islands Specific Reuse Plan Update* prepared by Fehr & Peers (January 2017; Appendix I).

Significance Thresholds

Pursuant to Appendix G of the *State CEQA Guidelines*, significant noise impacts would occur if the project would result in any of the following conditions:

- 1 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.
- 2 Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- 3 Result in a substantial permanent increase in ambient noise levels above levels existing without the project.
- 4 Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above those existing prior to implementation of the project.
- 5 For a project located in 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.
- 6 For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise.

The evaluation of airport land use consistency and excessive noise are not analyzed in this EIR, as they were analyzed and determined to have no impact in the Initial Study for this project (see Appendix A).

The quantitative standards used for each threshold are described below.

For Thresholds 1 and 4, as they relate to temporary construction noise impacts, an impact would be potentially significant if temporary construction noise would exceed the construction noise thresholds described in the *Ventura County Construction Noise Threshold Criteria and Control Plan* (2005). Ventura County does not have regulatory authority over the proposed project. However, CSUCI does not currently have adopted noise thresholds for temporary construction noise impacts. Comparing the proposed project's temporary construction noise levels to Ventura County's thresholds for temporary construction noise provides a reasonable estimate of the potential significance of project construction noise associated with the proposed project.

Table 29 shows the allowable construction hours from the *Ventura County Construction Noise Threshold Criteria and Control Plan*. Table 30 shows the applicable construction activity noise level criteria. As shown in Table 30, for construction work lasting longer than 8 weeks, construction noise would result in a significant impact if an existing receptor would be exposed to exterior noise levels above the hourly equivalent noise level at the nearest receptor, plus 3dB. Table 31 shows the location-specific significance thresholds for each sensitive receptor, based on the construction activity noise threshold criteria in Table 30 and the nearby measured ambient noise levels (see Table 28).

Table 29 Construction Hours

Timeframe Hours*	Description
Daytime: 7:00 AM to 7:00 PM (Monday – Friday) 9:00 AM to 7:00 PM (Saturday, Sunday, and local holidays)	Generally means any time period not specifically defined as a more noise-sensitive time period.
Evening: 7:00 PM to 10:00 PM	More noise-sensitive time periods.
Nighttime: 10:00 PM to 7:00 AM (Monday – Friday) 10:00 PM to 9:00 AM (Saturday, Sunday, and local holidays)	Most noise-sensitive time periods.

* Also, the construction-related, slow response, instantaneous maximum noise (L_{max}) shall not exceed the noise threshold criteria by 20 dBA more than eight times per daytime hour, more than six times per evening hour, and more than four times per nighttime hour.

Source: Ventura County 2005

Table 30 Construction Activity Noise Threshold Criteria

Construction Duration Affecting Noise-sensitive Receptors during the Daytime	Noise Threshold Criteria shall be the greater of these noise levels at the nearest receptor area or 10 feet from the nearest noise-sensitive building	
	Fixed $L_{eq}(h)$, dBA	Hourly Equivalent Noise Level (L_{eq}), dBA ^{1,2}
0 to 3 days	75	
4 to 7 days	70	
1 to 2 weeks	65	Ambient $L_{eq}(h) + 3$ dB
2 to 8 weeks	60	
Longer than 8 weeks	55	
Receptor Location	Construction Activity Time	
Residential	Evening	50
Residential, Live-in Institutional	Nighttime	45

Notes: ¹ The instantaneous L_{max} shall not exceed the noise threshold criteria by 20 dBA more than eight times per daytime hour, 6 times per evening hour, and 4 times per nighttime hour.

² Hourly measurements shall be made on a typical mid-week day prior to project work

Source: Ventura County Construction Noise Threshold Criteria and Control Plan, 2005

Table 31 Significance Thresholds for Each Identified Existing Noise-Sensitive Receptor near the Project Site

Existing Noise-Sensitive Receptor	Nearest Measured Ambient Noise Level (dBA, Leq)	Construction Activity Noise Threshold (dBA, Leq)
1 – Multi-Family Residences	61.4	64.4
2 – Single-Family Residences	57.4	60.4
3 – Community Pool	61.4	64.4
4 – John Spoor Broome Library	57.4	60.4

Notes: See Table 31 for sound level measurement results.

See Figure 30 for proximity of sound measurement locations and noise-sensitive receptors.

For Threshold 2, an impact would be potentially significant if an existing or proposed receptor would be exposed to vibration levels above the following FTA standards:

- 80 VdB at residences and buildings where people normally sleep

For Thresholds 1 and 3, as they relate to long-term noise, an impact would be potentially significant if operational noise, including traffic noise, would cause existing receptors to be exposed to a substantial increase in noise, as determined by the FTA-established standards as summarized in Table 26 above.

4.7.6 Project Impacts and Mitigation Measures

Impact N-1 : NOISE FROM CONSTRUCTION OF THE PROPOSED PROJECT HAS THE POTENTIAL TO EXPOSE NEARBY SENSITIVE RECEPTORS TO CONSTRUCTION NOISE FOR A PERIOD LONGER THAN EIGHT WEEKS. THIS IMPACT WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. (THRESHOLDS 1 AND 4)

The main sources of noise during construction activities would include machinery used in site preparation and equipment used during building construction and paving. The project site is a vacant, graded area with paved roads and partitioning walls on site; therefore, no building demolition would be required, and site preparation and grading would be minimal. Construction would occur over a period approximately 26 months, per the proposed development schedule in Table 4. Table 35 shows the maximum expected noise levels at the noise-sensitive receptors nearest the project site during different phases of construction based on the assumptions and methodology described in Section 4.7.5, above. As shown in Table 32, construction noise may reach up to 84 dBA at the nearest multi-family residences, 70 dBA at the community pool, 68 dBA at the single-family residences, and 57 dBA at the John Spoor Broome Library.

It should be noted that in order to provide a conservative estimate of construction noise levels, this analysis is based on line-of-sight sound attenuation and does not account for attenuating factors, like topography or noise impeding structures or vegetation, such as the residences, community facilities, and trees that are located within the University Glen community. Actual site conditions may decrease the noise levels at sensitive receptors below the levels shown in Table 32, resulting in a conservative estimate of construction noise levels.

Table 32 Noise Levels during Construction Phases

Construction Phase	Combined Leq (dBA, CNEL)	Construction Noise Threshold (dBA)	Construction Noise Threshold Exceeded?
Multi-Family Residential (70 feet from closest construction)			
Site Preparation	82		Yes
Grading	82		Yes
Building Construction	84	64.4	Yes
Paving	82		Yes
Architectural Coating	69		Yes
Community Pool (350 feet from closest construction)			
Site Preparation	68		Yes
Grading	68		Yes
Building Construction	70	64.4	Yes
Paving	68		Yes
Architectural Coating	60		No

Construction Phase	Combined Leq (dBA, CNEL)	Construction Noise Threshold (dBA)	Construction Noise Threshold Exceeded?
Single-Family Residential (450 feet from closest construction)			
Site Preparation	66		Yes
Grading	66		Yes
Building Construction	68	60.4	Yes
Paving	66		Yes
Architectural Coating	57		No
John Spoor Broome Library (2,800 feet from closest construction)			
Site Preparation	56		No
Grading	56		No
Building Construction	57	60.4	No
Paving	56		No
Architectural Coating	55		No

Notes: Noise levels based on actual maximum measured noise levels at 50 feet (Lmax).
 Noise levels assume a noise attenuation rate of 6 dBA per doubling of distance and rounded to the nearest whole number.
 Noise levels at the Community Pool would not be reduced, as it is an outdoor facility.
 See Appendix D for assumed construction equipment and Appendix G for calculations
 Source: Noise levels based on FHWA (2006b) Users Guide Table 1, FTA (2006), and University of Washington (2004)

The existing residences nearest to the project site would experience temporary construction noise levels that exceed applicable construction noise thresholds. Given that the site is relatively flat, it is unlikely that grading equipment would be used near sensitive receptors for a substantial duration of the construction period. Nevertheless, to provide an appropriately conservative approach, this analysis assumed that all types of construction equipment would be located as near as 70 feet from existing residences at some point during construction. During the Architectural Coating phase, the community pool and single-family residences located at a further distance from the project site would not experience construction noise that exceeds the threshold. In addition, the John Spoor Broome Library would not be exposed to construction noise levels that exceed the threshold. Therefore, project-related construction noise impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Noise-generating construction activities would exceed the applicable construction noise thresholds. The following measures are required to reduce construction noise to the maximum extent feasible:

MM N-1 (A) CONSTRUCTION ACTIVITY TIMING AND DISCLOSURE

Construction activity shall be restricted to weekdays (Monday through Friday) between 7:00 AM and 7:00 PM, and on Saturday between 9:00 AM and 5:00 PM. No construction activity will be allowed on Sundays and local holidays. Loud activities should be scheduled between 8:00 AM and 5:00 PM, to the extent practicable, to avoid disturbance of the adjacent neighborhood during evening hours. Quiet activities (such as interior work after a building is enclosed and certain exterior activities) may be granted extended hours on request subject to acceptance by campus staff.

Information stating the restrictions regarding the hours of construction shall be provided to nearby residents by the applicant and shall be posted on-site. Signs shall be placed prior to commencement of, and throughout, grading and construction activities. All residences within the University Glen community will be notified, via mail or email, regarding the estimated timeline of all of the phases of the proposed project and the hours that construction activity can be performed. This notice will be sent two weeks prior to initial commencement of construction activity.

MM N-1 (B) VEHICLE AND EQUIPMENT IDLING

Construction vehicles and equipment shall not be left idling for longer than five minutes when not in use.

MM N-1 (C) SOUND CONTROL CURTAINS

Flexible sound control curtains shall be placed around all stationary equipment and jackhammers when in use, and shall be oriented to break line-of-sight between operating equipment and all visible residential receptors within line-of-sight of the equipment. The equipment area with appropriate sound control curtains shall be designated on building and grading plans. Equipment and shielding shall remain in the designated location until specified stationary equipment and jackhammers are no longer in use.

SIGNIFICANCE AFTER MITIGATION

Construction noise would be reduced to the extent feasible by Mitigation Measures N-1(a) through N-1(c). Sound barriers described in Mitigation Measure N-1(c) that break line of sight between a noise source and receptor are typically capable of reducing noise levels by approximately 5 to 10 dBA (FHWA 2006a). However, construction noise levels may continue to exceed the applicable construction noise thresholds over short durations. Construction noise is temporary in nature, and would be reduced to the maximum extent feasible through the implementation of required construction noise reduction measures. Therefore, with mitigation, construction noise impacts would be less than significant.

Impact N-2 : CONSTRUCTION-RELATED ACTIVITIES ASSOCIATED WITH THE PROPOSED PROJECT WOULD INTERMITTENTLY GENERATE GROUNDBORNE VIBRATION ON AND ADJACENT TO THE PROJECT SITE. THIS MAY AFFECT EXISTING SENSITIVE RECEPTORS NEAR THE PROJECT SITE; HOWEVER, CONSTRUCTION VIBRATION WOULD NOT EXCEED FTA THRESHOLDS FOR VIBRATION. THEREFORE, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 2)

Construction activities have the potential to generate groundborne vibration. Vibration from construction activities could impact nearby sensitive receptors. The primary sources of man-made vibrations are associated with grading and excavation. Because of the relatively flat topography of the site and lack of geological hazards (refer to Section 12, *Geology and Soils*, within Appendix A), pile-driving would not be required for construction of the proposed project. Therefore, the primary vibratory source during construction within the project area would likely be large bulldozers and loaded trucks. Table 33 identifies various vibration velocity levels for the types of construction equipment that would operate at the project site during construction activities. As shown, typical bulldozer or loaded truck activities generate an approximate vibration level of 77-78 VdB at a distance of 50 feet.

Nearby sensitive receptors, including the residences located 70 feet south of the project site, the community pool approximately 350 feet south-southwest of the project site, and residences located approximately 450 feet south of the project site, could be exposed to groundborne vibrations during construction. As shown in Table 33, vibration levels could reach up to 74 VdB at receptors 70 feet away, up to 53 VdB at receptors 350 feet away, and up to 49 VdB at receptors 450 feet away. Vibration levels would not reach a perceptible level at the John Spoor Broome Library. Vibration levels would not exceed the FTA recommended 80 VdB threshold for infrequent events at residences and buildings where people

normally sleep. Vibration also would not exceed 100 VdB, the vibration level which would damage extremely fragile historic buildings. Therefore, vibration impacts would be less than significant.

Table 33 Vibration Levels for Construction Equipment

Equipment	Approximate Vibration Decibels (VdB) at Distance (Feet) from Construction			
	70 (Receptor 1)	350 (Receptor 3)	450 (Receptor 2)	2,800 (Receptor 4)
Large Bulldozer	74	53	49	25
Loaded Trucks	73	52	48	24
Jackhammer	65	44	41	17
Small Bulldozer	44	23	20	0

Source: FTA (2006).

Mitigation Measures

No mitigation required.

Impact N-3 : UNIVERSITY GLEN RESIDENTS WOULD NOT EXPERIENCE A NOISE LEVEL INCREASE EXCEEDING APPLICABLE THRESHOLDS AS A RESULT OF PROJECT-GENERATED TRAFFIC ON CHANNEL ISLANDS DRIVE. IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLDS 1 AND 3)

Implementation of the proposed project would result in an increase in the average number of daily vehicle trips along the segments of Channel Islands Drive, south and west of the project site. The *Traffic Impact Study for the CSU Channel Islands Specific Reuse Plan Update* prepared for the proposed project (Fehr & Peers 2017) determined the existing traffic levels on Channel Islands Drive, as well as the traffic levels expected as a result of the proposed project. These traffic levels were used to determine existing and potential future sound levels at sensitive receptors along Channel Islands Drive. Based on the rural/residential location of the project site, the fleet mix for vehicle trips along Channel Islands Drive was estimated at 95% passenger vehicles and 5% light- and medium-duty trucks. Figure 35 shows the location of Sensitive Receptor 1 (multi-family residences) and Sensitive Receptor 2 (single-family residences), which are the two modeled receptors along Channel Islands Drive that would experience the largest increase in noise, compared to current levels, based on the distance from the project site.

Table 35 and Table 36 show estimated noise levels based on noise modeling using the FHWA Traffic Noise Model. compares modeled hourly Leq to measured Leq at three locations in the project site vicinity for the purposes of validating the assumptions in the Traffic Noise Model. As shown in Table 34, the sound measurements are within 2.9 dB of the modeled noise level for peak hour traffic, which is consistent with the FHWA's guidance that TNM results should be within ± 3 dB of measured noise levels to be considered accurate for use in noise analysis (FHWA 2002). Table 35 shows estimated roadway noise levels with construction of the proposed project, and compares the potential increase in roadway noise to applicable noise increase thresholds.

Table 34 Noise Measurements Measured and Modeled (dBA Ldn)

Measurement Location	Leq Measured	Leq Modeled	Measured and Modeled Difference (Leq)
4 – Along Channel Islands Drive, near Santa Cruz Island Drive, approximately 20 feet from the centerline of the road	61.4	58.5	2.9
5 – Along Channel Islands Drive, near Platts Harbor Drive, approximately 15 feet from the centerline of the road	57.4	58.3	0.9
6 – Along San Miguel Island Drive, at the approximate location of the proposed Central Park, approximately 600 feet from the centerline of Channel Islands Boulevard	43.6	41.6	2.0

Notes: Refer to Appendix H for full noise model output and noise measurement data sheets.

Based on existing noise conditions; refer to Section 4.7.4 Existing Noise Environment for additional detail.

Table 35 Existing and Existing plus Project Sound Levels (dBA Ldn)

Noise-Sensitive Receptor	Receptor Location	Approx. Existing Cond. (dBA)	Existing plus Project Conditions (dBA)	Change (dBA)	FTA Noise Increase Threshold ¹	FTA Threshold Exceeded?
1 – Multi-Family Residential	Southeast corner of Channel Islands Drive and Santa Cruz Island Drive	49.8	50.3	0.5	7	No
2 – Single-Family Residential	Southern corner of Channel Islands Drive and Twin Harbor Drive	52.0	52.1	0.1	5	No

Notes: Recep. = Receptor, Cond. = Conditions, Approx. = Approximate

Refer to Appendix H for full noise model output.

Future conditions are based on the estimated traffic from the proposed but not yet approved (pending) development projects (Fehr & Peers 2017)

Based on existing noise conditions; refer to Section 4.7.4 Existing Noise Environment for additional detail.

FTA Noise Increase Thresholds provided in Table 29.

As shown in Table 35, the addition of project-generated traffic would increase traffic noise levels on Channel Islands Drive adjacent to the project site by between 0.1 and 0.5 dBA Ldn. These projected noise levels would not exceed the applicable FTA noise increase thresholds.

As discussed in *Overview of Noise*, above, the manner in which newer homes in California are constructed (within the last 30 years) generally provides a reduction of exterior-to-interior noise levels of about 30 dBA with closed windows (FTA 2006). As a result, the interior noise level at existing residences along Channel Islands Drive would not experience a perceptible change in interior noise levels as a result of roadway noise. Therefore, sensitive receptors along Channel Islands Drive would not experience a substantial increase in roadway noise conditions, or an exceedance of applicable interior noise standards. Therefore, roadway noise from project-generated traffic would not result in a significant impact.

Mitigation Measures

No mitigation required.

4.7.7 Cumulative Impacts

The geographic extent for the analysis of cumulative stationary noise impacts is generally limited to areas within 0.5 mile of a proposed project. This area is defined as the geographic extent of the cumulative noise impact area because noise impacts would generally be localized. Beyond this distance, impulse noise may be briefly audible and steady construction from the proposed project would generally dissipate such that the level of noise would reduce and/or blend in with the background noise level. There are no past, present or reasonably foreseeable future developments within 0.5 mile of the project site that would cumulatively increase the potential for exposure of people to increased stationary noise levels associated with construction and operation of the proposed project.

The geographic extent for the analysis of cumulative transportation noise impacts is limited to the study area described in Section 4.10, *Transportation and Circulation*. This area is defined as the geographic extent of the cumulative noise impact area because any substantial contribution of project-generated traffic would be limited to this area. At greater distances, proposed project-generated traffic would disperse to a larger number of roadways and would not create noise above any standards. The proposed project would generate an increase in the average number of trips along the segments of Channel Islands Drive between Camarillo Street and Twin Harbor Drive. Table 36 provides estimates of cumulative noise levels that are based on noise modeling (FHWA Traffic Noise Model). Sensitive receptors near the project site include residential uses located adjacent to Channel Islands Drive (see Figure 35 for modeled receptor locations). A significant cumulative impact would occur if the change in noise levels from Existing to Cumulative (2022) + Project conditions exceeded the applicable FTA thresholds. The proposed project would have a considerable contribution to a significant cumulative impact if the change in noise levels from Cumulative (2022) conditions to Cumulative (2022) plus Project conditions exceeded the applicable FTA thresholds.

Table 36 Future and Future + Project Sound Levels (dBA CNEL)

Sensitive Receptor	Existing Condition (dBA)	Cumulative Condition (dBA)	Cumulative + Project Conditions	Change from Existing to Cumulative + Project (dBA)	FTA Noise Increase Threshold	FTA Threshold Exceeded?
1 (Multi-Family Residential)	49.8	50.9	51.9	2.1	5*	No
2 (Single-Family Residential)	52.0	52.2	52.2	0.2	5	No

Refer to Appendix H for full noise model output.

Future conditions are based on the estimated traffic from the proposed but not yet approved (pending) development projects (Fehr & Peers 2017).

* The more conservative 5 dB threshold has been used here given how close the Existing Condition is to 50 dB at Receptor 1

As shown in Table 36, existing residences located along Channel Islands Drive would not experience a change in roadway noise levels that would exceed the FTA thresholds under Cumulative (2022) + Project conditions. Therefore, cumulative noise impacts would be less than significant.

4.8 Public Services

This section assesses potential impacts of implementation of the proposed project related to public services, including fire and police protection. The evaluation of impacts related to schools and libraries are not analyzed in this EIR, as they were analyzed and determined as having less than significant impacts in the Initial Study of this project (Appendix A). Impacts related to parks are discussed in Section 4.9, *Recreation*.

4.8.1 Setting

All CSUCI safety services are provided through the CSUCI University Police Department (UPD) (CSUCI 2017). The UPD has primary law enforcement jurisdiction for all criminal incidents occurring on-campus and works in conjunction with outside agencies, such as the Ventura County Sheriff's Office and local fire and emergency medical services (CSUCI 2017).

Fire Protection

Fire protection to CSUCI is provided by the Ventura County Fire Department (VCFD) (CSUCI 2016b). However, the UPD is the first to be notified of all emergency situations on the CSUCI campus and a dispatcher will respond appropriately to the emergency, such as contacting the VCFD. These agencies would then work together to respond to the incident (CSUCI 2017). The VCFD is an all-hazard, full-service agency that provides fire protection, medical aid, rescue, and hazardous materials response, and a variety of other services to the public (VCFD 2017a). There are currently 538 firefighters and staff personnel employed by VCFD that serves more than 480,000 people in the unincorporated areas of Ventura County, and the cities of Ojai, Port Hueneme, Moorpark, Camarillo, Simi Valley, and Thousand Oaks (VCFD 2017a).

The VCFD initial response is designed to provide the capability to mitigate the hazards known at the time of dispatch. Response levels are based on type of incident, location, weather conditions, existing or potential emergencies, and resources available. Staffing levels and the staffing of specialized resources are adjusted according to existing or potential conditions. The VCFD has response time goals for suburban and rural areas of its service area. The response time goal for suburban areas is 8.5 minutes 90 percent of the time and the response time goal for rural areas is 12 minutes 90 percent of the time. Over the last 24 months the VCFD has achieved the suburban response time 92 percent of the time and the rural response time 88 percent of the time (Margaret Remmen, Personal Communication, 2016).

The nearest VCFD station is Station 50, located approximately 3.5 miles northwest of the CSUCI campus at 189 Las Posas Road in the city of Camarillo. Additionally, Station 32, located approximately 4.5 miles east of the CSUCI campus at 830 South Reino Road in Newbury Park, and Station 54, located 4.0 miles north of the CSUCI campus at 2160 Pickwick Drive in the city of Camarillo, are two additional fire stations near the CSUCI campus. These stations would be most likely to respond to an emergency at the CSUCI campus, given the proximity.

Station 50 is staffed daily with five firefighters and houses an engine, crash truck, tractor-trailer hazardous-materials unit, a paramedic squad, a foam unit, and a utility pickup. Additionally, Station 50 is currently the VCFD hazardous materials response station where the VCFD Hazmat Officer is assigned, and the aircraft fire/rescue vehicle also operates at this station (VCFD 2017c). Station 32 has a daily staffing of three firefighters and houses a medic-engine, a reserve engine, and a patrol (heavy-duty pickup truck with a slide-in pump unit) (VCFD 2017b; VCFD 2017e). Station 54 is staffed by seven firefighters daily, plus the battalion chief and houses an engine, 100-foot tillered aerial ladder truck, water rescue with two rescue water craft and an inflatable boat, and an urban search and rescue vehicle (VCFD 2017d).

Police Protection

CSUCI POLICE DEPARTMENT

Police protection to the CSUCI campus community is provided by the CSUCI Police Department (UPD). Officers are responsible for reporting and investigating crimes, issuing traffic citations, responding to medical emergencies, traffic accidents, reports of fire, as well as other incidents that require police assistance (CSUCI 2017a). In addition, various trainings are provided on campus to students, such as the Rape Aggression Defense training, recognizing and preventing violence on campus, guidance for surviving an active shooter situation, and intimate partner violence and stalking (CSUCI 2016a). As of 2008, the UPD has 38 staff and 16 student workers (CSUCI 2017d), including an Emergency Medical Technician (EMT) that is always on staff (CSUCI 2017a).

The UPD is located in Placer Hall on the CSUCI campus and is available 24 hours a day, seven days a week (CSUCI 2017). Police officers on campus work closely with the California Highway Patrol and the Ventura County Sheriff's Office. Both of these law enforcement agencies have concurrent jurisdiction on campus and routinely patrol areas immediately adjacent to the campus. The Channel Islands Police Chief, as a member of the Ventura County Law Enforcement Coordinating Committee, meets monthly with the Sheriff and all other police chiefs in the County (CSUCI 2016a).

In accordance with the Kristin Smart Campus Safety Act of 1998, the UPD and the Ventura County Sheriff's Office have a written agreement that designates which agency will have operational responsibility for the investigation of violent crimes that occur on campus (CSUCI 2016a).

VENTURA COUNTY SHERIFF'S DEPARTMENT

The Ventura County Sheriff's Department works with the UPD when there is a need for its services. The Sheriff's Department services the unincorporated areas of Ventura County and five incorporated cities within Ventura County, including Camarillo, Fillmore, Moorpark, Ojai, and Thousand Oaks (Ventura County Sheriff's Office 2017b). Within the Patrol Division are also the Mounted Unit, K-9 Unit, Sheriff's Communications Center and the Office of Emergency Services (Ventura County Sheriff's Office 2017c).

The closest station is the Camarillo Patrol Station, located at 3701 East Las Posas Road, approximately 5.5 miles northwest of the project site. There are a total of 21 sworn members within the Patrol Division assigned to the County area responsible for responding to calls for service in a 136 square mile area, from Somis to Malibu (Ventura County Sheriff's Office 2017a).

4.8.2 Regulatory Setting

Federal

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)

CSUCI recognizes NIMS, which provides a systematic, proactive approach to guide government agencies, nongovernmental organizations, and the private sector to work together to prevent, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment (CSUCI 2015). NIMS has been incorporated into CSUCI's Emergency Operations Plan and improves CSUCI's ability to prepare for and respond to potential incidents and hazard scenarios.

State

STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS)

The Governor's Office of Emergency Services in coordination with all interested state agencies with designated response roles in the State emergency plan and interested local emergency management agencies established the SEMS system. The SEMS framework includes the Incident Command System, multi-agency or inter-agency coordination, the Master Mutual Aid Agreement and system, and the operation area concept. SEMS was established to provide effective management of multi-agency and multijurisdictional emergencies in California and is intended to facilitate the flow of information within and between levels of the system, and facilitate coordination among all responding agencies. The use of SEMS is intended to improve the mobilization, deployment, utilization, tracking, and demobilization of needed mutual aid resources; as well as, reduce the incidence of poor coordination and communications, and reduce resource ordering duplication on multi-agency and multijurisdictional responses (California Governor's Office of Emergency Services 2009).

CALIFORNIA STRATEGIC FIRE PLAN (UPDATED 2012)

This statewide plan is a strategic document, which guides fire policy for much of California. The plan is aimed at reducing wildfire risk through pre-fire mitigation efforts tailored to local areas through assessments of fuels, hazards, and risks (California Department of Forestry and Fire Protection [CAL FIRE] 2012).

CALIFORNIA STATE MULTI-HAZARD MITIGATION PLAN, FINAL (UPDATED 2013)

The purpose of the State Multi-Hazard Mitigation Plan (SHMP) is to significantly reduce deaths, injuries, and other losses attributed to natural and human-caused hazards in California. The SHMP provides long-term guidance for hazard mitigation activities emphasizing partnerships among local, state, and federal agencies as well as the private sector (California Governor's Office of Emergency Services 2013).

PUBLIC RESOURCES CODE

Section 4291. A state law, effective in January 2005, this section extends the required defensible space clearance around homes and structures from 30 feet to 100 feet for wildfire protection. The code applies to all lands that have flammable vegetation. The regulations include several requirements for how the vegetation surrounding buildings and structures should be managed to create defensible space.

2013 CALIFORNIA FIRE CODE

This code establishes regulations affecting or relating to structures, processes, premises and safeguards regarding residences and historic buildings. The code includes: 1) hazards of fire and explosion arising from the storage, handling or use of structures, materials or devices; 2) conditions hazardous to life, property or public welfare in the occupancy of structures or premises; 3) fire hazards in the structure or on the premises from occupancy or operation; 4) matters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems; and 5) conditions affecting the safety of fire fighters and emergency responders during emergency operations.

EDUCATION CODE SECTION 67381: KRISTIN SMART CAMPUS SAFETY ACT OF 1998

This code reaffirms that campus law enforcement agencies have the primary authority for providing police or security services, including the investigation of criminal activity, to their campuses. The campus law enforcement agency can have written agreements with local law enforcement agencies if the campus is within their jurisdictions.

Local

CSUCI EMERGENCY OPERATIONS PLAN

This plan addresses CSUCI's planned response and recovery to emergencies associated with natural and man-made disasters, and technological incidents. It provides an overview of operational concepts, identifies components of the campus emergency management organization within the SEMS and NIMS systems, and describes the overall responsibilities of the federal, state and county entities and CSUCI for protecting life and property and assuring the overall well-being of the campus population.

4.8.3 Methodology and Significance Thresholds

According to Appendix G of the *State CEQA Guidelines*, impacts related to public services would be significant if the project would:

- 1 Result in substantial adverse physical impacts associated with the provision of new or physically altered government and public services facilities, or the need for new or physically altered government 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, police protection, schools, parks, or other public facilities.
- 2 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.
- 3 Include recreational facilities or require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impacts to public fire or police protection services would be considered significant if the construction of new or expanded facilities would be required as a result of the proposed project and those facilities would result in significant environmental impacts. As explained more fully in the Initial Study (see Appendix A) implementation of the proposed project would not result in a significant impact to schools and libraries. In addition, the proposed project's impacts to parks and recreational facilities (Thresholds 2 and 3) are discussed within Section 4.9, *Recreation*. Therefore, no further discussion of these impacts is included in this section. Threshold 1, in relation to fire protection and police protection is discussed below.

4.8.4 Project Impacts and Mitigation Measures

Impact PS-1 IMPLEMENTATION OF THE PROPOSED PROJECT WOULD INCREASE THE SERVICE POPULATION FOR THE VENTURA COUNTY FIRE DEPARTMENT AND REQUIRE POLICE PROTECTION SERVICES FROM THE UNIVERSITY POLICE DEPARTMENT, BUT THIS INCREASE WOULD NOT TRIGGER THE NEED TO CONSTRUCT A NEW FIRE STATION, POLICE FACILITIES, OR ALTER EXISTING FACILITIES TO ACCOMMODATE ADDITIONAL PERSONNEL OR EQUIPMENT TO MAINTAIN ACCEPTABLE PERFORMANCE STANDARDS AND LEVELS OF SERVICE. THEREFORE, IMPACTS RELATED TO FIRE PROTECTION AND POLICE PROTECTION SERVICES WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 1)

As previously described, CSUCI is within the service area of the VCFD. The existing (year 2016) service population for the VCFD in Ventura County includes the aforementioned incorporated cities and unincorporated county population, totaling 494,673 people (Department of Finance 2016). The proposed project would generate approximately 1,518 people, which is approximately 0.3 percent of the existing service population.

VCFD Station 50 currently provides fire protection services to the CSUCI campus and University Glen community. Based on the incremental increase in service area population (1,518 people) that would

result from the proposed project, VCFD's current ability to meet the response time goals of 12 minutes to rural areas, and the distance between the project site and existing fire stations, the proposed project would not trigger the need to construct a new fire station or to expand existing fire stations in order to maintain acceptable response times, performance standards, or levels of service. In addition, as noted in Section 4.10, *Transportation and Circulation*, all road widths and circulation, as well as the placement of fire hydrants and installation of automatic sprinkler systems within the project site, would be designed in accordance with applicable Ventura County Fire Department requirements and other standards.

As previously described, the UPD would be the primary provider of police protection services to the project site. The UPD already provides police protection services to the residential development directly adjacent to the project site within the University Glen community and the CSUCI campus. It is likely that implementation of the proposed project would not require additional police facilities, as service levels could be maintained using the facilities currently available. However, in the event additional facilities are required there are a number of existing buildings within the campus that would be suitable for conversion for UPD use with minimal to no adverse impact on the environment. Therefore, impacts related to the construction of new or expanded fire protection or police protection facilities would be less than significant impact.

Mitigation Measure

No mitigation is required.

4.8.5 Cumulative Impacts

Fire Protection Services

This cumulative analysis considers the project in the context of the service area of the VCFD. The estimated current (year 2016) population of the unincorporated areas of Ventura County and the cities in the VCFD service area is approximately 494,673 (DOF 2016). The 2016-2040 SCAG RTP/SCS provides a population forecast up to the year 2040. The forecasted (year 2040) population of the unincorporated areas of Ventura County and the cities serviced by the VCFD would include approximately 533,000 residents (SCAG 2016), indicating an increase of approximately 38,327 residents. The proposed project's population of 1,518 persons would represent approximately 4.0 percent of the population increase within the VCFD's service area.

The project, in combination with other past, present and reasonably foreseeable cumulative development, would result in an increase in demand for fire protection services. Although a new fire station is not anticipated at this time, if new facilities needed to be constructed in the future, appropriate environmental review would be required under CEQA, which would address impacts resulting from the new or expanded facility. Because the exact location of future facilities is currently unknown it would be speculative to evaluate their environmental impacts at this time.

Police Protection

This cumulative analysis considers the project in the context of the service area of the Ventura County Sheriff's Department, as this is the agency that would assist the UPD to serve the project site. The estimated current (year 2016) population of the Ventura County Sheriff's Department service area is approximately 360,333 (DOF 2016). The forecasted (year 2040) population of the unincorporated areas of Ventura County and the cities serviced by the Ventura County Sheriff's Department would include approximately 398,400 residents (SCAG 2016), indicating an increase of approximately 38,067 residents. The proposed project's population of 1,518 persons would represent approximately 4.0 percent of the population increase within the Sheriff's Department's service area.

The project, in combination with other past, present and reasonably foreseeable cumulative development, would result in increases in service population and resulting additional demand for police protection services. This could trigger the need to construct new or expanded police enforcement facilities to house the additional staff and equipment needed to serve this additional population, which could result in potentially significant physical impact on the environment. Although not anticipated at this time, if new facilities needed to be constructed in the future, appropriate environmental review would be required under CEQA. Furthermore, the potential location of future facilities is currently unknown and therefore it would be speculative to evaluate their environmental impacts at this time.

4.9 Recreation

This section addresses the subject of recreation with respect to the proposed project. The recreation section describes current recreational uses near the project site, in the city of Camarillo (City) and in the surrounding area. Additionally, it describes ways in which the project could lead to an increased demand for recreational facilities, physical deterioration of existing recreational facilities, or the need for the creation or expansion of recreation facilities, the construction of which could have an adverse effect on the environment.

4.9.1 Setting

Existing Parks and Recreational Facilities

The project site is in the southern area of Ventura County, within the boundaries of the CSUCI campus. The project site and wider CSUCI campus are within the Pleasant Valley Recreation and Parks District (PVRPD) boundary (PVRPD 2016b), which provides services throughout its 45 square mile area (PVRPD 2013). The PVRPD services 27 park locations (totaling 256 acres), 13 facilities, 4,000 programs, and numerous community-wide special events throughout the year servicing over 400,000 people annually (PVRPD 2013). The park locations include community parks, neighborhood parks, and special use parks. Community parks service residents within an approximate 1.5 mile radius, neighborhood parks service residents within 0.5 mile of the park, and special use parks do not have a service radius because of the area-wide interest in these facilities (City of Camarillo 2002). In addition to the PVRPD, the CSUCI campus has approximately 504 acres of parkland, including open space and trails, parks and athletic fields, and community centers (CSUCI Site Authority 2000, CSUCI 2013). The 367 acre University Park was acquired by CSUCI in 2009 from the County of Ventura. The parkland was transferred with the stipulation that the area be used as open space for passive recreation and for academic research. University Park is currently open to the public with a parking permit required. Groups are required to coordinate with the Channel Islands Event and Facilities Committee and apply to use University Park (CSUCI 2013). Table 40 lists the parks, recreation, and aquatic facilities located near the project site (PVRPD 2013).

Table 37 Pleasant Valley Recreation and Parks District (PVRPD) and California State University, Channel Islands (CSUCI) Parks, Recreation Centers, and Aquatic Facilities

Park Name	PVRPD or CSUCI Managed	Location	Approximate Distance from Project Site (miles)	Service Radius (miles)
Neighborhood Parks				
Adolfo Park	PVRPD	3601 Adolfo Road	4.2 N	0.5
Arneill Ranch Park	PVRPD	1301 Sweetwater Avenue	3.9 N	0.5
Birchview Park	PVRPD	5564 Laurel Ridge Lane	4.5 NE	0.5
Calleguas Creek Park	PVRPD	675 Avenida Valencia	3.6 NE	0.5
Carmenita Park	PVRPD	1506 Sevilla Street	2.9 NW	0.5
Charter Oak Park	PVRPD	325 Charter Oak Drive	4.7 N	0.5
Corner Park	CSUCI	Northwest of Anacapa Island Drive and Channel Islands Drive roundabout	0.31 S	0.5

Park Name	PVRPD or CSUCI Managed	Location	Approximate Distance from Project Site (miles)	Service Radius (miles)
Corner Parks	CSUCI	North and South side of the intersection of Channel Islands Drive and Chapel Drive/Rincon Drive	0.53 SW	0.5
Dizdar Park	PVRPD	20 South Glenn Drive	2.9 N	0.5
Dos Caminos Park	PVRPD	2198 N. Ponderosa Road	4.6 N	0.5
Encanto Park	PVRPD	5300 Avenida Encanto	4.0 NE	0.5
Foothill Park	PVRPD	1501 Cranbrook	4.6 N-NW	0.5
Heritage Park	PVRPD	1630 Heritage Trail	5.1 NE	0.5
Las Posas Equestrian Park	PVRPD	2084 Via Veneto	5.2 NW	0.5
Laurelwood Park	PVRPD	2127 Dexter	3.7 N-NW	0.5
Lokker Park (Eldred E. Lokker Park)	PVRPD	848 Vista Coto Verde	4.6 N-NW	0.5
Mel Vincent Park	PVRPD	668 Calistoga Road	4.0 NW	0.5
Nancy Bush Park	PVRPD	1150 Bradford Avenue	4.4 NW	1.5
Neighborhood Internalized Paseo	CSUCI	South of Channel Islands Drive, south of University Glen residents	0.45 S	0.5
Phase 1A Pocket Park	CSUCI	Northside of Smugglers Cove	0.33 SW	0.5
Pocket Park	CSUCI	Northeastern corner of Smugglers Cove	0.29 S	0.5
Quito Park	PVRPD	7013 Quito Court	5.9 NE	0.5
Santa Cruz Side Park	CSUCI	East of the intersection of Channel Islands Drive and Platts Harbor Drive	0.12 SE	0.5
Springville Park	PVRPD	801 Via Zamora	4.7 NW	0.5
Tot Lot	CSUCI	Northside of Channel Islands Drive along southern boundary of University Glen	0.43 S	0.5
Town Center Linear Park	CSUCI	Parallel to Rincon Drive, west of Town Center, and east of John Spoor Broome Library	0.53 SW	0.5
Trailside Park	PVRPD	5462 Cherry Ridge Drive	4.4 NE	0.5
Woodcreek Park	PVRPD	1200 Woodcreek Road	4.6 NE	0.5
Woodside Park	PVRPD	247 Japonica Avenue	2.8 N-NE	0.5
Community Parks				
Camarillo Grove Park	PVRPD	6968 E. Camarillo Springs Road	4.0 NE	1.5
Campus Athletic Fields	CSUCI	West of Ventura Street and north of Round Mountain Road	0.92 SW	1.5
Campus Green University Park (aka Big Rock Park)	CSUCI	Southeast of the intersection of Santa Barbara Avenue and Camarillo Street	0.54 W-SW	1.5

Park Name	PVRPD or CSUCI Managed	Location	Approximate Distance from Project Site (miles)	Service Radius (miles)
Joint Use Community Park (Expanded)	CSUCI	Southwest corner of Channel Islands Drive, southern boundary of University Glen	0.40 S	1.5
Mission Oaks Park	PVRPD	5501 Mission Oaks Boulevard	4.6 NE	1.5
Pitts Ranch Park	PVRPD	1400 Flynn Road	4.2 NE	1.5
Pleasant Valley Fields	PVRPD	152 Westpark Court	2.9 N-NE	1.5
Valle Lindo Park	PVRPD	889 Aileen Street	3.8 NW	1.5
Natural Resource/Open Space				
Cathedral Cove Cactus Garden	CSUCI	West of the intersection of Rincon Drive and San Luis Avenue	0.43 SW	1.5
Community Paseo and Bike Trail	CSUCI	West of the intersection of Santa Cruz Island Drive and Twin Harbor Drive	0.15 SW	1.5
East Ridge Natural Resources	CSUCI	East of University Drive, south of Federal Youth Division	0.39 NW	1.5
Long Grade Canyon Creek Greenway	CSUCI	Northeast of Rincon Drive, north of University Glen residences	0.37 SW	1.5
Open Space/Meadow	CSUCI	Southwest of the intersection of Channel Islands Drive and University Drive	0.36 W	1.5
Off-site Trail System (Expanded)	CSUCI	East of University Drive, along Federal Youth Division	0.25 NW	1.5
Palm Garden	CSUCI	Southeast of the intersection of San Luis Avenue and Rincon Drive	0.46 SW	1.5
Santa Monica Mountain Trail Staging Area	CSUCI	North of W. Potrero Road, east of University Glen residences, east of Joint Use Community Park (Expanded)	0.43 SE	1.5
University Park	CSUCI	East of University Drive and north of the project site	0.1 N	1.5
Special Use Park				
Constitution Park	PVRPD	1313-1437 Paseo Camarillo	3.4 NW	N/A
Recreation Centers				
Campus/Community Recreational Center	CSUCI	West of Camarillo Street, and south of Santa Barbara Avenue	0.63 SW	1.5
Community Center Park	PVRPD	1605 E. Burnley Street	3.7 N-NW	1.5
Freedom Park and Center	PVRPD	275 E. Pleasant Valley Road	3.5 NW	1.5
Aquatic Facilities				
Cathedral Cove Pool	CSUCI	North of Channel Islands Drive, southern boundary of University Glen, east of Chapel Drive/Rincon Drive	0.50 SW	0.5

Park Name	PVRPD or CSUCI Managed	Location	Approximate Distance from Project Site (miles)	Service Radius (miles)
Pleasant Valley Park and Aquatic Center (Bob Kildee Community Park)	PVRPD	1030 Temple Avenue	3.6 N	1.5
Santa Cruz Pool	CSUCI	Western edge of Santa Cruz Island Drive	0.08 SW	0.5

Notes: N= North, NE = Northeast, NW = Northwest, S= South, SE = Southeast, SW = Southwest, E = East, W = West

Source: Pleasant Valley Recreation and Park District Website, 2016a

City of Camarillo Website, 2016c

City of Camarillo 2002

California State University 2000

California State University 2013

As shown in Table 40, the project site is located within a five-mile radius of all parks within the PVRPD boundary and all CSUCI campus-related facilities; however, the service radius of many of the parks limit the applicability of the services provided by the parks to the project site. Parks that would service the project site are shown on Figure 36, which includes both existing parks and parks proposed as part of the project.

Based on the CSUCI Student Housing website and the Specific Reuse Plan (2000), the CSUCI campus area (students residing on-campus and University Glen Phase 1 residents) has an approximate current population of 3,293 residents (approximately 1,510 on-campus students and approximately 1,783 University Glen Phase 1 residents (CSUCI 2017b, CSUCI 2017e, CSUCI 2017f, CSUCI 2017g, CSUCI Site Authority 2000, Ventura County 2016a).

University Glen Phase 1 resident numbers were based on Ventura County Ordinance Code, Section 8209-6.3, *Additional population generated by subdivision*. This provides the average number of people per single-family dwelling unit of 3.21 persons. For multi-family dwelling units, the average number of people is 2.36. This is calculated by:

The 272 single-family dwelling units [DU] multiplied by 3.21 persons (873) and the 386 multi-family DU multiplied by 2.36 (911). This equates to 1,783 residents.

The PVRPD and CSUCI areas currently provide approximately 10.4 acres of neighborhood and campus-related parks and facilities per 1,000 people residing within the CSUCI campus, University Glen, and the City of Camarillo (PVRPD 2013, CSUCI Site Authority 2000, DOF 2016). This is calculated by:

1,510 residing in CSUCI student housing, plus 1,783 residents in University Glen, plus 69,924 residing in City of Camarillo, which equates to 73,217 residents.

The total acreage is 256 acres for PVRPD, plus 504 acres for CSUCI, which equates to 760 acres total.

Divide the number of residents by 1,000, which equates to 73.2. The 760 acres is then divided by 73.2 to equal 10.4 acres per 1,000 residents.

The CSU does not currently have an adopted ratio for the acreage of parks and recreation to serve the population. However, the Specific Reuse Plan includes a guideline of five acres of neighborhood and community parks for each 1,000 members of the East Campus residential sub-area population. Using that ratio as a reference, the PVRPD and CSUCI parks and facilities provide adequate park space for the population within the PVRPD and CSUCI campus.

Figure 36 Parks, Recreation Centers, and Aquatic Facilities Servicing the Proposed Project



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Map 1: Parks, Recreation, and Aquatic Facilities Servicing the Proposed Project

Ventura County Regional Parks

In addition to the PVRPD and CSUCI parks and recreational facilities, Ventura County's regional 50-acre Santa Rosa Valley Park, is located approximately 7 miles northeast of the project site that provides natural open space suitable for horseback riding, wilderness exploring and hiking (County of Ventura 2016c)

4.9.2 Regulatory Setting

State

CALIFORNIA GOVERNMENT CODE, TITLE 7.75 CALIFORNIA STATE UNIVERSITY, CHANNEL ISLANDS SITE AUTHORITY ACT [67470 - 67480]

California Government Code Section 67471(c)(1) establishes special authority composed of representatives of the California State University and local government (termed the CSUCI Site Authority) for the purpose of facilitating the optimal use of the former hospital site by the California State University and other compatible uses, and mitigating the on-site and off-site impacts of those uses (California Legislative Information 2016).

Regional

There are no regional regulations that apply to the proposed project related to parks and recreation.

Local

CSUCI PARK AND RECREATION MASTER PLAN (2000)

As part of the CSUCI Specific Reuse Plan, the CSUCI Site Authority adopted a *Park and Recreation Master Plan* (PRMP) to evaluate and define the park and recreational needs for the (then) new residential community associated with the developing CSUCI campus. The PRMP, which is included as an appendix to the Specific Reuse Plan, was based on the philosophy that:

... Recreation facilities and open space are essential components of the community, enhancing the physical and mental health and wellbeing of its residents and enriching their lives.

The PRMP states that the recreational needs of the University population shall be met by onsite facilities and should not present any undue burden on existing park and recreational facilities. These requirements are summarized below (CSUCI Site Authority 2000):

- The guideline acreage requirement is five acres of neighborhood and community parks for each one thousand members of the East Campus community.
- Land Credits are excluded for school lands and regional park facilities.
- No credit is given to private open space within a subdivision, unless approved by the Site Authority. If approved, a maximum of 50% credit for private open space and recreation facilities acreage will be allowed.
- Standards for private open space that must be met in order to be credited toward the subdivision local park requirements are outlined. The same standards were applied to public open space by the PRMP.

The PRMP assigns different values to the various types of proposed recreation facilities, as summarized in Table 38.

Table 38 Park Land Credit Valuation Table

Letter Grade	Description	Examples	Value (percent) of acreage credited*
A	Flat, usable land and active areas	Play fields, courts, tot lots	100
B	Specialized Activities	Pool, community center	50-100
C	Natural Resources	Interpretive center, trailhead, native/natural open space	0-10
D	Trails and Bike Paths	Biking and hiking trails	10-25
E	Off-site Facilities	Athletic fields	10-25

* Percent of acreage to be credited

Source: CSUCI Site Authority 2000

4.9.3 Methodology and Significance Thresholds

Based on Appendix G of the *State CEQA Guidelines*, impacts related to recreation from the proposed project would be significant if the proposed project would:

- 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.
- 2 Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Impacts under Threshold 1 are determined by whether or not there is sufficient park area available to serve the existing University population as well as the increased population resulting from the proposed project. Determination of “sufficient” is based on the quantitative guideline of five acres of neighborhood and community parks for each 1,000 residents as indicated in the PRMP.

In determining the available park acreage, school lands (specifically the athletic fields) and regional park facilities (Santa Rosa Valley Park) are not included in the total due to the exclusion stated in the PRMP; though they can be used by the residents. Also, because the existing parks within the University Glen Phase 1 community are already being utilized by the residents, the analysis assumes a 50% reduction of credit, consistent with the PRMP.

4.9.4 Project Impacts and Mitigation Measures

Impact REC-1 : THE PROPOSED PROJECT WOULD INCREASE THE USE OF EXISTING NEIGHBORHOOD AND REGIONAL PARKS OR OTHER RECREATIONAL FACILITIES BY INCREASING THE POPULATION OF THE UNIVERSITY GLEN COMMUNITY. THE INCREASED DEMAND WOULD BE MET BY EXISTING PARKS AND RECREATIONAL FACILITIES AND THOSE PROPOSED AS PART OF THE PROJECT. AVAILABLE PARKLANDS AND PROPOSED PARKLANDS WOULD MEET THE MINIMUM THRESHOLD OF FIVE ACRES OF PARK LAND PER 1,000 RESIDENTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 1)

As discussed previously, the CSUCI campus and existing University Glen residential community are within the PVRPD. All of the parks within the PVRPD, however, do not have a service radius that extends to the project site. Table 39, below, summarizes the parks that service the project site and the land credit valuation of each. The table includes parks proposed as part of the project. These parks are also shown in Figure 36.

Table 39 Parks, Recreation Centers, and Aquatic Facilities Servicing the Proposed Project

Park Name	Managed by	Approximate Acreage	Land Credit Valuation		
			Grade	Low Credit*	High Credit*
Neighborhood Parks					
Channel Islands Drive Roundabout Park (proposed)	CSUCI	0.08	A	0.08	0.08
Channel Islands Drive Tree Park (proposed)	CSUCI	0.50	A	0.50	0.50
Corner Park	CSUCI	0.16	A	0.16	0.16
Corner Parks	CSUCI	0.29	A	0.29	0.29
Neighborhood Internalized Paseo	CSUCI	1.50	D	0.15	0.38
Paseos and Courtyards (proposed)	CSUCI	1.10	D	0.11	0.28
Phase 1A Pocket Park	CSUCI	0.13	A	0.13	0.13
Pocket Park	CSUCI	0.42	A	0.42	0.42
Santa Cruz Side Park	CSUCI	0.50	A	0.50	0.50
Tot Lot	CSUCI	0.17	A	0.17	0.17
Town Center Linear Park	CSUCI	0.75	C	0.00	0.38
Vista Parks (proposed)	CSUCI	0.50	A	0.40	0.40
Community Parks					
Campus Green University Park (aka Big Rock Park)	CSUCI	2.30	A	2.30	2.30
Joint Use Community Park (Expanded)	CSUCI	6.07	A	6.07	6.07
Natural Resource/Open Space					
Alley Way Park (proposed)	CSUCI	0.09	D	0.01	0.02
Cathedral Cove Cactus Garden	CSUCI	0.18	C	0.00	0.02
Community Paseo and Bike Trail	CSUCI	3.50	D	0.35	0.88
East Ridge Natural Resources	CSUCI	25.0	C	0.00	2.50
Long Grade Canyon Creek Greenway	CSUCI	11.0	D	1.10	2.75
Off-site Trail System (Expanded)	CSUCI	5.0	D	0.50	1.25
Open Space/Meadow	CSUCI	0.46	C	0.00	1.0
Palm Garden	CSUCI	0.35	C	0.00	0.04
Parking Lot Park (proposed)	CSUCI	0.06	D	0.01	0.02

Park Name	Managed by	Approximate Acreage	Land Credit Valuation		
			Grade	Low Credit*	High Credit*
Round Mountain Natural/Cultural	CSUCI	80.0	C	0.00	8.00
Santa Monica Mountain Trail Staging Area	CSUCI	1.0	C	0.00	0.50
University Park	CSUCI	339.0	C	0.00	36.90
Special Use Park					
Constitution Park	PVRPD	2.65	A	2.65	2.65
Recreation Centers					
Campus/Community Recreational Center	CSUCI	1.50	B	0.75	1.50
Central Park and Clubhouse (proposed)	CSUCI	1.40	B	0.70	1.40
Aquatic Facilities					
Cathedral Cove Pool	CSUCI	0.20	B	0.10	0.20
Santa Cruz Pool	CSUCI	0.65	B	0.33	0.65
Total Currently Available Acreage		481.47	-	15.97	69.64
Proposed Acreage		3.73	-	1.81	2.7
Total Acreage		485.20	-	17.48	72.34

*Numbers rounded to nearest hundredth.

Notes: Land Credit Valuation percentages are provided within Table 41, above

University Park's approximate acreage is reduced due to the off-site trail system and east ridge natural resources parklands within this park.

Source: City of Camarillo 2002, CSUCI Site Authority 2000

The total currently available acreage of parks and recreational facilities for the CSUCI University Glen community totals 481.47 acres. The parks included in the proposed project total 3.73 acres. These parks, indicated as proposed, are shown on Figure 36 and in Table 39. Acreages associated with each are provided in Table 39. To calculate the recreational needs for the entire University Glen Phase 1 and Phase 2 community, the needs and land dedication include the residents living in the community now and if the proposed project is approved. Currently, University Glen has 272 single-family DU and 386 multi-family DU, totaling 658 DU, or 1,783 residents (based on 3.21 persons per single-family DU and 2.36 per multi-family DU). The park and recreation facility guideline of five acres for each 1,000 residents totals 8.9 acres. The proposed project would include 120 single-family DU and 480 multi-family DU, totaling 600 DU. The park and recreation facility guideline total for the proposed project is 7.6 acres. The total future need for the entire University Glen community would therefore be 16.5 acres of park and recreational facilities.

As shown in Table 38, the required parklands for the existing University Glen Phase 1 residents total 8.9 acres. The current available parks, recreational facilities, and natural resource/open space would provide between 15.97 and 69.64 acres, which is above the minimum guideline of five acres per 1000 people.

Table 40 Park and Recreation Facility Needs

Description	Approximate Acres	Land Dedication Credit (Low)	Land Dedication Credit (High)
Current University Glen Park Land Requirements	8.9	-	-
Proposed Project Park Land Requirements	7.6	-	-
Total Future University Glen Resident Land Requirements	16.5	-	-
Current Available Parks and Recreational Facilities	481.47	15.97	69.64
Proposed Parks and Recreational Facilities	3.73	1.81	2.7
Total Parks and Recreational Facilities	485.20	17.48	72.34

Notes: Park and recreational facility acres and land dedication credits are provided within Table 42, above

The current available parks plus the parks proposed as part of the project would provide between 17.48 and 72.34 acres of parks, recreational facilities, and natural resource/open space for the residents to use for recreational purposes, meeting the minimum guideline of 16.5 acres to serve the future population of University Glen. Therefore, impacts related to the increased use of existing parks and recreational facilities, such that substantial physical deterioration would occur or be accelerated would be less than significant.

Mitigation Measure

No mitigation measures are required.

Impact REC-2 : THE ADVERSE PHYSICAL EFFECTS ASSOCIATED WITH THE PARK AND RECREATIONAL COMPONENTS OF THE PROPOSED PROJECT ARE ANALYZED THROUGHOUT THIS EIR. POTENTIAL ADVERSE IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT HAVE BEEN IDENTIFIED IN SEVERAL ENVIRONMENTAL ISSUE AREAS, RELATED PRIMARILY TO CONSTRUCTION ACTIVITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. (THRESHOLD 2)

The proposed project includes the construction of several park and open space recreational areas, and a clubhouse. The construction of these facilities would occur within the project site boundaries. Access to the recreational facilities would be provided by paved pedestrian walkways and paved streets. The operations of the facilities would require minimal electricity since all parks, except for the clubhouse, would require little to no energy.

Impacts associated with construction of each of these facilities have been considered as part of the wider project analyzed in this EIR and the Initial Study prepared for the proposed project. Significant impacts have been identified in the areas of air quality, biological resources, cultural resources, geology and soils, noise, and transportation and circulation. Mitigation measures required to reduce those impacts to less than significant levels would also address the contribution of the parks and recreation facilities to those impacts under this threshold. Once applied, impacts from the overall project, including the contribution of the recreational components of the proposed project, would then be reduced to a less than significant level.

Mitigation Measure

Mitigation measures identified in Section 4.2, *Air Quality*, Section 4.3, *Biological Resources*, Section 4.7, *Noise*, and Section 4.10, *Transportation and Circulation*, Section 4.11, *Tribal Cultural Resources*, as well as geology and soils within the Initial Study (Appendix A) would address the recreation and parks components contribution to overall project impacts.

SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures AQ-1, AQ-2(a), AQ-2(b), BIO-1, BIO-2(a), BIO-2(b), N-1(a), N-1(b), N-1(c), TCR-2(a), and TCR-2(b), would ensure that the impacts associated would be less than significant with the required mitigation.

4.9.5 Cumulative Impacts

The proposed project would provide parks and recreation facilities in addition to those already provided at the CSUCI campus. The CSUCI campus is outside of the service radii of many of the community parks and recreational facilities located outside of the campus. Therefore, the study area for the proposed project includes only those parks that would serve the campus, most of which are themselves outside the service radii of the cumulative development identified Table 6, Cumulative Projects List, in Section 3.3, *Cumulative Development*, with the exception of the future growth in campus population.

Table 6, Cumulative Projects List, in Section 3.3, *Cumulative Development*, identifies additional University growth of 1,000 students in the cumulative projects list. Adding this increase in population to the existing population at the campus (including students and University Glen Phase 1) plus the proposed project, the overall cumulative population at the University under the cumulative scenario would be 5,811, with 1,510 students currently residing in CSUCI student housing, 1,783 University Glen Phase 1 residents, a proposed project population of 1,518 and 1,000 additional students associated with future enrollment growth.

Based on this population and the guideline park acreage of five acres per 1000 residents, park and recreation requirements would be 29 acres. The current available parks plus the parks proposed as part of the project would provide between 17.48 and 72.34 acres of parks. The low credit acreage (17.48 acres) does not provide any credit for the 339 acre University Park. Assuming a low five percent credit for this regional park resource for use by cumulative development at the campus, more than sufficient park land would be provided to meet the five acres per 1,000 residents guideline included in the Specific Reuse Plan.

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4.10 Transportation and Circulation

This section presents the key assumptions, methods, and results of analysis for the transportation and circulation impacts of the proposed project. This section is based on, among other things, the *Traffic Impact Study for the CSU Channel Islands Specific Reuse Plan Update* by Fehr & Peers Transportation Consultants (2017). This Report is included in Appendix I and contains the traffic counts, level of service (LOS) calculations and a detailed description of the traffic forecasting done for the analysis. The evaluation of air traffic patterns concerning traffic levels and safety risks are not analyzed in this EIR report, as they were analyzed and dismissed as no impact in the Initial Study for this project (Appendix A).

The study analyzes potential project-generated off-site traffic impacts on the nearby Ventura County and city of Camarillo street system for existing conditions (2016) and a horizon year (2022).

- **Existing (2016) Conditions** – The analysis of existing Year 2016 traffic conditions provides a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets, traffic volumes, and operating conditions. The existing traffic conditions are the baseline for assessing the significance of project impacts.
- **Existing (2016) plus Project Conditions** – This is an analysis of existing traffic conditions with traffic expected from the proposed project added to the traffic volumes.
- **Cumulative (2022) Conditions** – Cumulative traffic conditions are projected without the addition of the proposed project. The objective of this phase of analysis is to forecast future traffic growth and operating conditions that could be expected to result from regional ambient growth and known cumulative projects if the proposed project were not developed. The Cumulative traffic forecasts provide the basis for determining cumulative project impacts.
- **Cumulative (2022) plus Project Conditions** – This is an analysis of traffic conditions with traffic from the proposed project added to the cumulative traffic forecasts to identify potential impacts.

4.10.1 Setting

Existing Roadway Network

CSUCI is located in Ventura County, approximately 2.5 miles south of the city of Camarillo. Regional access to the project area is provided by U.S. Highway 101 (U.S. 101) and State Route (SR) 1, while local access to the project site is provided by several local streets in the study area. The campus currently has three public entrances. Formerly, CSUCI's primary entrance from Lewis Road was via Camarillo Street, which travels a circuitous route to campus through the unincorporated University Glen residential development. The primary entrance was relocated with the development of a new roadway slightly more than one-mile south of Camarillo Street on Lewis Road called University Drive, and is reached via the intersection of University Drive and Lewis Road. The Camarillo Street access route remains open. Another public access route is also available to the lower campus from Potrero Road via Oxnard Road. The existing roadway network around the CSUCI campus is shown in Figure 37.

Within the study area, the existing street network consists of a roadway system including freeways, arterials, collectors, and local roads. The following provides a general discussion of roadway types in the study area:

- **Freeways/Highways** – Freeways and state highways are high-capacity facilities that primarily serve longer distance travel. Access is limited to interchanges typically spaced at least one mile apart.

Figure 37 Existing Roadway Network



Source: Fehr & Peers, 2017.

- **Arterials/Thoroughfares** – Roadways designated as arterials or thoroughfares are intended to provide maximum movement of traffic to and from major traffic generators, such as commercial centers. They also collect and distribute traffic to and from freeways.
- **Collectors** – Collector streets are intended as the intermediate route to convey traffic between local area streets, which contain either origins or destinations, and arterial streets.
- **Local Streets** – The primary functions of local streets are to provide vehicular access to abutting properties and to move smaller amounts of traffic in and out of specific neighborhoods. Local streets should not carry through-traffic or buses and heavy trucks, except in commercial and industrial districts. Higher-density residential areas and commercial areas should not use local roads for access where they go through lower-density residential neighborhoods.

The following describes the local roadway system in the study area.

FREEWAYS

- **Ventura Freeway (U.S. 101)** – U.S. 101, located north of the CSUCI campus, is a multi-lane east-west freeway that serves as the principal inter-city route in Ventura County. Primary access between the freeway and the project site is provided via the interchanges at Lewis Road and Las Posas Road.
- **Pacific Coast Highway (SR 1)** – SR 1 between Rice Avenue and Las Posas Road is a multi-lane north-south highway that serves as the secondary or coastal inter-city route in Ventura County. Primary access between the freeway and the project site is provided via the interchange at Hueneme Road.
- **East 5th Street (SR 34)** – East 5th Street originates at SR 1 in the city of Oxnard and extends eastward to its terminus at Pleasant Valley Road. One travel lane is provided in each direction. The roadway provides an access route between the project site and the Oxnard-Port Hueneme areas.

ARTERIALS

- **Lewis Road** – Lewis Road, located immediately west of the project site, extends north from Potrero Road to Somis Road in the northern end of the city of Camarillo. In the city, Lewis Road is designated as SR 34. Between Pleasant Valley Road and University Drive, Lewis Road provides two travel lanes in each direction, left-turn pockets, and some right-turn pockets. South of University Drive, Lewis Road narrows to one travel lane in each direction. Posted speeds are 50 mph. Lewis Road provides direct access to the project site via its connection to University Drive.
- **Las Posas Road** – Las Posas Road extends westerly from Lewis Road through residential areas in northern Camarillo and then proceeds on a southerly alignment to U.S. 101 and ultimately to its terminus at SR 1 adjacent to Point Mugu State Park in unincorporated Ventura County. North of Pleasant Valley Road, Las Posas Road provides two travel lanes in each direction. South of Ventura Boulevard, posted speeds are 55 miles per hour. Las Posas Road provides a connection between the project site and points in northern Ventura County and Santa Barbara County.
- **Pleasant Valley Road** – Pleasant Valley Road extends between Port Hueneme and U.S. 101, at which point it becomes Santa Rosa Road. The roadway provides just one travel lane in each direction with the exception of the section between Lewis Road and East 5th Street, where the roadway widens to accommodate two travel lanes in each direction. The posted speed limit is 55 miles per hour. In the study area, the border between the city of Camarillo and unincorporated Ventura County runs down the middle of Pleasant Valley Road.
- **Ventura Boulevard** – Ventura Boulevard originates at Lewis Road and extends west to the Camarillo western city limit. Ventura Boulevard provides a southerly frontage road to U.S. 101. There is one travel lane in each direction and a shared center turn lane or left-turn pockets. The posted speed limit is 35 miles per hour.
- **Cawelti Road** – Cawelti Road is a two-lane roadway located north of the project site. The roadway extends between Lewis Road on the east and Las Posas Road on the west.

- **Hueneme Road** – Hueneme Road is a two-lane roadway located south of the project site. The roadway extends from SR 1 to Potrero Road. Hueneme Road provides an access route between SR 1 and the project site.
- **Potrero Road** – Potrero Road is located adjacent to the south side of the CSUCI campus. The roadway provides a secondary access route between the project site and southern Ventura County. It extends east from Lewis Road through the Santa Monica Mountains almost to the Los Angeles County line, and provides one travel lane in each direction. The posted speed limit is 30 miles per hour.

COLLECTOR AND LOCAL ROADS

- **Daily Drive** – Daily Drive originates at Lewis Road and extends west to just beyond the U.S. 101 Las Posas Road interchange. Daily Drive is a northerly frontage road to U.S. 101. There is one travel lane in each direction and a shared center turn lane or left-turn pockets. The posted speed limit is 35 miles per hour.
- **Camarillo Street** – Camarillo Street is located adjacent to the north of the CSUCI campus. The roadway provides an access route to the project site. It extends east from Lewis Road to the CSUCI campus and provides one travel lane in each direction. The posted speed limit is 35 miles per hour.

Existing Public Transit Services

The study area is served by public transit provided by Ventura County Transportation Commission's (VCTC) Transit and Camarillo Area Transit. Metrolink and Amtrak provide regional service to Camarillo.

- **VISTA CSUCI Camarillo** – The CSUCI Camarillo line provides bus service between the Camarillo Metrolink station and CSUCI along Lewis Road. Weekday service is provided from 7:00 AM to 10:30 PM with 30-minute headways. Weekend and CSUCI school holiday service terminates at 5:30 PM.
- **VISTA CSUCI Oxnard** – The CSUCI Oxnard line provides bus service between the Centerpoint Mall in Oxnard and CSUCI along SR 1. Weekday service is provided between 7:00 AM and 10:00 PM with 60-minute headways and a travel time of 25 minutes. Weekend and CSUCI school holiday service is provided between 7:45 AM and 6:00 PM.
- **Metrolink Ventura Line** – The Metrolink Ventura line provides commuter/regional rail service between Los Angeles Union Station and East Ventura. Weekday inbound service (Ventura to LA) is provided on four trains that depart Camarillo between 5:50 and 7:50 AM with headways of approximately 40 minutes. Weekday outbound service is provided on one morning train and three evening trains that arrive in Camarillo between 5:50 and 8:40 PM. There is no weekend service.

Bicycle Facilities

The study area has a limited bicycle network. Existing facilities near the project site are identified below.

CLASS II BICYCLE LANES

Class II bicycle facilities, known as bike lanes, are lanes on the outside edge of roadways reserved for the exclusive use of bicycles, and designated with special signage and pavement markings. The following roadway segments in the project study area have Class II bicycle facilities:

- **Lewis Road** – between Pleasant Valley Road and Potrero Road.
- **Pleasant Valley Road** – between Lewis Road and Santa Rosa Road.
- **Las Posas Road** – north of Pleasant Valley Road.
- **Ventura Boulevard** – between Carmen Drive and Camarillo Center Drive.
- **Daily Drive** – between Lewis Road and Calle La Roda.

CLASS III BICYCLE ROUTES

Class III bicycle facilities, also known as bike routes, are roadways recommended for bicycle use and often connect to bike lanes and bike paths. Routes are designated with signs only and may not include additional pavement width. Las Posas Road has Class III bicycled facilities between Pleasant Valley Road and East 5th Street.

4.10.2 Regulatory Setting

Federal

AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination toward people with disabilities and guarantees, among other things, that they have equal opportunities as the rest of society to become employed, purchase goods and services, and participate in government programs and services. The ADA includes requirements pertaining to transportation infrastructure. The Department of Justice's revised regulations for Titles II and III of the ADA, known as the 2010 ADA Standards for Accessible Designs, set minimum requirements for newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities. These standards apply to accessible walking routes, curb ramps, and other facilities.

State

CALIFORNIA TRANSPORTATION DEVELOPMENT ACT

The Mills-Alquist-Deddeh Act (SB 325) (also known as the Transportation Development Act) was enacted in 1971 to improve public transportation services and encourage regional transportation coordination. This law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans. The TDA provides two funding sources: 1) the Local Transportation Fund (LTF), which is derived from a ¼ cent of the general sales tax collected statewide, and 2) the State Transit Assistance fund (STA), which is derived from the statewide sales tax on diesel fuel.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Department of Transportation (Caltrans) operates and maintains the State's highway system. Caltrans' (2002) provides the *Guide for the Preparation of Traffic Impact Studies*, which includes guidance in determining if and when a traffic impact study (TIS) is needed, the scope of a TIS, information about traffic data, traffic impact methodologies, and mitigation measures (California Department of Transportation [Caltrans] 2002).

Regional

VENTURA COUNTY COMPREHENSIVE TRANSPORTATION PLAN (2013)

The Comprehensive Transportation Plan (CTP) was created by the VCTC in 2013. The plan fully examines various funding strategies and options from the federal, state, regional and local levels as well as providing a detailed level of planning for the County's transportation future (VCTC 2013). The plan provides a framework for future community-based planning, coordination, collaboration and implementation, and informs Ventura County's long range transportation decisions (VCTC 2013). The plan includes details of the state of the system, challenges for the future, the proposed and current

transformation of the transit system, a financial plan and analysis, and plan implementation that includes a desired outcome and related actions (VCTC 2013).

CONGESTION MANAGEMENT PLAN (CMP)

The VCTC, as the designated Congestion Management Authority for Ventura County, is responsible for implementing the CMP in Ventura County. The CMP includes network performance, a deficiency plan, land use impacts, transportation demand management, multi-modal performance, and a capital improvement program. The Ventura County Congestion Management Program (VCCMP) provides local government agencies and private developers with the resources to track and analyze traffic congestion throughout Ventura County. The first CMP was developed by VCTC in 1991 with subsequent updates prepared about every two years (VCTC 2009).

Local

CALIFORNIA STATE UNIVERSITY TRANSPORTATION IMPACT STUDY MANUAL (2012)

The CSU Transportation Impact Study Manual provides guidance in the preparation of TIS for projects on CSU campuses, including all lands owned by CSU (CSU 2012). Per the CSU Transportation Impact Study Manual, CSU considers local plans and regulations to be of interest of each CSU campus because each campus is situated within a local community. CSU also attempts to work cooperatively with local communities and consider local plans and policies (CSU 2012). The following are considered when a CSU TIS is being completed:

- Transportation-related goals and policies from the City's or County's current general plan.
- Transportation analysis methods and tools from the City or County, and adjustments made (or substitute methods used) based on the best practices contained in this manual, including the consultation process provided for in this manual.
- Transportation performance measures (e.g., Level of Service and other methods used) and any thresholds of significance adopted by the City or County, if applicable.

Other information provided in this manual include scoping information for the TIS, example writing and details for sections of the TIS and analysis methods, and example mitigation measures.

CSUCI COMMUNITY DEVELOPMENT AREA SPECIFIC REUSE PLAN (2000)

The CSUCI Community Development Area Specific Reuse Plan Circulation Element (referred to as "Specific Reuse Plan") provides information on the collector roads and residential roads utilized by the University Glen residents. The plan includes parking design standards and roadway design standards (CSUCI Site Authority 2000).

Parking Design Standards

Permanent parking needs for the residential community areas shall be served primarily by the garages of individual units and parking lots for townhouse and apartment type residences. Additional parking for transient parking needs shall be addressed through driveways and on-street parking. Additional parking spaces shall be designed for in the townhouse and apartment parking lots to accommodate transient parking needs.

Roadway Design Standards

The Specific Reuse Plan includes guidelines for the design of the roadway system. The following guidelines direct the design of streets and roadways within the Community Development Area:

- Major circulation corridors should establish a hierarchy to convey the functional importance of places, to create a visual framework, and to enable easy orientation within the community.
- Road alignments should focus views upon amenities such as open space, mountains, parks, and public community facilities such as the K-8 school.
- The circulation pattern should disperse rather than channel, traffic through the neighborhoods.
- Roadway widths should be appropriate to their anticipated use, but should be minimized where ever possible.
- Where appropriate, curves should be used in residential collector and access roadways to respond to landform and topographies to create an interesting street scene, to reduce speeds, and to provide a variety of views. Where appropriate, a more traditional neighborhood feeling should be created by the use of more formal, grid-like street patterns.
- Paved roadway widths within hillside and estate areas should be constructed to minimal width standards in order to de-emphasize construction impact on sensitive areas.
- Traffic "calming" techniques should be encouraged, including reduced speed limits, through-traffic restrictions, raised intersections, textured paving, chicanes, channeling, medians, and on-street parking in the residential community.
- The above techniques are to be directed to conventional (gasoline-powered) automobiles, and should be utilized to encourage convenient access by other modes of transportation.

4.10.3 Existing Intersection and Roadway Operation

The traffic study examined 11 intersections and eight internal roadway segments in the vicinity of the project site for each of the traffic scenarios described at the beginning of this chapter. Eight signalized intersections, one side-street stop-controlled intersection, and two yield-controlled roundabouts were analyzed as part of the TIS for the proposed project.

The following eight signalized intersections were analyzed (see Figure 38):

1. Lewis Road & University Drive
2. Lewis Road & Camarillo Street
3. Lewis Road & Cawelti Road
4. Lewis Road & Pleasant Valley Road
5. US-101 SB Ramps & Ventura Boulevard
6. Lewis Road & Ventura Boulevard
7. US-101 NB Ramps & Daily Drive
8. Lewis Road & Daily Drive

The following three unsignalized intersections were analyzed as part of this study:

9. Camarillo Street & Channel Islands Drive (side-street stop controlled intersection)
10. Santa Rosa Island Drive & Channel Islands Drive (yield-controlled roundabout)
11. San Miguel Island Drive & Channel Islands Drive (yield-controlled roundabout)

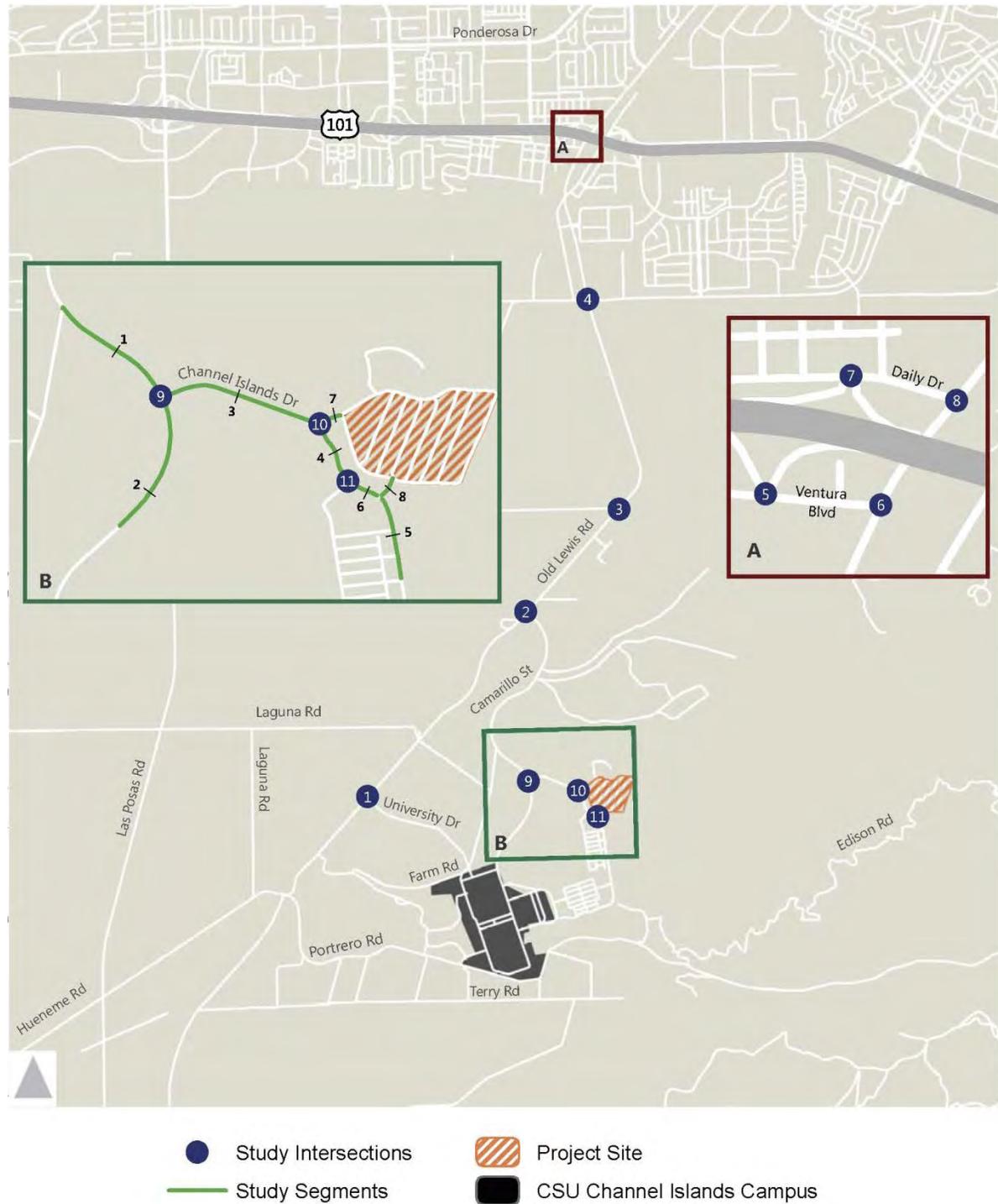
Four of the study intersections are located in the city of Camarillo, six are located in unincorporated Ventura County, and one is located on the boundary between the two jurisdictions.

Utilizing the trip distribution from the traffic impact analysis, a segment analysis was conducted. The following eight segments, illustrated in Figure 38, were identified for analysis:

1. Camarillo Street between Lewis Road and Channel Islands Drive
2. Camarillo Street between Channel Islands Drive and Santa Barbara Avenue
3. Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive
4. Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive
5. Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive

- 6. Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive
- 7. Santa Rosa Island Drive Between Channel Islands Drive and Arch Drive
- 8. San Miguel Island Drive between Arch Point and Channel Islands Drive

Figure 38 Study Intersections and Roadway Segments



Source: Fehr & Peers, 2017.

Existing (2016) Conditions

This section presents the Existing (2016) peak hour turning movement traffic volumes for the analyzed intersections and internal roadway segments, describes the methodology used to assess the traffic conditions at each intersection, and analyzes the resulting operating conditions at each, indicating volume-to-capacity (V/C) ratios and LOS.

EXISTING (2016) INTERSECTION TRAFFIC VOLUMES

New traffic counts were conducted for the extended weekday morning (7:00 to 9:00 AM) and afternoon (4:00 to 6:00 PM) peak periods in November 2016 at the 11 intersections. Twenty-four-hour machine counts were also collected on eight internal roadway segments within the project site to evaluate the anticipated demand from the proposed project against the capacity of those roadways.

INTERSECTION LEVEL OF SERVICE

LOS categories range from excellent, nearly free-flow traffic at LOS A, to overloaded, stop-and-go conditions at LOS F. Table 41 provides LOS definitions for signalized intersections based on the Intersection Capacity Utilization (ICU) method. The ICU method determines the intersection volume to capacity (V/C) ratio and corresponding LOS for the turning movements and intersection characteristics at signalized intersections. This analysis is consistent with the guidance of the California State University Transportation Impact Study Manual (CSU TISM) (California State University, 2012), applying the CSU system impact criteria, while utilizing the intersection analysis methodologies from local jurisdictions

Table 41 Level of Service Definitions for Signalized Intersections

Level of Service	Definition	Volume-to-Capacity Ratio
A	Excellent. No vehicle waits longer than one red light and no approach phase is fully used.	0.000-.600
B	Very good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	0.601-0.700
C	Good. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	0.701-0.800
D	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.	0.801-0.900
E	Poor. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.901-1.000
F	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.	> 1.000

Sources: Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980 as cited in Fehr & Peers 2017

Table 42 shows the LOS definitions for unsignalized intersections based on the HCM unsignalized methodology. The HCM method characterizes intersection operations in terms of seconds of delay.

Table 42 Level of Service Definitions for Unsignalized Intersections

Level of Service	HCM Average Control Delay per Vehicle (seconds)	Description
A	≤ 10.0	No delay for stop-controlled approaches.
B	> 10.0 and ≤ 15.0	Operations with minor delay.
C	> 15.0 and ≤ 25.0	Operations with moderate delay.
D	> 25.0 and ≤ 35.0	Operations with long delays for some movements.
E	> 35.0 and ≤ 50.0	Operations with high delays and long queues.
F	> 50.0	Operations with extreme congestion, with very high delays and long queues.

Source: Transportation Research Board 2000 as cited in Fehr and Peers 2012

As presented in Table 43, under Existing (2016) conditions, all 11 intersections operate at LOS C or better during the AM and PM peak periods. Figure 39 presents the Existing (2016) traffic volumes at each of the analyzed intersections during the AM and PM weekday peak periods. Detailed LOS calculations are provided in Appendix I.

Table 43 Existing (2016) Intersection LOS

Number	Intersection	Location	Peak Hour	V/C or Delay	LOS
1	Lewis Road and University Drive (new campus entrance) <i>Signalized</i>	Ventura County	AM	0.339	A
			PM	0.359	A
2	Lewis Road and Camarillo Street (old campus entrance) <i>Signalized</i>	Ventura County	AM	0.470	A
			PM	0.615	B
3	Lewis Road and Cawelti Road <i>Signalized</i>	Ventura County	AM	0.381	A
			PM	0.342	A
4	Lewis Road and Pleasant Valley Road <i>Signalized</i>	Camarillo/Ventura County	AM	0.548	A
			PM	0.607	B
5	U.S. 101 SB Ramps (Lewis Interchange) and Daily Drive <i>Signalized</i>	Camarillo	AM	0.592	A
			PM	0.501	A
6	Lewis Road and Ventura Boulevard <i>Signalized</i>	Camarillo	AM	0.518	A
			PM	0.418	A
7	U.S. 101 NB Ramps (Lewis Interchange) and Daily Drive <i>Signalized</i>	Camarillo	AM	0.403	A
			PM	0.553	A
8	Lewis Road and Daily Drive <i>Signalized</i>	Camarillo	AM	0.538	A
			PM	0.469	A

Number	Intersection	Location	Peak Hour	V/C or Delay	LOS
9	Camarillo Street and Channel Islands Drive <i>Side-Street Stop-Controlled*</i>	Ventura County	AM	10**	B
			PM	10.7**	B
10	Channel Islands Drive and Santa Rosa Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.3	A
			PM	3.4	A
11	Channel Islands Drive and San Miguel Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.3	A
			PM	3.3	A

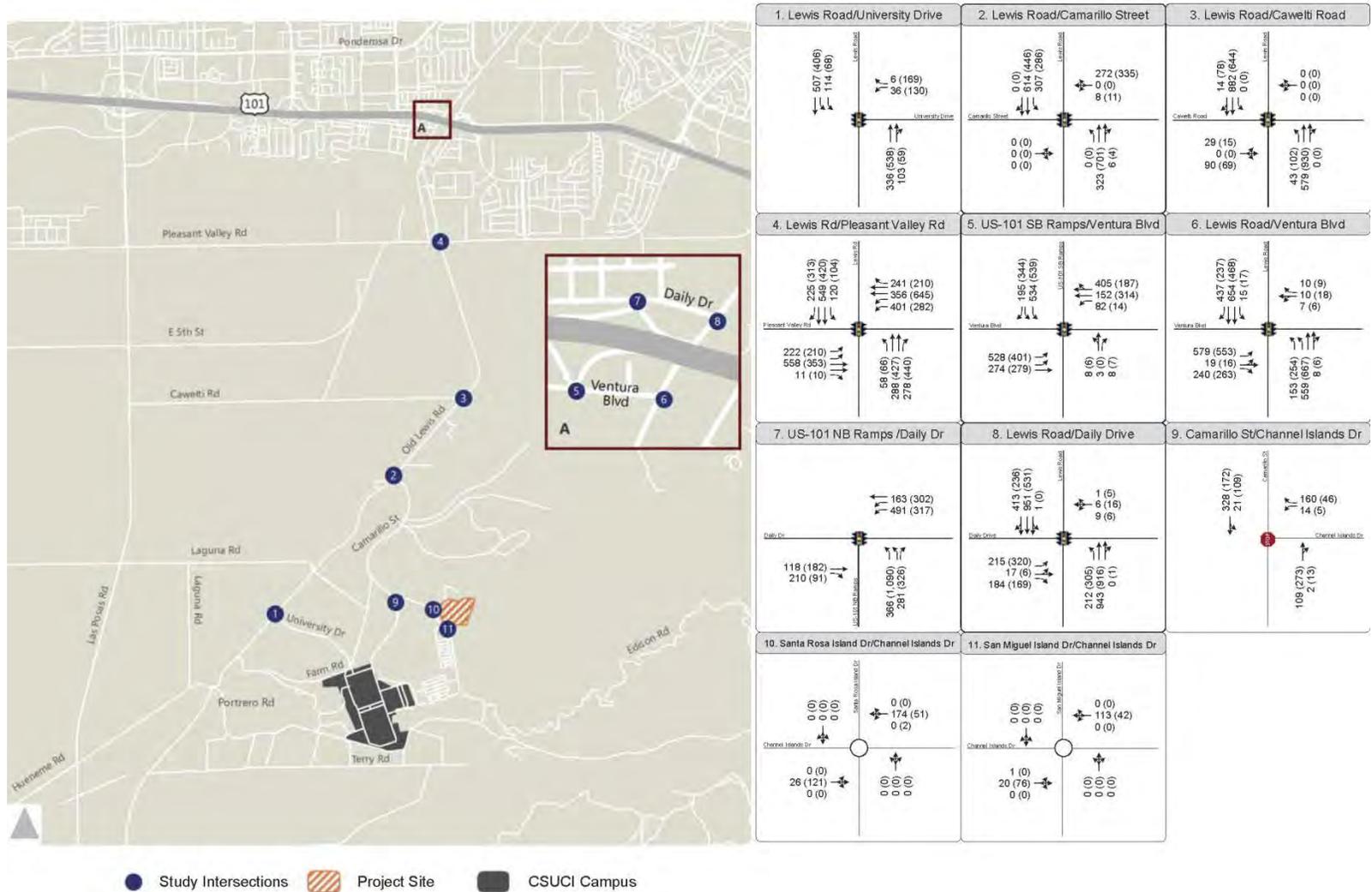
Notes: LOS = Level of Service, SB = Southbound, NB = Northbound, U.S. 101 = U.S. Highway 101, V/C = volume-to-capacity ratio
Analysis performed using ICU methodology

*For unsignalized intersections, HCM methodology was used

**For side-street stop-controlled intersections, vehicular delay reported is for worst case approach

Source: Fehr & Peers 2017

Figure 39 Existing (2016) AM and PM Peak Hour Traffic Volumes



Source: Fehr & Peers, 2017.

SEGMENT LEVEL OF SERVICE

In determining the operational characteristics of the roadway segments; LOS A through F were applied, with LOS A indicating free flow conditions and LOS F indicating severe congestion. Table 44 provides LOS thresholds for segment roadways in the study area based on average annual daily traffic (ADT) volumes.

Table 44 Average Annual Daily Traffic Level of Service Thresholds

Level of Service	Class II – Two Lanes
A	1,500
B	3,900
C	7,000
D	11,000
E	21,000

Source: Fehr & Peers 2017

The data presented in Table 45 indicate that each of the study-area roadway segments currently operate at LOS C or better. LOS D is considered the minimum acceptable LOS based on the CSU Transportation Impact Study Manual.

Table 45 Existing (2016) Segment LOS

Segment Number	Roadway Segments	24-Hour Volumes	LOS
1	Camarillo Street between Lewis Road and Channel Islands Drive	6,249	C
2	Camarillo Street between Channel Islands Drive and Santa Barbara Avenue	4,614	C
3	Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive	1,943	B
4	Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive	2,009	B
5	Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive	1,156	A
6	Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive	1,209	A
7	Santa Rosa Island Drive between Channel Islands Drive and Arch Drive	38	A
8	San Miguel Island Drive between Arch Point and Channel Islands Drive	0	A

Notes: All segments are Class II Two Lane roadways

Source: Fehr & Peers 2017

4.10.4 Project Traffic Volumes

The development of trip generation estimates for the proposed project involved a three-step process including traffic generation, trip distribution, and traffic assignment each of which is described below.

Project Trip Generation Estimates

As discussed in Section 2.0, *Project Description*, the proposed project consists of 120 single-family residential homes and 480 apartment units (both market rate and income/age-restricted). Trip generation rates from the Institute of Transportation's (ITE) *Trip Generation*, 9th Edition (2012) were used to estimate the number of trips associated with the project and are presented in Table 46.

Table 46 Summary of Project Trip Generation Estimates

Land Use	No. of DU	Rate Unit	Weekday Trips									
			Daily Trips		AM Peak Hour				PM Peak Hour			
			Rate ¹	Total	Rate	In	Out	Total	Rate	In	Out	Total
Single-Family Residential ²	120	DU	9.52	1,142	0.75	23	67	90	1.00	76	44	120
Apartment Residential	220	DU	6.65	2,062	0.51	32	126	158	0.51	103	55	158
Senior Adult Housing Residential (Attached)	252	DU	3.44	585	0.20	12	22	34	0.25	23	20	43
Total	600	-	-	3,789	-	67	215	282	-	202	119	321

Notes: No. = Number DU = Dwelling Unit

¹ The trips rates illustrated in this table are based on actual ITE Trip Generation (9th Edition) average trip rates.

² The single-family residential rate has been applied to both the detached single-family units and townhomes.

Source: Fehr & Peers 2017

To provide a conservative analysis, the trip generation estimates in this study assume that all trips will be made by vehicle and does not apply any internal capture or walk/bike trip credits for the proposed project. There is a high likelihood that a number of the residents of the proposed project would be associated with CSUCI and would not drive to CSUCI. If residents of the proposed project walk or bike to CSUCI, the assumptions applied would result in the overestimation of vehicle trip generation for the proposed project.

As shown in Table 46, the proposed project would generate an estimated net increase of 3,789 daily trips, including 282 trips (67 inbound/215 outbound) during the AM peak hour and 321 trips (202 inbound/119 outbound) trips during the PM peak hour.

Project Traffic Distribution

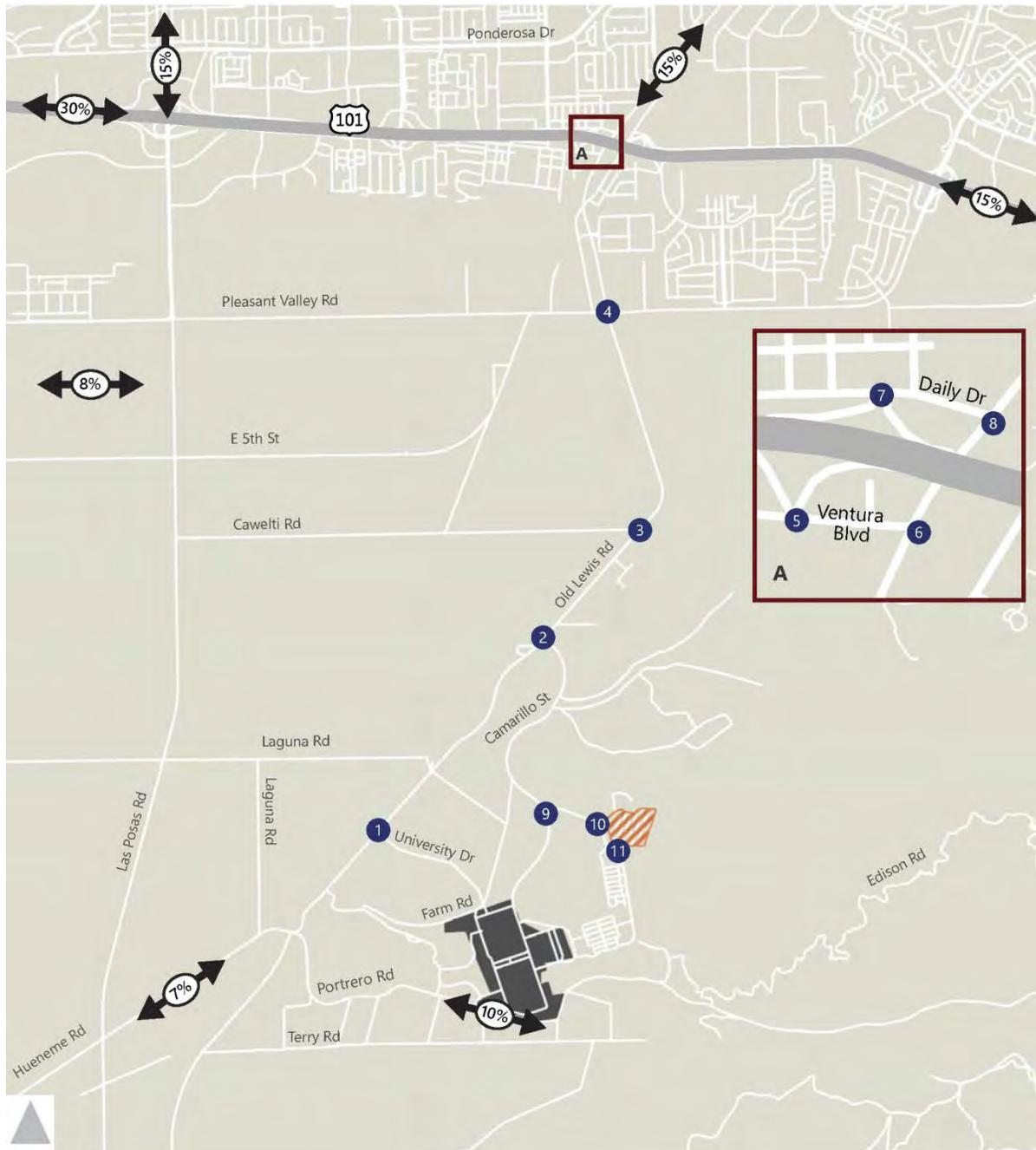
The project distribution patterns to and from the proposed project used in this study, illustrated in Figure 40, were based on a combination of the following factors: the street system serving the project site; the level of accessibility of routes to and from the project site; and the locations of employment and commercial centers to which residents of the project would be drawn. The Southern California Association of Governments’ (SCAG) Regional Travel Demand Model was also used to inform the general distribution pattern for this study. It is estimated that:

- 30 percent of project traffic will travel to points north in the city of Camarillo
- 15 percent of project traffic will travel to points west in the city of Oxnard
- 25 percent of project traffic will travel to points south and east including Thousand Oaks, Simi Valley, and Los Angeles
- 30 percent of project traffic will travel to points northwest including the city of Ventura and Santa Barbara County

Project Traffic Assignment

Using the trip generation estimates summarized in Table 46 and the trip distribution patterns, traffic for for the proposed project was assigned to the study intersections. Figure 41 presents the estimated project-generated traffic volumes at each of the analyzed intersections during the AM and PM weekday peak periods.

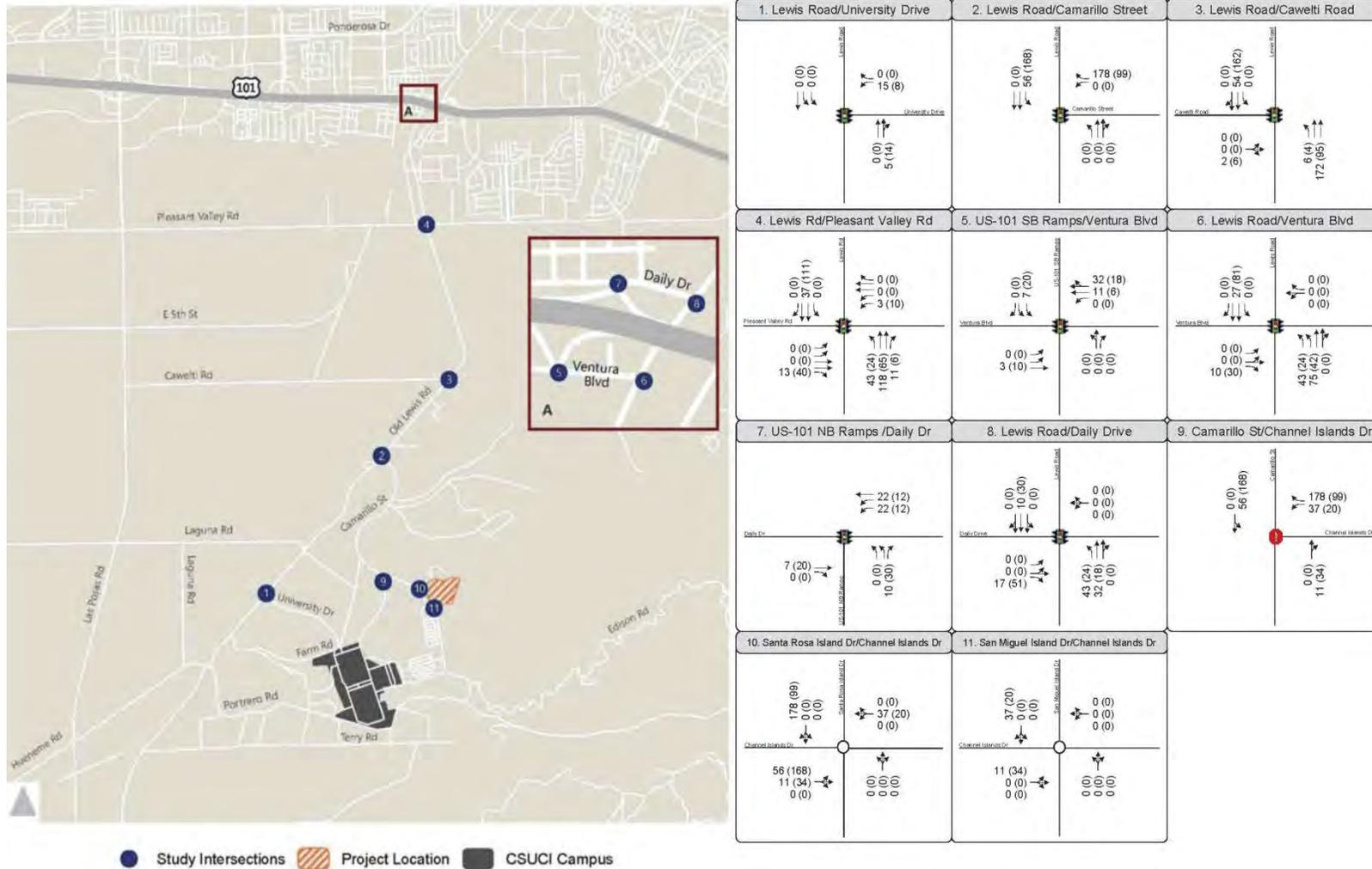
Figure 40 Generalized Trip Distribution



- # Study Intersections
- ◄(%)► Trip Distribution
- ▨ Project Location
- CSUCI Campus

Source: Fehr & Peers, 2017

Figure 41 Project Only AM and PM Peak Hour Traffic Volumes



Source: Fehr & Peers, 2017

4.10.5 Existing (2016) plus Project Scenario

Intersection Traffic Projections

The traffic estimated for the proposed project and assigned to the study intersections was added to the existing traffic volumes to estimate Existing (2016) plus Project traffic volumes. Turning movement traffic volumes for the Existing plus Project scenario is provided in Appendix I. Figure 42 presents the estimated Existing (Year 2016) plus Project traffic volumes at each of the analyzed intersections during the AM and PM weekday peak periods.

Table 47 summarizes the results of the analysis of the Existing (Year 2016) plus Project weekday morning and afternoon peak hour V/C ratio and corresponding LOS at each analyzed intersection. As indicated, ten of the eleven intersections operate at LOS C or better during the AM and PM peak periods. One intersection (Lewis Road & Camarillo Street) is projected to operate at LOS D during the PM peak period under Existing (2016) plus Project conditions. Detailed LOS calculations are provided in Appendix I.

Table 47 Existing (2016) plus Project Intersection LOS

Number	Intersection	Jurisdiction	Peak Hour	V/C or Delay	LOS
1	Lewis Road and University Drive (new campus entrance) - <i>Signalized</i>	Ventura County	AM	0.349	A
			PM	0.359	A
2	Lewis Road and Camarillo Street (old campus entrance) - <i>Signalized</i>	Ventura County	AM	0.616	B
			PM	0.782	D
3	Lewis Road and Cawelti Road - <i>Signalized</i>	Ventura County	AM	0.403	A
			PM	0.399	A
4	Lewis Road and Pleasant Valley Road - <i>Signalized</i>	Camarillo/Ventura County	AM	0.556	A
			PM	0.611	B
5	US-101 SB Ramps (Lewis Interchange) and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.614	B
			PM	0.509	A
6	Lewis Road and Ventura Boulevard <i>Signalized</i>	Camarillo	AM	0.532	A
			PM	0.457	A
7	US-101 NB Ramps (Lewis Interchange) and Daily Drive <i>Signalized</i>	Camarillo	AM	0.420	A
			PM	0.570	A
8	Lewis Road and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.577	A
			PM	0.513	A
9	Camarillo Street and Channel Islands Drive - <i>Side-Street Stop-Controlled*</i>	Ventura County	AM	11.9**	B
			PM	14.2**	B
10	Channel Islands Drive and Santa Rosa Island Drive - <i>Yield-Controlled Roundabout</i>	Ventura County	AM	2.6	A
			PM	3.7	A
11	Channel Islands Drive and San Miguel Island Drive - <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.6	A
			PM	3.6	A

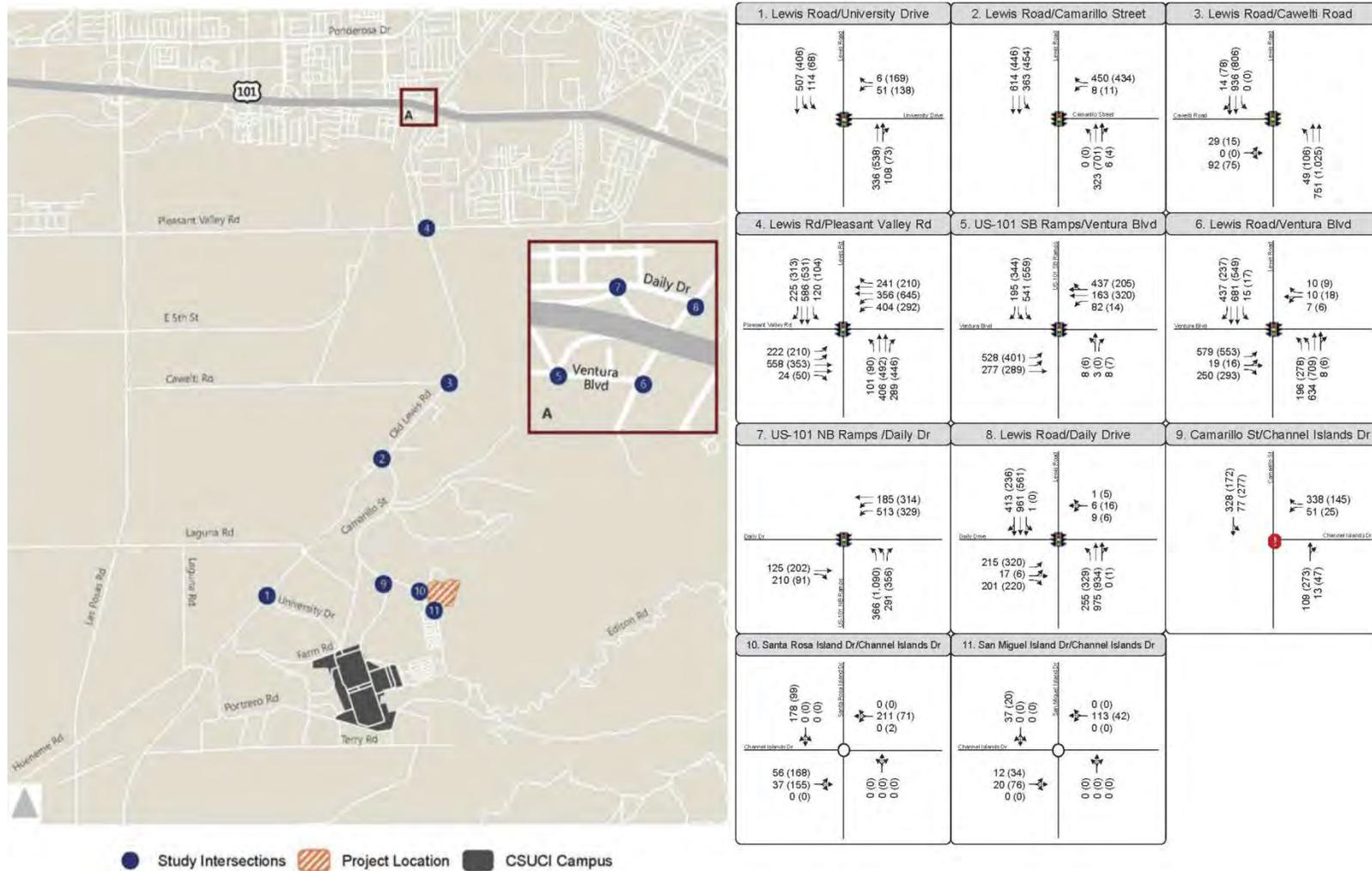
Notes: LOS = Level of Service, SB = Southbound, NB = Northbound, US-101 = U.S. Highway 101, V/C = volume-to-capacity ratio

*For unsignalized intersections, HCM methodology was used. All other analysis performed using ICU methodology

**For side-street stop-controlled intersections, vehicular delay reported is for worst case approach

Source: Fehr & Peers 2017

Figure 42 Existing (2016) plus Project AM and PM Peak Hour Traffic Volumes



Source: Fehr & Peers, 2017

Roadway Segment Traffic Projections

All eight segments were evaluated in the Existing (2016) plus Project scenario. The 24-hour volumes include traffic from the proposed project. As shown in Table 48, all of the studied roadways are projected to operate at a LOS D or better under Existing (2016) plus Project conditions.

Table 48 Existing (2016) plus Project Segment LOS

Segment Number	Roadway Segment	24-Hour Volumes	LOS
1	Camarillo Street between Lewis Road and Channel Islands Drive	9,395	D
2	Camarillo Street between Channel Islands Drive and Santa Barbara Avenue	5,259	C
3	Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive	5,732	C
4	Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive	2,652	B
5	Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive	1,156	A
6	Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive	1,852	B
7	Santa Rosa Island Drive and Arch Drive	681	A
8	San Miguel Island Drive between Arch Point and Channel Islands Drive	643	A

Notes: All segments are Class II Two Lane roadways

Source: Fehr & Peers 2017

4.10.6 Cumulative (2022) Scenario

Cumulative (2022) Condition Traffic Volumes

The Cumulative (2022) Condition traffic projections reflect the changes to Existing (2016) Condition traffic that can be expected from three primary sources. The first source is the ambient growth in traffic, which reflects increases in traffic because of regional growth and development. The second source is traffic generated by specific development projects located within, or in the vicinity of, the study area. The third source is roadway or intersection capacity enhancements. These factors are described below.

FUTURE AMBIENT GROWTH

Based on projected traffic growth in the area, the SCAG's Regional Travel Demand Model regional ambient growth factor of one percent per year (a total of 6.15 percent compounded growth across six years) was applied to the Existing (2016) Condition traffic volumes to reflect the effects of regional growth and development to Cumulative (Year 2022) Condition.

RELATED PROJECTS

Cumulative (2022) Condition traffic forecasts include the effects of specific cumulative development projects (i.e., related projects) expected to be built in the vicinity of the project site by 2022. The list of related projects was prepared based on data from Ventura County and the City of Camarillo. Projected CSUCI growth of full-time equivalent (FTE) students is also included as a related project.

A total of 17 related projects were identified; these projects are listed in Table 49 and illustrated on Figure 43. The trip generation rates developed for the related projects are intended to reflect trip-making during the AM and PM peak hours.

CUMULATIVE (YEAR 2022) BASELINE STREET IMPROVEMENTS

There are no infrastructure changes in the study area planned for implementation by year 2022 per confirmation by City and County staff.

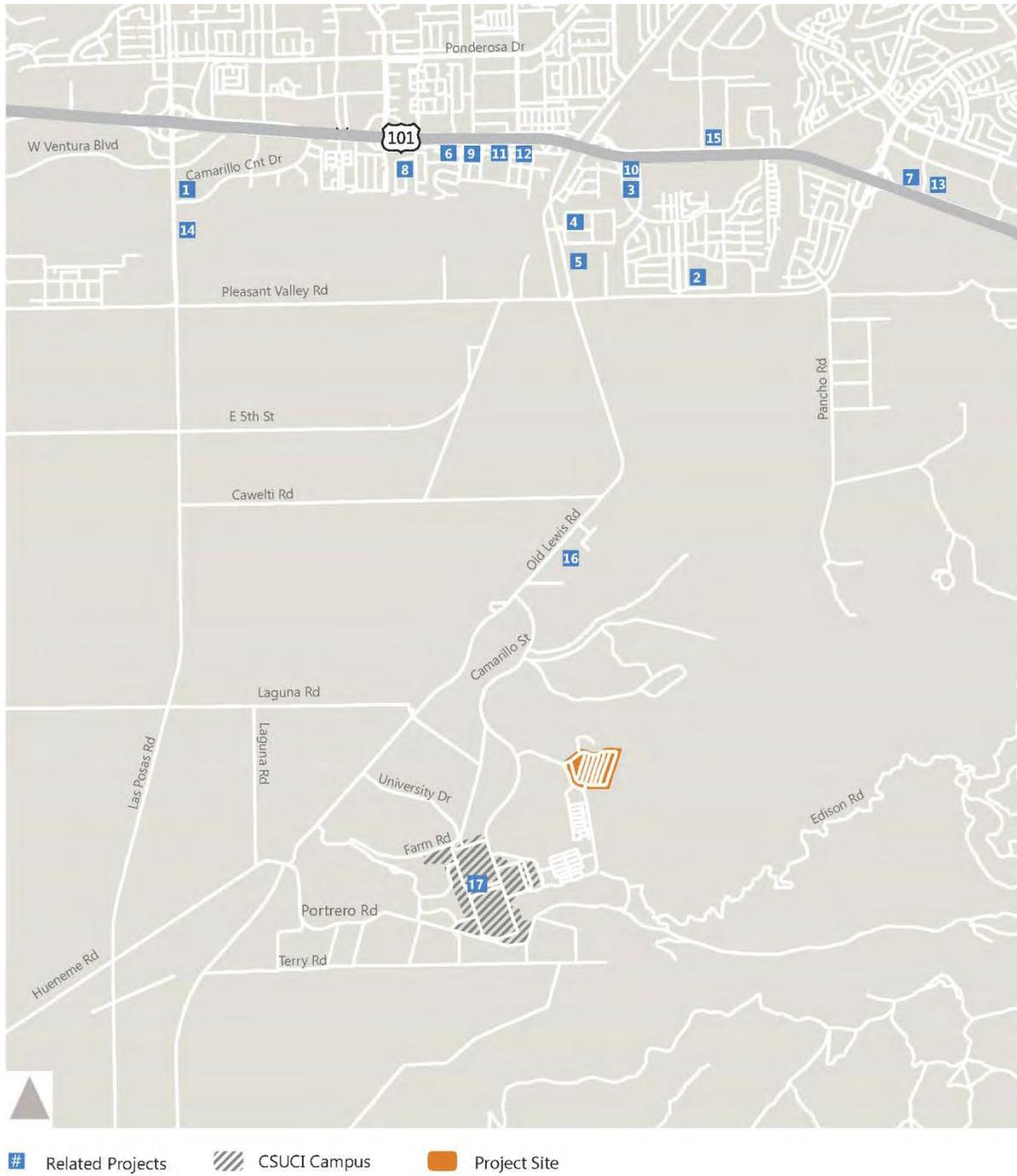
Table 49 Related (Cumulative Condition) Projects' Trip Generation Estimates

No.	Description / Land Use	Size		Estimated Trip Generation						
				Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
					In	Out	Total	In	Out	Total
City of Camarillo										
1	High-Turnover (Sit-Down) Restaurant	10.99	KSF	1,397	65	53	119	65	43	108
2	Single Family	26	Units	248	5	15	20	16	10	26
3	Apartments	10	Units	67	1	4	5	3	2	5
4	Apartments	368	Units	2,447	38	150	188	122	66	188
4	Apartments	82	Units	545	8	33	42	27	15	42
4	Apartments	83	Units	552	8	34	42	28	15	42
5	Condominium	87	Units	505	7	32	38	30	15	45
6	Apartments	22	Units	146	2	9	11	7	4	11
7	Condominium	129	Units	749	10	47	57	45	22	67
8	Single Family	9	Units	86	2	5	7	6	3	9
8	Single Family	4	Units	38	1	2	3	3	1	4
9	Single Family	4	Units	38	1	2	3	3	1	4
10	Specialty Retail Center	42.36	KSF	1,877	51	64	115	139	151	290
10	Specialty Retail Center	8	KSF	355	10	12	22	26	28	55
11	Specialty Retail Center	5	KSF	222	6	8	14	16	18	34
12	Specialty Retail Center	2.49	KSF	110	3	4	7	8	9	17
13	General Light Industrial	68.2	KSF	475	55	8	63	8	58	66
13	General Light Industrial	70.61	KSF	492	57	8	65	8	60	68
13	General Light Industrial	56.45	KSF	393	46	6	52	7	48	55
13	General Light Industrial	88.18	KSF	615	71	10	81	10	75	86
13	General Light Industrial	20.83	KSF	145	17	2	19	2	18	20
13	General Light Industrial	23.60	KSF	165	19	3	22	3	20	23
13	General Light Industrial	14.43	KSF	101	12	2	13	2	12	14
14	General Light Industrial	129.0	KSF	899	104	14	119	15	110	125
15	General Light Industrial	31.38	KSF	219	25	3	29	4	27	30
Ventura County										
16	Assisted Living	205	beds	545	19	10	29	20	25	45
CSUCI										
17	CSUCI FTE Campus Growth	1,000	students	1,710	109	31	140	54	116	170
Total Related Projects Trip Generation				15,142	752	571	1,322	677	972	1,650

Notes: CSUCI = California State University, Channel Islands, No. = Number, KSF = Thousand Square-Feet, FTE = Full-Time Equivalent (Student)

Source: Fehr & Peers 2017

Figure 43 Related Projects



Source: Fehr & Peers, 2017.

RELATED PROJECT TRAFFIC DISTRIBUTION AND ASSIGNMENT

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of population from which employees and potential patrons of proposed commercial developments may be drawn, the locations of employment and commercial centers to which residents of residential projects may be drawn, and the location of the projects in relation to the surrounding street system.

Cumulative (2022) Condition Intersection Levels of Service

Cumulative (2022) Condition weekday traffic volumes were used to establish cumulative operating conditions without the project for all analyzed intersections. Cumulative (2022) Condition LOS are presented below in Table 50. All intersections are projected to operate at a LOS C or better across the AM and PM peak periods under the Cumulative (2022) Condition. Figure 44 presents the Cumulative (2022) Condition AM and PM peak hour volumes at the analyzed intersections. Detailed LOS calculations are included in Appendix I.

Table 50 Cumulative (2022) Condition Intersection LOS

Number	Intersection	Jurisdiction	Peak Hour	V/C or Delay	LOS
1	Lewis Road and University Drive (new campus entrance) - <i>Signalized</i>	Ventura County	AM	0.364	A
			PM	0.445	A
2	Lewis Road and Camarillo Street (old campus entrance) - <i>Signalized</i>	Ventura County	AM	0.508	A
			PM	0.686	B
3	Lewis Road and Cawelti Road - <i>Signalized</i>	Ventura County	AM	0.439	A
			PM	0.400	A
4	Lewis Road and Pleasant Valley Road - <i>Signalized</i>	Camarillo/ Ventura County	AM	0.590	A
			PM	0.664	B
5	US-101 SB Ramps (Lewis Interchange) and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.735	C
			PM	0.642	B
6	Lewis Road and Ventura Boulevard - <i>Signalized</i>	Camarillo	AM	0.661	B
			PM	0.628	B
7	U.S. 101 NB Ramps (Lewis Interchange) and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.594	A
			PM	0.676	B
8	Lewis Road and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.743	C
			PM	0.730	C
9	Camarillo Street and Channel Islands Drive - <i>Side-Street Stop-Controlled*</i>	Ventura County	AM	10.1**	B
			PM	10.9**	B
10	Channel Islands Drive and Santa Rosa Island Drive - <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.9	A
			PM	3.6	A
11	Channel Islands Drive and San Miguel Island Drive - <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.6	A
			PM	3.5	A

Notes: LOS = Level of Service, SB = Southbound, NB = Northbound, U.S. 101 = Highway 101, V/C = volume-to-capacity ratio

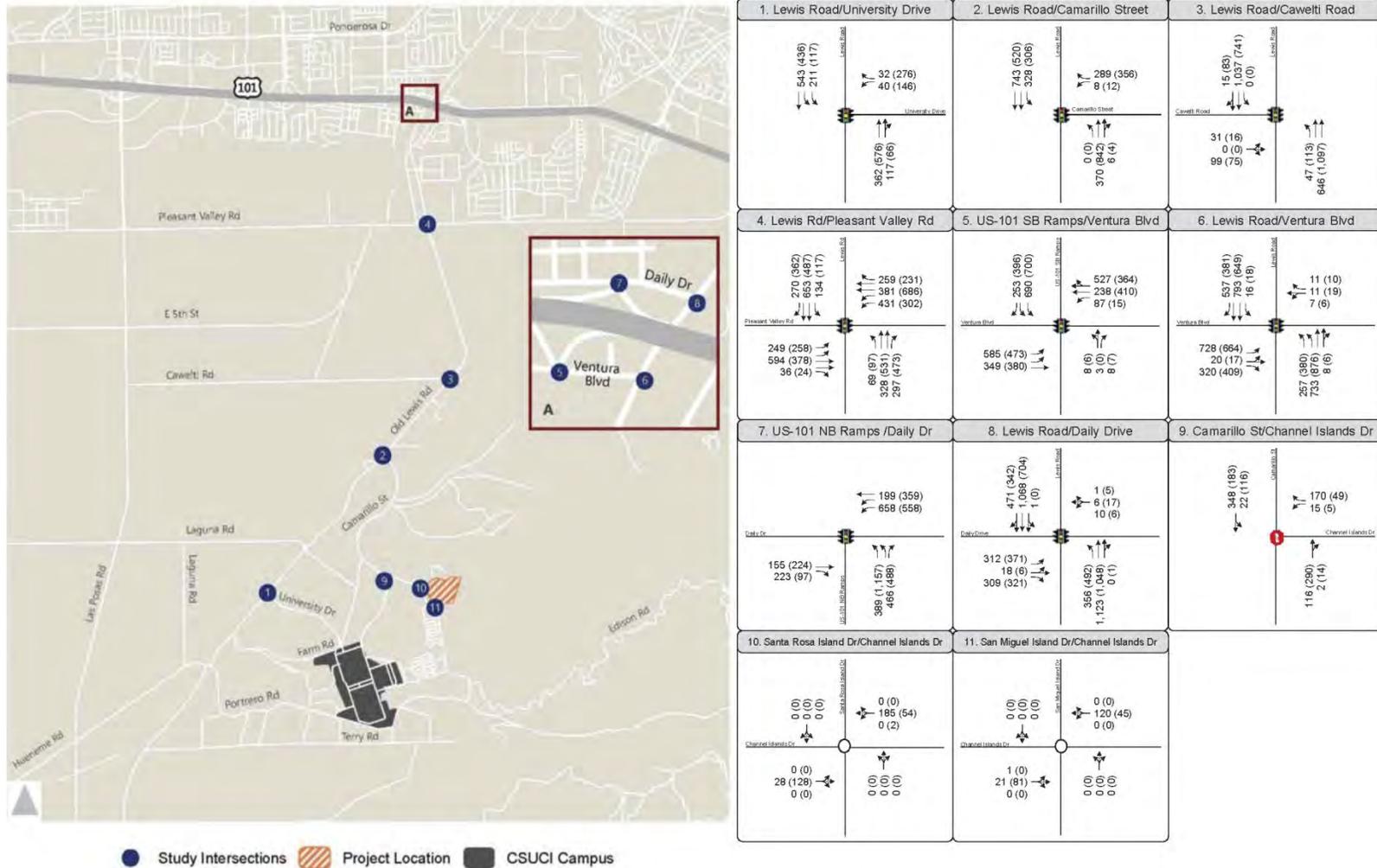
Analysis performed using ICU methodology

*For unsignalized intersections, HCM methodology was used

**For side-street stop-controlled intersections, vehicular delay reported is for worst case approach

Source: Fehr & Peers 2017

Figure 44 Cumulative (2022) Condition AM and PM Peak Hour Traffic Volumes



Source: Fehr & Peers, 2017

Cumulative (2022) Condition Roadway Segment Levels of Service

The 24-hour volumes shown in Table 51 are the sum of the Existing (2016) ADT and the forecasted trips made from the anticipated CSUCI full-time equivalent (FTE) growth. Each of the eight segments are projected to operate at LOS D or better under the Cumulative (2022) Condition.

Table 51 Cumulative (2022) Condition Segment LOS

Segment Number	Roadway Segment	24-Hour Volumes	LOS
1	Camarillo Street between Lewis Road and Channel Islands Drive	7,186	D
2	Camarillo Street between Channel Islands Drive and Santa Barbara Avenue	5,306	C
3	Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive	2,234	B
4	Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive	2,310	B
5	Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive	1,329	A
6	Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive	1,390	A
7	Santa Rosa Island Drive between Channel Islands Drive and Arch Drive	44	A
8	San Miguel Island Drive between Arch Point and Channel Islands Drive	0	A

Notes: All segments are Class II Two Lane roadways

Source: Fehr & Peers 2017

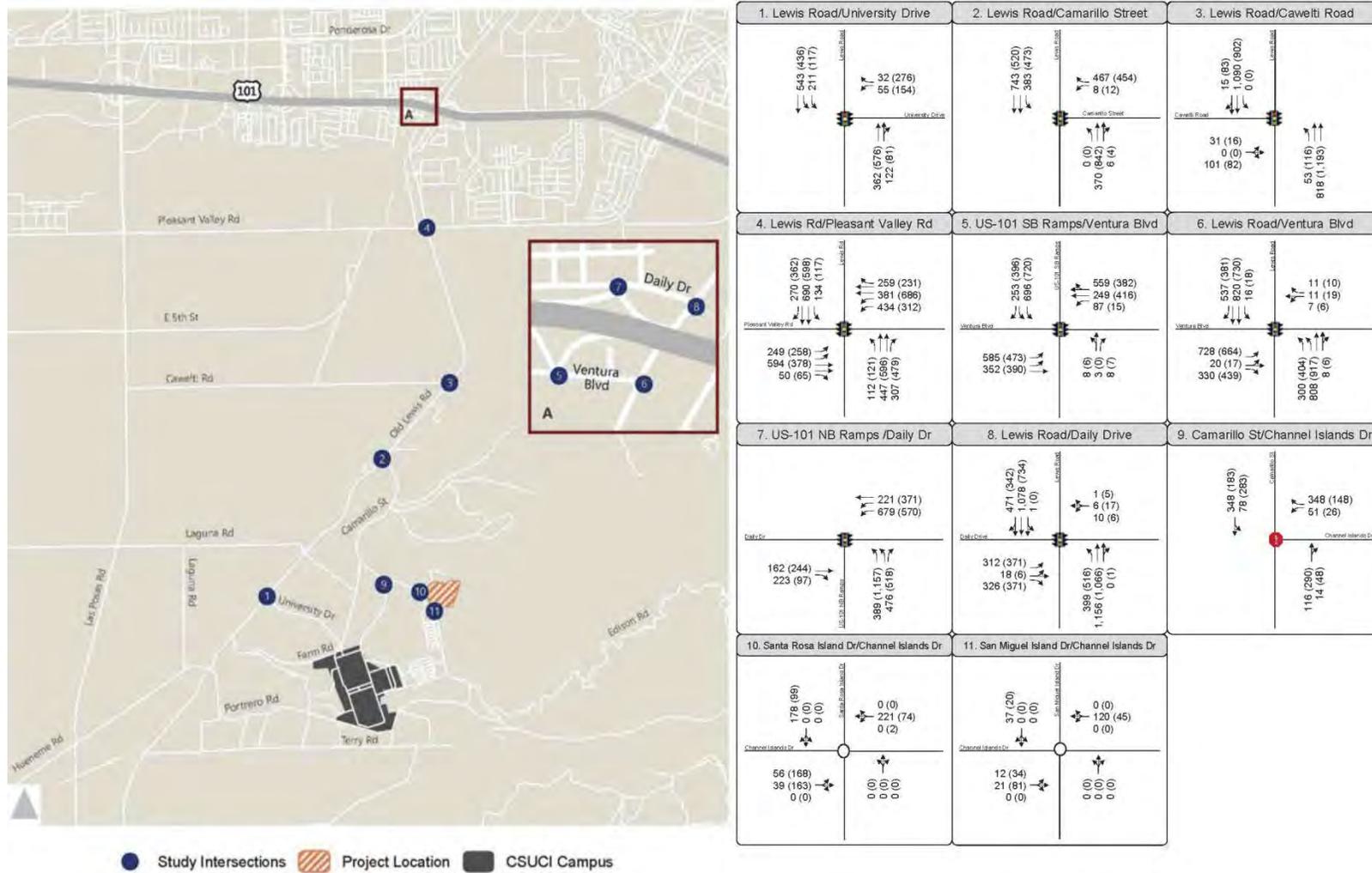
4.10.7 Cumulative (2022) plus Project Scenario

Cumulative (2022) plus Project Intersection Levels of Service

The proposed project traffic volumes were then added to the Cumulative (2022) Condition traffic projections for the AM and PM peak hour periods to develop the Cumulative (2022) plus Project traffic forecasts. Figure 45 presents the Cumulative (2022) plus Project AM and PM peak hour volumes at the analyzed intersections. The Cumulative (2022) plus Project peak hour traffic volumes were analyzed to determine the projected operating conditions with the addition of the proposed project traffic. The level of service results for the Cumulative (2022) with Project condition are presented in Table 52.

Under Cumulative (2022) plus Project conditions, seven of the intersections are projected to operate at LOS C or better in both the AM and PM peak periods. One intersection (Lewis Road and Camarillo Street, intersection number 2) is projected to operate at a LOS D during the PM peak period under a Cumulative (2022) plus Project conditions. Detailed LOS calculations are included in Appendix I.

Figure 45 Cumulative (2022) plus Project AM and PM Peak Hour Traffic Volumes



Source: Fehr & Peers, 2017

Table 52 Cumulative (2022) plus Project Intersection LOS

Number	Intersection	Jurisdiction	Peak Hour	V/C or Delay	LOS
1	Lewis Road and University Drive (new campus entrance) <i>Signalized</i>	Ventura County	AM	0.374	A
			PM	0.445	A
2	Lewis Road and Camarillo Street (old campus entrance) <i>Signalized</i>	Ventura County	AM	0.654	B
			PM	0.851	D
3	Lewis Road and Cawelti Road <i>Signalized</i>	Ventura County	AM	0.461	A
			PM	0.442	A
4	Lewis Road and Pleasant Valley Road <i>Signalized</i>	Camarillo/Ventura County	AM	0.607	B
			PM	0.668	B
5	US-101 SB Ramps (Lewis Interchange) and Daily Drive <i>Signalized</i>	Camarillo	AM	0.757	C
			PM	0.649	B
6	Lewis Road and Ventura Boulevard <i>Signalized</i>	Camarillo	AM	0.674	B
			PM	0.654	B
7	U.S. 101 NB Ramps (Lewis Interchange) and Daily Drive <i>Signalized</i>	Camarillo	AM	0.611	B
			PM	0.692	B
8	Lewis Road and Daily Drive <i>Signalized</i>	Camarillo	AM	0.782	C
			PM	0.782	C
9	Camarillo Street and Channel Islands Drive <i>Side-Street Stop-Controlled*</i>	Ventura County	AM	12.2**	B
			PM	15.7**	C
10	Channel Islands Drive and Santa Rosa Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	2.7	A
			PM	3.2	A
11	Channel Islands Drive and San Miguel Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.7	A
			PM	3.6	A

Notes: LOS = Level of Service, SB = Southbound, NB = Northbound, U.S. 101 = U.S. Highway 101, V/C = volume-to-capacity ratio
Analysis performed using ICU methodology

*For unsignalized intersections, HCM methodology was used

**For side-street stop-controlled intersections, vehicular delay reported is for worst case approach

Source: Fehr & Peers 2017

Cumulative (2022) plus Project Roadway Segment Levels of Service

The project daily trips were then added to the Cumulative (2022) Condition ADT volumes to develop the Cumulative (2022) plus Project ADT forecast. The LOS results for the Cumulative (2022) plus Project conditions are presented in Table 53. All of the eight segments are projected to operate at LOS D or better under Cumulative (2022) plus Project conditions.

Table 53 Cumulative (2022) plus Project Segment LOS

Segment Number	Roadway Segment	24-Hour Volumes	LOS
1	Camarillo Street between Lewis Road and Channel Islands Drive	10,332	D
2	Camarillo Street between Channel Islands Drive and Santa Barbara Avenue	5,951	C
3	Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive	6,024	C
4	Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive	2,954	B
5	Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive	1,329	A
6	Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive	2,034	B
7	Santa Rosa Island Drive between Channel Islands Drive and Arch Drive	687	A
8	San Miguel Island Drive between Arch Point and Channel Islands Drive	643	A

Notes: All segments are Class II Two Lane roadways
Source: Fehr & Peers 2017

4.10.8 Methodology and Thresholds of Significance

Methodology

The methodology for calculating and assigning trips generated by the proposed project and future growth under the cumulative condition and determining the resulting LOS at affected intersections and roadway segments are summarized in the previous sections. For further detail see Appendix I of this EIR, which contains the full traffic impact study performed by Fehr & Peers (2017).

Thresholds of Significance

According to Appendix G of the *State CEQA Guidelines*, impacts related to transportation and circulation from the proposed project would be significant if the project would result in any of the following:

- 1 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.
- 2 Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- 3 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.
- 4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment).
- 5 Result in inadequate emergency access.
- 6 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 explained more fully in the Initial Study (see Appendix A) implementation of the proposed project would not result in a change in air traffic patterns (Threshold 3). Therefore, no further discussion of this impact is included in this section. Thresholds 1, 2, 4, 5 and 6 are discussed below.

CSU TRANSPORTATION IMPACT STUDY MANUAL (2012)

Significance criteria established by the CSU Transportation Impact Study Manual were used to assess the potential for significant project impacts at the study intersections. The CSU Transportation Impact Study Manual criteria were developed based on a review of the significance criteria utilized by each of the local jurisdictions that surround the 23 CSU campuses. This study applies the impact threshold criteria consistent with the CSU Transportation Impact Study Manual. The CSU Transportation Impact Study Manual identifies any intersection or roadway segment operating at LOS D or better under a no project scenario that is projected to operate at LOS E or F with the addition of project trips to be significantly impacted.

Table 54 summarizes the significant impact criteria related to transportation operations under the CSU Transportation Impact Study Manual.

Table 54 CSU Transportation Impact Study Significance Criteria

Elements	Significance Impact Determination
Off-Site Traffic Operations	<ul style="list-style-type: none"> ▪ A roadway segment or intersection operates at LOS D or better under a no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F. ▪ A roadway segment or intersection operates at LOS E or F under a no project scenario and the project adds both 10 or more peak hour trips and 5 seconds or more of peak hour delay, during the same peak hour. ▪ If an intersection operates at a very poor LOS F (control delay of 120 seconds or more), the significance criterion shall be an increase in v/c ratio of 0.02 or more.
Bicycle Facilities	<ul style="list-style-type: none"> ▪ A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.
Pedestrian Facilities and ADA Compliance	<ul style="list-style-type: none"> ▪ A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. ▪ A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.
Transit	<ul style="list-style-type: none"> ▪ A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.
Intersection Traffic Control	<ul style="list-style-type: none"> ▪ The addition of project traffic causes an all-way stop-controlled or side street stop-controlled intersection to meet Caltrans signal warrant criteria.
Transportation Plan Consistency	<ul style="list-style-type: none"> ▪ A project significantly conflicts or creates significant inconsistencies with applicable transportation policies or the Campus Master Plan transportation policies.
Safety	<ul style="list-style-type: none"> ▪ Directly or indirectly cause or expose all users (motorists, pedestrians, bicyclists, and bus riders) to a permanent and substantial transportation hazard due to a new or existing physical design feature or incompatible uses.
Construction Period (Temporary)	<ul style="list-style-type: none"> ▪ The construction of a project creates a temporary but prolonged significant impact due to lane closures, need for temporary signals, emergency vehicles access, traffic hazards to bikes/pedestrians, damage to roadbed, truck traffic on roadways not designated as truck routes, etc.
On-Site Circulation	<ul style="list-style-type: none"> ▪ Project designs for on-site circulation, access, and parking areas are inconsistent with the circulation and parking plans in the Campus Master Plan or with applicable roadway design standards. ▪ A project fails to provide adequate accessibility for service and delivery trucks on-site, including access to truck loading areas. ▪ A project fails to provide adequate accessibility for buses accessing appropriate drop-off areas on-campus.

Elements	Significance Impact Determination
	<ul style="list-style-type: none"> ▪ A project fails to provide adequate accessibility for pedestrians and bicyclists. ▪ Note 1 -- The level of detail provided in the on-site circulation analysis should match the level of project design detail available; thus, a Campus Master Plan update will necessarily require a broader-level review than a new building or parking structure. ▪ Note 2 – If no site plan is available, the impact assessment should discuss the design standards to which the project design should be held, and provide a mitigation measure requiring adherence to the relevant design standards.

Source: CSU 2012

While this impact analysis was performed based on the significance criteria established in the CSU Transportation Impact Study Manual, this analysis also reviewed the significance thresholds adopted by Ventura County and the City of Camarillo. Table 55 and Table 56 illustrate the significance threshold criteria established by Ventura County and the City of Camarillo. The significance criteria adopted by Ventura County and City of Camarillo are provided for the purposes of disclosure, while the CSU Transportation Impact Study Manual significance criteria, shown in Table 54 above, were used to determine significant intersection and segment impacts in this study. For a comparison of the impacts of the proposed project against the local agency operating criteria see Appendix I (Traffic Study) of this EIR.

Table 55 City of Camarillo Intersection Operation Significance Criteria

LOS	Final V/C Ratio	Project-Related Increase in Peak Hour Trips
D	0.801 – 0.900	30 or more project trips in the critical movement lane
E	0.901 – 1.000	20 or more project trips in the critical movement lane
F	> 1.000	10 or more trips in the critical movement lane

Notes: LOS = Level of Service, V/C = volume to capacity (ratio)

Source: Fehr & Peers 2017

Table 56 Ventura County Intersection Significant Impact Thresholds

Intersection LOS (Existing)	Final V/C Ratio	Project-Related Increase in V/C Ratio or Peak Hour Trips	
		Existing Conditions	Cumulative Conditions
A	0.000 – 0.600	0.20 V/C Ratio	-
B	0.601 – 0.700	0.15 V/C Ratio	-
C	0.701 – 0.800	0.10 V/C Ratio	-
D	0.801 – 0.900	10 or more trips to critical movements	-
E	0.901 – 1.000	5 or more trips to critical movements	1 or more trips to critical movements 10 or more trips to the intersection
F	> 1.000	1 or more trips to critical movements	1 or more trips to critical movements 10 or more trips to the intersection

Notes: LOS = Level of Service, V/C = volume-to-capacity (ratio)

Source: Ventura County 2011a as cited in Fehr & Peers 2017

CALTRANS FACILITIES ANALYSIS

Per the guidance provided in the CSU TISM, the methodologies and LOS measures of effectiveness from Caltrans guidelines were used to determine impacts to facilities that fall under the jurisdiction of Caltrans. For this analysis, Caltrans jurisdiction intersections were analyzed using the Highway Capacity

Manual (HCM) (Transportation Research Board, 2000) signalized methodology, rather than the ICU methodology used under Impact T-1 and T-2, below.

Caltrans' *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002) identifies the transition from LOS C to LOS D as the threshold target operating condition for signalized ramp intersections and freeway segment operations. For the off-ramp queuing analysis, the 95th percentile queue estimates are compared against the available off-ramp storage to assess if the estimated queue exceeds available off-ramp storage, resulting in queues backing onto the freeway mainline.

4.10.9 Project Impacts and Mitigation Measures

Impact T-1 IMPLEMENTATION OF THE PROPOSED PROJECT WOULD NOT CAUSE OPERATIONS AT STUDY AREA INTERSECTIONS OR SEGMENTS TO EXCEED APPLICABLE LOS CRITERIA UNDER EXISTING (2016) PLUS PROJECT CONDITIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 1)

To assess whether significant impacts would occur at the study intersections, the Existing (2016) plus Project operating conditions were compared to the Existing (2016) without Project operating conditions. Per Table 54, a significant impact would occur if an intersection operates acceptably (D or better) without the project and the increase in project traffic reduces intersection operation to LOS E or F. As shown in Table 57, impacts on the operation of the study intersections would be less than significant.

Table 57 Existing (2016) plus Project Intersection LOS and Impact Analysis

No.	Intersection	Location	Peak Hour	Existing (2016)		Existing (2016) Plus Project		Significant Impact?
				V/C or Delay	LOS	V/C or Delay	LOS	
1	Lewis Road and University Drive (new campus entrance) - Signalized	Ventura County	AM	0.39	A	0.349	A	No
			PM	0.359	A	0.359	A	No
2	Lewis Road and Camarillo Street (old campus entrance) - Signalized	Ventura County	AM	0.470	A	0.616	B	No
			PM	0.615	B	0.782	D	No
3	Lewis Road and Cawelti Road - Signalized	Ventura County	AM	0.381	A	0.403	A	No
			PM	0.342	A	0.399	A	No
4	Lewis Road and Pleasant Valley Road - Signalized	Camarillo/ Ventura County	AM	0.548	A	0.556	A	No
			PM	0.607	B	0.611	B	No
5	US-101 SB Ramps (Lewis Interchange) and Daily Drive - Signalized	Camarillo	AM	0.592	A	0.614	B	No
			PM	0.501	A	0.509	A	No
6	Lewis Road and Ventura Boulevard - Signalized	Camarillo	AM	0.518	A	0.532	A	No
			PM	0.418	A	0.457	A	No
7	US-101 NB Ramps (Lewis Interchange) and Daily Drive - Signalized	Camarillo	AM	0.403	A	0.420	A	No
			PM	0.553	A	0.570	A	No
8	Lewis Road and Daily Drive - Signalized	Camarillo	AM	0.538	A	0.577	A	No
			PM	0.469	A	0.513	A	No
9	Camarillo Street and Channel Islands Drive Side-Street Stop-Controlled*	Ventura County	AM	10**	B	11.9**	B	No
			PM	10.7**	B	14.2**	B	No

No.	Intersection	Location	Peak Hour	Existing (2016)		Existing (2016) Plus Project		Significant Impact?
				V/C or Delay	LOS	V/C or Delay	LOS	
10	Channel Islands Drive and Santa Rosa Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.3	A	3.3	A	No
			PM	3.4	A	3.7	A	No
11	Channel Islands Drive and San Miguel Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.3	A	3.6	A	No
			PM	3.3	A	3.6	A	No

Notes: LOS = Level of Service, No. = Number, SB = Southbound, NB = Northbound, U.S. 101 = U.S. Highway 101, V/C = volume-to-capacity ratio

*For unsignalized intersections, HCM methodology was used

**For side-street stop-controlled intersections, vehicular delay reported is for worst case approach

Source: Fehr & Peers 2017

Per Table 54, a segment is significantly impacted if it operates acceptably (D or better) without the project and the increase in project traffic causes a segment to operate at LOS E or F with the addition of project traffic. As shown in Table 58, impacts are identified on the study roadway segments under Existing (2016) plus Project conditions would be less than significant. In addition, the trip volumes predicted along these roadway segments do not account for likely trip reductions due to residents at the project site walking or bicycling to the main campus rather than traveling by vehicle. As a result these already less than significant impacts to roadway segment operations are likely overestimations.

Table 58 Existing (2016) plus Project Segment LOS and Impact Analysis

Segment No.	Roadway Segment	Existing (2016) plus Project 24-Hour Volumes	LOS	Significant Impact?
1	Camarillo Street between Lewis Road and Channel Islands Drive	9,847	D	No
2	Camarillo Street between Channel Islands Drive and Santa Barbara Avenue	5,352	C	No
3	Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive	6,277	C	No
4	Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive	2,745	B	No
5	Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive	1,156	A	No
6	Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive	1,945	B	No
7	Santa Rosa Island Drive between Channel Islands Drive and Arch Drive	774	A	No
8	San Miguel Island Drive between Arch Point and Channel Islands Drive	736	A	No

Notes: No. = Number, LOS = Level of Service

All segments are Class II Two Lane roadways

Source: Fehr & Peers 2017

Mitigation Measures

No mitigation is required.

Impact T-2 IMPLEMENTATION OF THE PROPOSED PROJECT WOULD NOT CAUSE OPERATIONS AT ANY OF THE 11 STUDY AREA INTERSECTIONS OR ANY OF THE EIGHT STUDY AREA SEGMENTS TO EXCEED APPLICABLE SIGNIFICANCE CRITERIA UNDER THE CUMULATIVE PLUS PROJECT CONDITION. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 1)

To assess whether cumulative impacts would occur at the study intersections, the Cumulative (2022) plus Project operating conditions were compared to the Cumulative (2022) Condition operating conditions. For those intersections operating acceptably (D or better) under the Cumulative (2022) Condition, the potential for the additional project traffic to cause an intersection to operate at LOS E or F was determined. As shown in Table 59, all study intersections would operate acceptably under the Cumulative (2022) and Cumulative (2022) plus Project condition. Cumulative impacts would be less than significant.

Per Table 54, a segment is significantly impacted if it operates acceptably (D or better) without the project and the increase in project traffic causes a segment to operate at LOS E or F with the addition of project traffic. As shown in Table 60, impacts on the study roadway segments under Cumulative (2022) with Project condition would be less than significant. While the proposed project would result in a reduction of LOS from LOS B to LOS D at the intersection of Lewis Road and Camarillo Street, this would not result in a significant impact under CSU TISM thresholds. As noted previously, the trip volumes predicted along these roadway segments do not account for likely trip reductions due to residents at the project site walking or bicycling to the main campus rather than traveling by vehicle. As a result these already less than significant impacts to roadway segment operations are likely overestimations

Table 59 Cumulative (2022) plus Project Intersection LOS and Impact Analysis

No.	Intersection	Location	Peak Hour	Cumulative (2022)		Cumulative (2022) plus Project		Significant Impact?
				V/C or Delay	LOS	V/C or Delay	LOS	
1	Lewis Road and University Drive (new campus entrance) - <i>Signalized</i>	Ventura County	AM	0.364	A	0.374	A	No
			PM	0.445	A	0.445	A	No
2	Lewis Road and Camarillo Street (old campus entrance) - <i>Signalized</i>	Ventura County	AM	0.508	A	0.654	B	No
			PM	0.686	B	0.851	D	No
3	Lewis Road and Cawelti Road - <i>Signalized</i>	Ventura County	AM	0.439	A	0.461	A	No
			PM	0.400	A	0.442	A	No
4	Lewis Road and Pleasant Valley Road - <i>Signalized</i>	Camarillo/ Ventura County	AM	0.590	A	0.607	B	No
			PM	0.664	B	0.668	B	No
5	US-101 SB Ramps (Lewis Interchange) and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.735	C	0.757	C	No
			PM	0.642	B	0.649	B	No
6	Lewis Road and Ventura Boulevard - <i>Signalized</i>	Camarillo	AM	0.661	B	0.674	B	No
			PM	0.628	B	0.654	B	No
7	US-101 NB Ramps (Lewis Interchange) and Daily Drive - <i>Signalized</i>	Camarillo	AM	0.594	A	0.611	B	No
			PM	0.676	B	0.692	B	No

No.	Intersection	Location	Peak Hour	Cumulative (2022)		Cumulative (2022) plus Project		Significant Impact?
				V/C or Delay	LOS	V/C or Delay	LOS	
8	Lewis Road and Daily Drive <i>- Signalized</i>	Camarillo	AM	0.743	C	0.782	C	No
			PM	0.730	C	0.782	C	No
9	Camarillo Street and Channel Islands Drive <i>Side-Street Stop-Controlled*</i>	Ventura County	AM	10.1**	B	12.2**	B	No
			PM	10.9**	B	15.7**	C	No
10	Channel Islands Drive and Santa Rosa Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.9	A	3.9	A	No
			PM	3.6	A	3.2	A	No
11	Channel Islands Drive and San Miguel Island Drive <i>Yield-Controlled Roundabout</i>	Ventura County	AM	3.6	A	3.7	A	No
			PM	3.5	A	3.6	A	No

Notes: LOS = Level of Service, No. = Number, Intersect. = Intersection SB = Southbound, NB = Northbound, US-101 = Highway 101, V/C = volume-to-capacity ratio, Crit. = Critical

Analysis performed using ICU methodology

*For unsignalized intersections, HCM methodology was used

**For side-street stop-controlled intersections, vehicular delay reported is for worst case approach

Source: Fehr & Peers 2017

Table 60 Cumulative (2022) plus Project Segment LOS and Impact Analysis

Segment No.	Roadway Segment	Cumulative (2022) plus Project 24-Hour Volumes	LOS	Significant Impact?
1	Camarillo Street between Lewis Road and Channel Islands Drive	10,784	D	No
2	Camarillo Street between Channel Islands Drive and Santa Barbara Avenue	6,044	C	No
3	Channel Islands Drive between Camarillo Street and Santa Rosa Island Drive	6,568	C	No
4	Channel Islands Drive between Santa Rosa Island Drive and Santa Cruz Island Drive	3,046	B	No
5	Channel Islands Drive between San Miguel Island Drive and Anacapa Island Drive	1,329	A	No
6	Channel Islands Drive between Santa Cruz Island Drive and San Miguel Island Drive	2,126	B	No
7	Santa Rosa Island Drive between Channel Islands Drive and Arch Drive	780	A	No
8	San Miguel Island Drive between Arch Point and Channel Islands Drive	736	A	No

Notes: No. = Number

All segments are Class II Two Lane roadways

Source: Fehr & Peers 2017

Mitigation Measures

No mitigation is required.

Impact T-3 THE PROPOSED PROJECT WOULD NOT RESULT IN IMPACTS TO THE CMP ROADWAY NETWORK. THE STUDY AREA INTERSECTIONS WOULD OPERATE AT LOS D OR BETTER; THEREFORE, IMPACTS ARE LESS THAN SIGNIFICANT. (THRESHOLD 2)

An analysis was completed to comply with the monitoring requirements found in the VCTC's VCCMP (2009). The VCTC has adopted LOS E as a minimum system-wide level of service on all VCCMP. In the study area, Lewis Road and Pleasant Valley Road (study intersection number 4) are part of the CMP roadway network.

The results of the intersection analysis in Impact T-2, within Table 59, indicate that these facilities would operate at LOS D or better. Therefore, impacts on the CMP roadway network would be less than significant.

Mitigation Measures

No mitigation is required.

Impact T-4 ANALYSIS OF TWO INTERSECTIONS UNDER CALTRANS JURISDICTION INDICATES THAT CALTRANS THRESHOLDS WOULD BE EXCEEDED UNDER EXISTING (YEAR 2016) PLUS PROJECT CONDITIONS AT THE INTERSECTION OF U.S. 101 SOUTHBOUND RAMPS/VENTURA BOULEVARD AS A RESULT OF PROPOSED PROJECT TRAFFIC. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. (THRESHOLD 1)

Two intersections under Caltrans' jurisdiction were analyzed using the HCM signalized methodology:

- U.S. 101 Southbound Ramps & Ventura Boulevard
- U.S. 101 Northbound Ramps & Daily Drive

To assess whether Caltrans thresholds would be exceeded at the study intersections, the Existing (Year 2016) plus Project operating conditions were compared to the Existing (Year 2016) conditions.

The results of the analysis indicate that the U.S. 101 Northbound Ramps & Daily Drive intersection would operate at LOS C or better under all analysis scenarios. Therefore, impacts to this intersection would be less than significant. See Table 21 and Table 22 in Appendix I for more detail regarding this analysis.

The results of the analysis, however, indicate that addition of traffic from the proposed project would cause LOS at the intersection of U.S. 101 Southbound Ramps & Ventura Boulevard to change from LOS C to LOS D in the AM peak hour only. Because the project causes the LOS to degrade from LOS C to LOS D with the addition of project traffic, this would result in a potentially significant impact. See Table 21 in Appendix I for more detail regarding this analysis.

Additionally, the Cumulative (Year 2022) plus Project operating conditions were compared to the Cumulative (Year 2022) operating conditions. The results of the analysis indicate that the U.S. 101 Southbound Ramps & Ventura Boulevard intersection would operate at LOS D in the AM peak hour under Cumulative (Year 2022) operating conditions without the proposed project. Addition of the proposed project would cause the delay at the U.S. 101 Southbound Ramps & Ventura Boulevard intersection to increase slightly but would not result in further degradation of LOS at the intersection, i.e. the intersection would continue to operate at LOS D. Therefore, while cumulative conditions would exceed Caltrans thresholds and be potentially significant the project's contribution would not be considerable.

Mitigation Measures

MM T-4 SIGNAL TIMING

The applicant shall request that Caltrans optimize cycle length and signal timing splits for the intersection of U.S. 101 Southbound Ramps & Ventura Boulevard. If required, the applicant shall pay a fair share proportion of the cost to implement this mitigation measure. The optimization to cycle length and signal timing shall be completed prior to occupancy of the first phase of residential construction.

SIGNIFICANCE AFTER MITIGATION

Implementation of MM T-4 would result in operation of the U.S. 101 Southbound Ramps & Ventura Boulevard intersection at LOS C under Existing (Year 2016) plus Project operating conditions. See Table 21 in Appendix I for further detail regarding the effectiveness of this mitigation measure. Also, while the implementation of this mitigation measure is outside the jurisdiction of the California State University, Board of Trustees, in its role as lead agency, implementation of improved signal timing is part of regular Caltrans' maintenance of its facilities. As such, it is reasonable to assume the mitigation measure would be implemented and is considered feasible for the purposes of this analysis. Impacts would, therefore, be less than significant.

Impact T-5 AN ANALYSIS OF FOUR CALTRANS FREEWAY SEGMENTS TO DETERMINE PASSENGERS PER MILE PER LANE AND CORRESPONDING LEVEL OF SERVICE INDICATES THAT THESE CALTRANS LOCATIONS OPERATE AT LOS D, EXCEEDING CALTRANS TARGET THRESHOLDS UNDER EXISTING (YEAR 2016) AND CUMULATIVE (YEAR 2022) WITHOUT THE PROPOSED PROJECT CONDITIONS. ADDITION OF PROJECT-RELATED TRAFFIC WOULD NOT RESULT IN FURTHER REDUCTIONS TO LEVEL OF SERVICE ON THESE FREEWAY SEGMENTS. IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 1)

Four freeway segments were analyzed using the HCM methodology to determine passenger cars per mile per lane and the corresponding level of service. The freeway segments analyze include:

1. U.S. 101 Southbound – West of Lewis Road
2. U.S. 101 Southbound – East of Lewis Road
3. U.S. 101 Northbound – West of Lewis Road
4. U.S. 101 Northbound – East of Lewis Road

Peak hour traffic volumes were derived from the Caltrans Traffic Census Program. To assess whether Caltrans thresholds would be exceeded at the study intersections, the Existing (Year 2016) plus Project freeway highway segment operating conditions were compared to the Existing (Year 2016) without Project operating conditions. Additionally, the Cumulative (Year 2022) plus Project operating freeway highway segment operating conditions were compared to the Cumulative (Year 2022) without Project operating conditions.

The Caltrans Guide for the Preparation of Traffic Impact Studies identifies LOS C as the target operation LOS for freeway segment operations. As determined by the analysis, the Caltrans thresholds would be exceeded for both Existing (Year 2016) and Cumulative (Year 2022) conditions without the proposed project at each of the analyzed segments in the AM peak hour, PM peak hour, or both. See Tables 23 and 24 in Appendix I for further detail.

LOS on the analyzed freeway segments would not be reduced further due to the addition of traffic from the proposed project under Existing (Year 2016) plus Project conditions or under Cumulative (Year 2022) plus Project conditions; therefore, project impacts would be less than significant and while cumulative

conditions would exceed Caltrans thresholds and be potentially significant the project's contribution would not be considerable.

Mitigation Measures

No mitigation is required.

Impact T-6 A QUEUING ANALYSIS OF TWO CALTRANS FREEWAY OFF-RAMPS AT DAILY ROAD AND VENTURA BOULEVARD ALONG U.S. 101 INDICATES THAT NONE OF THE FREEWAY OFF-RAMP QUEUES FORECASTED WOULD EXCEED THE AVAILABLE STORAGE UNDER EXISTING (2016) PLUS PROJECT CONDITIONS OR UNDER CUMULATIVE (2022) PLUS PROJECT CONDITIONS. (THRESHOLD 1)

Two freeway off-ramp intersections along U.S. 101 were analyzed to determine queue lengths at the off-ramps: U.S. 101 Southbound Off-Ramp at Daily Drive and U.S. 101 Northbound Off-Ramp at Ventura Boulevard. Based on the analysis in the traffic study for the proposed project, none of the analyzed freeway off-ramp queues exceed the available storage based on 95th percentile queues under Existing (2016) plus Project conditions or under Cumulative (2022) plus Project conditions, therefore no project or cumulative impacts were identified at the freeway off ramps analyzed. See Tables 25 and 26 in Appendix I for further detail regarding this analysis.

Mitigation Measures

No mitigation is required.

Impact T-7 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH ADOPTED POLICIES, PLANS, OR PROGRAMS REGARDING PUBLIC TRANSIT, BICYCLE, OR PEDESTRIAN FACILITIES, OR OTHERWISE DECREASE THE PERFORMANCE OR SAFETY OF SUCH FACILITIES. IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 6)

The undeveloped project site does not contain existing public transit, bicycle, or pedestrian facilities. However, the project is located approximately 2.5 miles south of the city of Camarillo and is accessible from existing transportation facilities provided by VCTC from the CSUCI campus (VCTC 2016).

The Specific Reuse Plan contains guidelines directing the design of streets and roadways within the Community Development Area. The applicable guidelines in relation to public transit, bicycle, or pedestrian facilities are stated below (CSUCI Site Authority 2000):

- Automobile use should be discouraged in favor of bicycles and pedestrian paths.
- Roadway widths should be appropriate to their anticipated use, but should be minimized where ever possible.

Roadways within the project site would be designed in compliance with the requirements of the Specific Reuse Plan and consistent with Ventura County Fire Code (as discussed in Section 4.6, *Land Use and Planning*) and as such would be appropriate to their anticipated use. The proposed project does not include a bicycle path in the circulation plan. The site plan does provide for an interconnected network of sidewalks throughout the proposed project that would connect with pedestrian walkways throughout the University Glen Phase 1 area and wider CSUCI campus. Therefore, the proposed project would not conflict with policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities and impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Impact T-8 THE PROPOSED PROJECT COULD POTENTIALLY CREATE HAZARDS DUE TO DESIGN FEATURES INCOMPATIBLE WITH THE VENTURA COUNTY FIRE CODE. CONSISTENCY WITH THE VENTURA COUNTY FIRE CODE MINIMUM ACCESS STANDARDS WOULD BE INCLUDED IN THE PROPOSED PROJECT DESIGN; THEREFORE, THE PROPOSED PROJECT'S IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 4)

The proposed project's Circulation Plan is consistent with Ventura County Fire Code in relation to the minimum road access standards. These standards are promulgated to protect current and future land owners by providing roads with sufficient accessibility for fire equipment and to reduce further roadway maintenance costs (Ventura County Fire Protection District [VCFPD] 2011). Fire Code Section FP 14.6.5 VCFPD Access Standards would be incorporated into the design of the proposed project. Therefore, impacts related to an increase in hazards due to a design feature would be less than significant.

Mitigation Measures

No mitigation measures are required.

Impact T-9 PREVIOUS CONCERNS REGARDING EMERGENCY ACCESS HAVE BEEN RAISED AS A RESULT OF THE SPRINGS FIRE, THE INCREASE IN POPULATION AT THE PROJECT SITE AND THE OVERALL POPULATION INCREASE IN UNIVERSITY GLEN NEIGHBORHOOD. THE ROADWAYS WITHIN THE PROJECT SITE AND THROUGHOUT THE UNIVERSITY GLEN COMMUNITY WOULD COMPLY WITH VENTURA COUNTY FIRE CODE AND WOULD NOT RESULT IN INADEQUATE EMERGENCY ACCESS TO THE AREA. HOWEVER, IN CONSIDERATION OF RESIDENTS' CONCERNS, MITIGATION MEASURES ARE RECOMMENDED TO FURTHER REDUCE THIS ALREADY LESS THAN SIGNIFICANT IMPACT. (THRESHOLD 5)

The University Glen community does not currently have an adopted Emergency Evacuation Plan. In 2013, the Springs Fire caused severe congestion on roadways in the area and created a concern among existing residents about the time required to evacuate the University Glen community during an emergency. The proposed project would increase the population in this area, increasing the number of people required to evacuate the area should an emergency occur. As noted under Impact T-8, the proposed project's Circulation Plan complies with Ventura County Fire Code in relation to the minimum road access standards. Therefore, impacts related to emergency access would be less than significant. However, in consideration of residents' concerns implementation of Mitigation Measure T-9(a) and (b) is recommended to further reduce this already less than significant impact.

MM T-9 (A) ADOPT AN EMERGENCY EVACUATION PLAN FOR THE UNIVERSITY GLEN COMMUNITY

The CSUCI Site Authority, in consultation with the University Glen community, University Police Department and the applicant, should prepare and adopt an Emergency Evacuation Plan prior to occupancy of the proposed project.

MM T-9 (B) CONDUCT EMERGENCY EVACUATION DRILLS

In addition to the drafting and adoption of the Emergency Evacuation Plan, a limited emergency evacuation drill for the University Glen community should be conducted on a regular basis with the required timing to be determined by the University Police Department.

SIGNIFICANCE AFTER MITIGATION

Implementation of MM T-9(a) and (b) would further reduce the already less than significant impacts related to emergency access to and from the project site and University Glen community.

4.10.10 Cumulative Impacts

Cumulative development within the project area would cause increases in traffic on area roadways. Section 3.3, *Cumulative Development*, describes planned and pending projects in the vicinity of the project site. As discussed under the Cumulative (2022) plus Project Conditions, the traffic analysis estimated an acceptable LOS of D or better at all intersections and roadway segments studied resulting in a less than significant cumulative impact. All future (2022) traffic impacts described in the above discussions consider cumulative project traffic growth.

4.11 Tribal Cultural Resources

The Initial Study (Appendix A) for the proposed project determined that no impacts would occur to tribal cultural resources as a result of the proposed project. However, after initiating consultation under AB 52 it was determined that there is the potential for impacts to tribal cultural resources as a result of the proposed project. Therefore, this section of the EIR replaces the analysis included in the Initial Study related to Tribal Cultural Resources.

4.11.1 Ethnographic Setting

The project site lies within an area historically occupied by the Ventureño Chumash, so called after their historic period association with Mission San Buenaventura (Grant 1978a). The Chumash spoke six closely related languages, which have been divided into three branches: Northern Chumash (consisting only of Obispeño), Central Chumash (consisting of Purisimeño, Ineseño, Barbareño, and Ventureño), and Island Chumash (Jones and Klar 2007:80). The Chumashan language family is considered an isolate stock with a long history in the Santa Barbara region (Mithun 2001:304). Groups neighboring Chumash territory included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrielino (Tongva) to the south. Chumash place names in the project vicinity include Awhay (Ojai), Stuk (La Jolla Basin), and Kayiwis (Calleguas Creek; Applegate 1974).

Early Spanish accounts describe the Santa Barbara Channel as heavily populated at the time of contact. Estimates of the total Chumash population range from 8,000-10,000 (Kroeber 1925:551) to 18,000-22,000 (Cook and Heizer 1965: 21). Coastal Chumash lived in hemispherical dwellings made of tule reed mats or animal skins in rainy weather. These houses could usually lodge as many as 60 people (Grant 1978a). The village of *šukuw* (or *shuku*) at Rincon Point was encountered by Gaspar de Portola in 1769. This village had 60 houses and 7 canoes, with an estimated population of 300 (Grant 1978b).

The *tomol*, or wooden plank canoe, was an especially important tool for procuring marine resources and maintaining trade networks between Coastal and Island Chumash. Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets and hooks and lines. Shellfish were gathered from beach sands using digging sticks, and mussels and abalone were pried from rocks using wood or bone wedges. The acorn was an especially important resource. Acorn procurement and processing involved the manufacture of baskets for gathering, winnowing, and cooking and the production of mortars and milling stones for grinding. Bow and arrow, spears, traps, and other various methods were used for hunting (Hudson and Blackburn 1979). The Chumash also manufactured various other utilitarian and nonutilitarian items. Eating utensils, ornaments, fishhooks, harpoons, and other items were made using bone and shell. Olivella shell beads were especially important for trade.

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

4.11.2 Regulatory Setting

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category: "tribal cultural resources." AB 52 establishes that "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal

cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Register of Historical Resources

A tribal cultural resource could be considered significant if it is eligible for listing in the California Register of Historical Resources (California Register). The California Register helps government agencies identify, evaluate, and protect California’s historical resources, and indicates which properties are to be protected from substantial adverse change (Pub. Resources Code, Section 5024.1(a)). The California Register is administered through the State Office of Historic Preservation (SHPO) that is part of the California State Parks system.

A resource is evaluated under four California Register criteria to determine its historical significance. A resource must be significant at the local, state, or national level in accordance with one or more of the following criteria set forth in the State CEQA Guidelines at Section 15064.5(a)(3):

- 1) It is associated with events that have made a significant contribution to the broad pattern of California’s history and cultural heritage;
- 2) It is associated with the lives of persons important in our past;
- 3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- 4) It has yielded, or may be likely to yield, information important in prehistory or history.

The California Register also requires a resource to possess integrity, which is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.” Archaeological resources can sometimes qualify as “historical resources” [State CEQA Guidelines, Section 15064.5(c)(1)].

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

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or

- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Two other programs are administered by the state: California Historical Landmarks and California “Points of Historical Interest.” California Historical Landmarks are buildings, sites, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. California Points of Historical Interest are buildings, sites, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. Resources listed as Landmarks or Points of Historical Interest are automatically considered eligible for listing in the California Register.

Impacts that adversely alter a tribal cultural resource, including those listed in or eligible for listing in the California Register and those determined to be significant by a lead agency, are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

State Health and Safety Code

State Health and Safety Code, Section 7050.5/California Public Resources Code, Section 5097.9 State Health and Safety (HSC) Code Section 7050.5 and PRC Section 5097.9 contain provisions for the treatment of human remains contained in archaeological sites. Under HSC Section 7050.5, if human remains are discovered during any project activity, the county coroner must be notified immediately. If human remains are exposed, HSC Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. Construction must halt in the area of the discovery of human remains, the area of the discovery shall be protected, and consultation and treatment shall occur as prescribed by law. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. NAHC, pursuant to Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased person so they can inspect the burial site and make recommendations for treatment or disposal.

4.11.3 Existing Conditions in the Project Vicinity

Round Mountain, or *Satwiwa*, is located approximately one mile from the project site and consists of a Chumash village site and solstice shrine. The shrine was first described by J.P Harrington, a cultural anthropologist working in the early 20th century, after a trip to the area with Fernando Librado, a Chumash informant that worked with Harrington (King 2011). Round Mountain has been recommended eligible for listing in the California Register based on its integrity of location, setting, feeling, and association and the likelihood that the archaeological site may yield important information to California prehistory. In addition, Round Mountain is considered sacred to the Chumash. Because Round Mountain is eligible for listing in the California Register and considered sacred by California Native Americans, the resource is considered a tribal cultural resource under CEQA.

An Initial Study for the proposed project was prepared in November, 2016 and is included as Appendix A of this EIR. The Initial Study included a Tribal Cultural Resources section as well as a Cultural Resources section that discusses previous grading activities at the project site, stating that no cultural resources, including no material or remains of Native American origin, were identified during previous grading activities.

4.11.4 AB 52 Consultation Conducted to Date

On November 22 and December 12, 2016, CSUCI contacted four tribes, the Santa Ynez Band of Chumash Indians, the Barbareño/Ventureño Band of Mission Indians, the Coastal Band of the Chumash Nation, and the Northern Chumash Tribal Council, to notify them of the proposed project and invite them to consult on the project under AB 52. Of the four tribes contacted, only the Barbareño/Ventureño Band of Mission Indians requested a consultation, the others indicated no need for it as long as the closest tribe was having one.

On January 4, 2017, Mr. Terry Tarr, CSUCI Project Manager, and Mr. Raudel Banuelos, CSUCI Director of Facilities, met with Julie Tumamait-Stenslie (tribal representative) to discuss the proposed project. Ms. Tumamait-Stenslie expressed concerns regarding the sensitivity of the area based on the presence of numerous recorded Chumash sites and Round Mountain, especially regarding potential project-related indirect impacts to Round Mountain caused by increased activity in the vicinity of the site. Ms. Tumamait-Stenslie's recommendations included exploratory archaeological testing in any areas where grading would extend deeper than previous ground disturbance, archaeological and Native American monitoring of project-related ground disturbance, and the installation of interpretive signage to inform and educate the public on the sensitivity and sacredness of the site, the sensitivity of plants and animals in the area, and the significance of the general surroundings to Native peoples.

In addition, Ms. Tumamait-Stenslie and the University discussed including a small interpretive garden within the project site as an educational component for the residents of the proposed project. The campus has agreed to collaborate with a tribal representative to provide this feature within the project site and will coordinate with the tribal representative on selection of specific plantings and signage about the history, culture, plant and animal types used historically, plants being grown in the garden, etc. As a general intent there is a mature oak grove in a parkland area along the south side of the property initially appears to be an appropriate location for such a garden and would immediately provide shade trees and be a natural gathering place for an interpretive garden and educational space. Strategically located this could have signage visible from Channel Islands Boulevard at the south entrance to the development to give it some prominence if desired. Once developed this could have positive implications for University student education as a "living laboratory" for biology, environmental, and sustainability related studies in addition to cultural studies for the Chumash.

Consultation with Julie Tumamait-Stenslie continued with emails and phone calls reviewing the contents of this section of the EIR to receive concurrence on language including discussion of mitigation measures.

4.11.5 Methodology and Significance Thresholds

According to Appendix G of the *State CEQA Guidelines*, an impact to tribal cultural resources from the proposed project would be significant if the following is true:

- 1 The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

4.11.6 Project Impacts and Mitigation Measures

Impact TCR-1 : CONSTRUCTION OF THE PROPOSED PROJECT WOULD RESULT IN INCREASED PEDESTRIAN ACTIVITY IN THE VICINITY OF THE PROPOSED PROJECT, WHICH HAS THE POTENTIAL TO INDIRECTLY IMPACT ROUND MOUNTAIN. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. (THRESHOLD 1)

Round Mountain, located approximately one mile from the project site, is a tribal cultural resource under CEQA. Increased foot traffic in the area, including from people residing at the project site, could indirectly impact the archaeological site at Round Mountain as well as plants and animals living in the area that are considered important to the Chumash. Several species of medicinal plants are known to grow on Round Mountain and in the general vicinity. While access to Round Mountain is currently restricted by the University (marked as a no trespassing zone), not all hikers obey the signs limiting access. There is some limited potential that erosion caused by people accessing Round Mountain, including a potential increase in illicit hiking, could impact plants, animals, and archaeological sites located on and around Round Mountain. It should be noted that there is an existing cut dirt roadway (marked no trespassing) that was installed by the former State hospital to access a communications tower (it is abandoned but evident on top of the mountain). This roadway runs from the base of the mountain on Round Mountain Road to the very top and most observed hiking has been on that roadway thereby limiting erosion and other impacts that might occur compared with cross country hiking. This roadway is evident looking at aerial photography such as on a smart phone and the other sides are quite steep by comparison and less likely to be used by hikers. The second area that appears from aerial photography as a potential trail, starts at the base of the eastern side of Round Mountain but there are a couple of gates/fences at that location that are also marked no trespassing and are less likely to be used than the main road.

Mitigation Measures

MM TCR-1 (A) INTERPRETIVE SIGNAGE

Interpretive signage shall be installed near the perimeter of the project site where it intersects with offsite trails and/or open space to inform people to stay on the walking trails, and to educate and inform the public on the sensitivity and sacredness of the project site and the general vicinity to the Chumash people, the importance of leaving plants and animals in place, and of the potential to damage to cultural and natural resources by leaving the trail. The signage shall be written and designed in consultation with a Chumash tribal representative. The signage shall be installed as part of the proposed project.

SIGNIFICANCE AFTER MITIGATION

Implementation of MM TCR-1(a) would ensure the proposed project does not result in impacts to tribal cultural resources. The mitigation measure proposed was developed in consultation with Native American tribal representatives as part of the AB 52 consultation process. Impacts would be less than significant.

Impact TCR-2 : CONSTRUCTION OF THE PROPOSED PROJECT WOULD INVOLVE GROUND DISTURBANCE, WHICH HAS THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED TRIBAL CULTURAL RESOURCES. IMPACTS WOULD BE LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. (THRESHOLD 1)

The project site has previously been disturbed and graded. Previous grading activities did not uncover any archaeological, paleontological, or cultural resources, or any human remains. While the likelihood

that intact archaeological resources or human remains are present in the surficial soil layer is low, the general project vicinity is considered sensitive by California Native Americans for Native American cultural remains due to the known presence of an ethnographic village site (*Satwiwa*), Round Mountain, and several nearby prehistoric archaeological sites of Native American origin. Therefore, the following mitigation measures would be required to address potentially significant impacts resulting from the potential to unearth or adversely impact previously unidentified tribal cultural resources.

Mitigation Measures

MM TCR-2 (A) TRIBAL CULTURAL RESOURCE WORKER ENVIRONMENTAL AWARENESS PROGRAM

Prior to the commencement of construction activities a qualified archaeologist and Chumash tribal representative shall provide a Worker Environmental Awareness Program (WEAP) for the general contractor, subcontractor(s), and all construction workers participating in earth disturbing activities. The WEAP training shall describe the sensitivity and sacredness of the area, the potential of exposing Native American cultural materials, the types of materials that may be encountered, and directions on the steps that shall be taken if such a find is encountered. This training may be presented alongside other environmental training programs required prior to construction. A WEAP acknowledgement form must be signed by all workers who receive the training.

MM TCR-2 (B) ARCHAEOLOGICAL AND NATIVE AMERICAN MONITORING

In response to the comments provided, the following measure has been added and replaces mitigation measure CR-1 in the Initial Study regarding discovery of unanticipated archaeological resources.

Any project-related ground disturbing activities taking place within native soils, including but not limited to depths that exceed previous grading/site disturbance areas, shall be observed by a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology. If unanticipated cultural deposits are encountered, work shall stop and the California State University, Board of Trustees shall be notified. The qualified archaeologist shall assess the nature, extent, and potential significance of any cultural remains. If the resources are determined to be Native American in origin, the archaeologist shall consult with the California State University, Board of Trustees to begin Native American consultation procedures, as appropriate. If the discovery is determined to be not significant, work would be permitted to continue in the area. Potentially significant resources may require a Phase II subsurface testing program to determine the resource boundaries within the project site, assess the integrity of the resource, and evaluate the site's significance through a study of its features and artifacts. If, in consultation with the California State University, Board of Trustees, a discovery is determined to be significant, a mitigation plan would be prepared and carried out in accordance with State guidelines. If the resource cannot be avoided, a data recovery plan would be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. Any cultural material collected as part of an assessment or data recovery effort would be property of the University and curated at a qualified facility as directed by the University.

SIGNIFICANCE AFTER MITIGATION

Mitigation measures TCR-2(a) and (b) would ensure the proposed project does not result in substantial impacts to tribal cultural resources. The mitigation measures proposed were developed in consultation with Native American tribal representatives. Impacts would be less than significant.

4.11.7 Cumulative Impacts

Past projects have resulted in cumulatively significant impacts on tribal cultural resources in the vicinity of the University and throughout the county as a result of demolition, destruction, relocation, or alteration of land. The same regulations that address archaeological resources have been used for tribal cultural resources, but due to concerns regarding their effectiveness, more recent regulations such as AB 52 have been implemented to provide more direct protections. Projects would be required to comply with AB 52, which would contribute to a reduction in cumulative impacts on tribal cultural resources. However, even with these regulations in place, cumulative projects in the County that are by right and do not require review under CEQA may not adequately address tribal cultural resources, and could potentially contribute to the cumulatively significant impact on such resources during clearing, grading, or construction activities. However, because the proposed project incorporates measures to reduce impacts to tribal cultural resources and the University has complied with the provision of AB 52, the proposed project's contribution to these impacts would not be considerable.

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4.12 Utilities and Service Systems

This section evaluates potential effects on utilities related to implementation of the proposed project by identifying anticipated demands and existing as well as planned service availability. For purposes of this EIR, utilities consist of (1) water supply, (2) wastewater, and (3) storm drain facilities. Data used to prepare this section was gathered from various sources, including the Camrosa Water District, CSUCI, and a *Sewer, Domestic Water and Recycled Water Report for University Glen Phase 2 at CSU Channel Islands*, completed by Huitt-Zollars (2017b) (see Appendix J).

4.12.1 Setting

The Camrosa Water District (Camrosa) is an independent Special District that provides potable, non-potable, and reclaimed water to its 30,000 customers within a 31 square-mile service area that includes the southern portion of Ventura County (Camrosa Water District 2017b). Camrosa also provides wastewater collection services to customers in the central portion of CWD's service area, including CSUCI.

Water Supply Sources

Camrosa currently provides potable and non-potable water to the CSUCI campus (CSUCI 2017h). The Camrosa potable water supply is made up of imported surface water and local groundwater. Currently, imported surface water makes up approximately 60 percent of the total potable water supply, with local groundwater making up the other 40 percent (Camrosa Water District 2016). Additionally, Camrosa uses local surface water from Calleguas Creek and recycled water as non-potable water supply.

IMPORTED SURFACE WATER

Imported surface water is purchased from Calleguas Municipal Water District (MWD), a Metropolitan Water District of Southern California (Metropolitan) wholesaler. Under normal water conditions, Calleguas MWD receives all imported water from the State Water Project. However, under extreme drought conditions when State Water Project supplies are low, Metropolitan is able to blend Colorado River supplies with State Water Project supplies. Camrosa's allocation from Calleguas MWD varies slightly every year, but is typically around 9,000 acre-feet per year (AFY). Over the last ten years, Camrosa has purchased an average of 7,471 AFY from Calleguas MWD. Camrosa has established a not to exceed limit of 7,900 AFY, which is used as the projected available imported water supply for planning purposes (Camrosa Water District 2016).

Metropolitan treats State Water Project water at the Joseph Jensen Filtration Plant prior to delivering water to Simi Valley, where it is distributed through Calleguas MWD's distribution system to its customers, including Camrosa. Calleguas MWD also is able to store imported water in Lake Bard, or inject it into the Fox Canyon Aquifer through the Las Posas Aquifer Storage and Recovery Project (ASR). Lake Bard is capable of storing approximately 10,500 acre-feet (AF) of water, with 7,500 AF readily available. The Las Posas ASR is capable of storing approximately 50,000 AF of water in the Fox Canyon Aquifer. Water stored in the Las Posas ASR is not currently available to Camrosa. However, a pump station is currently under construction to make this water available to all Calleguas MWD costumers (Calleguas MWD 2016). The Las Posas ASR has a goal of maintaining at least 20,000 AF of water in storage in the Las Posas Basin, with an estimated extraction capacity of approximately 70 cfs. Currently, Calleguas MWD has 12,000 AF of groundwater stored in the East Las Posas Basin (Camrosa Water District 2016).

LOCAL GROUNDWATER

Camrosa's remaining potable water supplies are provided by local groundwater from the northeast Pleasant Valley Groundwater Basin, Santa Rosa Groundwater Basin, Tierra Rejada Groundwater Basin, and the Perched Aquifer. Camrosa currently has one groundwater well each in the Pleasant Valley and Tierra Rejada Groundwater Basins, and is in the process of constructing a second well in the Pleasant Valley Groundwater Basin. There are currently eight groundwater wells in the Santa Rosa Groundwater Basin, five that are connected to the potable system and three that contribute to the non-potable system. There is currently one operating well in the Perched Aquifer, which is the supply for the Round Mountain Water Treatment Plant, a desalination facility constructed in 2014 with a capacity of one million gallons per day (mgd) (Camrosa Water District 2016).

The Pleasant Valley Groundwater Basin and the western Santa Rosa Groundwater Basin are within the jurisdiction of the Fox Canyon Groundwater Management Agency (FCGMA). Camrosa has a FCGMA allocation of 806 AFY from the Santa Rosa Groundwater Basin and additional pumping allocations accumulated through the Conejo Creek pumping program (discussed in more detail under *Local Surface Water*). Camrosa has no wells in the portion of the Santa Rosa Groundwater Basin within FCGMA jurisdiction. Rather, groundwater within the eastern portion of the Santa Rosa Groundwater Basin (where Camrosa wells are located) is managed by the Santa Rosa Basin Groundwater Management Plan (Camrosa MWD 2013), which has established an annual safe yield of 3,320 AFY. There is currently no management or established safe yield in place for the Tierra Rejada Groundwater Basin. However, the basin is small and there are few other pumpers, all of whom are agricultural producers and have a long history of sustainable self-management. The Tierra Rejada Groundwater Basin responds predictably to precipitation and the behavior of other pumpers, and Camrosa adjusts its extractions accordingly. Additionally, the Perched Aquifer is not a defined groundwater basin by the State of California and there is currently no groundwater management plan for the aquifer.

LOCAL SURFACE WATER

Surface water available to the Camrosa is effluent from the City of Thousand Oak's Hill Canyon Wastewater Treatment Plant that is discharged into Conejo Creek. Through an agreement with the City of Thousand Oaks, Camrosa exercises the City's water right to divert flows in Conejo Creek. Camrosa must return a minimum six cfs from the diversion via bypass pumps for downstream beneficial uses. The quantity of water able to be diverted from Conejo Creek is dependent on the effluent discharge from the Hill Canyon Wastewater Treatment Plant. Camrosa projects the availability of 9,000 AFY from Conejo Creek (Camrosa Water District 2016).

Water from Conejo Creek is used as non-potable water supply for agricultural and landscape irrigation users. Currently, an average of 5,000 AFY of non-potable water from Conejo Creek is used by Camrosa. However, CSUCI does not receive non-potable water from Conejo Creek. Any surplus non-potable water is transferred to the Pleasant Valley County Water District (PVC Water District), an adjoining agricultural water district through the Conejo Creek pumping program. In 2013, Camrosa, City of Thousand Oaks, PVC Water District, and the FCGMA entered into a 40 year agreement for the transfer of excess Conejo Creek water from CWD to PVC Water District in exchange for groundwater pumping credits from the Pleasant Valley Groundwater Basin. This program, codified under FCGMA Resolution 2014-01, stipulates that PVC Water District retire, and Camrosa accrue, one acre foot of pumping allocations for each acre foot of non-potable Conejo Creek surface water Camrosa delivers to PVC Water District, up to 4,500 AFY. As of 2015, Camrosa had accumulated 3,385 AF under the Conejo Creek Water Pumping Program, and exercised 77 AF of its extraction allocations earned under the program (Camrosa Water District 2016).

RECYCLED WATER

Recycled water is produced at the Camrosa owned and operated Camrosa Water Reclamation Facility (CWRF), located near CSUCI (Camrosa Water District 2017a). The CWRF has a capacity of 1.5 mgd and is currently operating at approximately 1.4 mgd. About two thirds of the tertiary-treated Title-22 water produced at the CWRF is delivered to agricultural customers, and the rest is delivered to CSUCI. Water not delivered directly to customers is sent for storage to Camrosa’s storage ponds, which have a storage capacity of 300 AF. Surplus recycled water is provided to properties outside of the District boundaries to help fulfill the Camrosa goal to put all recycled water to a beneficial use (Camrosa Water District 2016).

The CWRF currently produces approximately 1,500 AF of recycled water per year from an average influent of approximately 1.4 mgd. In 2015 approximately 1,323 acre-feet of recycled water from the CRWF was used within the District boundaries, approximately 1,067 acre-feet by agricultural users and 256 acre-feet by CSUCI. Because the CRWF is currently operating close to its design capacity, Camrosa is in the process of increasing plant capacity of 2.25 mgd to accommodate increased wastewater flows from buildout of CSUCI and continued growth within the District boundaries. Accordingly, forecasted recycled water availability within the District is 1,570 AFY through 2035 (Camrosa Water District 2016).

Table 61 shows the actual water supplies utilized in 2015.

Table 61 Camrosa Actual Water Supply (2015)

Water Supply Source	Actual Water Supply (acre-feet)
Purchased Imported Water (potable)	5,566
Local Groundwater (potable)	3,125
Desalinated Groundwater (potable)	263
Recycled Water/Conejo Creek Surface Water (non-potable)	6,773
Total Water Use	15,727

Source: Camrosa Water District 2016

CONSERVATION

As of May 9, 2016, Executive Order B-37-16 calls for long-term improvements to local drought preparation across the State, and directs the State Water Resources Control Board (SWRCB) to develop proposed emergency water restrictions for 2017 if the drought persists. Additionally, Camrosa declared a Stage 2 Water Supply Shortage on June 23, 2016. The goal of a Stage 2 Water Supply Shortage or water emergency declaration is a 20-30 percent reduction in potable water demands while preventing the loss of property and protecting the health and safety of the community and region (Camrosa Water District Ordinance 40-15). During a Stage 2 Water Supply Shortage the following water conservation requirements are observed with the District:

- **Leaks.** No person may permit leaks of water that he/she has the authority to eliminate. Any detected leak, break or malfunction shall be corrected within 24 hours after a person discovers or receives notice from the District.
- **Wash-Down of Hard or Paved Surfaces.** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by a hose equipped with a positive self-closing water shut-off device, a low volume, high-pressure cleaning machine, or a low-volume high-pressure water broom.

- **Drinking Water Served Upon Request Only.** Eating or drinking establishments, including but not limited to a restaurant, hotel, café, cafeteria, bar, or other public place where food or drinks are sold, served, or offered for sale, are prohibited from providing drinking water to any person unless expressly requested.
- **Limits on Watering Days.** Water or irrigating of landscape or other vegetated area with potable water may be limited to three days per week on a schedule established and posted by the District.
- **Limits on Filling Residential Swimming Pools & Spas.** Use of water to fill or refill swimming pools and spas may be limited to maintain the level of water only when necessary. Draining of pools and spas or refilling shall be done only for health or safety reasons.
- **Substitution of Non-potable Water.** No person shall permit the outdoor use of potable water for irrigation or dust abatement where non-potable or recycled water is available.

Water Supply and Demand

As described above, the Camrosa potable water supply is currently made up of 60 percent imported surface water from Calleguas MWD and 40 percent local groundwater. Non-potable water supplies are provided by local groundwater, local surface water, and recycled water. Camrosa plans to further develop local groundwater supplies to reduce dependence on imported surface water. Camrosa has established a goal to reduce dependence on imported water to less than 50 percent in 2020 and less than 33 percent in 2025 (Camrosa Water District 2016). Table 62 shows projected average water supply and demand through the year 2035, assuming a multiple-dry year scenario.

Table 62 Camrosa Water District Multiple Dry Years Supply and Demand Comparison

Supply and Demand from Retail Sector		2020	2025	2030	2035
First Year	Supply Totals	24,450	28,830	28,930	28,930
	Demand Totals	15,941	15,587	15,987	16,113
	Difference	8,509	13,243	12,943	12,817
Second Year	Supply Totals	23,931	25,995	26,082	26,082
	Demand Totals	15,941	15,587	15,987	16,113
	Difference	7,990	10,408	10,095	9,969
Third Year	Supply Totals	21,385	23,458	23,543	23,543
	Demand Totals	15,941	15,587	15,987	16,113
	Difference	5,444	7,871	7,556	7,430

Source: Camrosa Water District 2016

As shown in Table 62, the Camrosa 2015 Urban Water Management Plan indicates that, based on existing water allocations and groundwater supplies, an adequate supply of water should be available to meet projected demand through 2035 even during a multiple-dry year scenario.

Wastewater Treatment

Wastewater generated from the CSUCI campus is collected and delivered to the CWRP located to the west of the campus. The CWRP passes wastewater through three stages of filtration and treatment, including sand filtration and chlorine disinfection, to produce tertiary-treated Title-22 recycled water quality. Recycled water produced by the CWRP is delivered to CSUCI to use as irrigation water for landscaping, athletic fields, and open spaces. Additionally, several nearby farmers also receive recycled water for crop irrigation. Water that is not delivered directly to CSUCI or agricultural users is stored in CWD storage ponds north of the CSUCI campus.

As noted previously, Camrosa is currently in the process of expanding the capacity of the CWRP. Camrosa proposed expanding the capacity of the facility by expanding the capacity of the existing chlorine contact chambers through reducing the contact-time requirement. By reducing chlorine contact times, Camrosa can expand the capacity of the facility to 2.25 mgd. However, operating the CWRP at these higher flow rates and verifying compliance with applicable recycled water standards will require additional monitoring for chlorine residual at the reactor outlet box, ammonia at the reactor influent, and turbidity at the influent and the effluent of the reactor. Additionally, this would require revisions to the chlorine dosing strategy and provisions for diversion of off-spec water (Camrosa Water District 2016).

Stormwater System

Storm water flows within the developed portions of the CSUCI campus are handled by a system of storm drains and curbs and gutters. Existing storm drains collect runoff from the southern and northwestern portions of the project site and deliver runoff west toward an existing 96 inch concrete pipe under Channel Islands Drive. Runoff from the northeastern portion of the project site, Inspiration Point Drive, and offsite runoff from east of the project site are collected by existing storm drains and delivered to a drainage channel north of the project site. Water within the channel is delivered to the existing 96 inch concrete pipe under Channel Islands Drive. Stormwater is then delivered to an existing flood control basin along University Drive. Additionally, the CSUCI Exterior Management Plan (2016) states that all new construction projects will be required to direct runoff from roofs to planter areas. This would promote infiltration of stormwater to groundwater prior to the water reaching the storm drain system.

4.12.2 Regulatory Setting

Federal

CLEAN WATER ACT

The Federal Water Pollution Control Act was passed in 1972, and was amended in 1977 as the Clean Water Act (CWA; 33 U.S.C. 1251-1376). The CWA was reauthorized in 1981, 1987, and 2000, and establishes the basic structure for regulating discharges of pollutants into the waters of the United States and has given the U.S. Environmental Protection Agency (USEPA) the authority to implement pollution control programs. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface waters. Many pollutants are regulated under the CWA, including various toxic pollutants, total suspended solids, biological oxygen demand and pH (acidity/alkalinity measure scale). Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process, described below under the “Section 402” discussion. The CWA generally applies to surface Waters of the United States, managed by the U.S. Army Corps of Engineers (USACE).

Section 402 of the Clean Water Act authorizes the California SWRCB to issue NPDES General Construction Storm Water Permit (Water Quality Order 99-08-DWQ), referred to as the “General Construction Permit.” Construction activities can comply with and be covered under the General Construction Permit provided that they:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters.
2. Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation.
3. Perform inspections of all BMPs.

Projects that disturb one or more acres are required to obtain NPDES coverage under the Construction General Permits.

The USEPA's NPDES Phase II Final Rule and the SWRCB General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4s) (WQ Order No. 2013-0001-DWQ), provides coverage for smaller municipalities (population less than 100,000), including non-traditional Small MS4s, such as university campuses like CSUCI. The Municipal Storm Water Permitting Program regulates storm water discharges from MS4s. Storm water runoff from surfaces such as rooftops, paved streets, highways or parking lots can carry with it pollutants such as: oil, pesticides, herbicides, sediment, trash, bacteria and metals. The runoff can then drain directly into a local watercourse. Often, the runoff drains into storm drains which eventually drain untreated into a local waterbody.

Federal regulations allow two permitting options for storm water discharges: individual permits and general permits. The SWRCB elected to adopt a statewide general permit for Small MS4s in order to efficiently regulate numerous storm water discharges under a single permit. CSUCI is listed as a non-traditional small MS4 permittee in Attachment B of the Phase II Small MS4 General Permit Order No. 2013-0001-DWQ.

Section 401 of the CWA requires that any activity, including river or stream crossing during road, pipeline, or transmission line construction, which may result in discharges into a State waterbody, must be certified by the RWQCB. This certification ensures that the proposed activity does not violate State and/or federal water quality standards. The limits of non-tidal waters extend to the Ordinary High Water Mark (OHWM), defined as the line on the shore established by the fluctuation of water and indicated by physical characteristics, such as natural line impressed on the bank, changes in the character of the soil, and presence of debris. The USACE may issue either individual, site-specific permits or general, nationwide permits for discharge into U.S. waters.

Section 404 of the CWA requires a permit for construction activities involving placement of any kind of fill material into waters of the U.S. or wetlands. A Water Quality Certification pursuant to Section 401 of the CWA is required for Section 404 permit actions. If applicable, construction would also require a request for Water Quality Certification (or waiver thereof) from the Los Angeles RWQCB. When an application for a Section 404 permit is made the Applicant must show it has:

1. Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
2. Minimized unavoidable impacts on waters of the U.S. and wetlands; and
3. Provided mitigation for unavoidable impacts.

Section 303(d) of the CWA (33 USC 1250, et seq., at 1313(d)) requires states to identify "impaired" waterbodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states are required to prioritize waters and watersheds for future development of TMDL requirements. The SWRCB and RWQCBs have ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The NFIP, implemented by the Congress of the United States in 1968, enables participating communities to purchase flood insurance. Flood insurance rates are set according to flood-prone status of property as indicated by Flood Insurance Rate Maps (FIRM) developed by the Federal Emergency Management Agency. FIRMs identify the estimated limits of the 100-year floodplain for mapped watercourses, among other flood hazards. As a condition of participation in the NFIP, communities must adopt regulations for floodplain development intended to reduce flood damage for new development through such measures as flood proofing, elevation on fill, or floodplain avoidance. Ventura County participates in the NFIP, and

individual projects that occur as a result of the proposed zone change will need to consider mapped flood hazards.

SAFE DRINKING WATER ACT

The federal Safe Drinking Water Act (SDWA) establishes standards for contaminants in drinking water supplies. Contaminants regulated by the SDWA include metals, nitrates, asbestos, total dissolved solids, and microbes.

State

SAFE DRINKING WATER ACT (1976)

California enacted its own Safe Drinking Water Act in 1976. The State Water Resources Control Board has been granted primary enforcement responsibility for the SDWA. Title 22 of the California Administrative Code establishes SWRCB authority and stipulates drinking water quality and monitoring standards. These standards are equal to or more stringent than the federal standards.

RECYCLED WATER REGULATIONS

Within California, recycled water is regulated by the USEPA, the SWRCB, and Regional Water Quality Control Boards (RWQCBs). The SWRCB has adopted Resolution No. 77-1, Policy with Respect to Water Reclamation in California. This policy states that the SWRCB and RWQCBs will encourage and consider or recommend for funding water reclamation projects that do not impair water rights or beneficial in-stream uses. The CDPH establishes the recycled water uses allowed in California and designates the level of treatment (i.e., undisinfected secondary, disinfected secondary, or disinfected tertiary) required for each of these designated uses (Title 22, California Code of Regulations).

The RWQCBs implement the SWRCB Guidelines for Regulation of Water Reclamation and issue waste discharge permits that serve to regulate the quality of recycled water based on stringent water quality requirements. The CDPH develops policies protecting human health and comments and advises on RWQCB permits.

CALIFORNIA WATER CODE TITLE 22

The California Water Code requires the SWRCB to establish water reclamation criteria; the Drinking Water Program was transferred from the California Department of Public Health (CDPH) to the SWRCB on July 1, 2014. In 1975, the former CDHS prepared Title 22 to fulfill this requirement. Title 22 regulates production and use of reclaimed water in California by establishing three categories of reclaimed water: primary effluent, which typically includes grit removal and initial sedimentation or settling tanks; adequately disinfected, oxidized effluent (secondary effluent) which typically involves aeration and additional settling basins; and adequately disinfected, oxidized, coagulated, clarified, filtered effluent (tertiary effluent) which typically involves filtration and chlorination. In addition to defining reclaimed water uses, Title 22 defines requirements for sampling and analysis of effluent and requires specific design requirements for facilities.

URBAN WATER MANAGEMENT PLANNING ACT OF 1983

The California Urban Water Management Planning Act requires all publicly or privately owned utilities that provide water service to more than 3,000 service connections or over 3,000 AFY to prepare an Urban Water Management Plan (UWMP). The UWMP is intended to support long-term resource planning and ensure suppliers have adequate supplies for existing and future demand. SB X7-7, passed in

2009, requires a reduction in 20 percent per capita water use by the year 2020. These water savings targets must be quantified in updated UWMPs.

Local

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD (LARWQCB)

The LARWQCB protects ground and surface water quality in the Los Angeles Region, including the coastal watersheds of Los Angeles and Ventura Counties, along with small portions of Kern and Santa Barbara Counties. It has constitutional, statutory, and regulatory authority to regulate discharges to waters of the State, to promote the beneficial use of water, and to prevent the waste of water. The LARWQCB is one of nine Regional Boards statewide. These Boards are part of the California Environmental Protection Agency (CalEPA).

CAMROSA WATER DISTRICT

California is entering a sixth year of drought, and Ventura County water supply in general remains uncertain. Therefore, in August 2014, Camrosa established a permanent moratorium on any new development (in excess of a single-family residence with a meter size greater than one inch) that will result in unmitigated new demand upon all water, potable, non-potable and recycled, delivered by any water distribution system within the District (Camrosa Water District 2017). However, such new development may be approved contingent upon coordination with the District in order to identify potential infrastructure improvement projects that may assist in meeting mitigation requirements of the moratorium (Camrosa Water District 2017).

4.12.3 Methodology and Significance Thresholds

Available information pertaining to utilities was reviewed during this analysis, including but not limited to: Ventura County General Plan (1988), the proposed project's Water Supply Assessment (included as Appendix K to this EIR), the *Sewer, Domestic Water, and Recycled Water Report for University Glen Phase 2 At CSU Channel Islands* (Huitt-Zollars 2017b), and the *Hydrology, Hydraulics, and Water Quality Report for University Glen Phase 2 at CSU Channel Islands* by Huitt-Zollars (2017a). Additionally, information was gathered by contacting the following agencies: Gold Coast Recycling and Transfer Station and the CSUCI Facilities Department.

According to Appendix G of the *State CEQA Guidelines*, impacts related to utilities and service systems would be significant if the project would:

- 1 Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- 2 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.
- 3 Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- 4 Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- 5 Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- 6 Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

7 Comply with federal, state, and local statutes and regulations related to solid waste.

Of the criteria listed above, the Initial Study prepared for the project determined that Criteria 1, 2, 6, and 7 would result in less than significant impacts, while Criteria 3, 4, and 5 would result in potentially significant impacts. Criterion 3 is discussed primarily in Section 4.5, *Hydrology and Water Quality*, within Impacts HWQ-2 and Section 4.3, Biological Resources, within Impact BIO-2; therefore, the impact analysis provided below focuses on Criteria 4 and 5.

4.12.4 Project Impacts and Mitigation Measures

Impact U-1 : THE PROPOSED PROJECT WOULD INCREASE DEMAND FOR POTABLE AND RECYCLED WATER THROUGH THE INTRODUCTION OF UP TO 600 NEW RESIDENTIAL UNITS AND LANDSCAPED AREAS. RECYCLED WATER AND DOMESTIC WATER WOULD BE PROVIDED BY THE CAMROSA WATER DISTRICT. IMPACTS WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 4)

The proposed project would include up to 600 new residential units and ancillary facilities and utilize potable and recycled water for construction, operations, and landscape maintenance. As previously described above, water supplies would be provided to the project site by Camrosa. Between 2010 and 2015, the CSUCI campus decreased potable water use despite a growing campus population by substituting recycled water. Campus potable water use fell from 275 AF in 2010 to 217 AF in 2015, while recycled water use rose from 131 AF to 256 AF over the same time period. In addition, Camrosa water demand projections, presented in its 2015 UWMP, factor in student count increases and future buildout of the CSUCI campus over the next 10 to 15 years (Camrosa Water District 2016).

As discussed in the Water Supply Assessment, included as Appendix K to this EIR, Camrosa currently projects that it will have a surplus water supply of over 8,000 AFY through the year 2035. The proposed project is anticipated to require approximately 18.09 AFY of recycled water and 348.36 AFY of domestic water, for a total new water supply requirement of 366.45 AFY, based on Camrosa design factors.⁵ This quantity is less than five percent of forecast water supply surplus for the period of 2020 to 2035. Nonetheless, the proposed project would result in 358 more residential units than originally planned, for a total of 600 new residential units and associated water requirements.

An August 1979 agreement with the then Camarillo State Hospital provides for up to 900,000 gallons per day (gpd) of potable water to be provided to the campus by Camrosa. Usage data from the past year indicates less than 450,000 gpd of campus demand on any given day; this included usage during construction activity. Adding the estimated daily usage from the proposed project (310,992 gpd) based on the conservative Camrosa design factors to the current actual daily use at the campus of 450,000 gpd demonstrates that the campus would remain well below the 900,000 gpd volume identified in its current agreement with Camrosa. The University's potable water demand, including the recently constructed 600 bed student housing unit, the proposed project, and anticipated growth of the University to 2025, would also remain well below the 1979 agreement for water provision based on actual water demand factors, rather than the more conservative Camrosa demand factors used to derive the estimate daily use for the proposed project. Therefore, the proposed project would not represent "new development" and is not subject to the requirements of the Camrosa moratorium on new development. With that said, the University intends to continue its program to reduce water demand at the campus including, but not limited to, replacement of turf with drought tolerant landscaping, installation of water saving fixtures, and other water conservation measures. Potential impacts to water supply would be less than significant.

⁵ Based on actual water usage values over the previous five years for the University Glen Phase 1 community, project operations would require 15.68 AFY of recycled water for irrigation and 54.06 AFY of domestic (potable) water.

Mitigation Measures

No mitigation is required.

Impact U-2 : THE PROPOSED PROJECT WOULD INCREASE WASTEWATER GENERATION AT THE PROJECT SITE, BUT THIS INCREASE WOULD NOT REQUIRE NEW OR EXPANDED TREATMENT FACILITIES AND WOULD NOT EXCEED TREATMENT REQUIREMENTS. IMPACTS RELATED TO WASTEWATER GENERATION WOULD BE LESS THAN SIGNIFICANT. (THRESHOLD 5)

The *Sewer, Domestic Water and Recycled Water Report for University Glen Phase 2 at CSU Channel Islands* (Huitt-Zollars 2017b) assesses the net increase in sewer generation between the previously entitled 242-unit project and the proposed 600-unit project, in order to determine whether the existing downstream sewer system has sufficient capacity to accommodate the proposed project.

The existing backbone sewer system that services the project site will convey flows through an existing 12-inch PVC line located within Channel Islands Drive, which extends through the University Glen Phase 1 community and into the CWRP. As discussed above under “Wastewater”, the CWRP is currently operating at approximately 90 percent of its current capacity and, as a result, Camrosa is currently in the process of expanding the capacity of the facility (Camrosa Water District 2016); this action is separate from the proposed project and would occur regardless of the proposed development.

The existing in-tract sewer lines from the partially developed 242-unit single-family residential project will be demolished and a new sewer system will be designed to fit the current project site plan. Flow rates to analyze sewer generation for the previously entitled 242-unit project were based on criteria set forth by the Camrosa Water District Sanitary Sewer Design and Construction Standards for single- and multi-family dwellings, and average flow rate and peak daily flow rate were calculated with an assumed Peak Flow factor of five (most conservative value). The results for the previously entitled 242 unit project can be found in Table 63 below.

Table 63 Average and Peak Flows for the SRP Approved 242 Single-Family Residential Project

POC # 1 – Intersection of Channel Islands Drive and Project Outlet Location			
Land Use	Cumulative Number of Units	Computed Average Flow	Computed Peak Flow^[1]
Single Family Dwelling	242	88,088 gal/day	440,440 gal/day
Multi-Family Dwelling	0	0 gal/day	0 gal/day
Total	242	88,088 gal/day 61 gal/min	-- 306 gal/min

Source: Huitt-Zollars 2017b

Notes: [1] Assumed peak flow factor of 5

SRP = Specific Reuse Plan, POC = point of connection, gal/day = gallons per day, gal/min = gallons per minute

Similarly, flow rates to analyze sewer generation for the proposed 600-unit project were obtained using criteria set forth by the Camrosa Water District Sanitary Sewer Design and Construction Standards for single and multiple family dwellings, and the average flow rate and peak daily flow rate were calculated with an assumed Peak Flow factor of five. In order to verify that the existing downstream backbone sewer has sufficient capacity to handle the increased number of dwelling units, average flow rates and peak flow rates were calculated at additional downstream locations. Each location took into consideration the increase in sewer generation due to the existing units draining into the same backbone system. Each location is identified below and the corresponding results can be found in Table 64.

- POC # 1: Intersection of Channel Islands Drive and Project Outlet Location
- POC # 2: Intersection of Channel Islands Drive and Culyer Harbor Drive

- POC # 3: Intersection of Camarillo Street and Rincon Drive

Table 64 Average and Peak Flows Downstream from the Project

POC # 1 – Intersection of Channel Islands Drive and Project Outlet Location			
Land Use	Cumulative Number of Units	Computed Average Flow	Computed Peak Flow^[1]
Single Family Dwelling	120	43,680 gal/day	218,400 gal/day
Multi-Family Dwelling	480	103,200 gal/day	516,000 gal/day
Total	600	146,880 gal/day 102 gal/min	-- 510 gal/min

POC # 2 – Intersection of Channel Islands Drive and Culyer Harbor Drive			
Land Use	Cumulative Number of Units	Computed Average Flow	Computed Peak Flow^[1]
Single Family Dwelling	156	56,784 gal/day	283,920 gal/day
Multi-Family Dwelling	688	147,920 gal/day	739,600 gal/day
Total	844	204,704 gal/day 142 gal/min	-- 711 gal/min

POC # 3 – Intersection of Channel Islands Drive and Rincon Drive			
Land Use	Cumulative Number of Units	Computed Average Flow	Computed Peak Flow^[1]
Single Family Dwelling	250	91,000 gal/day	455,000 gal/day
Multi-Family Dwelling	1,008	216,720 gal/day	1,083,600 gal/day
Total	1,258	307,720 gal/day 214 gal/min	-- 1,068 gal/min

Notes: [1] Assumed peak flow factor of 5

SRP = Specific Reuse Plan, POC = point of connection, gal/day = gallons per day, gal/min = gallons per minute

When comparing the Peak Flow Rates for the previously entitled 242-unit project (Table 63) and the proposed 600-unit project (shown above), the results indicate that the current planned development will generate a net increase of 204 gal/min during the peak hour. The analysis provided in the *Sewer, Domestic Water and Recycled Water Report for University Glen Phase 2 at CSU Channel Islands* (Huitt-Zollars 2017b) determines that the existing backbone sewer system has sufficient capacity to accommodate the increase in flows.⁶ As discussed above, regarding the CWRP, there is existing remaining treatment capacity at the facility, and current capacity is planned to be further expanded by Camrosa.

Compliance with water quality standards and regulations addressed in Section 4.5, *Hydrology and Water Quality*, would ensure acceptable water quality standards are maintained, including with respect to wastewater generated under the proposed project. Therefore, potential impacts would be less than significant.

Mitigation Measures

No mitigation is required.

⁶ Based on actual water usage values over the previous five years for the University Glen Phase 1 community, project operations would require substantially lower amounts of domestic (potable) water than estimated in the Huitt-Zollars analysis, which is based on Camrosa design factors. With this reduced domestic water demand there would be an accompanying reduction in wastewater generation and a decrease in flow rates.

4.12.5 Cumulative Impacts

Water

This cumulative analysis considers the project in the context of the service area of the CWD, as this is the agency that would serve the project. As discussed above, the CWD anticipates sufficient water supply availability to accommodate the proposed project requirements as well as other anticipated development within the service territory. In addition, the demand from the proposed project would not exceed the daily demand value in current water agreement in place between the University and Camrosa. Therefore, the proposed project would not contribute to significant cumulative impacts to water supply.

Wastewater

As discussed above, the proposed project would increase wastewater generation at the project site, in comparison with the previously entitled development; however, the increase would not require new or expanded treatment facilities and would not exceed treatment requirements. Therefore, the proposed project would not contribute to cumulative impacts regarding wastewater conveyance or treatment.

5 Other CEQA Required Discussions

5.1 Growth Inducing Effects

Section 15126(d) of the *State CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could do so by removing an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending on the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is, therefore, considered significant if it could result in significant physical effects in one or more environmental issue areas.

5.1.1 Economic and Population Growth

Economic

The proposed project would generate temporary employment opportunities during construction. However, the size and scale of the proposed project is such that it would be expected to draw workers from the existing local work force and would not result in an influx of new population to the area during construction. Therefore, construction of the proposed project would not be considered growth inducing from a temporary employment standpoint.

The proposed project does not involve any commercial uses that would generate permanent employment opportunities. The proposed project would result in development of 600 residential units, comprised of apartments, townhomes, and single-family residences. Additionally, the proposed project would include a central park and community center and neighborhood parks. The proposed project could provide employment opportunities associated with operation and maintenance of the project site (e.g. landscaped areas, buildings), but again these jobs would be expected to be filled by workers from the existing local work force. Therefore, the proposed project would not be growth-inducing with a respect to jobs and the economy.

A jobs-housing ratio over 1.5:1 is considered high and may indicate an increasing imbalance between jobs and housing (i.e., new residential construction has not kept up with job creation), while a ratio below 1:1 is considered low (Cervero 1996). According to Southern California Association of Governments (SCAG) data, in 2012 (the most recent year for which SCAG data is available) Ventura County had a jobs-housing ratio of 1.23:1 (SCAG 2016). This indicates that there are 1.23 jobs for every housing unit in Ventura County. Development of the small number of temporary and permanent jobs associated with the proposed project would, however, incrementally lower the existing job-housing ratio in Ventura County. Due to the large number of existing jobs in the area, development of the project would not significantly alter the jobs-housing ratio nor result in an imbalance between available employment opportunities and housing availability.

Population Growth

The project site would result in a total of 600 residential units. This increase in residential units would induce population growth. The current, 2016, population of Ventura County was 856,508 persons (DOF 2016) and SCAG forecasts the population to grow to 965,400 persons by 2040, an increase of 108,508 persons. Based on an average household size of 3.21 for single-family residences and 2.36 for multi-family residences, development of the proposed project would add an estimated 1,518 residents (120

single-family units x 3.21 persons/dwelling unit and 480 multi-family units x 2.36 persons/dwelling unit), based on Ventura County Municipal Code, Section 8209-6.3 *Additional population generated by subdivision*, over the existing population in the county. This population growth is well within the 2040 projection for the county as a whole.

5.2 Removal of Obstacles to Growth

The project site is currently vacant. However, it is adjacent to a developed area with existing infrastructure. The currently entitled development of 242 residential units on the project site includes extension of infrastructure to service proposed residences. As discussed in Sections 4.5, *Hydrology and Water Quality*, and 4.11, *Utilities and Service Systems*, the existing utilities and infrastructure, including roadway configuration and utility lines, would need to be replaced and/or modified to serve the increased density and layout of the proposed project over what is currently entitled. While infrastructure would be altered in order to accommodate the higher density development, the proposed project would not further extend infrastructure beyond the project site through undeveloped areas. Therefore, project implementation would not remove an obstacle to growth.

5.3 Irreversible Environmental Effects

The *State CEQA Guidelines* require that Environmental Impact Report (EIRs) evaluating projects that involve amendments to public plans, ordinances, or policies, contain a discussion of significant irreversible environmental changes. Because the proposed project includes an amendment to the Specific Reuse Plan this information is provided here. This section addresses nonrenewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

Conversion of the project site from a graded and partially developed, vacant property to a residential development with a mix of single- and multi-family residences along with recreational and open space areas would result in a long term increase in the level of use at the site. The proposed project would involve the use of building materials and energy, some of which are nonrenewable resources. Consumption of these resources would occur with any development in the region and are not unique to the proposed project. Resources that would be consumed as a result of project implementation include water, electricity, and fossil fuels during construction and operations; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources. Compliance with applicable building codes, including CALGreen, as well as University policies, the Specific Reuse Plan and the mitigation measures identified in this DEIR would ensure that natural resources are conserved to the extent feasible.

State CEQA Guidelines Section 15021 also requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this EIR concludes that the proposed project would not result in any significant and unavoidable impacts.

5.4 Energy Conservation

Public Resources Code Section 21100(b)(2) and Appendix F of the *State CEQA Guidelines* require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

5.4.1 Environmental Setting

State

California is one of the lowest per capita energy users in the U.S., ranked 49th in the nation, due to its energy efficiency programs and mild climate (U.S. Energy Information Administration [EIA] 2014). California used 295,405 gigawatt-hours (GWh) of electricity in 2015 (CEC 2017a) and 2,309,759 million cubic feet of natural gas in 2014 of which 401,172 million cubic feet were consumed by residential users (EIA 2015). In addition, Californians presently consume nearly 18 billion gallons of motor vehicle fuels per year (California Energy Commission [CEC] 2014). The single largest end-use sector for energy consumption in California is transportation (38.7 percent), followed by industry (24.4 percent), commercial (18.6 percent), and residential (18.3 percent) (EIA 2014).

The majority of California's electricity is generated in-state with approximately 44 percent imported from the Northwest and Southwest in 2015 (CEC 2015). In addition, approximately 26 percent of California's electricity supply comes from renewable energy sources (CEC 2016a), such as wind (24,100 GWh), solar photovoltaic (PV) (15,100 GWh), geothermal (12,900 GWh), and biomass (8,600 GWh) (CEC 2016). Senate Bill (SB) 350, adopted in October 2015, requires that renewables supply 50 percent of retail electricity by 2030. Self-generation using rooftop solar PV and increased appliance energy efficiency has resulted in a decline in State energy total system power in 2015, a trend that is expected to continue (CEC 2016a).

California's existing gas supply portfolio is regionally diverse and includes supplies from California sources (onshore and offshore), Southwestern U.S. supply sources (the Permian, Anadarko, and San Juan basins), the Rocky Mountains, and Canada (California Gas and Electric Utilities 2016). California natural gas demand, including volumes not served by utility systems, is expected to decrease at a rate of 1.4 percent per year from 2016 to 2035. Residential gas demand is expected to decrease at an annual average rate of 0.5 percent due to aggressive energy efficiency programs (California Gas and Electric Utilities 2016).

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline (CaRFG), which is sourced almost exclusively from in-state refineries. Gasoline is the most used transportation fuel in California, with 15.1 billions of gallons sold in 2015, and is used by light-duty cars, pickup trucks, and sport utility vehicles (CEC 2016b). Diesel is the second most used fuel in California, with 4.2 billion gallons sold in 2015, and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm, and construction and heavy duty military vehicles (CEC 2016c). Both gasoline and diesel are primarily petroleum-based and their consumption releases greenhouse gases, including CO₂ and NO_x. The transportation sector is the single largest source of greenhouse gas (GHG) emissions in California, accounting for 37 percent of all inventoried emissions in 2013 (ARB 2016b).

The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. It provides guidance on construction techniques to maximize energy conservation and minimum efficiency standards for a variety of building elements, including appliances, heating and cooling equipment, and insulation for doors, pipes, walls and ceilings. The California Green Building Standards Code (CALGreen) sets targets for: energy efficiency, water consumption, dual plumbing systems for potable and recyclable water, diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design.

Regional

Electricity service for the proposed project would be provided by Southern California Edison (SCE), which provides electricity to about 14 million people in Southern California. In 2015, SCE provided 27,581 millions of kWh (GWh) to its residential users (CEC 2016d). SCE's power mix consists of approximately 25 percent renewable energy sources (wind, geothermal, solar, small hydroelectric, and biomass) (SCE 2015). Gas service would be provided by the Southern California Gas Company (SoCalGas), which serves 21.6 million consumers throughout Southern California. In 2015, SoCalGas provided 2,038 million therms to its residential users (CEC 2016e).

5.4.2 Methodology and Significance Thresholds

Appendix F of the *State CEQA Guidelines* requires inclusion of relevant information in the EIR that addresses a project's energy consumption impacts and its ability to avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy. Although Appendix F does not identify a threshold for determining the significance of impacts, for purposes of determining the significance of an impact in this EIR, the following criteria are used:

- 1 Would the project result in the wasteful and inefficient use of nonrenewable resources during construction and operation of the project?
- 2 Would the project result in the need for new systems or substantial alterations to electrical or natural gas infrastructure, the construction or operation of which would have significant impacts on the physical environment?

5.4.3 Project Impacts

The proposed project would involve the use of energy during construction and operation. Energy use during the construction phase would be primarily in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. Temporary grid power may also be provided to construction trailers or electric construction equipment. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with the proposed project would increase fuel consumption.

THRESHOLD 1: WOULD THE PROJECT RESULT IN THE WASTEFUL AND INEFFICIENT USE OF NONRENEWABLE RESOURCES DURING CONSTRUCTION AND OPERATION OF THE PROJECT?

The proposed project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the CALGreen (Title 24, Part 11 of the California Code of Regulations). Adherence to Title 24 requirements would ensure that the proposed project would not result in wasteful and inefficient use of nonrenewable resources due to building operation. In addition, the proposed project would recycle and reuse existing road material on the project site to construct a new road network, which would reduce the number of hauling trips associated with construction of the proposed project, and therefore, reduce fuel use during construction.

The proposed project would develop new residences to serve the CSUCI population and qualifying members of the public. The intent is to attract faculty and staff to the University by providing housing opportunities near the campus, including retirees, for a hybrid community where these groups would be given priority by management as long as demand exists, and then open to the public for the balance. Many of the proposed project's future residents would likely access the CSUCI campus, which is located

only a mile away, by foot or bicycle given the proximity to the project site and the limitations on parking availability at the campus. If vehicle trips to the campus from the project site are made, they would be of short duration. By generating new housing close to the main employment/ education center in the area, the proposed project would help limit vehicle miles traveled (VMT), and thus, fuel use, associated with campus use.

All equipment used during the construction phase of the project would be required to comply with the regulations of Title 13, Chapter 9, of the California Code of Regulations pertaining to construction equipment specifications. The regulations require that new and old construction equipment be properly tested, maintained, and operated to reduce air pollutant emissions. Compliance with Title 13 would not only reduce exhaust emissions, but would also improve the fuel economy of the equipment fleet. Mitigation Measure N-1(b) requires that the construction vehicles and equipment used on the project site are not to be left idling for longer than five minutes when not in use. Mitigation Measures AQ-2(b) requires that construction equipment is maintained in good condition and proper tune as per manufacturers' specifications and that alternatively fueled construction equipment, such as compressed natural gas (CNG), liquefied natural gas (LNG), or electric, be used, if feasible. Compliance with Title 13, as well as Mitigation Measure AQ-2(b) would ensure that construction equipment is energy efficient and that, when feasible, electrical power is used to run equipment rather than diesel equipment.

THRESHOLD 2: WOULD THE PROJECT RESULT IN THE NEED FOR NEW SYSTEMS OR SUBSTANTIAL ALTERATIONS TO ELECTRICAL, NATURAL GAS, OR COMMUNICATION SYSTEMS INFRASTRUCTURE, THE CONSTRUCTION OR OPERATION OF WHICH WOULD HAVE SIGNIFICANT IMPACTS?

New construction, or substantial alteration of existing, energy infrastructure to expand capacity could result in potentially significant environmental impacts. To determine whether the proposed project would require substantial alteration or new infrastructure, the proposed project's energy demands were estimated and compared to statewide demand. Table 65 shows the proposed project's estimated annual operational fuel use due to resident vehicle travel. Fuel usage was estimated using the default fleet vehicle mix in CalEEMod, total annual mitigated annual VMT for the proposed project as estimated by CalEEMod, and average fuel efficiencies for the different vehicle categories (see Appendix D for CalEEMod results and Section 4.2, *Air Quality*, for a discussion of mitigation applied to the emissions model to reduce VMT). Based on these assumptions, the proposed project would result in the consumption of approximately 466,290 gallons of vehicle fuel per year during operation, which represents approximately 0.0003 percent of annual statewide fuel consumption.

Table 66 shows the proposed project's energy demand compared to statewide demand. Electricity and natural gas consumption were estimated using CalEEMod. Based on these assumptions the proposed project would utilize approximately 3,040 megawatt hours (MWh) of electricity and 3.5 million cubic feet of natural gas per year during operation, which represents approximately 0.001 percent and 0.00015 percent of statewide annual demand for electricity and natural gas, respectively.

Based on these comparisons of proposed project fuel consumption and electricity and natural gas demand to statewide demand for these resources, the proposed project's energy demand would result in a nominal increase statewide energy demand. Furthermore, California's use of nonrenewable electricity and natural gas are expected to continue to decline due to stringent energy efficiency measures and a mandated increase in renewable energy use, which would serve to at least partially offset the increase in nonrenewable energy use resulting from the proposed project. Therefore, the proposed project would not result in the need for construction of new facilities or substantial alteration of existing facilities to meet the proposed project's energy demands.

Table 65 Estimated Project-Related Annual Motor Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips ¹	Annual Vehicle Miles Traveled ²	Average Fuel Efficiency (miles/gallon) ³	Total Annual Fuel Consumption (gallons)
Passenger Cars	58.33	4,982,643	23.3	213,847
Light/Medium Trucks	34.47	2,946,319	17.1	172,299
Heavy Trucks/Other	6.78	579,374	7.3	79,366
Motorcycles	0.40	33,724	43.4	777
Total	100%	8,542,060	-	466,290

¹ Percent of vehicle trips found in Table 4.3 “Trip Type Information” in CalEEMod output (see Appendix D)

² Mitigated annual VMT found in Table 4.2 “Trip Summary Information” in CalEEMod output (see Appendix D). Annual VMT per vehicle type = Mitigated annual VMT x Percent of vehicle trips per vehicle type.

³ Source: Tables 4-12 and 4-13 in U.S. Department of Transportation, Research and Innovative Technology Administration 2013.

Note: Total may not add up due to rounding.

Table 66 Estimated Project Energy Use Compared to Statewide Energy Use

Form of Energy	Units	Annual Project-Related Energy Use	Annual Statewide Energy Use	Project % of Statewide Energy Use
Electricity	Megawatt hours	3,040 ¹	295,405,000 ³	0.001
Natural Gas	Billions of cubic feet	0.0035 ¹	2,313 ⁴	0.00015
State Motor Vehicle Fuels	gallons	466,290 ²	18,019,000,000 ⁵	0.0003

¹ CalEEMod output (see Appendix B of the Initial Study [Appendix A] for calculation results)

² See Table 65

³ California Energy Commission (CEC) 2017a

⁴ CEC 2017b

⁵ CEC 2015

As the proposed project would not result in an inefficient, wasteful, or unnecessary use of energy or require the construction or alteration of energy infrastructure, the proposed project would result in less than significant environmental impacts due to energy use.

6 Alternatives

As required by section 15126.6(a) of the CEQA Guidelines, this EIR examines a reasonable range of alternatives to the proposed project that could feasibly achieve most of the basic project objectives, but would avoid or substantially lessen the proposed project's significant impacts.

In identifying suitable alternatives, potential alternatives must be reviewed to determine whether they:

- Can avoid or substantially reduce significant environmental effects;
- Can attain most of the basic project objectives;
- Are potentially feasible; and
- Are reasonable and realistic.

CEQA provides the following additional guidance for discussing project alternatives:

- An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives.
- An EIR is not required to consider alternatives that are infeasible. The term "feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological and legal factors.
- The EIR must focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project.
- The alternatives discussed should be ones that offer substantial environmental advantages over the proposed project.
- The EIR should briefly describe the rationale for selecting the alternatives to be discussed, as well as any alternatives that the lead agency considered but rejected.
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project.
- The alternatives analysis discussed must be reasonable, and selected to foster informed decision-making and public participation. An EIR need not consider an alternative where the effect cannot reasonably be ascertained or where the implementation is remote or speculative, because unrealistic alternatives do not contribute to a useful analysis.

Consistent with the above parameters, included in this analysis are the CEQA-required "No Project" alternative and one additional alternative. The alternatives were selected for analysis because they are potentially feasible and may be able to reduce one or more of the significant adverse impacts associated with the proposed project. The alternatives are summarized below and discussed in detail in the following sections.

- Alternative 1: No Project
- Alternative 2: Previously Entitled Development
- Alternative 3: Inspiration Point

In conducting the alternatives analysis, as discussed previously, consideration must be given as to how, and to what extent, an alternative can meet the project's basic objectives. The objectives for the project, as listed in Section 2.3.4, are as follows:

- Provide multiple types of high-quality, local housing to attract faculty and staff to the CSUCI campus from outside the area.
- Provide additional housing resources that blend with and augment the existing University Glen community to form one cohesive neighborhood.

- Provide a live/work environment associated with the CSUCI campus.
- Provide age- and income-restricted housing to respond to the community request for a mixed demographic of apartments, single-family detached houses, and townhomes.
- Provide additional active and passive recreational amenities for use by the entire University Glen community.
- Utilize the Private-Public Partner (P3) development process to provide a method for implementation of the project.

6.1 Significant and Unavoidable Impacts to the Proposed Project

Mitigation measures summarized in the Executive Summary and described more fully throughout this EIR would reduce significant impacts associated with the proposed project to a less than significant level. Therefore, the proposed project would not result in any environmental impacts that would be significant and unavoidable, following the implementation of project-specific mitigation and compliance with applicable laws and regulations. Potential impacts would be less than significant.

6.2 Alternatives Considered but Rejected

Section 15126.6 of the State CEQA Guidelines states:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

- 1 Failure to meet most of the basic project objectives;
- 2 Infeasibility; or
- 3 Inability to avoid significant environmental impacts.

Among the factors that may be taken into account when addressing the feasibility of alternatives are: site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

The alternative identified below was considered but eliminated from further discussion for the reasons provided in the following discussion.

6.2.1 Alternative Location

The California Supreme Court, in *Citizens of Goleta Valley v. Board of Supervisors* (1990), indicated that a discussion of alternative sites is needed if the project “may be feasibly accomplished in a successful manner considering the economic, environmental, social, and technological factors involved” at another site. Criteria that form the basis of whether alternative sites need to be considered in detail include:

- 1 Could the size and other characteristics of another site physically accommodate the project?
- 2 Is another site reasonably available for acquisition?
- 3 Is the timing of carrying out development on an alternative site reasonable for the applicant?
- 4 Is the project economically feasible on another site?
- 5 What are the land use designation(s) of alternative sites?
- 6 Does the lead agency have jurisdiction over alternative sites? And
- 7 Are there any social, technological, or other factors which may make the consideration of alternative sites infeasible?

In order to meet the project objectives described above, particularly with respect to providing multiple types of housing at the CSUCI campus and providing a live/work environment for the CSUCI campus, alternative locations for the proposed project would need to occur on the CSUCI campus. At this time there are no alternative locations available with the appropriate land use designation for this type of development on the CSUCI campus. Therefore, alternative locations were eliminated from further analysis because they would not meet the objectives of the proposed project.

6.3 No Project Alternative

6.3.1 Description

The No Project Alternative assumes that the proposed project would not be implemented, and no action would occur. As such, the previously entitled 242-unit development would not be constructed, and the project site would remain in its current state, consisting of level, graded areas, as well as building pads, retaining walls, and an array of paved streets, curbs, and gutters. The majority of the 32-acre project site is contained within a circularly-shaped development area, as well as an area to the northwest known as Inspiration Point, which is physically separated from the rest of the project site by an unnamed drainage which is crossed by a developed road. As with the rest of the project site, the Inspiration Point site is also leveled/graded, and features building pads and retaining walls, as well as a variety of other minor improvements in preparation for implementation of the project.

6.3.2 Impact Analysis

With implementation of the No Project Alternative, the project site would remain under existing conditions, and activities would continue as they currently are. The visual character of the site would remain as a vacant site with partial improvements, similar to an unpaved parking lot. Expansive views of the surrounding ridgelines from the nearby roadways would remain. Additional development on the project site would not occur, and the site may continue to be used for purposes such as overflow parking for events on the CSUCI campus. As such, short- and long-term impacts associated with land use changes on the project site would generally not occur. No additional residents, employees, or visitors would be brought onto the project site as a result of the No Project Alternative, and impacts that are typically based on a per-capita generation would not occur under this alternative.

The project site is currently disturbed by previous grading and leveling and the main project site (not including the Inspiration Point area) is regularly rotary de-weeded for use of the site for overflow

parking. These activities would continue to occur under the No Project Alternative, which also would not include the implementation of stormwater drainage improvements proposed as part of the project; therefore, existing rates and patterns of stormwater runoff from the site would continue as they presently occur, including at the Inspiration Point culvert which is subject to overflow during large storm events. Existing hazards associated with flooding would persist under the No Project Alternative.

Overall, impacts resulting from the No Project Alternative would be less than for the proposed project or other identified alternatives (discussed below). The CSUCI Specific Reuse Plan would not be amended under the No Project Alternative nor would it provide the envisioned land use of residential development identified in the Specific Reuse Plan. In addition, this alternative would not provide for higher density development near a major employment area. None of the project objectives would be achieved through implementation of the No Project Alternative.

6.4 Alternative 2: Previously Entitled Development

6.4.1 Description

The Previously Entitled Development Alternative would implement the residential development previously entitled for the project site, consisting of 242 new single-family residential units. Under this alternative, the CSUCI Specific Reuse Plan would not be amended to allow for the additional 358 residential units that would occur under the proposed project, because the Specific Reuse Plan already accounts for the 242 units included under the Previously Entitled Development Alternative. As such, the project site would remain designated for low to low-medium residential density (zero to 10 units per acre) development, and the 242 single-family units previously approved for the project site would be constructed.

Potential environmental impacts associated with the Previously Entitled Development Alternative would be similar to the impacts anticipated to occur under the proposed project, but would be of generally lesser intensity due to the construction of 358 fewer residential developments. Each environmental issue area addressed in the EIR is addressed below for Alternative 2.

6.4.2 Impact Analysis

With implementation of the Previously Entitled Development Alternative, the same types of construction and operational activities that would occur under the proposed project would be implemented, except that they would be of a lesser intensity due to the implementation of 358 fewer residential units. The impact discussions provided below characterize how environmental impacts could occur under this alternative.

a. Aesthetics

The Previously Entitled Development Alternative would not require an approval or amendment to the existing CSUCI Specific Reuse Plan, and would be fully consistent with the Specific Reuse Plan including with respect to aesthetics. In comparison with existing site conditions, which include a level (graded) area including a series of building foundations, retaining walls, streets, and gutters, this alternative would introduce new structures and landscaping to introduce the previously entitled 242 residential units. As such, views into the project site from the surrounding area and hillsides would be altered, and views from the project site to the surrounding area would also be altered. The project site would be developed in a manner that provides for a seamless expansion of the existing University Glen Phase I community, to include a similar scale, character, quality, and connective nature with the proposed University Glen Phase 2, though of somewhat lower density than proposed as part of the project. The

structures could be up to a maximum of 40 feet in height, similar to the existing University Glen Phase 1 housing located directly south of the project site. This development would be consistent with the existing visual character of the CSUCI campus. Similar to the proposed project, potential impacts to aesthetics would be less than significant.

b. Air Quality

Construction emissions associated with the Previously Entitled Development Alternative would have the same characteristics as the proposed project, but would be of a lesser intensity due to the implementation of 358 fewer residential units under the Previously Entitled Development Alternative. The following mitigation measures are required to address construction emissions associated with the proposed project and would be implemented for this alternative, to ensure that potential impacts to air quality would be less than significant.

- MM AQ-2(a) Construction Fugitive Dust Emissions
- MM AQ-2(b) Construction ROC and NO_x Emissions

As with the proposed project, there would be potential for Valley Fever to occur in previously undisturbed areas, where soils may harbor malignant fungal spores. Similar to the proposed project, the following mitigation measure would be implemented to address the potential for Valley Fever to occur in previously undisturbed areas of the project site.

- MM AQ-6 Valley Fever

Due to the small magnitude of DPM emissions that would be generated during construction, the attenuation of emissions by distance and wind direction, and the temporary duration of construction activities, potential TAC impacts due to DPM emissions would be less than significant for the proposed project. Given that the construction activities associated with this alternative would be of lesser intensity due to the fewer number of units, this alternative would further reduce this already less than significant impact.

As described in Section 4.2, *Air Quality*, the proposed project would exceed the VCAPCD significance threshold for operational NO_x emissions. The reduction in number of units associated with the Previously Entitled Development Alternative would reduce operational NO_x emissions associated with vehicle trips and energy use. The estimated population at the project site under this alternative would be 776 people, based on a factor of 3.21 persons per single-family unit. This is approximately 50% of the population of the proposed project. Using the single family residential trip generation rate from the traffic study (Appendix I), this alternative would generate an estimated 2,303 daily trips, approximately 1,486 fewer than the proposed project. This approximately 40% reduction in vehicle trips would reduce NO_x emissions from this alternative to below VCAPCD thresholds. Impacts would be less than significant and implementation of mitigation measure AQ-1 would not be required.

Similar to the proposed project, this alternative would not cause the population of unincorporated Ventura County to exceed population forecasts, and would be consistent with the VCAPCD AQMP and would meet the VCAPCD Guidelines significance criterion regarding population impacts. Also, similar to the proposed project, this alternative would not reduce intersections to a LOS E or F and, therefore, would not result in a CO hot spot. Impacts for both of these would be less than significant and no mitigation would be required.

c. Biological Resources

The 32-acre site is currently undeveloped, but previously disturbed through previous grading and regular rotary de-weeding activities. As with the proposed project, construction of the Previously Entitled Development Alternative and maintenance of the 100-foot fuel modification zone would have the

potential to impact special status wildlife and plant species. The following mitigation measures would be implemented to ensure that potential impacts to biological resources would be less than significant.

- MM BIO-1(a) Nesting Birds
- MM BIO-1(b) Special Status Plant Surveys
- MM BIO-1(c) Special Status Plant Avoidance Measures
- MM BIO-1(d) Restoration Plan

Also as with the proposed project, the Previously Entitled Development Alternative includes demolition of the existing drainage culvert and crossing, and construction of a new crossing and culvert at the crossing of Inspiration Point Road into the northern portion of the project site. This alternative would also require improvements to the rectangular orifice outlet that drains the constructed wetland located south of the project site. Therefore, the same acreages of impact to potentially jurisdictional waters would occur under this alternative as the proposed project. Similar to the proposed project, the following mitigation measures would be implemented to ensure that potential impacts to jurisdictional waters would be less than significant.

- MM BIO-2(a) Avoidance and Mitigation
- MM BIO-2(b) Compensatory Mitigation

Similar to the proposed project, potential impacts to biological resources would be less than significant with mitigation incorporated.

d. Cultural Resources

As described in the Initial Study prepared for the proposed project (included as Appendix A), previous disturbance on the project site has not uncovered any archaeological, paleontological, or cultural resources, or any human remains. However, there is potential the unanticipated remains or resources could be encountered during project-disturbing activities for this alternative. This potential impact would be the same for the Previously Entitled Development Alternative as for the proposed project because although residential units would be less dense, the same area of disturbance would be affected. Mitigation measures identified under Tribal Cultural Resources (which replace mitigation measure CR-1 included in the Initial Study) would be implemented to avoid potential impacts associated with the discovery of unanticipated cultural resources.

Similar to the proposed project, potential impacts to cultural resources associated with this alternative would be less than significant with mitigation incorporated.

e. Geology and Soils

Development of the project site for the Previously Entitled Development Alternative could expose people or structures to potential adverse effects associated with landslides. As discussed in the Initial Study for the proposed project (included as Appendix A), mitigation would be required to ensure that potential impacts would be less than significant.

- MM GEO-1(a) Incorporate recommendations of Geotechnical Study: Cal State University Channel Islands East Campus Development
- MM GEO-1(b) Update Geotechnical Study, as needed

Similar to the proposed project, development of this alternative at the project site could also potentially result in structures being placed on a geologic unit or soil that is unstable or could become unstable as a result of the project. As discussed in the Initial Study for the proposed project (included as Appendix A), mitigation would be required to ensure that potential impacts would be less than significant.

- MM GEO-3 Incorporate recommendations of 2007 Geotechnical Study Addendum

Impacts would be similar to those for the proposed project, and would be less than significant following implementation of the required mitigation measures.

f. Greenhouse Gas Emissions

As with the proposed project, construction of the Previously Entitled Development Alternative would result in greenhouse gas emissions beyond existing conditions due to construction activity and long-term operations. These emissions would be less than those associated with the proposed project due to the reduction in number of units (242 single-family versus 120 single-family and 480 multi-family) and lower population at the project site (776 versus 1,518). Total estimated GHG emissions would not exceed SCAQMD Tier 4 or 2021 CSU efficiency targets; therefore, the proposed project would not conflict with the GHG reduction goals of CSU, AB 32, or SB 32, and potential impacts would be less than significant.

This alternative would meet housing demands of a growing campus population in a manner that would encourage use of alternative modes of transportation and minimize transit-related GHG emissions resulting from expected population growth, though not to the extent of the proposed project. This alternative would not, however, result in higher density residential development within a mile of a major suburban employment center, given that it would be comprised of relatively low density single family residential development.

Impacts would be similar to the proposed project, though with regard to consistency with plans aimed at reducing GHG emissions this alternative would be less preferable when compared to the proposed project.

g. Hydrology and Water Quality

The development of the site would increase the quantity of impervious surfaces through the introduction of new structures to a presently undeveloped site. Implementation of the Previously Entitled Development Alternative would include a site-specific stormwater drainage plan in compliance with VCWPD requirements. As described for the proposed project, the existing drainage culvert and crossing at Inspiration Point would be demolished and replaced under the Previously Entitled Development Alternative, alleviating existing flooding hazards on the project site. The outlet to the existing constructed wetland would also be modified in order to reduce the peak discharges during a 100-year storm event, and mitigation would be implemented to address potential impacts.

- MM HWQ-1 Modification of the Rectangular Office Outlet from the Constructed Wetlands

Overall, while this alternative would likely result in a reduction in the amount of impervious surfaces at the project site due to the lower density of development, potential impacts to hydrology and water quality would be generally similar in nature to the proposed project and would be less than significant with mitigation incorporated.

h. Land Use and Planning

Surrounding land uses for the Previously Entitled Development Alternative are the same as for the proposed project. Under this alternative, the internal site design and layout would be less dense than under the proposed project, and would be consistent with the existing CSUCI Specific Reuse Plan (not requiring an amendment as described under the proposed project). Both the proposed project and this alternative would be compatible with adjacent and nearby land uses and would not conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Potential impacts would be less than significant. No mitigation would be required.

i. Noise

Construction and operation of the Previously Entitled Development Alternative would introduce new temporary construction and permanent operational noises to the project site. These uses and associated operational noise levels are accounted for in the CSUCI Specific Reuse Plan.

This alternative would result in similar levels of construction noise at the site as the proposed project, though the overall duration of construction activities would be less due to the fewer number of units to be constructed under this alternative. In order to address potentially significant short-term noise impacts associated with construction activities, the following mitigation measures would be implemented.

- MM N-1(a) Construction Activity Timing and Disclosure
- MM N-1(b) Vehicle and Equipment Idling
- MM N-1(c) Sound Control Curtains

Also similar to the proposed project, construction-related activities associated with this alternative would intermittently generate groundborne vibration on and adjacent to the project site. Construction vibration levels would be similar to the proposed project and would not exceed FTA thresholds for vibration, though the overall duration of construction activities would be shorter. Similar to the proposed project, impacts would be less than significant and no mitigation is required.

As described for the proposed project, University Glen Phase 1 residents would not experience a noise level increase exceeding applicable thresholds as a result of traffic generated by this alternative on Channel Islands Drive under the existing or cumulative scenarios; the Previously Entitled Development Alternative would introduce 358 fewer residential units, resulting in a fewer number of vehicle trips (approximately 1,486 fewer than the proposed project). Therefore, traffic noise levels from this alternative would be lower than the proposed project and would also not exceed applicable thresholds. Similar to the proposed project, impacts would be less than significant.

j. Public Services

Similar to the proposed project, implementation of this alternative would increase the service population for the Ventura County Fire Department and require police protection services from the University Police Department. The estimated increase in service population at the project site under this alternative would be 776 people, based on a factor of 3.21 persons per single-family unit. This is approximately 50% of the population of the proposed project. Therefore, similar to the proposed project, this increase in service population would not trigger the need to construct a new fire station, police facilities, or alter existing facilities to accommodate additional personnel or equipment to maintain acceptable performance standards and levels of service. Therefore, as with the proposed project, impacts related to fire protection and police protection services would be less than significant.

k. Recreation

The Previously Entitled Development Alternative would introduce 358 fewer residential units than the proposed project, resulting in an estimated population at the project site of 778 compared to the estimated proposed project population of 1,518. Regional parks and recreational facilities serving the project site are the same for the Previously Entitled Development Alternative as for the proposed project; the total currently available acreage of parks and recreational facilities serving the campus and CSUCI University Glen Phase 1 community totals 481.47 acres.

As with the proposed project, implementation of the Previously Entitled Development Alternative would include park and open space areas. Assuming a similar amount of park area could be accommodated in the reduced density design of this alternative, park acreage would be the same as for the proposed project at 3.7 acres.

With this alternative the total population of the University Glen community would be 2,561, based on a University Glen Phase 1 population of 1,783 and a population of 778 for this alternative. The Specific Reuse Plan park and recreation facility guideline of five acres for each 1,000 residents would then total 12.8 acres. As described in Section 4.9, *Recreation*, the current available parks, recreational facilities, and natural resource/open space would provide between 17.48 and 72.34 acres of parks, recreational facilities, and natural resource/open space for the residents to use for recreational, which is well above the minimum guideline of five acres per 1000 people. Similar to the proposed project, impacts would be less than significant and no mitigation is required.

I. Transportation and Circulation

The proposed project and the Previously Entitled Development Alternative are located on the same project site, and would therefore have the potential to affect the same intersections and roadway segments in the surrounding area. This alternative would introduce 358 fewer new residential units to the project site than the proposed project. The estimated population at the project site under this alternative would be 776 people, based on a factor of 3.21 persons per single-family unit. This is approximately 50% of the population of the proposed project. Using the single family residential trip generation rate from the traffic study (Appendix I), this alternative would generate an estimated 2,303 daily trips, approximately 1,486 fewer than the proposed project. This is an approximately 40% reduction in vehicle trips compared to the proposed project.

Operation of the proposed project would not cause study area intersections or road segments to exceed applicable LOS criteria in the CSU TISM under either the Existing (2016) plus Project or Cumulative (2022) plus Project conditions. Therefore, this alternative, with its 40% reduction in vehicle trips, would also not exceed applicable LOS criteria in the CSU TISM.

Similar to the proposed project, this alternative, with its 40% reduction in vehicle trips, would not result in impacts to the CMP roadway network. The study area intersections would operate at LOS D or better.

This alternative would reduce the amount of proposed project-related traffic using intersection of U.S. 101 Southbound Ramps & Ventura Boulevard, though the intersection would still change from LOS C to LOS D in the AM peak hour only. Because this alternative would cause the LOS to degrade from LOS C to LOS D with the addition of project traffic, this would result in a potentially significant impact under Caltrans performance thresholds, similar to the proposed project and the same mitigation measure required for the proposed project would be required. Addition of the reduced level of traffic from this alternative would also cause the delay at the U.S. 101 Southbound Ramps & Ventura Boulevard intersection to increase slightly under the Cumulative (Year 2022) plus Project operating conditions, which would be at LOS D both with and without the alternative. Similar to the proposed project, this alternative would not result in a further reduction in LOS under Cumulative (Year 2022) plus Project operating conditions; therefore, the alternative's contribution to this cumulative impact would not be considerable.

Similar to the proposed project, this alternative would add traffic to Caltrans operated freeway segments that operate at LOS D under Existing (Year 2016) and Cumulative (Year 2022) conditions without the proposed project. Addition of the reduced amount of traffic from this alternative would not result in further reductions to level of service on these freeway segments, similar to the proposed project. Impacts would be less than significant.

Similar to the proposed project, this alternative would not conflict with policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities and impacts would be less than significant.

Also similar to the proposed project, compliance with the Ventura County Fire Code Minimum Access Standards would be required for this alternative, resulting in less than significant impacts related to

hazards due to a design feature. This alternative would also increase the population of the overall University Glen community, though to a lesser degree than the proposed project (776 people for this alternative vs. 1,518 people for the proposed project). While the roadways within the project site and throughout the University Glen community would comply with Ventura County Fire Code and would not result in inadequate emergency access to the area under this alternative, concerns regarding emergency access were raised by residents at the scoping meeting for the EIR. Therefore, mitigation measures MM T-6(a), *Adopt an Emergency Evacuation Plan for the University Glen Community*, and MM T-6(b), *Conduct Emergency Evacuation Drills*, which are recommended for implementation as part of the proposed project would also be recommended for implementation as part of this alternative.

m. Tribal Cultural Resources

The project site for the Previously Entitled Development Alternative is the same as for the proposed project. Although the development intensity would be less concentrated under this alternative, the potential impacts to tribal cultural resources associated with ground disturbance would be the same, and would require implementation of the following mitigation measures and compliance with regulatory requirements regarding discovery of human remains to reduce impacts to less than significant, similar to the proposed project.

- MM TCR-2(a) Tribal Cultural Resource Worker Environmental Awareness Program
- MM TCR-2(b) Archaeological and Native American Monitoring

In addition, as described for the proposed project, development of the project site and the increase in population in the area would have the potential to indirectly impact Round Mountain, a tribal cultural resource located approximately one mile from the project site, as a result of increased pedestrian access through the area. Although this alternative would result in fewer people residing at the project site than the proposed project, it would still result in a potential indirect impact to Round Mountain due to the overall increase in population at the campus. Potential indirect impacts to Round Mountain would be less than significant with implementation of the mitigation measures listed below which were derived through consultation under AB 52 with the tribal Chumash representative.

- MM TCR-1(a) Interpretive Signage

n. Utilities

As with the proposed project, water supply for the Previously Entitled Development Alternative would be provided by the Camrosa Water District. Due to the reduction in residential units to be developed at the site, long-term potable water demand would be less under this alternative than under the proposed project as determined by Huitt Zollars (2017b). Conversely, the demand for recycled water would be greater under this alternative because of the larger landscaped area associated with the reduced density development Table 67 and Table 68 compares the domestic (potable) and recycled water demand from the proposed project and this alternative using Camrosa Water District Water Design and Construction Standards. Note that actual demand for domestic (potable) and recycled water would likely be much lower for both this alternative and the proposed project based on actual water demand usage at the campus over the past five years (see Appendix K for further detail).

Based on available water supplies described in Section 4.12, *Utilities and Service Systems*, there would be sufficient domestic (potable) and recycled water supplies to meet the needs of this alternative, similar to the proposed project. As with the proposed project, this alternative could be accommodated within the University's existing agreement for water provision with Camrosa. Similar to the proposed project, impacts would be less than significant.

Table 67 Domestic (Potable) Average Water Demand

Land Use	Computed Average Domestic Water Demand	
	Previously Entitled Development Alternative	Proposed Project
Single Family Dwelling	179,951 gal/day	89,232 gal/day
Multiple Family Dwelling	0 gal/day	221,760 gal/day
Total	179,951 gal/day	310,992 gal/day
	210.57 AFY	348.36 AFY

Source: Huitt-Zollars 2017b

Table 68 Recycled Average Water Demand for Irrigation

Water Use Factor	Previously Entitled Development Alternative	Proposed Project
Consumption Rate (AFY per acre) ¹	1.80	1.80
Irrigated area ²	40%	30%
Total Demand	24.12 AFY	18.09 AFY

¹ Assumed Consumption Rate of 1.80 AFY per acre (Average for Ventura County)

² Irrigated percent taken as average percent of pervious coverage from VCWPD Hydrology Manual for various land uses

Source: Huitt-Zollars 2017b

Similar to the proposed project, this alternative would increase wastewater generation at the project site, but the increase would be lower than for the proposed project due to the reduced number of units and lower population at the project site under this alternative. Given that the proposed project would not require new or expanded wastewater treatment facilities and would not exceed treatment requirements, no upgrades, expansion or improvements to wastewater treatment facilities would be required as part of this alternative. Similar to the proposed project, potential impacts would be less than significant and no mitigation would be required.

o. Conclusion

Under Alternative 2, the Previously Entitled Development Alternative, environmental impacts similar to those identified for the proposed project would occur, though for some impacts, such as in the areas of noise, transportation and circulation, and utilities and service systems, the magnitude would be lower for this alternative than the proposed project due to the development of 358 fewer residential units under this alternative (242 units versus 600 units under the proposed project). The same mitigation measures as are identified for the proposed project would be implemented for the Previously Entitled Development Alternative, with the exception of AQ-1 which would not be required. This alternative would meet housing demands of a growing campus population in a manner that would encourage use of alternative modes of transportation and minimize transit-related GHG emissions resulting from expected population growth, though not to the extent of the proposed project. This alternative would not, however, result in higher density residential development within a mile of a major suburban employment center, given that it would be comprised of relatively low density single family residential development.

No amendments or revised approvals to the existing CSUCI Specific Reuse Plan would be required under this alternative.

The Previously Entitled Development Alternative would meet some of the objectives of the proposed project, as listed in Section 2.4, *Project Objectives*, of this EIR, including the objectives to:

- Provide additional housing resources that blend with and augment the existing University Glen community to form one cohesive neighborhood.
- Provide a live/work environment associated with the CSUCI campus.
- Provide additional active and passive recreational amenities for use by the entire University Glen community.

However, this alternative would not achieve the objectives to:

- Provide multiple types of high-quality, local housing to attract faculty and staff to the CSUCI campus from outside the area.
- Provide age- and income-restricted housing to respond to the community request for a mixed demographic of apartments, single-family detached houses, and townhomes.

6.5 Alternative 3: Elimination of Inspiration Point

6.5.1 Description

The Elimination of Inspiration Point Alternative would implement the proposed project as assessed in this EIR, but would not include any changes in the Inspiration Point area of the northern project site, including improvements to the existing culvert located within the access road (“Inspiration Point Road”) leading to this area. As with the rest of the project site, the Inspiration Point area is currently leveled (graded) with building foundations installed, as well as some retaining walls and ancillary improvements such as sidewalks and gutters. Under the proposed project, up to 11 single-family homes would be developed adjacent to the hillside within the Inspiration Point portion of the project site; under the Elimination of Inspiration Point Alternative, these 11 residential units would not be implemented. Under the Elimination of Inspiration Point Alternative, a total of 581 residential units would be developed, including 43 single-family detached houses, 66 townhomes, 220 market rate apartments and 252 income/age restricted residences.

Each environmental issue area addressed in the EIR is addressed below for Alternative 3.

6.5.2 Impact Analysis

a. Aesthetics

As described, this alternative would implement all aspects of the proposed project with exception of the 11-unit Inspiration Point area. Photos of existing conditions at the Inspiration Point area are provided in Chapter 2 of this EIR. As shown in these photos, Inspiration Point is graded with existing infrastructure in place and the surrounding hillsides have minimal vegetation due to the 2013 Springs Fire that occurred in the area. This alternative would avoid development of up to 11 structures at this location, and preserve the open space vegetation surrounding this area. As such, the visual character would remain unchanged from existing conditions, reducing the already less than significant impacts to visual character and quality in this area of the project site further when compared to the proposed project. Changes to impacts on views of this area of the site would be minimal as it is unlikely that this area would be highly visible from the surrounding roadway network once the main area of the project site is developed with structures up to 40 feet in height. Potential impacts would be similar to the proposed project and less than significant.

Impacts on views from Lewis Road and Potrero Road would be similar to the proposed project for this alternative. No impact would occur as the project is not visible from either of these roadways.

b. Air Quality

Construction emissions associated with this alternative would have the same characteristics as the proposed project, but would be of a marginally lesser intensity due to elimination of 11 residential units in the Inspiration Point area. The following mitigation measures are required to address construction emissions associated with the proposed project and would be implemented for this alternative, to ensure that potential impacts to air quality would be less than significant.

- MM AQ-2(a) Construction Fugitive Dust Emissions
- MM AQ-2(b) Construction ROC and NO_x Emissions

As with the proposed project, there would be potential for Valley Fever to occur in previously undisturbed areas, where soils may harbor malignant fungal spores. Similar to the proposed project, the following mitigation measure would be implemented to address the potential for Valley Fever to occur in previously undisturbed areas of the project site.

- MM AQ-6 Valley Fever

Due to the small magnitude of DPM emissions that would be generated during construction, the attenuation of emissions by distance and wind direction, and the temporary duration of construction activities, potential TAC impacts due to DPM emissions would be less than significant for the proposed project. Given that the construction activities associated with this alternative would be of marginally lesser intensity due to the fewer number of units, this alternative would further reduce this already less than significant impact.

As described in Section 4.2, Air Quality, the proposed project would exceed the VCAPCD significance threshold for operational NO_x emissions. The reduction in number of units associated with this alternative would reduce operational NO_x emissions associated with vehicle trips and energy use. The estimated population at the project site under this alternative would be 1,483 people, based on a factor of 3.21 persons per single-family unit and 2.36 people per multi-family unit. This is approximately 98% of the population of the proposed project. Using the trip generation rates from the traffic study (Appendix I), this alternative would generate an estimated 3,685 daily trips, approximately 104 fewer than the proposed project. This approximately 3% reduction in vehicle trips would incrementally reduce NO_x emissions from the proposed project but could still exceed VCAPCD thresholds. Impacts would be potentially significant and implementation of mitigation measure AQ-1 would be required.

Similar to the proposed project, this alternative would not cause the population of unincorporated Ventura County to exceed population forecasts, and would be consistent with the VCAPCD AQMP and would meet the VCAPCD Guidelines significance criterion regarding population impacts. Also, similar to the proposed project, this alternative would not reduce intersections to a LOS E or F and, therefore, would not result in a CO hot spot. Impacts for both of these would be less than significant and no mitigation would be required.

c. Biological Resources

The overall 32-acre site is currently undeveloped, but previously disturbed through previous grading and regular rotary de-weeding activities. Due to the previously disturbed condition of the project site, species diversity and abundance onsite are relatively low and natural biological habitat is limited to the laurel sumac scrub occurring between Inspiration Point and the main body of the project site, and the eucalyptus trees on Inspiration Point. Laurel sumac scrub habitat, in general, provides suitable habitat for a large variety of animal species. The natural habitat within the drainage area (i.e., unnamed stream) and surrounding the project site provides suitable habitat for a diversity of species commonly seen in Southern California scrub vegetation types. Eucalyptus trees serve as potential roosting and nesting habitat for raptors and other birds, and provide a nectar source for hummingbirds and butterflies.

Under this alternative, this area would be avoided, and potential habitat in this area would be left intact. However, as with the proposed project, construction activities throughout the remainder of the project site and maintenance of the 100-foot fuel modification zone would have the potential to impact special status wildlife and plant species under this alternative. The following mitigation measures would be implemented to ensure that potential impacts to biological resources would be less than significant.

- MM BIO-1(a) Nesting Birds
- MM BIO-1(b) Special Status Plant Surveys
- MM BIO-1(c) Special Status Plant Avoidance Measures
- MM BIO-1(d) Restoration Plan

As described, this alternative would not include demolition of the existing drainage culvert and crossing, or construction of a new culvert at the crossing of Inspiration Point Road into the northern portion of the project site. This alternative would require modifications to the rectangular orifice outlet that drains the constructed wetland located south of the project site along Channel Islands Drive and Camarillo Street. Although the culvert is not located within any sensitive habitat (i.e., dominant vegetation is coyote bush scrub), the culvert is located within a USACE/RWQCB and CDFW jurisdictional drainage. This alternative would reduce impacts to jurisdictional waters compared to the proposed project as shown in Table 13.

Table 69 Potential Resource Agency Jurisdiction for Alternative 3 compared to the Proposed Project

Resource Agency	Potential Jurisdictional Area	
	Proposed Project	Alternative 3
USACE/RWQCB	0.021 acre (936 ft ²)	0.002 acre (100 ft ²)
CDFW	0.043 acre (1,882 ft ²)	0.000 acre (0 ft ²)

Similar to the proposed project, the following mitigation measures would be implemented to ensure that potential impacts to jurisdictional waters would be less than significant.

- MM BIO-2(a) Avoidance and Mitigation
- MM BIO-2(b) Compensatory Mitigation

d. Cultural Resources

As described in the Initial Study prepared for the proposed project (included as Appendix A), previous disturbance on the project site has not uncovered any archaeological, paleontological, or cultural resources, or any human remains. However, there is potential the unanticipated remains or resources could be encountered during project-disturbing activities for this alternative. This potential impact would be the same for this alternative as for the proposed project because although development would not occur in the Inspiration Point area of the site, ground disturbance on the remainder of the project site would occur as part of this alternative. Mitigation measures identified under Tribal Cultural Resources (which replace mitigation measure CR-1 included in the Initial Study) would be implemented to avoid potential impacts associated with the discovery of unanticipated cultural resources.

Similar to the proposed project, potential impacts to cultural resources associated with this alternative would be less than significant with mitigation incorporated.

e. Geology and Soils

Development of the project site for this alternative could expose people or structures to potential adverse effects associated with landslides. As discussed in the Initial Study for the proposed project

(included as Appendix A), mitigation would be required to ensure that potential impacts would be less than significant.

- MM GEO-1(a) Incorporate recommendations of Geotechnical Study: Cal State University Channel Islands East Campus Development
- MM GEO-1(b) Updates Geotechnical Study, as needed

Similar to the proposed project, development of this alternative at the project site could also potentially result in structures being placed on a geologic unit or soil that is unstable or could become unstable as a result of the project. As discussed in the Initial Study for the proposed project (included as Appendix A), mitigation would be required to ensure that potential impacts would be less than significant.

- MM GEO-3 Incorporate recommendations of 2007 Geotechnical Study Addendum

Impacts would be similar to those for the proposed project, and would be less than significant following implementation of the required mitigation measures.

f. Greenhouse Gas Emissions

As with the proposed project, construction of this alternative would result in greenhouse gas emissions beyond existing conditions due to construction activity and long-term operations. These emissions would be less than those associated with the proposed project due to the reduction in number of units (11 fewer single-family units for a total 589 units) and incrementally lower population at the project site (1,483 versus 1,518). Total estimated GHG emissions would not exceed SCAQMD Tier 4 or 2021 CSU efficiency targets; therefore, the proposed project would not conflict with the GHG reduction goals of CSU, AB 32, or SB 32, and potential impacts would be less than significant.

This alternative would meet housing demands of a growing campus population in a manner that would encourage use of alternative modes of transportation and minimize transit-related GHG emissions resulting from expected population growth, though not quite to the extent of the proposed project. This alternative would also result in higher density residential development within a mile of a major suburban employment center, similar to the proposed project since it would include a mix of single- and multi-family residential units at a density similar to the proposed project. Impacts would be less than significant and similar to the proposed project with regard to consistency with plans aimed at reducing GHG emissions.

g. Hydrology and Water Quality

As described, the Inspiration Point Alternative would implement the residential units included under the proposed project, with the exception of the 11 units located on the Inspiration Point area in the northern portion of the project site. Under this alternative, the existing culvert located under Inspiration Point Road would not be replaced. The existing culvert does not have the capacity to convey flows associated with the 100-year storm event; therefore, the roadway and area south of the culvert would remain subject to flooding during large storm events.

As with the proposed project, the outlet to the existing constructed wetland would be modified as part of this alternative to reduce the peak discharges during a 100-year storm event, and mitigation would be implemented to address potentially significant impacts.

- MM HWQ-1 Modification of the Rectangular Office Outlet from the Constructed Wetlands

Overall, while this alternative would result in a reduction in the amount of impervious surfaces at the project site due to the elimination of development at Inspiration Point, potential impacts to hydrology and water quality would be more severe in nature when compared to the proposed project and would be potentially significant.

h. Land Use and Planning

Surrounding land uses for this alternative are the same as for the proposed project. As with the proposed project, this alternative would require an amendment to the existing Specific Reuse Plan to allow the higher density of development envisioned under this alternative. Therefore this alternative would be consistent with the (revised) Specific Reuse Plan once approved. Both the proposed project and this alternative would be compatible with adjacent and nearby land uses and would not conflict with any applicable land use plan, policy, or regulation of any agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Potential impacts would be less than significant. No mitigation would be required.

i. Noise

Construction and operation of the Inspiration Point Alternative would introduce new temporary construction and permanent operational noises to the project site. These uses and associated operational noise levels are accounted for in the CSUCI Specific Reuse Plan.

This alternative would result in similar levels of construction noise at the site as the proposed project, though the overall duration of Single-Family Housing phase of construction (from 12/12/18 through 7/21/20) would be marginally shorter due to the fewer number of units to be constructed during that phase under this alternative. In order to address potentially significant short-term noise impacts associated with construction activities, the following mitigation measures would be implemented.

- MM N-1(a) Construction Activity Timing and Disclosure
- MM N-1(b) Newest Power Construction Equipment
- MM N-1(c) Vehicle and Equipment Idling

Also similar to the proposed project, construction-related activities associated with this alternative would intermittently generate groundborne vibration on and adjacent to the project site. Construction vibration levels would be similar to, though slightly less than, for the proposed project and would not exceed FTA thresholds for vibration, though the overall duration of construction activities would be slightly shorter. Similar to the proposed project, impacts would be less than significant and no mitigation is required.

As described for the proposed project, University Glen Phase 1 residents would not experience a noise level increase exceeding applicable thresholds as a result of traffic generated by this alternative on Channel Islands Drive under the existing or cumulative scenarios; this alternative would introduce 1 fewer residential units, resulting in a fewer number of vehicle trips (approximately 104 fewer than the proposed project). This reduction in traffic volumes would not result in a perceptible decrease in traffic-related noise between this alternative and the proposed project. Like the proposed project, traffic noise levels from this alternative would not exceed applicable thresholds. Similar to the proposed project, impacts would be less than significant.

p. Public Services

Similar to the proposed project, implementation of this alternative would increase the service population for the Ventura County Fire Department and require police protection services from the University Police Department. The estimated increase in service population at the project site under this alternative would be 1,483 people, based on a factor of 3.21 persons per single-family units and 2.36 for multi-family units. This is approximately 98% of the population of the proposed project. Therefore, similar to the proposed project, this increase in service population would not trigger the need to construct a new fire station, police facilities, or alter existing facilities to accommodate additional personnel or equipment to maintain acceptable performance standards and levels of service. Therefore, as with the proposed project, impacts related to fire protection and police protection services would be less than significant.

j. Recreation

This Alternative would introduce 11 fewer residential units than the proposed project, resulting in an estimated population at the project site of 1,483 compared to the estimated proposed project population of 1,518. Regional parks and recreational facilities serving the project site are the same for this alternative as for the proposed project; the total currently available acreage of parks and recreational facilities serving the campus and CSUCI University Glen Phase 1 community totals 481.47 acres.

As with the proposed project, implementation of the Inspiration Point Alternative would include 3.7 acres of park and open space areas.

With this alternative the total population of the University Glen community would be 3,266, based on a University Glen Phase 1 population of 1,783 and a population of 1,483 for this alternative. The Specific Reuse Plan park and recreation facility guideline of five acres for each 1,000 residents would then total 16.3 acres. As described in Section 4.9, *Recreation*, the current available parks, recreational facilities, and natural resource/open space would provide between 17.48 and 72.34 acres of parks, recreational facilities, and natural resource/open space for the residents to use for recreational, which is well above the minimum guideline of five acres per 1000 people. Similar to the proposed project, impacts would be less than significant and no mitigation is required.

k. Transportation and Circulation

The proposed project and this alternative are located on the same project site, and would therefore have the potential to affect the same intersections and roadway segments in the surrounding area. This alternative would introduce 11 fewer new residential units to the project site than the proposed project. The estimated population at the project site under this alternative would be 1,483 people, based on a factor of 3.21 persons per single-family unit and 2.36 for multi-family units. This is approximately 98% of the population of the proposed project. Using the trip generation rates from the traffic study (Appendix I), this alternative would generate an estimated 3,685 daily trips, approximately 104 fewer than the proposed project. This is an approximately 3% reduction in vehicle trips compared to the proposed project.

Operation of the proposed project would not cause study area intersections or road segments to exceed applicable LOS criteria in the CSU TISM under either the Existing (2016) plus Project or Cumulative (2022) plus Project conditions. Therefore, this alternative, with its 3% reduction in vehicle trips, would also not exceed applicable LOS criteria in the CSU TISM.

Similar to the proposed project, this alternative, with its 3% reduction in vehicle trips, would not result in impacts to the CMP roadway network. The study area intersections would operate at LOS D or better.

This alternative would reduce the amount of proposed project-related traffic using intersection of U.S. 101 Southbound Ramps & Ventura Boulevard, though the intersection would still change from LOS C to LOS D in the AM peak hour only. Because this alternative would cause the LOS to degrade from LOS C to LOS D with the addition of project traffic, this would result in a potentially significant impact under Caltrans performance thresholds, similar to the proposed project and the same mitigation measure required for the proposed project would be required. Addition of the reduced level of traffic from this alternative would also cause the delay at the U.S. 101 Southbound Ramps & Ventura Boulevard intersection to increase slightly under the Cumulative (Year 2022) plus Project operating conditions, which would be at LOS D both with and without the alternative. Similar to the proposed project, this alternative would not result in a further reduction in LOS under Cumulative (Year 2022) plus Project operating conditions; therefore, the alternative's contribution to this cumulative impact would not be considerable.

Similar to the proposed project, this alternative would add traffic to Caltrans operated freeway segments that operate at LOS D under Existing (Year 2016) and Cumulative (Year 2022) conditions without the proposed project. Addition of the reduced amount of traffic from this alternative would not result in further reductions to level of service on these freeway segments, similar to the proposed project. Impacts would be less than significant.

Similar to the proposed project, this alternative would not conflict with policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities and impacts would be less than significant.

Also similar to the proposed project, consistency with the Ventura County Fire Code Minimum Access Standards would be required for this alternative, resulting in less than significant impacts related to hazards due to a design feature. This alternative would also increase the population of the overall University Glen community, though to a lesser degree than the proposed project (1,483 people for this alternative vs. 1,518 people for the proposed project). While the roadways within the project site and throughout the University Glen community would be consistent with Ventura County Fire Code and would not result in inadequate emergency access to the area under this alternative, concerns regarding emergency access were raised by residents at the scoping meeting for the EIR. Therefore, mitigation measures MM T-6(a), *Adopt an Emergency Evacuation Plan for the University Glen Community*, and MM T-6(b), *Conduct Emergency Evacuation Drills*, which are recommended for implementation as part of the proposed project would also be recommended for implementation as part of this alternative.

I. Tribal Cultural Resources

The project site for this alternative is the same as for the proposed project, with the exception of the Inspiration Point area in the northern portion of the project site. The potential impacts to tribal cultural resources associated with ground disturbance would generally be the same, under this alternative and the proposed project, with the exception that no impacts would occur in the Inspiration Point area. This alternative would require implementation of the following mitigation measures and compliance with regulatory requirements regarding discovery of human remains to reduce impacts to less than significant, similar to the proposed project.

- MM TCR-2(a) Tribal Cultural Resource Worker Environmental Awareness Program
- MM TCR-2(b) Archaeological and Native American Monitoring

In addition, as described for the proposed project, development of the project site and the increase in population in the area would have the potential to indirectly impact Round Mountain, a tribal cultural resource located approximately one mile from the project site, as a result of increased pedestrian access through the area. Although this alternative would result in fewer people residing at the project site than the proposed project, it would still result in a potential indirect impact to Round Mountain due to the overall increase in population at the campus. Potential indirect impacts to Round Mountain would be less than significant with implementation of the mitigation measure listed below which were derived through consultation under AB 52 with the tribal Chumash representative.

- MM TCR-1(a) Interpretive Signage

m. Utilities and Public Services

As with the proposed project, water supply for the Inspiration Point Alternative would be provided by the Camrosa Water District. Due to the reduction in residential units to be developed at the site, long-term potable water demand would be incrementally less under this alternative than under the proposed project as determined by Huitt Zollars (2017b). Recycled water demand would also be incrementally lower due to reduction in landscaped areas at Inspiration Point requiring irrigation. Table 70 and Table

71 compare the domestic (potable) and recycled water demand from the proposed project and this alternative using Camrosa Water District Water Design and Construction Standards. Note that actual demand for domestic (potable) and recycled water would likely be much lower for both this alternative and the proposed project based on actual water demand usage at the campus over the past five years (see Appendix K for further detail).

Table 70 Domestic (Potable) Average Water Demand: Alternative 3

Land Use	Computed Average Domestic Water Demand	
	Alternative 3	Proposed Project
Single Family Dwelling	81,052 gal/day	89,232 gal/day
Multiple Family Dwelling	221,760 gal/day	221,760 gal/day
Total	302,812 gal/day	310,992 gal/day
	339.19 AFY	348.36 AFY

Source: Huitt-Zollars 2017b

Table 71 Recycled Average Water Demand for Irrigation: Alternative 3

Water Use Factor	Alternative 3	Proposed Project
Consumption Rate (AFY per acre) ¹	1.80	1.80
Irrigated area ²	30%	30%
Total Demand	17.01 AFY	18.09 AFY

¹ Assumed Consumption Rate of 1.80 AFY per acre (Average for Ventura County)

² Irrigated percent taken as average percent of pervious coverage from VCWPD Hydrology Manual for various land uses

Source: Huitt-Zollars 2017b

Based on available water supplies described in Section 4.12, *Utilities and Service Systems*, there would be sufficient domestic (potable) and recycled water supplies to meet the needs of this alternative, similar to the proposed project, and this alternative could be accommodated within the University’s existing agreement for water provision with Camrosa. Similar to the proposed project, impacts would be less than significant.

Similar to the proposed project, this alternative would increase wastewater generation at the project site, but the increase would be lower than for the proposed project due to the reduced number of units and lower population at the project site under this alternative. Given that the proposed project would not require new or expanded wastewater treatment facilities and would not exceed treatment requirements, no upgrades, expansion or improvements to wastewater treatment facilities would be required as part of this alternative. Similar to the proposed project, potential impacts would be less than significant and no mitigation would be required.

n. Conclusion

Under Alternative 3, up to 589 of the proposed project’s 600 residential units would be developed, avoiding the Inspiration Point area in the northern portion of the project site. As with the proposed project, implementation of the Inspiration Point Alternative would require amendment to the existing CSUCI Specific Reuse Plan in order to allow the density development proposed at the project site under this alternative.

Replacement of the existing culvert under Inspiration Point Road would not be implemented as part of this alternative, and the roadway and downstream area (where new residential units would be constructed) would continue to be subject to flooding hazards during large storm events. Potential less

than significant impacts to natural biological habitat located on the Inspiration Point site would also be avoided. In addition, impacts to jurisdictional waters would also be reduced, though these would remain potentially significant and mitigation would be required due to required improvements to the constructed wetland outlet.

Other potential impacts of the Inspiration Point Alternative would be comparable to those associated with the proposed project, including in air quality, greenhouse gas emissions, noise, public services, recreation, transportation and utilities and public services, though incrementally lower than the proposed project due to the reduced population at the project site.

The Inspiration Point Alternative would meet the objectives of the proposed project, as listed in Section 2.4, *Project Objectives*, of this EIR, including the objectives to:

- Provide additional housing resources that blend with and augment the existing University Glen community to form one cohesive neighborhood.
- Provide a live/work environment associated with the CSUCI campus.
- Provide additional active and passive recreational amenities for use by the entire University Glen community.
- Provide multiple types of high-quality, local housing to attract faculty and staff to the CSUCI campus from outside the area.
- Provide age- and income-restricted housing to respond to the community request for a mixed demographic of apartments, single-family detached houses, and townhomes.

6.6 Environmentally Superior Alternative

CEQA requires the identification of the environmentally superior alternative among all alternatives studied in the EIR. When the “no project” alternative is determined to be environmentally superior, CEQA also requires identification of the environmentally superior alternative among the development options. The No Project Alternative would reduce impacts in most issue areas. Exceptions include Hydrology and Water Quality, because existing flooding hazards associated with insufficient capacity of the Inspiration Point culvert would persist under the No Project Alternative. The site would remain disturbed but undeveloped and proposed parks and open space resources would not be implemented under the No Project Alternative. No amendments or revised approvals to the existing CSUCI Specific Reuse Plan would be required; however, the No Project Alternative would not provide the envisioned land use of residential development identified in the Specific Reuse Plan. In addition, this alternative would not provide for higher density development near a major employment area consistent with policies aimed at reducing GHG emissions. No project objectives would be met under the No Project Alternative.

Table 72 provides an overview of the alternative’s environmental impacts in comparison to the proposed project.

The No Project Alternative would reduce impacts in most issue areas. Exceptions include Hydrology and Water Quality, because existing flooding hazards associated with insufficient capacity of the Inspiration Point culvert would persist under the No Project Alternative. The site would remain disturbed but undeveloped and proposed parks and open space resources would not be implemented under the No Project Alternative. No amendments or revised approvals to the existing CSUCI Specific Reuse Plan would be required; however, the No Project Alternative would not provide the envisioned land use of residential development identified in the Specific Reuse Plan. In addition, this alternative would not provide for higher density development near a major employment area consistent with policies aimed at reducing GHG emissions. No project objectives would be met under the No Project Alternative.

Table 72 Impact Comparison of Alternatives

Issue	Alternative 1: No Project	Alternative 2: Previously Entitled Development	Alternative 3: Elimination of Inspiration Point
Aesthetics	+	=	=
Air Quality	+	+	=
Biological Resources	+	=	+
Cultural Resources	+	=	=
Geology and Soils	+	=	=
Greenhouse Gas Emissions	+/-	+/-	=
Hydrology and Water Quality	-	=	-
Land Use and Planning	-	=	=
Noise	+	+	=
Public Services	+	+	=
Recreation	+	+	=
Transportation and Circulation	+	+	=
Tribal Cultural Resources	+	=	=
Utilities and Public Services	+	+	=

+ Superior to the proposed project (reduced level of impact)
 - Inferior to the proposed project (increased level of impact)
 = Similar level of impact to the proposed project

The Previously Entitled Development Alternative would result in generally less impacts than the proposed project, due to the lower intensity of development that would occur. Potential impacts would be relatively comparable for Aesthetics, Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, and Tribal Cultural Resources, because the decreased intensity of residential development would generally not affect the characteristics of impacts to these issue areas. No amendments or revised approvals to the existing CSUCI Specific Reuse Plan would be required under this alternative and it would be consistent with the current development density envisioned in the Specific Reuse Plan. Impacts to air quality, noise, public services, recreation, transportation and circulation and utilities would generally be lower than for the proposed project where they are typically based on a per-capita generation given the reduced population that would occur under this alternative. However, with the exception of the impact to operational air quality, each of the impacts under this alternative would have the same level of significance (e.g. potentially significant, less than significant) and each of the required mitigation measures would apply to this alternative. While this alternative would result in lower operational GHG emissions than the proposed project, it would not result in higher density residential development within a mile of a major suburban employment center, given that it would be comprised of relatively low density single family residential development. Therefore, with regard to consistency with plans aimed at reducing GHG emissions this alternative would be less preferable when compared to the proposed project.

The Previously Entitled Development Alternative would not achieve the project objectives to:

- Provide multiple types of high-quality, local housing to attract faculty and staff to the CSUCI campus from outside the area.
- Provide age- and income-restricted housing to respond to the community request for a mixed demographic of apartments, single-family detached houses, and townhomes.

In addition, while alternative would achieve the objectives of providing additional housing resources that blend with and augment the existing University Glen community to form one cohesive neighborhood and providing a live/work environment associated with the CSUCI campus, it would be to a lesser degree than the proposed project given the reduced number of residential units provided under this alternative.

The Elimination of Inspiration Point Alternative would result in generally comparable impacts as the proposed project, because all aspects of the proposed project, except for the development of 11 units at Inspiration Point, would occur under this alternative. Exceptions where potential impacts would be marginally better than for the proposed project include biological resources, because natural habitat areas on the Inspiration Point site and in the unnamed drainage would remain undisturbed and overall impacts to jurisdictional waters would be reduced. However, impacts to hydrology and water quality would be worse under this alternative because the improvements to the culvert and crossing at Inspiration Point would not occur as part of this alternative.

As with the proposed project, the existing CSUCI Specific Reuse Plan would need to be amended under the Elimination of Inspiration Point Alternative. Most of the objectives of the proposed project would be achieved but to a lesser degree than the proposed project due to the provision of up to 11 fewer residential units, as primary objectives of the project include the provision of local housing and a live/work environment associated with the CSUCI campus.

Based on the comparison of potential environmental impacts, the Environmentally Superior Alternative would be the No Project Alternative. Following that, the next Environmentally Superior Alternative would be the Previously Entitled Development Alternative. However, this alternative would not meet the objectives of the proposed project in that it would not provide for a mix of multiple types of local housing nor would it provide age- and income-restricted housing.

The proposed project and the Elimination of Inspiration Point Alternative would have generally the same level of impact for most environmental issue areas, with potential impacts in all cases able to be reduced to less than significant levels with incorporation of mitigation strategies. Therefore, the proposed project would be Environmentally Superior Alternative in that it would result in generally the same level of impact as the Elimination of Inspiration Point Alternative. It would also better achieve the project objectives in that it would provide a greater number of residential units at the site than the Elimination of Inspiration Point alternative.

7 References and Preparers

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7.1.2 Personal Communications

Ventura County Air Pollution Control District. Alicia Stratton. Air Quality Specialist. December 5, 2016.

Ventura County Fire Protection District. Margaret Remmen. Management Assistant III. 2016.

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